Digital Identity at the Movies:

Understanding and Designing the Contemporary Cinema-going Experience

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As you set out for Ithaka
hope your road is a long one,
full of adventure, full of discovery.
Laistrygonians, Cyclops,
angry Poseidon—don't be afraid of them:
you'll never find things like that on your way
as long as you keep your thoughts raised high,
as long as a rare excitement
stirs your spirit and your body.
Laistrygonians, Cyclops,
wild Poseidon—you won't encounter them
unless you bring them along inside your soul,
unless your soul sets them up in front of you.

Hope your road is a long one.
May there be many summer mornings,
and may you visit many Egyptian cities
to learn and go on learning from their scholars.

Keep Ithaka always in your mind.
Arriving there is what you're destined for.
But don't hurry the journey at all.
Better if it lasts for years,
so you're old by the time you reach the island,
wealthy with all you've gained on the way,
not expecting Ithaka to make you rich.

Ithaka gave you the marvelous journey.
Without her you wouldn't have set out.
She has nothing left to give you now.

And if you find her poor, Ithaka won't have fooled you.
Wise as you will have become, so full of experience,
you'll have understood by then what these Ithakas mean.

C.P. Cavafy: Ithaca. Collected Poems (Princeton University Press, 1975)
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This thesis and the hard work it represents, is dedicated to my parents Maria & Panagiotis and my late grandparents Charikleia & Miltiadis, who raised me to always aim high and made me who I am today. I would not be here without your unconditional love and support.

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ABSTRACT

This thesis presents a multidisciplinary, mixed methods approach that combines Film Studies and Human Computer Interaction (HCI), aiming to elucidate the rapidly digitised cinema-going experience and its implications on the construction of cinema audiences' digital identity. Existing literature in the field of Film Studies has looked into it from a social, economic and architectural perspective, without taking into consideration the emerging incorporation of digital practices and therefore, digital footprint within the cinema-going experience itself. HCI scholars have experimented with enriching the cinema-going experience using technological interventions but their research remains limited in the screening room space. Combining Film Studies and HCI, this research project suggests a new insight on audience research.

The conducted fieldwork consists of focus groups, expert interviews, participatory design, diaries, prototyping and prototype evaluation workshops. The studies' results reveal that cinema-going is a holistic experience, a trajectory that begins before reaching the cinema, during one's presence in it and after walking away from it, consisting of multiple physical and digital interactions, activities, platforms and devices that leave behind digital traces. Mapping this journey led to the segmentation of cinemagoers in four different types according to their cinema-going related behaviours. The approach followed resulted in the development of a prototype of a multiplatform system that provides enhanced and personalised experiences, made by the users for the users, taking into account what they think as important, beneficial, and problematic.

This PhD project contributes to the field of Film Studies using an HCI methodological approach to renew cinema history literature, adding an understanding of how audiences make use of digital platforms and data during the contemporary cinema going experience. Additionally, it adds a contextual contribution to the HCI community, extending user needs

and data handling in the field of cinema by presenting cinema-going trajectories in the digital age. The exploration of digital identity construction within cinema-going extends the digital identity literature of both fields by examining the actual audiences' practices and viewpoint but also by getting the cinema exhibition's perspective on the matter. Finally, implications for design serve as a basis for expanding on the suggested prototypes and designing better cinematic experiences that address users' needs –adding to the list a commercial contribution of the project.

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Chapter 1

Introduction

1.1 Overview

> 'We're in a second industrial revolution, and I have no idea how the future is going to shape up in terms of visual storytelling to an audience, in a room, with people watching one screen. I know that it's essential, and we have to fight to keep theatres open as much as possible because it's a communal experience. I know the audience is there for something that could enrich your life forever, and the problem is we may not know what new developments there will be'.
>
> Martin Scorsese, 2018

The above quote by American film director Martin Scorsese pinpoints a strong argument with regards to the definition and future of cinema-going: cinema as a theatrical experience, otherwise called 'moviegoing' or 'cinema-going' herein, is currently threatened by the rapidly rising dominance of movie watching at home and the abundance of streaming services. For Scorsese, new technological developments should protect this unique, cultural experience that brings people together. However, innovation in the era of media revolution is unknown and unpredictable; this PhD thesis explores the contemporary cinema-going experience within this increasingly digital media landscape.

In contrast to looking into the present of cinema-going, it is evident that the big question that concerns the film industry is *what is the future of cinema and cinema-going*? Taking a look at current trends and discussions in the field, the answer appears to lie in the following three concepts: data-driven, personalised, enriched with virtual reality (VR) (inter alia Grater, 2016; Koljonen, 2016; Rear, 2017; Loughran, 2018; Yao, 2018). Data, personalisation and immersive cinema were the focus of *This Way Up 2016* conference for cinema exhibitors. Keynote speaker Johanna Koljonen (2016) underlined the need for using existing data to better understand cinema audiences and engaging with them after the

film finishes. Additionally, in his talk, film producer and director Jörg Tittel (2016) drew the attention towards the craze around cinematic VR: 'VR inside cinemas is a fad, VR *and* cinemas are the future… We will all be living in an augmented and mixed reality. As soon as we start walking across that bridge…the sooner we will all thrive'[1]. VR had come into cinemas a year earlier, in October 2015, when the first VR cinema opened its doors in Amsterdam (Dijkstra, 2015) only to close down in April 2018[2]. At the same time, Cineworld Dublin opened its first 4DX screen and Dreamscape Immersive launched their first immersive hybrid film-game VR experience[3] (Loughran, 2018).

Moving on to experience-linked products using data, US-based start-up *Atom Tickets*[4] created a ticketing app and website that provides cinemagoers with a 'VIP experience' by facilitating group ticket booking. It mostly works towards benefitting the industry though: it feeds customer data back to production and distribution so that they understand their customers and match their needs (Shu, 2018). Furthermore, ODEON's *Cinime* was an app created to be used within the screening room in ODEONs UK. It provided features such as 'augmented reality, image recognition and bespoke audio watermarking technologies to deliver rewards and unlock bonus brand and film content'[5] but ceased its circulation in 2016 and was characterised a 'failure' (Mitchell, 2016).

There is a pattern of trial and error in technological developments, which inevitably leads to the question: what would make cinema audiences stay? Yao (2018) suggested that a solution would be to apply the successful subscription model of Spotify[6] and Netflix[7] in cinema-going,

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[1] (https://thiswayupcon.com)
[2] (https://thevrcinema.com/)
[3] The user wears a laptop backpack, sensor-equipped gloves, and a VR headset to enter a 4D virtual world: a space zoo which houses creatures from all over the galaxy.
[4] (www.atomtickets.com)
[5] (https://proudcreative.com/Cinime-app)
[6] (www.spotify.com)
[7] (www.netflix.com)

as for example the New York-based Moviepass[8] has already started doing. This app provides a movie theatre subscription per month, which allows the cinemagoer to attend multiple cinema brands -limited to collaborating cinemas in the US. It differs from existing similar schemes, which limit the cinemagoer to subscribe to only one cinema brand (e.g. Cineworld Unlimited[9]).

As shown above, film industry discussions currently concentrate on the potential benefit of data on experience enhancement (see Koljonen, 2016). The data we leave behind after visiting any digital space is our digital identity, which enriches our physical identity by allowing us to reshape and rework it (Turkle, 2011). Constructing and developing our identity is always a work in progress that adapts to what materials we have available at hand (Turkle, 2011: 158). Turkle (2011) suggests that when online worlds are the main material, individuals are free to better understand themselves or create a better version of themselves. Each individual forms multiple, distinct digital identities that are contextualised depending on various environments and situations.

The scope of this project is to investigate the role of digital data, digital identity and personalisation specifically in moviegoing, which is something that has drawn little attention from academia so far. This thesis seeks to examine how the contemporary cinema-going experience is shaped by the integration of digital technologies in the cinema field and how it can be improved. To shed light on this -predominantly- Film Studies research subject, a user-centred, participatory methodological approach drawn from the discipline of Human Computer Interaction (HCI) is followed, where cinema exhibitors and cinema audiences are actively involved in the research. Cinema is a social and cultural institution that produces activities linked to a movie: from production, distribution, and exhibition to consumption and audience experience

[8] (https://www.moviepass.com)

[9] https://www.cineworld.co.uk/static/en/uk/unlimited

(Maltby et al., 2007). Exhibitors and audiences were chosen as the stakeholders for this project among the four cinema groups presented above because they are the most closely associated with the experience of going to the movies: exhibitors create it and audiences live it.

There is a repeated tendency in cinema-related debates to focus on the concerns and threats that surround cinema's perseverance (for example see Rombes, 2009; Di Placido, 2018; Sims, 2018) or the technology related to it (see a selection from Rear, 2017; Leger, 2018; Loughran, 2018; Pennington, 2018). The emergence of digital technologies is reconfiguring what cinema and cinema-going will look like (Currah, 2003; Tryon, 2009). The theatrical experience of watching a movie is being challenged by the increased popularity of digital home entertainment. Cinematic entertainment, which was first located in a public space, the movie theatre, has now moved to the home. The domestic space is 'theatricalised' (Klinger, 2006) since people can easily have projectors in their living room (Scorsese, 2018), streaming channels such as Netflix, Amazon Prime Video (www.amazon.com) and similar digital entertainment platforms that increasingly gain audiences' preferences.

These changes have been highlighted and embraced by film directors such as Martin Scorsese (Woodhead, 2018), David Cronenberg (Cronenberg, 2018) and Steven Spielberg (Pirelli, 2016) who discussed the transformation of cinema from a big screen into smaller ones and its evolution as an art coming from many sources. They underlined the urge to prepare for it:

> There are so many different ways that we are getting our entertainment today, it's not just on the big screen and it's not just on the TV screen, it's on the iWatch, it's on the Samsung, it's on the iPhone. And it's in the form of Snapchat and it's in the form of just every single four-second video, it's a form of self-expression, it's a form of art and there is an audience for it. And we have to be

> prepared for entertainment coming at us in many different shapes and genres. (Pirelli, 2016)
>
> Because of the internet, Netflix, streaming, cinema is dissolving, the big screen is shattering into many little screens, and this is causing much stress amongst movie-nostalgia hardliners. It does not matter to me. In fact, it pleases me. Because the human body is evolving, changing, and since the cinema is body, it makes sense that the cinema is changing, evolving as well. (Cronenberg, 2018)

Drawing from the above, cinema is 'reinvented' (Tryon, 2009:4); now is the moment to determine what cinema can do in this highly digitised landscape. Currently, the creative industries are 'the fastest growing part of UK economy' (CIF, nd)[10] as reported by the Creative Industries Federation (CIF) and Nesta (NESTA, 2018). Cinema is a subsector of the creative industries (CIF, nd). With ubiquitous computing and omnipresent data, all sectors of the economy are transforming into digital; they become digitalised. However, according to the International Monetary Fund's report 'digitalisation is both an enabler and a disruptor of businesses' (IMF, 2018: 2).

In the case of cinema, the profusion of data and digital platforms can enable the cinema-going experience to renew and adapt to the rapidly growing technology. Unawareness, underuse and wrong handling of the data can lead to disruption of a cinema business that does not keep up to date with digital change and is a subject that needs further research and academic attention. This project addresses a current observation: that the generated and collected data in the cinema exhibition is

[10] According to a report by Creative Industries Federation 'they contribute £101.5 billion in gross value added (GVA) - greater than automotive, aerospace, life sciences and oil and gas sectors combined'. The report can be found at https://www.creativeindustriesfederation.com/publications/growing-uks-creative-industries

underused. Audiences are unaware of this issue and cinema exhibitors do not know how to tackle it. Achieving to do so would fulfil their business purposes, approach their audiences and understand them better, and ultimately provide them with the best experience they could get.

Although there is a vast availability of scholarly research about cinema, the overall experience of going to watch a film at a movie theatre within a digital everyday routine, remains academically under-explored. What is also rarely considered is cinemagoers' digital data -captured and shared through emerging digital technologies/platforms. Cinema-going has been looked at from either a Film Studies -theoretical perspective- or a Computer Science - technological perspective-, lacking the combination of both. Computer Science and specifically HCI could add value to the existing discussion of the Film Studies scholars. Since collaboration between these two fields has not been discussed adequately before, this PhD project addresses this gap in academic knowledge by bringing a multidisciplinary and participatory mixed methods approach to investigate the modern cinema-going landscape. Mixed methods approaches are frequently used in HCI to explore multidisciplinary issues and research questions because they closely examine the user's perspective (Benford et al., 2009).

There is plenty of work in HCI intervening in cultural experiences to understand the user's viewpoint using mixed methods (for example Benford et al., 2009), creating and curating visitor experiential pathways when visiting cultural sites (e.g. Kefalidou et al., 2012; Kefalidou, et al., 2015) or when navigating natural ecologies (e.g. https://alanwalks.wales/) and mobility hubs (Kefalidou et al., 2016). Drawing methods commonly used in HCI will contribute to understand the current landscape and dynamics of cinema-going including digital activities and data and the potential of digital identity construction through experimenting with the use of cinemagoers' data. The use of these methods will also address Spielberg's view on personalising cinema-

going: ‘I think cinema is going to tailor itself to the individual audience. It is going to cater to the individual consumer: there’s going to be something for everybody’ (Pirelli, 2016). To achieve the above aims, this project consists of a series of five studies with 48 unique participants who contributed to collaboratively map the contemporary cinema-going experience and explore the value of data in personalising it. The datasets were analysed following a qualitative approach to provide a deep insight into the everyday reality of a cinemagoer and a cinema exhibitor. To gain an understanding of how contemporary cinema-going is framed within the industry and academia, this thesis will first investigate what are the wider debates around the subject.

1.2 Understanding the challenges that frame contemporary cinema-going

To begin with, the word ‘contemporary’ refers to the period within which this project defines cinema-going: late 2010s. Although this project’s primary research focuses on the UK and its cinema audiences, it is interested in general tendencies and perspectives and it is therefore useful to explore how the emergence, expansion and success of Hollywood coexisted with British cinema. Drawing from the above discussions, it is evident that the motion picture industry has gone through good and bad times with regards to its success throughout its whole history.

In 2015 and 2016 there was a concern around the engagement of the public with the cinema as a space to watch movies. Statistics drawn from a recent report of Statista show that 53% of US citizens prefer to watch a movie at home rather than in a movie theatre (Statista, 2017). As presented in the *2016 Top Markets Report: Media and Entertainment* conducted by the International Trade Administration ‘in the more developed markets, there is a levelling off for box office receipts as consumers also opt to view movies on personal devices in addition to

visiting movie theatres' (International Trade Administration, 2016: 7). Nevertheless, as of 2018, the global box office hit a record worth $41.7 billion (McNary, 2019). Particularly in the UK, the UK Cinema Association (2019) and the British Film Institute (BFI) report that 2017 and 2018 had the highest attendance levels for almost 50 years[11].

At the same time, the so-called 'cinema's disruptor' – Netflix (Sims, 2018) counts 148 million users globally and $15.794 billion revenue (Netflix, 2019). Ted Sarandos, Netflix's Chief Content Officer claimed during an interview that 'There's a romantic notion about the film being on a big screen … We have to get rid of the romantic part' (Fleming Jr, 2016). With this quote, he started a war with cinema distribution and its oldest institutions, such as the Cannes Film Festival (Sims, 2018). In answer to that, Patrick Corcoran, vice-president of the National Association of Theatrical Owners (NATO)[12] stated that home entertainment won't prevent someone who wants to get the unique experience of going to the movie theatre: 'If people are inclined to go see a movie, the fact that Netflix exists doesn't affect that decision' (Westbrook, 2017).

The debate around cinema-going is manifested diversely in distinct academic circles. Some Film Studies scholars -and frequently the press- focus on the death of cinema due to the takeover from home digital entertainment (Tryon; 2009; Yao, 2018; Di Placido, 2018; Sims, 2018). Other Film and Media Studies academics argue that the film industry's efforts to gradually turn to new forms of cinematic experiences such as event cinema[13] (for example, see Dallet et al., 2006; Atkinson, 2014), will be the evolution of cinema-going. Finally, HCI scholars almost

[11] 177 million cinemagoers in 2018, 3.7% up on 2017; £1,277 billion in box office revenue, with an average ticket price of £7.22 (UK Cinema Association, 2019) compared to 170.6 million admissions in 2017 levelled up with 2018's box office revenue but with higher ticket price (BFI, 2018).

[12] http://www.natoonline.org

[13] …which is estimated to reach $1 billion worldwide revenues by the end of 2019 (Press, 2017).

exclusively touch upon cinema within the screening room space, usually to technologically intervene in movie viewing (Häkilla et al., 2014a; 2014b; Pike et al., 2015; 2016; Ramchurn, 2018) or quantitatively understand algorithms behind recommender systems and movie preference (Tintarev & Masthoff, 2007; Topal & Ozsoyoglu, 2016; Tkalčič & Ferwerda, 2018).

Arguments of the above discussions are somehow problematic. First, in the UK, the so-called death of cinema and cinema-going is defied by figures - e.g. admissions increase yearly and cinema-going is gaining its lost ground gradually as demonstrated above. Secondly, live/event cinema is not cost-effective, it takes place in limited places and goes beyond the traditional form of cinema-going which most cinema aficionados enjoy. Thirdly, HCI scholars mostly experiment with cinemagoers during the screening of a movie, meaning that this disrupts their normal cinema-going activity and measures their behaviour while they know they are being subjects of a study (Pike et al., 2016). The latter also conceals another limitation, as the methods, processes and tools that are being used for experimentation such as biosensing and Brain Computer Interfaces (BCI), are expensive, are not yet applied to a big amount of audiences that collectively watch a movie (Hasson et al., 2008) and presumably for the above reasons cannot be applied in a wide variety of cinemas.

Following ‘a bottom-up perspective’ (Biltereyst & Meers, 2018: 1) on how cinema audiences experience cinema-going, could result in a deeper understanding and eventually in revisiting theories, concepts, and the history of film and cinema. As a result, academics turn to more interdisciplinary research strategies leaving behind memory studies, social geography, urban studies, history, or the digital humanities, which have repeatedly neglected the present of the cinema-going experience as it has been shaped in the 21st century (Biltereyst & Meers, 2018). This research project is adding HCI in the equation. HCI academics have

intervened in many cultural and entertainment experiences, such as theme park visiting (Rennick et al., 2016), concert going (Velt et al.; 2017) but typically heritage and museum visiting (for example Benford et al., 2009; Koleva et al., 2009; Kefalidou et al., 2012; 2015; Fosh et al., 2014; 2015; Carletti, 2016) as well as experiencing mobility hubs and airport journeys (e.g. Kefalidou et al., 2016). Benford et al. (2009) have established guidelines for understanding in depth the user experience and journey, specifically from a viewer's point of view, through adopting suitable research methods, tools and processes such as but not limited to designing with continuity and transitions in mind. Methodologically speaking, this thesis follows work that has used data gathering approaches from HCI to explore Film Studies questions, such as Keith Bound's work that measures cinematic suspense using psychophysiological methods (Bound, 2016).

Compared to cinema in the twentieth century, there is a relatively small body of literature that is concerned with contemporary moviegoing, with the exception of Grundström's (2018) work on how cinema audiences' practices form using digital media, predominantly social media. Covering this gap is instrumental for the Film Studies discipline, because there is an increasing number of devices and complicated experiences regarding cinema-going that cause more engagement with the cinema screen and the focused act of viewing. The common argument of the literature is identified and articulately presented by Biltereyst and Meers (2018) in their effort to create a chart of existing literature of new cinema history:

> One of the recurrent findings is that cinema-going was a significant social routine, strongly inspired by community identity formation, class and social distinction. The overall picture of the film audiences highlights them as social media users, historically the first social audiences for a mass medium, and they remain social media users in our contemporary media-saturated culture. (Biltereyst & Meers, 2018: 17)

What started as a public, communal experience has now turned out to become more private and individual again, with the growing adaptation of digital, personal technologies, home entertainment and on-demand services. The new landscape of digital, personal technologies brings cinema-going into the construction of digital identities. Film studies have not been equipped to study this and HCI has neglected to consider the everyday experiences of cinema-going. This piece of work will bring these two approaches together to explore the value and potential of digital data for enhancing cinema going.

Cinema-going experiences constitute part of the overall cinematic experience and can be holistically investigated as a user journey. To understand how digital data and platforms are integrated within the cinema-going experience, this thesis uses design methods and tools such as but not limited to personas, user journeys, and diaries. These are inexpensive to adopt and can be implemented globally in many different types of cinemas and audiences. The starting point of this research project is the research questions below.

1.3 Research Questions, Aims & Objectives

This thesis aims to map the contemporary cinema-going journey through the behaviours and the data traces left behind by cinemagoers. This mapping includes data capturing and sharing, how digital identity is constructed within the context of cinema-going and how to design meaningful experiences using that digital data. The three research questions that drive these aims are:

1. Which are the behaviours and digital traces that define the contemporary cinema-going experience within an era of ubiquitous data?
2. How are cinemagoers' digital identities conceptualised and understood by cinema exhibitors and audiences?

3. How is digital data valued by both cinemas and audiences and how can it be used to enhance the cinema-going experience?

The objectives of this research are to design an experience that makes use of the data captured –use the audiences' data transparently to deepen the understanding of their activity before, during and after the screening; to make the activity of cinema-going more interactive with filmgoers participating more actively together and individually within the cinema, and ultimately, develop a piece of work that can be used as a creative input to guide, influence and inspire the use of the same model in other forms of entertainment such as opera, theatre and other cultural experiences.

A participatory, user-centred, mixed methods approach is followed to address these questions and objectives. This participatory methodological strategy not only refers to the active involvement of cinema audiences but also a certain sector of cinema exhibitors (mainstream and art cinemas -not multiplexes). This derives from the special nature of this project that combines academic research with an industrial essence, since it is conducted in collaboration with an industrial partner, Broadway Cinema and Media Centre[14] in Nottingham. Broadway had an active role as an institution, in shaping the research strategy and scrutinising progress from an industrial standpoint. Below, the reader can find more details about the status of Broadway and its role in the project, as well as the details of the methodological approach.

1.4 Conducting academic research in collaboration with an industrial partner

> *Broadway is nationally recognised as the cultural leader for independent cinema, arts and technology in the Midlands*[15]

[14] www.broadway.org.uk

[15] That is the introductive claim Broadway is making on their mission page: https://www.broadway.org.uk/what-we-do/our-mission Retrieved on 14 February 2019

(www.broadway.org.uk)

Broadway cinema is an art house cinema with four screens, primarily projecting specialised[16] content as opposed to a mainstream cinema that mainly projects commercial genre films (blockbusters -wide distribution films). It has a long history in the local community because of its long-lasting presence in the centre of the Creative Quarter of Nottingham but also of its cultural past and meaning. The space where Broadway is located today, used to always be a place of getting people together, signposting the importance of community and collective experiences: it started as a church, then was used as a school and finally, a consortium of four Nottingham-based media organisations: Nottingham Film Theatre; New Cinema Workshop; Midland Group; and Nottingham Video Project[17]. On 31st August 1990, Broadway cinema opened its doors to the public after receiving funding from the British Film Institute (BFI), East Midlands Arts, Nottingham City Council and Nottinghamshire County Council[18]. Broadway functions as a non-profit organisation that is supported by public funding from the Nottingham City Council, the Arts Council, and primarily the BFI, and therefore needs to do a lot of reporting using audience data alongside its other cultural activities. According to Stafford (2007), research into specialised cinemas and art agencies that are publicly funded, such as Broadway, is interesting because it reveals 'the social benefits of cinemas and film culture' (p.141).

[16] The BFI's definition of 'specialised film' relates to those films that do not sit easily within a mainstream and highly commercial genre. It includes: foreign language films with subtitles, documentaries, archive/classic films, experimental artists, short films, and British films. (BFI, Definition of Specialised Film: http://www.bfi.org.uk/sites/bfi.org.uk/files/downloads/bfi-definition-of-specialised-film-bfi-neighbourhood-cinema-2016-01.pdf)

[17] Retrieved from https://en.wikipedia.org/wiki/Broadway_Cinema on 14 February 2019. All information was cross-checked with Broadway's current Chief Executive Mr. Steve Mapp who started working in Broadway cinema since its beginning.

[18] Retrieved from http://www.broadway.org.uk/history on 10 December 2016. The link is not working currently as there was a website renewal.

Broadway preserves a reputation for its involvement in experimental and innovative, academic and industrial projects, yet retains a traditional flavour of the cinematic experience, which attracts audiences from all over the country. It was characterised by Total Film Magazine as one of the top 10 cinemas in the world to 'provide a unique cinematic experience' (BBC Nottingham, 2008). Besides its normal cinema business, Broadway also hosts the educational hub for the creative industry of the East Midlands area, Film Hub Midlands[19], which serves as an educational organisation for multiple other cinemas or cultural organisations throughout the UK. Furthermore, it hosts an initiative called 'Near Now'[20], aiming to support artists and creative industries professionals and bring innovation and societal change using technology.

For the above reasons, it becomes evident that Broadway is interested in supporting and nurturing innovative research with regards to cinema's evolution. This explains their interest in undertaking the role of this PhD project's industrial partner aiming to understand better the use of data and how it could contribute to the formation of a more meaningful and creative experience for cinema audiences. In effect, this meant that Broadway's role was to actively mentor and supervise this research project alongside the academic supervisors throughout the whole four-year cycle of the PhD. As a result, I was offered a Broadway staff card, a designated supervisor from Broadway staff[21], access to their

[19] More information at https://filmhubmidlands.org

[20] Near Now is 'Broadway's producing, commissioning and artist development programme, working closely with artists and designers to produce and present projects that explore the place and impact of technology in everyday life'. It is registered as an Arts Council England National Portfolio Organisation (NPO). More information at https://www.broadway.org.uk/near-now and https://nearnow.orgk

[21] After discussions with various members of the cinema staff such as the CEO, the Development Director, the Digital Infrastructure Co-ordinator, the Marketing Manager and the Programme Director, a supervisor was allocated for direct correspondence and as contact of reference with regards to the PhD project. Mr Dave Deighton, initially holding the role of 'audience development officer', whose role turned to 'digital

databases, offices, as well as my own desk for one year, spending one day per fortnight there, observing how relationships are developed among staff, among staff and audiences, and what an art house cinema is in practice. During this period, several non-recorded casual conversations with Broadway staff resulted in me feeling part of the Broadway team and knowing the role and tasks of most employees within the organisation[22]. This contributed to forming a basic understanding of the cinema and informing the PhD's research strategy. Even though ethnography was not a method I used, immersing myself in the culture of the cinema was very useful to holistically understand how it operated and the status of data within the daily practice.

Within the four years of collaboration, I: 1. got access to more than 30+ spreadsheets with cinema data of Broadway's audiences, 2. delivered four annual presentations to board members to share findings and discuss future steps, 3. drew twelve reports up with main ideas/ progress points, 4. participated in more than 30 meetings with various members of staff -the majority of which were held with my industrial supervisor and Broadway's chief executive (CEO)-, 5. was permitted unlimited access and use of the Broadway spaces to conduct research studies, and finally, Broadway facilitated my participants' rewarding by providing me with 59 complimentary tickets in total. It also needs to be mentioned that nine members of Broadway staff served as my study participants when I needed to record their 'stakeholder viewpoint'. Last but not least, before proceeding with carrying out each study, it was initially presented to, discussed with and approved by my industrial supervisor and the CEO. The afore-mentioned practical points are evidencing an overall positive collaboration with the venue and its staff that contributed to expanding

infrastructure and marketing coordinator' in 2017 was the allocated industrial supervisor to this PhD.

[22] For example, I have met individually with members of staff such as the Social Media Manager, the Creative Director, the Film Hub Manager or the Box Office Manager in order to discuss distinct matters and get information or ideate.

the validity of the project results in an industrial setting. This collaboration led to developing a deep discernment of how such an example of cinema exhibitor works including the challenges and opportunities it faces within the aspiration to renew its digital strategy[23].

1.5 Methodological approach

After having established the complexity of this PhD project from the perspective of having an industrial partner, this section discusses the opportunities and challenges of the multidisciplinary approach of the research. This thesis is situated within both fields of Film Studies in the subsector of New Cinema History and Computer Science, in the subsector of HCI and more specifically, User Experience and User Journey Mapping. Nevertheless, it also concerns the debate around digital identity for both disciplines. The fact that Film and HCI scholars haven't individually and adequately touched upon the investigation of contemporary cinema-going and the construction of digital identity within this context, leaves space to ask how effective a mixed methods approach would be. Deciphering which kind of mixed methods tactics would be more appropriate was a challenge, as the final methodological approach should also take into consideration and illustrate insights gained from the collaboration with the industrial partner.

As a result, the research strategy this project adopts is to use methods from HCI and apply them to a Film Studies context where they haven't been implemented before. Instead of putting into effect the commonly used frameworks of quantitative or qualitative methods, this strategy highlights a novel insight in data exploration, collection and analysis. It uses mixed methods, which according to Cresswell (2014) can be characterised as 'exploratory sequential' or 'multiphase' (2014:16), as the 'research design' (2014:12) starts off with qualitative methods to

[23] More details about the findings from this collaboration are presented in chapter 4: Mapping the cinema exhibition.

explore the overall situation and goes on with a mix of both qualitative and quantitative to develop the next phase based on the findings of the precedent studies. It finally ends with the evaluation of the outcome using both. According to Verhoeven (2012: 6) 'the cross-disciplinary requirements and participatory technologies of digital research provide unique opportunities to new cinema historians'. With the above methodological approach, this thesis extends new cinema history with combining an 'industrially informed and consumption-attentive view of the cinema and the use of innovative information systems' (Verhoeven, 2012: 6).

The value of this interdisciplinary approach lies on the reveal of insights on cinema-going that weren't known before in the Film Studies field. Its novelty is apparent considering the following examples of research. Film scholars seldom use an approach that involves stakeholders who can provide a deep insight and contribute to making sense of the data acquired (Staiger, 2005). They have been researching the cinema-going experience mainly using empirical audience research, qualitative methods such as focus groups or interviews (see for instance Kuhn, 2002; Jones, 2003; Evans, 2011a; Hollinshead, 2011) to explore its socio-cultural, geographical and historical dimensions.

For example, Annette Kuhn (2002) carried out interviews with actual audiences of the 1930s to understand how the period of the Movie Palaces was conceived by cinemagoers of the time and to describe the cinema culture and rituals of that period. Additionally, Janna Jones (2003) travelled the USA to interview stakeholders that had any relation to the Movie Palaces while also conducted archive research, aiming to draw an accurate image of the Movie Palaces' demise and rebirth cultural-wise and architecture-wise. Elizabeth Evans (2011a) conducted empirical research, combining questionnaires and focus groups, with filmgoers of three independent cinemas in the East Midlands area,

approaching cinema as a cultural and social space and focusing on contemporary cinema audiences and their insights and tastes.

Focus has also been given on archival materials (Jancovich et al., 2003; Jones, 2003), textual analysis (Haines, 2003; Hanson, 2007; Atkinson, 2014) and ethnography (Jancovich et al., 2003) to talk about how the cinema-going experience is shaped in different places (cities/ countries), spaces (multiplexes, art house cinemas, local cinemas etc), forms (relatively new types of 'going to the movies' such as live cinema) and chronological periods. For instance, Mark Jancovich et al. (2003) reveal cinema-going attitudes and patterns and create a narrative around experiences in the spaces of cinema exhibition from the 19th until the 21st century specifically in the area of Nottingham by combining analysis of local archives with ethnographic research. Haines (2003) and Hanson (2007) examine texts to talk about how the cinema-going experience is shaped throughout the years in the USA and the UK respectively and how cinema audiences are part of different experiences depending on the decade and its cinematic trends.

During the last decade, the focus was turned to quantitative research on cinema-going in the digital age to include bigger samples of audiences (for example Allen, 2011; Van De Vijver & Biltereyst, 2014; Van De Vijver, 2017). The most recent example of Lies van de Vijver (2017) reports contemporary memories and experiences of cinemagoers of multiplexes using online surveys with closed and open-ended questions, aiming to cover a gap the in the literature on new cinema trends. Finally, the closest available academic example that somehow links film, data and digital identities would be the work of Aylett et al. (2016) who explore -through a multidisciplinary workshop- how filmmaking can be used as a medium to depict people's interaction with their personal data and the relationship with their digital identities. They are conducting experimental/ practice research, which is more associated with films and people becoming part

of films about themselves rather than exploring cinema audiences and their cinema-going activities related to digital identity.

Although existing empirical research succeeds in including the audience and reporting taste (Evans, 2011), rituals (Kuhn, 2002) and patterns (Grundström, 2018), it is quite limited in its perspective of actually involving the user in the research process. Researchers should conduct research with the users rather than merely research the users; aiming to indeed use their perspectives, creativity and experiences in practice. This project aspires to cover this gap of empirical research with its valuable combination of design methods such as participatory design and diary study (further discussed in chapter 3), which leave space and allow the user to play the most important role in shaping the study according to their own beliefs, experiences and behaviours.

HCI scholars address their research to ‘users' rather than ‘audiences'. This discipline acquired an interest in the cinematic viewing experience around the 2000s, mostly when 3D movies became available, generally using quantitative methods and experimental research. Existing research in this field is predominantly focused on technological advancements in the movie theatre and the screening room and concern largely the "while watching the movie" part and interactivity through the use of sensors brain-computer interfaces (for example see Häkkilä et al., 2014a; Häkkilä et al. 2014b; Pike et al., 2016; Ramchurn, 2018)[24]. For example, Häkkilä et al. (2014a) created a prototype that gives the opportunity to moviegoers to use their mobile phone (by shaking or tapping it) in order to collect movie content information. In another study, Häkkilä et al. (2014b) conducted a background study exploring filmgoers’ practices with interactive technology (an interactive pillow) in the movie theatre.

[24] The first time that an interactive cinema system was introduced was in 1967 Expo where the audience of Kinoautomat, could actually choose between two scenes and influence the flow of the movie (Kinoautomat, nd).

Academic work in the field of cinema data hasn't yet drawn HCI's attention on the data that exclusively concern audiences and cinema-going. There is an overarching point here about the HCI approach which shows that the discipline produces novel work in the field by being more focused on using experimental and design research and quantitative methods. Nonetheless, this goes along a major limitation: all these technological probes and innovations are made without really consulting with the actual cinemagoers first and do not examine if they need those and how exactly they want those to be so as to have real value. Researchers need to design for the public/ users and not for the sake of innovation without real-world value.

While the above research has offered unique innovative perspectives for understanding or transforming cinema experiences, these efforts have either approached cinema experiences from a merely Film Studies-based perspective or an HCI-based perspective. As good and efficient the methods used by both disciplines might be, they are rather related to exhibition practices; even in the case of looking into audiences trends, there does not seem to be value for the audiences themselves. Furthermore, there is a fundamental common limitation to them when used individually and not in combination that led to the need to differentiate this thesis' methodological approach: the afore-mentioned methods indirectly guide the participant and leave them to passively answer questions -usually retrospectively. There is a gap in using a methodological approach that keeps a balance between getting answers to a research question and letting the audiences unfold their creativity and freely express their mind concerning a research issue. This indirect guidance is problematic since the participants are required to reply to specific questions instead of reporting themselves what is (not) important, what they (don't) need, what they (don't) care about.

For example, the detailed appropriation of digital platforms and devices, the way cinemagoers use them related to their moviegoing activity simply

cannot be tracked and recorded by asking questions in interviews, focus groups or surveys. Dix (2007) talked about the importance of designing for appropriation and the guidelines that allow space to design 'for the unexpected' (p.27) such as but not limited to providing visibility and exposing intentions.

Verhoeven (2012) argues how our data is 'highly complex, heterogeneous and interlinked. The real value of our information lies between various objects of study, not within them and requires collaboration (including crowdsourcing) and the building of new and extended research capacities and connections' (2012: 6). Looking beyond the above limitations, adopting a participatory user-centred approach more efficiently, addresses the research questions presented above due to the active and constant participation of the stakeholders that would accurately self-report and self-reflect on their own data. This thesis translates stakeholders both as the cinema exhibitors and audiences, and involves them in the research from start till the end, developing an acumen to understand what they do, what they think and what they need. In HCI terms, stakeholders are the users and they are being situated in the centre of the research. They are invited to work with the researcher-designer to determine the problem, the landscape and then create a potential solution, through reflecting on their lived experiences and how these can inform interventions that will enhance their everyday life (Norman, 1988; Spinuzzi, 2005; Bødker, 2006, Wright and McCarthy, 2010). This results in being able to thoroughly map the contemporary cinema-going experience, detect any challenges and user needs and turn them into opportunities to enhance the experience.

1.6 Thesis structure

This thesis consists of seven chapters. Following on from this introduction, the thesis presents a review of relevant literature, the methodology followed, three chapters of findings and the conclusion.

The cinema-going experience is going through a big transformation due to the integration of digital platforms and data transactions, which is not documented adequately but is crucial for new cinema history. Chapter Two, therefore, explores and records the evolution of cinema-going and cinema audiences from the beginning of cinema until the late 2010s based on how they have been positioned by scholars and identifies the research gap. This chapter investigates why it is important to further explore the relationship between the moviegoing experience and data sharing and establishes an understanding of the notion of 'digital identity'.

Chapter Three expounds the project's methodological approach, why it was chosen and what value it adds. It sets out the mixed methods approach that was followed and describes in detail the studies that took place as part of this research strategy and the logic behind them. This chapter emphasises the value of bringing together methods from Film Studies and HCI: allowing for more users' agency during the decision-making and design processes, leading to meeting their exact needs and understanding how important their role is when creating new experiences.

Chapters Four and Five map the cinema-going experience by synthesising cinema-related activities, platforms, devices, feelings, interactions, and data transactions to result in a chart of contemporary cinema-going. More specifically, chapter Four describes how cinema exhibition integrates 'the digital' in cinema-going in UK, building on results acquired from fact-finding expert interviews. It introduces the idea that strategies related to data management and transparency discern between different types of cinemas (art house and mainstream). Vision and aspirations might be common within the organisational hierarchy of a cinema but discrete roles indicate how each professional perceives and approaches the value of data. This chapter will argue that creative integration of digital data through technology in the activity of cinema-

going is a challenge that can bring radical changes in the cinematic industry.

Chapter Five complements the standpoint of cinema exhibitors by demonstrating different types of cinema audiences' perspective on contemporary cinema-going. Implementing the mixed methods approach of triangulation, this chapter analyses the findings from focus groups, participatory design workshop, diaries and supplementary one to one interviews. It unpacks the cinemagoer's journey, which constitutes an amalgam of physical and digital activities happening before, during and after watching the movie that leave behind digital and physical traces. These traces – originating from the way one chooses to perform within a digital sphere but also in the physical space of a cinema, determine the type of cinemagoer they are. Throughout this journey, cinemagoers face occasional challenges. These can be digital and/or physical and mainly relate to social or digital interactions, space/environment, and planning.

Chapter Six translates those challenges into opportunities to create enhanced cinema-going experiences. It presents four prototypes that were created after accumulating the above data, and then presented and evaluated by the stakeholders in workshops. The main argument of the chapter is that utilising data to generate personalisation, accessibility, usability and usefulness, and embracing the communal nature of the cinema-going experience will result in the improvement of the cinema-going journey and better understanding of users' identity as cinemagoers.

Chapter Seven concludes the thesis by answering the research questions, summarising its contributions of the thesis, highlighting the limitations and caveats of the research, and pointing to future work to be carried out. The two core contributions of this thesis are the use of an HCI methodological approach to push Film Studies' understanding of cinema-going forward and the mapping of the contemporary cinema-

going experience including ‘all things digital’ taking into consideration audiences and exhibitors. In addition to that, there is an important contextual contribution within the HCI community, which extends user needs and data handling in the field of cinema by presenting cinema-going trajectories in the digital age (Styliari et al., 2018). The exploration of digital identity construction within cinema-going expands the digital identity literature of both Film Studies and HCI by looking at the actual audiences’ practices and viewpoint but also by getting the exhibition’s perspective on the matter. Finally, the implications for design serve as a basis for utilising the suggested prototypes and designing better cinematic experiences that address users’ needs –adding to the list a commercial contribution of the project.

Chapter 2

From Early to Contemporary Cinema-going

2.1 Introduction

Since the appearance of Kinetoscope in 1891 and Cinématographe[25] in 1895 (Science Museum, nd) moviegoing has turned from a novel and individual experience (figure 1) to an established, profitable, mass audience entertainment activity (Hanson, 2007). The emergence of the first Virtual Reality (VR) cinema in 2015 and the integration of Augmented Reality (AR)/VR technology in the cinema-going experience currently dominate the film industry's discussions and indicate that the experience leans towards getting 'individualised' again.



Figure 1 Edison's Kinetoscope 1895 where the viewer could only individually watch films. Image source: https://www.wired.com/2014/05/kinetoscope/

This chapter primarily aims to evidence how the evolution of cinema-

[25] The device was an improvement of Edison's Kinetoscope, which was a result of the projection of a quickly-moving sequence of photographs printed on a celluloid film onto a screen (Hanson, 2007). Kinetoscope was launched in 1891 and could serve only one person at a time (Anon, An introduction to early cinema, nd)

going and cinema audiences has been presented within academic literature from the beginning of cinema until the end of the 2010s. It also highlights how scholarly discussion around digital data/ digital identity fits into and extends the literature of new cinema history. Additionally, it reveals what lacks attention from academics, building on the existing gap of the literature that has been initially identified by Bruce Austin in 1982 who argued that TV audiences draw most academic attention at the expense of cinema audiences (Austin, 1982). In 2018, this gap was revisited by Biltereyst, Maltby and Meers' book *The Routledge Companion to New Cinema History* (2018) and Biltereyst and Meers' chapter *Film, cinema and reception studies: Revisiting research on audience's filmic and cinematic experiences.* Their principal concern is the continuation of 'inattention' (Austin, 1982:1) to film reception, and consequently to the experience of cinema audiences: "only marginal attention was given to real 'flesh-and-blood' audiences' experiences" (Biltereyst & Meers, 2018:22). Audience research has evolved during the last decades, expanding from observing the audiences' behaviour towards traditional media such as TV to mobile phones or tablets, covering issues of transmedia presence of media texts (Evans, 2014a). Nonetheless, there is still a tendency in modern audience research, to look at media other than film (Biltereyst & Meers, 2018).

The discipline that primarily looks into cinema audiences and experience is Film Studies. According to Biltereyst and Meers (2018), the literature on filmic and cinematic experiences focuses on specific films' reception, political economy, cultural identity, and film consumption as a social event dividing audiences into specific genres or specific groups such as couples. Biltereyst and Meers charted film/cinema audience research by dividing it into six strands (Biltereyst & Meers, 2018: 29-33). This list is a mixture of their categorisation complemented by my review of the literature: 1. Exhibition strategies and practices (see Johnson, 2012); 2. Film programming and box office strategies [specialised cinema –

French, Spanish, Chinese, Latin American to name a few of the most researched (see Kuhn, 2017 et al. for a detailed list) and specialised content (documentaries, independents, short films etc.) (for example Winston, 2000)]; 3. Historical studies on reception, analysing the event of 'going to the movies' as a social phenomenon belonging to cinema memory literature (e.g., Kuhn, 2002; Jones, 2003, Kuhn et al., 2017); 4. Movie viewing contextualisation [interrelations between text, intertextual zones and contextual forces and I would add in this movie viewing in specific locations as part of social geography and urban studies (e.g. Jancovich et al., 2003; Biltereyst and Van de Vijver 2016)] and transmedia existence of a film (e.g., Taylor, 2014; Brown and Waterhouse-Watson, 2016); 5. Social composition of the audience and cinema's role in everyday life –part of which would be literature on different types of cinema-going (Austin, 1989; Wilinsky, 2001; Evans, 2011); 6. Film viewing, stars and fan audiences (namely Barker and Brooks, 1998; Egan and Barker, 2006; Booth, 2010; Barker and Mathijs, 2012).

There are also some testimonies on how cinema is positioned in the digital era (a selection of which are Hanson, 2004; Rombes, 2009, Tryon, 2009; Laurent & Levatto, 2012; Mendiburu; 2012; Verhoeven 2012, 2013; Atkinson, 2014; Biltereyst & Meers, 2018; Grundström; 2018), within which interactive/ live cinema is also given attention by Film Studies scholars (Lunenfeld, 2002; Crawford, 2005; Burgin; 2012; Atkinson & Kennedy, 2016).

As far as the methods used, in Film Studies there is an inclination to either conduct textual analysis, write about an imagined viewer or conduct qualitative research, most frequently interviews or focus groups (Reinhard and Olson, 2016). The above is supported by Biltereyst and Meers (2018) who claim that 'a text-oriented approach to particular movies, genres, authors, styles still dominates the field' (p.22) and make a wide mention on the spectrum of methods used by Film Studies

scholars (see 2018, 28-29).

This is increasingly taking a turn as Maltby first argued that there is a common effort to involve contributors from several disciplines to the discussion 'including history, geography, cultural studies, economics, sociology and anthropology, as well as film and media studies' (2011:3). Biltereyst and Meers (2018) updated this multidisciplinary investigation in contemporary cinema by sharing the same argument that 'researchers from a broad range of disciplines now look at contemporary film audiences' (p.33). Nevertheless, the field of HCI is not mentioned in existing literature as a discipline looking into cinema-going and cinema audiences. Aiming to add value to this turn to multidisciplinary research, this thesis extends the debate on the contemporary cinema-going experience by bringing in scholarly knowledge from the field of HCI. HCI discussions revolve around experimentation with the present and future of cinema-going, including technological developments and interactivity which unavoidably entails the involvement of digital platforms and data. Little attention has been paid to the integration of digital data in the activity of cinema-going since the eras that are given most attention from scholars did not include today's vast circulation of digital data. This thesis proposes that the combination of academic work from both fields of Film Studies and HCI lead to a more user-inclusive appreciation of the cinema-going landscape in a digital era of ubiquitous data.

Our daily data transactions link to the academic debate on the construction of digital identity. New Media and HCI scholars have been long investigating the matter of digital identity but again not in relation to contemporary moviegoing. The term 'digital identity' -which can be also encountered as 'digital footprint', 'digital trace', 'digital behaviour', 'online existence', 'digital self' and more-, is becoming more and more complex as there is an abundance of constantly advancing electronic devices integrated in our daily lives, collecting our data on an everyday basis (see for example Turkle, 1995, 2011; Eaton, 1999; Boyd & Goodman; 2004;

Koosel, 2011, 2013; Elwell, 2014; Fehér, 2015a, b; Bozkurt & Tu, 2016). Digital identity can be perceived either as a technical term related to computer science, information security and management or as a term with a broader significance, referring to a person's online existence, practices and behaviour. There is a need to bring together these historical examinations of cinema-going with theories from digital media studies and HCI, in order to understand the full experience of contemporary cinema-going, which now increasingly involves digital activity (e.g. Atkinson, 2014; Grundstörm, 2018) and digital data exchanges. This is important because it will contribute to modernising the academic discussion around cinema audiences and the effect that the incorporation of the 'digital' has on their cinema-related behaviours and practices.

To address the above objectives, this chapter starts with a chronological recording of the transformations in cinema-going throughout the years as narrated by Film Studies literature. Presenting the debate in the history of cinema-going and the filmgoer's experience will help understand how the experience has evolved, how it differs from the past, and the audiences' role in its progress. It continues by pointing out some key themes that emerge from literature in an effort to establish a deeper understanding of 'cinema-going' based on the fact that Film Studies have a history of positioning the moviegoing experience as more than the projector or the film itself. Next, the chapter moves on to New Media literature describing how digital identity is positioned within academic discourse aiming to reach a deeper understanding and definition of the term. Such a definition has not yet been explored within Film Studies. Therefore, this piece of work will utilise Computer Science, New Media and Psychology approaches to frame digital identity within the context of cinema-going. The chapter ends with why it is important to further explore the relationship between the moviegoing experience and data sharing, linking the increasing integration of the 'digital' in cinema-going to the

investigation of the meaning of ‘digital identity’.

2.2 Moviegoing history overview

As this thesis is concerned with how the cinema-going experience is currently shaped by digital technologies and data, it is imperative that it first establishes an understanding of how the experience started and its progress throughout the decades. By examining the literature on cinema-going, it becomes apparent that it has seen some attention within specific parameters such as history, memory, the physical space and location. For instance, there is a respectful amount of academic work that concerns specifically the US (see for example Barbas, 1999; Waller, 2001; Wilinsky, 2001; Acland, 2003; Haines, 2003; Jones, 2003) and the UK (namely Kuhn, 2002; Hanson, 2007) cinematic culture, history and audiences. This can be attributed to socioeconomic factors as both the dominance of Hollywood and the cinema scene of UK played a great role in building cinematic tendencies worldwide, especially in the period of ‘glory’ of the movie palaces (Kuhn, 2002; Hanson, 2007; IBIS World, 2016)[26]. The review of the literature below, concerns exclusively the activity of going to the cinema and not the general evolution of cinema or cinema audiences[27].

As already mentioned, discussion on cinema-going has been predominantly historical. This has an ambiguous meaning: the existing relevant literature refers to the past cinema-going figures, practices and tendencies, space and architecture based on empirical analysis (for example Kuhn, 2002; Jones, 2003; Glancy and Sedgwick, 2012) or presents a chronological narrative of the activity of moviegoing based on textual analysis (Acland, 2003; Haines, 2003; Hanson, 2007, Griffiths, 2013). For instance, Kuhn (2002) looks at British cinema culture in the

[26] As Kuhn notably states: ‘In the 1930s, Britain boasted the highest annual per capita cinema attendance in the world’ (Kuhn, 2002:1).

[27] For a detailed literature review of the history of cinema audiences see Biltereyst and Meers, 2018 (p. 23-24).

1930s and positions cinema-going in everyday life, relying on empirical research and interviewing the 1930's generation of filmgoers. Her analysis revolves around the cinema-going experience beyond the act of film viewing and actually includes memories of the cinematic space and feelings that moviegoing caused to the people of this period. Similarly, this thesis concentrates on the experience as a whole and also includes people's feelings and thoughts beyond movie viewing.

Furthermore, Jones (2003), in her book *The Southern Movie Palace,* presents the movie palace's architecture of the 1920s. Her work around them fits in the industrial spatial approach, which means that someone can look at the building as an indicator of the experiences constructed by it. To strengthen her argument originally coming from archival research, she includes qualitative research with people who experienced the movie palaces concluding that 'the old movie theatres produce powerful feelings of nostalgia' (Jones, 2003: 4). Her work is meaningful for this piece of research which is interested in the role of the space in contemporary cinema-going. In this case though, the physical space is extended to and includes digital spaces used within the context of cinema-going.

Moreover, Acland (2003) in his book *Screen Traffic: Movies, Multiplexes, and Global Culture,* discusses the movie theatre experience and mundane industry practices of exhibition in the United States and Canada from 1986 to 1998. His work establishes the foundations of contemporary cinema-going in the end of the last century by positioning it as a public cultural activity that includes physical mobility, negotiation of community space, consumer selection. He introduces the variety of activities that filmgoers attend to before, during, and after they watch a film.

Based on existing academic work, the main points around moviegoing history could be divided into these 5 periods:

1. Establishment of the lower class, cheap venues and transformation of music halls into cinemas

Scholarly knowledge illustrates the beginning of the moving pictures[28] as being initially "hosted" in buildings that already had a habitual audience such as operas, theatres and music halls, attracting spectators of all class, both in urban and semi-urban[29] areas (Haines, 2003; Hanson, 2007, Griffiths, 2013). The emergence of narrative and longer films led to a more structured movie-viewing where filmgoers had to attend a screening from the beginning, compared to previously entering the screening room at no specific point. Longer texts on screen brought longer experiences, and moviegoing became a formal experience of entertainment rather than a fleeting amusement (Kuhn, 2002; Hanson, 2007)[30]. This automatically created the "feature film" which was the beginning of the empowerment of the cinema-going activity in the social hierarchy and led to the Golden Age (Beanland, 2011) of cinema[31].

2. Rise of movie palaces

Part of the literature is dedicated to studying both British and North American cinema-going in the 1920s and 1930s when movie (or dream) palaces were born (for example Sedgwick, 1998; Kuhn, 2002; Jones, 2003; Glancy and Sedgwick, 2012). When scholars refer to this period, they argue that the architecture and buildings affected and actually

[28] Moviegoing in the UK begins in March 1896 when the Lumière brothers displayed their invention, the Cinématographe, for the first time and ran their show at the Empire Music Hall in London's Leicester Square, which became the centre of the British Film industry (Hanson, 2007).

[29] 'Urban villages' as Griffiths suggests in his book Cinema and Cinema-going in Scotland (2013: 6).

[30] Hanson asserts that 'the early "actualities" and "topicals", through the dominant aesthetic in the first years of cinema, underwent a transformation into a narrative cinema' (2007: 21-22).

[31] According to Hanson (2007), the engagement of the audience to the lengthy narrative was important 'although the cinema aimed for a mass audience, attracting a middle-class audience meant changing not only the space of cinema but what was shown on the screen' (p.22). These changes led to the rise of the movie palaces.

enhanced the cinemagoers' experience (Kuhn, 2002; Jones, 2003; Hanson, 2007)[32]:

> They were designed to highlight opulence and luxury, often incorporating grand architectural styles to the point where the space around the screen became more important than the screen itself. The cinema building was as key a factor in the experience of cinema engagement as the texts on the screen were (Jones, 2003: 234).

Cinema-going is framed as occurring in physical spaces; it was transformed into an affordable and comfortable experience, the 'essential social habit of the age' as A.J.P. Taylor quotes (in Hanson, 2007:2) because of the Dream Palaces. Today, cinema-going happens both in physical and non-physical spaces and this thesis focuses on investigating the co-existence of both.

3. Period of decline with sub-urbanisation and threat from television. The emergence of new exhibition spaces

The academic discussion addresses the demise of the popularity of cinema and cinema-going in UK and USA; how socioeconomic factors such as the economic drain after the Second World War and the wide domestication of TV in the 1950s contributed to the closing down of many cinemas and the decrease in cinema-going attendance (Haines, 2003; Hanson, 2007)[33]. Cinema in the 1960s underwent significant changes in terms of content, industry players, distribution, cinematography and

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[32] Penny shows (entering a screening room with 1penny admission) were gradually transformed into movie palaces, because exhibitors wanted to attract audiences with an impressive entrance and auditorium (Hanson, 2007).

[33] Along with the rise of television in the mid 1950s (The Committee Office, 2010) came the gradual collapse with the Motion Picture Association of America (MPAA) rating system. MPAA rated a film's suitability according to its content and led to a 'new screen freedom' (Haines, 2003: 36) but the reduction of attendance. The most recent version of the ratings can be found here: http://www.mpaa.org/film-ratings/

exhibition: British cinemas turned into dance halls and US cinemas took the lead and were divided into indoor and drive-ins (Haines, 2003; Hanson, 2007). In the 1970s, blockbusters dominated the cinema world (in 1975). As a result of the above, the activity of going to the movies transformed, ending up with both indoor and outdoor spaces, larger screens, friendly personnel, unique atmosphere and increased ticket prices (Haines, 2003).

4. Appearance of multiplexes and family entertainment spaces

When narrating the history of moviegoing during the 1980s, scholars have an obvious focal point that reappears: architecture and design and how the 'ups and downs' of cinema attendance were related to the construction of cinema as an experience. The appearance and proliferation of multiplexes which revived cinema-going and made it 'popular' again (Hanson, 2007:162), the way the cinema space is built, comfort and ease of the filmgoer are main parts of the academic discussion again (Haines, 2003). The 'Ballyhoo'[34] that was introduced to the cinematic experience from the 1920s and was related to the marketing strategies the exhibitors adopted to attract audiences and promote the movies, slightly faded away in these years (Atkinson, 2014: 92). What is also distinctive of this period is the conversation around repertory cinema[35] or revival theatres and how art houses or a specific film fan audience emerged and gave a fresh air to the meaning of cinema-going (Wilinsky, 2001; Haines, 2003; Jones, 2003). The physical space, architecture and decoration are focal points of this thesis which investigates if and how these elements still retain an important role in modern cinema-going and the cinemagoer's journey.

[34] The Ballyhoo was the starting point of live cinematic events and therefore of extended cinema as Atkinson (2014) called it, which will be explained further down.

[35] Repertory cinema was another kind of art house venue, but with additional showmanship of live orchestras, talks and interactive exchange of experiences between a talker/participant in a film and the audiences (Willinsky, 2001; Haines, 2003).

5. Digitisation – competition from DVD/home cinema

The end of the 20th century concerned scholars in terms of cinema digitisation and financial issues as well as a new challenge that awaited cinema-going: DVDs and home cinemas (Haines, 2003; Hanson, 2007, Tryon, 2009). There are mentions about the deterioration of cinema because of digitisation (Cherchi Usai, 2001; Tryon, 2009); not only in terms of the quality of the general experience but also in terms of picture and sound[36] which also led to cinema-going being an expensive way of entertainment[37] with an increased ticket price (Haines, 2003). The penetration of DVD into film consumers' houses and their illegal reproduction (piracy), were a major 'enemy' of the cinema theatres as they had great quality of sound and image, extra scenes or other features that were a great marketing trick to attract the 'movie buffs' and collectors with smaller cost[38]. Watching films shaped to be a multiscreen experience with movie audiences creating domestic media centres (Allen, 1999).

Following on the latest technological advances and the expansion of transmedia experiences (Evans, 2011; Atkinson, 2014)[39] happening after 2000, academics are interested in digital cinema, film viewing at home and the convergence of cinema with other media platforms (see

[36] 'When I saw the 1997 reissue of Star Wars in 35mm digital sound, it was vastly inferior to the experience watching it in 70mm at the Loews Astor Plaza in 1977' (Haines, 2003: 162).

[37] In some areas in the US, the price for a night out in the cinema, including the concessions, could excess 30$ for two people (Haines, 2003).

[38] Tryon's approach touches on the comparison between the quality of domestic technology (for example formats such as HD DVD, BlueRay) and cinema experience, referencing the example of Michael Imperioli who characterised HD DVD as the 'ultimate film experience' (p. 35). DVDs provided not only extra knowledge and easy access to this particular audience but also a different kind of experience, since access was unlimited and it came with a package with extra features.

[39] The concept of transmediality in this section follows the definition of Evans (2011): 'the increasingly popular industrial practice of using multiple media technologies to present information concerning a single fictional world through a range of textual forms' (p.1).

for example Jenkins, 2006a; Rombes, 2009; Tryon, 2009; Evans, 2011; Atkinson, 2014) –issues not directly linked to the actual cinema-going experience. Haines (2003), in the dawn of the 21st century, argued that cinema-going has had to undergo many changes to resemble the glory that existed before the 1970s.

The above claims show us that until now, academics would talk about cinema-going as an activity that had (or not) great popularity, with technology, cost, ambience and architecture being dependent variables. The best moment throughout the history of cinema-going presented herein which is also greatly discussed by scholars, was the decade of the 1930s with the huge success of movie palaces and the worst is the decade after 1968, when the gradual demise of cinema-going started. Examining the above-mentioned histories collectively reveals key common themes that film studies have associated with cinema-going and are open for reconsideration in 21st-century cinema-going that is framed by the vast circulation and transactions of digital data. In the following section, I am looking into these themes in more detail in order to provide a broader understanding of the term 'cinema-going'.

2.3 Defining and understanding 'cinema-going'

Cinema doesn't have to be film; it has to be magic.
Manohla Dargis, 2012

This section is dedicated to understanding how this key concept of 'cinema-going'/'moviegoing' has been defined and understood by scholarship. When it comes to what constitutes moviegoing, the main arguments from relevant literature revolve around the following fundamental themes that eventually form a larger academic debate. First of all, the most frequently indicated theme is that moviegoing is presented as more than the film on the screen or the technology behind it (Biltereyst & Meers, 2018). Architecture and design of the cinema

building play a key role in shaping the cinema-going experience (namely Harding and Lewis, 1993; Valentine, 1994; Kuhn, 2002; Jones, 2003; Haines, 2003; Hanson, 2007). Secondly, scholars discuss that the elements that constitute moviegoing, along with programming, often create distinctions between different experiences depending on age, taste, class and economic status (Harding and Lewis, 1993; Sedgwick, 1998). Last but not least, another theme that comes out of the existing literature is cinema-going's quite rapid but still transitioning positioning as a collective activity, a particular kind of public experience rather than an individual amusement (see Kuhn, 2002; Jones, 2003). Overall, the experience of going to the cinema has been given less attention in literature compared to cinema audiences. This thesis aims to research these two simultaneously: cinema audiences within the modern cinema-going experience.

2.3.1. Cinema-going is more than the screen

> *The lived, more or less collective experience of a film projected in a cinema, in the dark, according to an unalterably precise screening procedure, remains the condition for a special memory experience, one from which every other viewing situation more or less departs.*
>
> Reymond Bellour, 2012

Scholars researching historical film audiences have placed the spaces and technologies around the movie as a core part of understanding the cinema-going experience (Biltereyst & Meers, 2018). This project delves into the experience outside the screen nowadays by studying thoroughly the elements that constitute it. According to Biltereyst and Meers (2018) the activity of going to the movies 'was more than about the filmic experience, and it entailed a wider cinematic and societal experience' (p.30). Cinemagoers in the early years of the movie palace (around 1920s) saw a movie theatre as a place of 'glory' (Haines, 2003: 175). Similarly, Jones (2003) claims that moviegoing changed radically from

the 1920s when the first US movie palaces made their appearance and came along with sociocultural and economic consequences such as the increase of the ticket price, the reserved seating, the programme of film projections, and eventually more popularity and huge profits.

Kuhn (2002) along with Jones (2003) and Haines (2003) talk about the magic behind the experience of being in one such theatre. Cinema-going saw a change in terms of auditorium design, size and technology. Haines (2003) claims that movie palaces and big screen cinemas of this decade had it all: posters and advertisements in nearby stores; a large number of employees along with the manager, who tried to make the activity a pleasurable experience to the filmgoers; 70mm prints operated by professional projectionists which produced high-quality image for that time along with stereophonic sound; moviegoing was going through a significant period of change. Additionally, 'the imposing and expansive interiors often included velvet curtains, balconies, mezzanines, crystal chandeliers, fountains, classical statues and artwork, dramatic lighting, handsome furnishings, full orchestras, completely outfitted organs […]' (Jones, 2003: 19). Most of the movie palaces were identified as cultural landmarks and were converted to performing arts centres with live shows and musical performances before showings; surprisingly the audience even applauded in the end (Haines, 2003; Jones, 2003). The above perspective presented by various scholars is helpful to my research in order to understand how the cinematic space was perceived in the past so as to compare it with how it is understood nowadays and whether it plays any role in the cinematic experience.

Another big change of the physical space that affected cinema-going was the creation of megaplex cinemas. The Megaplex[40] experience in the US was introduced in 1995 by Stanley Dunwood's company (AMC) and simultaneously expanded in British ground (Hanson, 2007). The newly-

[40] Cineplex Odeon made its appearance in Canada first and then became one of the biggest chains throughout the US starting from 1979 (Hanson, 2007).

brought multiplexes provided a much different experience to the audiences both in terms of space and quality. Haines (2003) and Hanson (2007) talk about the 'ups and downs' of cinema-going of this period: more emphasis was given in the concession areas and box office, rather than in the theatre architecture. New stadium-style seating was one of the innovations of megaplexes, as well as the usual around 50 feet screen. Moviegoing also went through a difficult period during the 1990s in terms of its social etiquette: respect of the space and the fellow cinemagoer. People were talking throughout the movie, and even calls were taking place from cell phones during the projection of a movie (Haines, 2003). Only a few chains and independent cinemas tried to retain a luxurious and sacred moviegoing experience (Haines, 2003). Technologies that were designed to be sensorily immersive also were considered by scholars to be part of the cinema-going experience in these years (Haines, 2003)[41]. This thesis takes forward these academic discussions by focusing on the cinema etiquette and the way cinemagoers behave and use digital technologies that are related to cinema-going today.

Moving on to the 2000s, Rombes (2009), Tryon (2009) and Atkinson (2014), are some examples of academic scholarship giving us a great sense of the environs of modern cinema, of how a movie experience can be personalised and finally how cinema audiences can engage[42] more with a text. More specifically, Tryon (2009) presents and embraces the potential of different media devices, with regards to new kinds of content and storytelling, e.g., short films and personal vlogs which give production and distribution new dimensions. He argues that the current

[41] limited restoration screenings such as 1952's 'This is Cinerama' (projected in 1997) made the audience feel they were part of the movie due to the three panoramic shot of the roller coaster in Technicolor (Haines, 2003). This can be perceived as the predecessor of modern 3D cinema.

[42] With 'engage', I adopt Evans' approach on the engagement model of form (what are audiences doing?), type (how are audiences responding?) and value (what are audiences giving up?) (Evans, 2016).

‘digital transition’ (2009: 174) through digital technologies is reinventing cinema and this thesis expands on that by closely examining the result of this digital transition within the cinematic experience.

Additionally, Atkinson (2014) offers a comprehensive mapping and analysis of all the examples of new technologies that can be used in contemporary cinema, including the potential concerns that come with them. She explores cinema audiences and their experience out of the movie theatre presenting one of the most recent testimonies on what cinema-going is today by introducing emerging and extending cinema. Atkinson manages to dive into the new meaning of cinema as a space, the portrayal of experiences and the construction of the audiences in them. She explores how paratextual extras both online, namely blogs, online reviews, online cinematic trailer spots, and offline, such as ‘billboards, posters, TV ads, newspaper reviews’ (2014: 15) contribute to further expose a movie to the audience and provide various reasons for being further involved with a film. These paratextuals, extend the narrative of the film and create another world with multiple features, accessible from several media.

According to Atkinson (2014), the contemporary cinematic experience of a moviegoer isn’t limited only to the activities they engage with while being in the cinema venue. There is also the engagement with ‘extended promotion of a film prior to its release (also including consideration of other extended artefacts that may not be primarily cinematic, but have cinematic elements) and extended exhibition – engagement with films subsequent to their release within ‘live’ cinematic experiences’ (Atkinson, 2014: 17)[43]. Based on Atkinson's argument that the cinema-going experience is not limited to the movie theatre and the cinemagoers' engagement with the cinema is extended before and after movie watching, this thesis will go onto explore what would constitute the

[43] As a result, audiences expect to be involved in ‘the narrative worlds within all levels of the diegesis’ (Atkinson, 2014: 17) of a film.

moviegoing experience, adding all online and offline activities before, during and after cinema-going. These will be further discussed in chapters 4, 5 and 6.

2.3.2. Distinctions between different cinema experiences: class and economic status, age, taste

Film Studies literature suggests that cinema audiences are divided based on class, age and taste. According to Hansen, the cinemagoer is 'a member of a demographically diverse audience' (Hansen, 1991: 5). Additionally, Stacey (1994: 73) argued that the cultural studies approach used to investigate TV audiences also influenced work on cinema audiences, pinpointing different strands of the audiences' identity such as class, gender, ethnicity or nationality (Biltereyst & Meers, 2018:26). Similarly, I am interested in what is the role of these factors in contemporary cinema-going and how they impact –if at all, the construction of different digital identities of a cinemagoer. For instance, in this thesis I am building specifically on the discussion around cinematic taste and how diverse audiences adopt different behaviours and use digital platforms to achieve various purposes according to their taste.

Scholars' narration around cinema has brought up social distinctions created in the context of cinema-going, such as the matter of social class at the end of the 19th century. Hanson (2007) claims that there were different shows and types of exhibition that indicated distinctive social classes. Exhibitors at the beginning of cinema were divided into travelling exhibitors (fairground shows that could accommodate almost 1000 spectators) and those in fixed theatres, initially called 'penny shows or penny gaffs' because of the price of the ticket[44] –which later evolved to be permanent cinema theatres (Hanson, 2007). This signified the beginning of a cultural change as well: 'The importance of music hall and subsequently cinema-going is that they symbolise […] the move from a

[44] Penny shows were very cheap in order to be accessible to the lower classes.

traditional folk culture to a more commercialized form of mass culture characteristic of the twentieth century' (Hanson, 2007: 24). 1910 was labelled as 'the moment of cinema' (p.19) in the UK as the 1909 Act, which regulated the cinema landscape, prompted the outburst of cinema exhibition and made cinema-going more popular. Until the beginning of the First World War, cinema-going was appealing to large audiences and mostly to the urban working class, something that established the cinema as the most usual leisure activity in the first half of the 20th century (Hanson, 2007).

Kuhn (2002) talks about how 1930s cinema-going added the middle-classes to its working-class enthusiasts as the decade processed; touching the sensitive matter of social class as Hanson (2007) also did Middle-class cinemagoers were differentiated from the working class, poorer audiences by ticket price and screening times (Kuhn, 2002). She argues that her interviewees who were children back at the 1930s thought of cost as an important obstacle sometimes setting them apart (or not) from the 'much-desired pictures' (Kuhn, 2002: 47-48):

> The price of admission is normally remembered as between a penny and three pence […] The careful specification of such tiny amounts is intended to emphasise that going to the pictures was a very inexpensive amusement […] (p.47). 'And if you had three pence […] then you were rich! That was a night at the pictures and a bag of sweeties to go in.

Through the words of her interviewees, Kuhn (2002) claims that having more money to live the 'whole cinematic experience' was important for that time.

The drive-ins are also part of the academic debate in terms of their social classes implications because of providing a cheap kind of

entertainment[45]. ‘People paid 25 cents per car as well as per person to see [a movie] under the stars’ (Reid, 2008). Issues of moviegoing cost additionally arose as the ticket price doubled in the 1970s (Haines, 2003). Even in the 2010s, cinema has ended up being a quite expensive way of entertainment depending on the experience a filmgoer wants to get. Paying approximately £20 for a night out in the cinema has put off cinemagoers according to a YouGov study (Farmer, 2015), therefore cost and social class can be considered a contemporary issue even in our decade.

Besides social class, scholars are also interested in the social notions of cinema-going as a bonding activity for family members and a socialising activity for youth and couples, hence distinguishing cinema-going experiences based on age (Harding and Lewis, 1993; Kuhn, 2002). As early as the 1930s, cinema-going was very important for a family as it was integrated into a family's routine as the most popular leisure activity (Kuhn, 2002)[46]. Furthermore, scholarship also presents the drive-in experience as a family activity, which later turned to be very popular among young adults, couples and older teens (Haines, 2003; Reid, 2008)[47]. Finally, existing literature suggests that age kept on playing an important role after the 1980s as well. Scholars highlight how multiplexes were initially designed to be a family-friendly place but ended up being a venue mainly attracting younger audiences because they didn’t have as

[45] ‘Since almost the entire investment goes into projector and sound equipment, and simple housing of the screen and projectors, the overhead cost is very low’ (Electronics, 1933).

[46] The exhibition has made it important through the way of marketing it to the families: ‘Going to a children’s matinee sometimes involved receiving free gifts, and a number of informants remember being given comics, fruit or sweets’ (Kuhn, 2002: 50)

[47] This is how drive-ins were advertised back in 1933: ‘Whole families with infirm elders, can be transported bodily, with minimum effort of unloading, parking, etc.' (Electronics, 1933) and this is what Jim Kopp of the United Drive-in Theatre Owners Association claims still in 2008: ‘They offered family entertainment. People could sit in their cars, they could bring their babies, they could smoke. Drive-ins offered more flexibility than indoor theatres […] Towards the end of their success before the 1980s, drive-ins were left to show B movies and, eventually, X-rated ones' (in Reid, 2008).

a priority the luxury or comfort in the screening rooms as they haven't gone through the golden era of cinema-going and their standards were lower (Haines, 2003; Hanson, 2007).

Taste, and more specifically the difference between art house cinemas and multiplexes, is another distinction that comes out when going through the literature on diverse cinema-going experiences. Biltereyst and Meers (2018) claim that the relationship between cinema audiences and the cultural institution, the cinema, is special and is part of recent scholarly knowledge. Haines (2003) approaches the late seventies as a phase where mainstream entertainment came in focus, revolving around themes of taste, cost and content. Epic adventures of PG rating like *Star Wars* (1977), *Superman* (1978) and *Grease* (1978) increased the general audiences' interest resulting in re-rise of cinema-going. Exhibitors at that point, feeling anxious about the future of cinema and cinema-going due to the gradual decrease of the ticket admissions both in UK and US, went through some alterations that would affect the setting of the moviegoing experience: they turned to twinning and multiplexes to reassure their future[48]. All the above, gradually led to the segmentation of the cinema audience providing different moviegoing experiences depending on movie taste and space preferences.

This dominance of pop culture and mass entertainment of large multiplexes versus the exquisite experience that an art house cinema would provide to the filmgoer form the basis of the academic debate around taste. As mentioned in the cinema-going history section above, repertory or art house cinemas came post-War but gained ground at the

[48] Although, James Edwars in the late thirties opened the first twin movie theatre, there was not much fuss about it. Then, in 1963, Stanley Durwood opened the Parkway Theatres inside a Shopping centre which also was a twin cinema with a single box-office. Comedian Jerry Lewis, worried that families and children audiences didn't get much attention any more, and created cinemas specifically addressing the family audience in cooperation with Network Cinema Corporation. These mini-cinemas, spread all over the US through franchising, began to close down by 1980 mainly due to the decrease of G rated films available on the market (Haines, 2003).

time multiplexes were popular to cover the gap the movie palaces left (Willinsky, 2001)[49]. According to Willinsky (2001), an art house cinema would be 'somewhere in between mainstream cinema and experimental avant-garde, [and] modernist cinema […] different, but not too different' (p.39). These cinemas had a specific audience consisted of movie buffs, older people, film students who were engaged to the experience and the ritual of moviegoing and wanted to follow whatever each repertory cinema did. For instance, they attended special screenings in the equivalent costumes.

To conclude, Hollinshead (2011) provides a summary of the above arguments by suggesting that choosing to go to an art house cinema or conversely, the 'absent audience' (p.392) of such a venue, correlates with age, social class and general socioeconomic factors such as educational deprivation. She poses an interesting point about the local cultural capital and how it can be a motive for 'community regeneration' (p.409). Hollinshead's research inspired this thesis to further explore the agency of the cinema in community development through the help of digital technologies and the utilisation of digital data.

2.3.3. Move towards more social and communal nature

The last theme that can be identified in academic discussion about cinema-going as an experience is its move towards having a more social and communal nature. There is a prevailing importance of the cinema-going activity in the literature as either a private or social activity as we will see below (see for example Kuhn, 2002; Hanson, 2007; Jeacle, 2009; Atkinson, 2014): 'cinema-going was remembered as part of the fabric and routine of social life, thereby questioning the relevance of the movies themselves' (Biltereyst & Meers, 2018: 29)'.

[49] Revival theatres and art house venues succeeded because the print quality was better than the one of multiplexes, and people behind them tried really hard to reprint new copies in CinemaScope (Willinsky, 2001).

Cinema begins as an individual amusement but quickly evolves into being a collective, social, communal experience. Cinema at its starting point consisted of a floor standing wooden box where only one person could view at a time. For example, private screenings were offered and in April 1894 the first kinetoscope parlour was opened to the public (Harding & Lewis, 1993). The language used plays a significant role to the changes that occurred: the word cinema replaced the kinetoscope and indicated the shift from private/ individual/ personal to public/ mass/ communal, along with the projector technology that ended up converting the film viewing experience from individual to mass (Hanson, 2007).

After turning into a public activity, cinema-going was talked about in terms of its social nature, rituals and its contribution to the society or the community as a socialising activity. For example, Corbett (1998) discusses how cinema-going was seen as a social ritual, constructed as a special experience for couples. Furthermore, Jones argues that the nature of moviegoing is to bring cinemagoers closer (2003). In her exploration of how people born in the early 1990s talk about their movie experiences (both in theatre and at home) she answers to how sociability is a crucial part of a moviegoing experience and concludes that cinemagoers 'view sociability as the most meaningful part of their movie experiences' (Jones, 2013: 390). She argues that cinema-going was conceived as a public socialising experience:

> While being here alone in the darkness is magical and mysterious, this place was not created for solitude. It was built for lots of people- more than 1,000 people, actually- to sit in the semidarkness and dream together and alone. That is what crowds of people have been doing here since 1926, stargazing and daydreaming for a couple of hours, while the rest of the world goes about its business (p. 3). The theatre was essentially a public space where patrons could socialize with one another in an opulent atmosphere set apart from their everyday lives.

(Jones, 2003: 234-5)

Haines shares this argument of 'magic' existing in the experience of being part of the same space and feeling the same sentiments with strangers:

> There was something magical about watching a movie on a large screen with a group of complete strangers that were sharing the exact same emotions together. You would never see these people again and yet for two hours you were connected.
>
> (Haines, 2003, p.172)

Research by Jeacle (2009) differentiates movie watching in a movie theatre from domestic film watching and focuses on how the collectivism of the experience is 'the overwhelming difference between home and cinema viewing. Sharing the comic lines or thrilling action sequences with a large audience is a compelling human experience' (Jeacle, 2009: 704).

Kuhn (2002), positions cinema within daily life, routines and rituals. The cinema theatre provided a shelter, a luxurious escape from everyday difficulties and indiscreet looks (Kuhn, 2002). The testimonies of the cinemagoers that Kuhn interviews give us an exact sense of how cinema-going was thought back in that period:

> This was a time when, for the majority of children, growing up was about prohibition and permission. […] For these children "the pictures" was undoubtedly the place to be, the "main attraction" (p.60) and 'Jim Godbold describes the "little lift" he felt as a kind of injection of psychological energy that, far from being an escape, held him and others like him to cope with the rigors and demands of their daily lives.
>
> (Kuhn, 2009: 229)

Kuhn's argument is central for my research in that she explains the reasons why people have enjoyed cinema-going and how they

developed ritualistic behaviours in the period of the movie palaces rise and my thesis extends these to contemporary cinema-going. She asks, ‘Why did they go to the cinema, and what did they get out of it? In today's conventional wisdom, the answer to these questions can be summed up in a single word: escape' (p.215). Kuhn contends that from the 1930s until today in the 21st-century cinema-going shares a universal principle: it gives a sense of immersion, the chance to get out of yourself for a while and invest in these moments. As Kuhn (2002) argues, engagement was high in this generation of filmgoers, who

> ‘often used the words "lovely" and "beautiful" in recollections of feelings experienced when watching a film. […] Words often seem inadequate, too, when those cinemagoers for whom cinema was the locus of general dreams and aspirations offer their reflections and retrospections on the meaning of cinema in their lives’ (p.232).

By the end of the 1930s, the film landscape included film societies, institutes, archives, festivals and official media reviewing.

Cinema-going is an experience that involves social elements being a leisure activity that brings friends and family together, cultural elements being a way to educate the public, architectural elements with old movie palaces being part of cultural heritage and examples of great architecture, and economic elements depending on revenues and ticket prices.

2.3.4. Summary

> The relations that constitute the experience of cinema are not fixed; the character of its heterogeneity cannot be predicted or assumed. The experience of cinema is a product of relations… (Allen, 2011:86)

Allen (2011) emphasises the lasting importance and flexibility of relationships produced during the cinema-going experience. As discussed above, cinema-going expands beyond the screen; it is an activity with social and communal nature, an experience that alters according to distinct socioeconomic factors. This section serves as a conclusion to how Film Studies position cinema-going and a bridge between reviewing the literature to understand and reviewing it to define the contemporary cinema-going experience based on Film Studies scholarship.

There is a shared academic sense of 'beyond the screen' importance both for cinema and for cinema-going that is, of course, the main interest of this chapter and thesis in general. Scholars have highlighted that cinema-going is not limited in movie viewing and is correlated with the space and social factors. It is interesting to explore how this concept of beyond the screen is depicted in today's world. In the era of digital cinema, Bazin's (1967) philosophical question of 'what is cinema' gets expanded to 'what is digital cinema' (Tryon, 2009) and 'where is cinema' (Atkinson, 2014). Cinema in the digital age is an amalgamation of things that are related to digital technology, interaction, YouTube, Vimeo, Netflix, file sharing and piracy, automated practices such as online booking and QR scanning of tickets (Tryon, 2009; Atkinson, 2014; Grundstörm, 2018). It is indeed digital since the computer is the principal tool in filmmaking (Brown, 2013) and this can be confirmed drawing from Henry Jenkins' definition of digital media as anything involving a computer not only as a tool but also as a *'medium of communication, education and entertainment'* (2004: 236). Sarah Atkinson better describes contemporary cinema in her book *Beyond the Screen: Emerging cinema and engaging audiences* as emerging cinema which includes online, non-screen based, touch-screen tablet experiences, transmedia, live exhibition experiences, social films and networked stories across both the mainstream and the para-cinematic' (2014: 2).

Regarding the ‘where’, cinema and the cinematic experiences are not limited to the dark screening room but expand to activities before the actual moviegoing and after it, linking to the *‘extended cinema’* that Atkinson argues about (2014: 15).

The focus of this chapter is cinema-going, which contains many elements: going to the movies isn't just an activity where a person just sits alone in the dark room, and the film is just a film. A number of scholars have positioned cinema-going as a form of experience that explicitly involves more than the act of watching a film. Maggie Valentine (1994), in her examination of cinema architecture writes that ‘The experience of "going to the movies" equaled and often surpassed, what was on screen' (Valentine, 1994: xii). Other scholars have similarly examined how non-filmic aspects of cinema-going are integral to audiences' overall experience. Haines (2003) argues that the moviegoing experience consists of a group of cinema-related elements such as the movie, the technology used for projection, the sound, the cinema architecture and design -which includes the seat design, the corridor decoration, even the cup holders-, the interaction with the staff (customer service), the food and drinks provided in the venue, the cleanliness of the movie theater and the "logistical" actions that surround moviegoing such as booking a ticket. Kuhn (2002) introduces the rituals of cinema-going such as buying drinks, popcorn and snacks as well as the process of searching which movies are projected on the day and ticket buying[50]. Finally, Biltereyst and Meers (2018) make a respectable contribution to update how cinema audiences have been looked at in the past but, still, is outdated –their work does not cover in detail contemporary cinema-

[50] Moviegoing rituals are one of the elements this thesis is focusing on and will be discussed in detail in chapter 4.

going experiences in contrast with this chapter which includes the involvement of digital data[51].

Thus far, this section has argued that more attention is given to the audiences rather than the cinema-going experience itself as shaped in the 21st century. Cinema is going through a very deep metamorphosis both as a medium and as an activity (Tryon, 2009). Although cinemas are increasingly using digital technologies within the cinema-going experience and are embracing the collection of audience data, Film Studies scholarship has seen little interrogation of such changes. The distinct experiences in film history need to give way to a framework that allows for more personalised experiences that potentially call on an array of digital spaces, technologies and platforms. My project will investigate this in more detail and map out how this is functioning. My research aims to add the views, feelings and desires of the modern filmgoer to the experience described above. Its scope is not only limited to the experience itself, but also to the activities around it, which increasingly include digital technologies and data. As a result, this experience surpasses the physical space of the venue and is expanded online; forming a holistic journey with a before, during and after. The next section seeks to look into the emergence of work relating to digital technologies and cultural activities in order to explore the concept of digital identity that can be constructed through their integration.

[51] The initial grounding of their paper is Barbara Klinger's article, dated back in 1997, to argue that during the last two decades there has been an effort to minimize the gap– however, 1997 is more than 20 years ago and cannot be used as a contemporary evidence of the 'shift within the field towards examining everyday film audiences' (2018: 22).

2.4 Defining and understanding digital identity

2.4.1. An overview of ‘digital identity’ within HCI, Psychology and New Media scholarship

Before I start discussing key debates around digital identity, there is a need to refer to the importance of how an individual forms their identity within a social context. Scholars of digital identity continue to ground their arguments on identity construction on sociologist Erving Goffman’s early work (inter alia Miller, 1995; Hogan, 2010; Koosel, 2011; 2013; Turkle, 2011; boyd, 2014; Elwell, 2014; Bozkurt & Tu, 2016). Goffman’s book *The Presentation of Self in Everyday Life* (1959) has become one of the most important examinations of selfhood and identity construction. According to Goffman (1959), the presentation of the self depends on interactions with others. An individual modulates how they present themselves according to the setting and the audience. Throughout Goffman's work, one can distinguish a series of frameworks and terms he borrowed from the theatrical world which applies to face-to-face interaction:

> The perspective employed in this report is that of the theatrical performance; the principles derived are dramaturgical ones. I shall consider the way in which the individual in ordinary work situations presents himself and his activity to others, the ways in which he guides and controls the impression they form of him, and the kinds of things he may and may not do while sustaining his performance before them. (Goffman, 1959: Preface)

During physical interaction, people present themselves depending on which kind of identity they want to adopt at the time. In order to manage that, a ‘dramaturgical’ (p.8) process is followed: they take some ‘backstage’ (p.69) preparation time, in order to come up with an effective ‘front’ (p.14) that will make them acceptable and will prevent them from

being embarrassed (Goffman, 1959). As Hugh Miller argues, ‘Goffman sees embarrassment as an important indicator of where people fail to present an acceptable self, and an important motivator' (Miller, 1995:1). Goffman analyses in depth people's daily interactions focusing on the relationship between ‘performance' (1959: 8) and life. His theory that people negotiate and substantiate their identities while interacting with others can be extended to the etiquette that is developing in the 21st century during online social interaction. As a result, it serves as a very important foundation for researching digital identity because this thesis is grounded on the hypothesis that online users –in this case, cinemagoers - adopt distinct behaviours depending on the activity they engage within digital environments. It would be interesting to explore in detail if there are discrepancies between their online behaviour -if they perform differently online- and their real life.

Similarly to Goffman, psychologist Salvador Minuchin (1974) also claimed that identity shaping is related to an individual's interactions with others. He argues that ‘the human experience of identity has two elements: a sense of belonging and a sense of being separate' (1974: 47). He uses the example of an individual's family to develop his argument. Minuchin positions family in the centre of a person's selfhood development, to discuss the matrix of identity and how social factors affect it. Being born in a family makes you who you are and gives you a place to belong to; equally, getting married and forming your own family separates you from the old one and gives you a sense of separating from the old identity (1974). As with Goffman's work, Minuchin's theories can be applied to questions around how online users either belong or are separate from online communities and groups. Users become members of an ecosystem equivalent to a family, through belonging to online communities and Social Networking Systems (SNSs). Correspondingly, cinemagoers are part of such an ecosystem, the audience community as Mark Kermode tweeted: ‘The cinema is a sacred space, and audience

community is at its heart' (Plymouth Arts Cinema, 2017[52]) which exists physically and digitally. Therefore, it would be useful to look into how they construct cinemagoers' identities depending on their sense of belonging or feeling separate.

In a fast-paced world where anything physical rapidly acquires its digital counterpart, and after briefly examining the two main identity construction theories this thesis adopts, it is useful to turn the discussion from physical identity to identity which is developed in today's online spaces: digital identity. Digital identity is a mixed, abstract term that can be encountered as and linked with digital signature, digital trace, digital footprint, shared digital data, digital self- representation, to name a few, depending on the context and the field that refers to it. It is in the interest of this section to primarily identify how digital identity emerged chronologically and which disciplines and academics were interested in untangling its meaning. According to Fehér (2015), the scholarly discussion around it is multidisciplinary; hence, this chapter draws from the fields of HCI, Psychology, New Media to frame its understanding of this complex term.

In the 1980s, computers represented the private relationship that each user developed with them, they became part of people's lives and identities, and even prevented them from feeling lonely during interactions and activities between them (Turkle, 1984: 183-218). However, in the 1990s, the appearance of the World Wide Web enabled users to develop relationships with each other, changing the way people create and express their identities (Turkle, 1995). This led to the emergence of 'digital identity' as a concept and an object of research in various academic disciplines such as HCI, cultural studies, social sciences, computer science, business and marketing. As Goffman (1959) and Minuchin (1974) position identity as being defined through

[52] Film critic Mark Kermode opened his talk in UK Cinema Association conference 2017 with this phrase.

relationships, within digital spaces, digital identity is tied to the formation of online relationships.

From the mid to late 1990s, academics began to debate the development of the self that is created through electronic communication and the variety of identities that an individual might adopt. They also focused on the therapeutic effects that forms such as online gaming may have (eg. Turkle, 1995), the risks behind online existence and interaction (eg. Miller, 1995), and issues around online personal security (inter alia Eaton, 1999). The anonymity that the era of Web 1.0 provided, where each user could be represented by various anonymous personas that were separated from their offline identity (Elwell, 2014) led to discussions primarily focused around online security.

Jonathan Eaton (1999) expressed his concern on how to protect one's personal identity online within such an environment. During this era, the UK government changed its priority from data protection to the testing and establishment of digital signatures during electronic transactions, for which proof of identity became necessary. Simultaneously, each user should memorise and use multiple PINs, usernames and passwords in order to have access to a plethora of online knowledge, products and services rather than have a unique digital identity valid throughout all online activities (Eaton, 1999). This resulted in the ‘password problem’, as Eaton (1999) characterises it, where some information was transferred unencrypted and consequently, entailed the risk of impersonation and hacking. It can, therefore, be assumed from the points made above that the initial debates around digital identity focused mainly around privacy and security. The above provide the basis of digital identity discussion and concerns that developed in the 21st century parallel to the technological evolution. The matching of discussions with the equivalent disciplines presented above also coincides with Fehér’s categorisation (2015). She divides academic debate around digital identity into three groups depending on the discipline and their specific

focus: Social Sciences, Computer Science, and Business.

The first group is Social Sciences, New Media and Psychology which are predominantly interested in online identity construction and self-representation. Scholars from those fields are interested in investigating digital identity and the digital self-using an interdisciplinary approach, giving emphasis on how each person constructs their identity online, how they represent themselves and what is their online social behaviour (for example Turkle, 1995; 2006; 2011; Boyd, 2002; 2014; Boyd et al., 2004; Davies, 2007; Ito, 2008; Zhao, 2008; Mehdizadeh, 2010; Koosel 2012; 2013; Bullingham & Vesconcelos, 2013; Fehér, 2013; 2015; Elwell, 2014).

The second group, Computer Science and IT position digital identity as being equal to every individual's physical one (in terms of personal data, unique identity and data security). Academics mainly focus on issues such as, but not limited to, identity verification and management, password protection methods, protocols and cybersecurity. In IT, digital identity is differentiated depending on which phase it goes through; creation of identity means that an individual creates their own online identity and it represents only themselves and their unique personal traits (for example biometric data, name, signature etc). This is distinguished from the Provision of identity where the user manages an identity assigned to them for a specific amount of time –whenever the user doesn't need it anymore they can destroy this identity (see for example Eaton, 1999; Camp, 2004; Windley, 2005; Ranchal et al., 2010; Rossnagel et al., 2014; Whitty et al., 2015; Dunphy & Petitcolas, 2018).

The third group, Business, Marketing and Public Relations discuss digital identity with a focus on online consumer behaviour. Scholarly knowledge mostly concentrates on which kind of identity an individual builds online as a consumer of services and products through data analysis, which kind of online engagement they have with brands or social media, how

they construct their online personal brand and which mobile identity patterns users develop (see among others Dholakia, 2004; Mennecke & Peters, 2013; Hackley et al., 2018). Although emphasis is given to the discussion of the first group, this chapter considers and combines all three approaches before arriving to any conclusions.

2.4.2. Defining 'digital identity'

The following section concentrates on the definition of digital identity - something that has raised a vivid debate among academic circles - by separating and grouping scholarly discussions in subcategories.

Digital Identity construction over multiple platforms

The current plethora of media and platforms in the second half of the 2010s in addition to the digital trace users leave behind during interactions with these platforms is rapidly increasing daily. These traces might be cookies on BBC's iPlayer, Google searches, video views, website visits and clicks, social media analytics and more. More specifically, these platforms might be anything digital an individual uses on any mobile or desktop operating system, any search engine on their computer, SNSs and so on.

Marshall McLuhan's (1964) Media Ecology Theory (MET) forms a foundation for scholars who argue that a user can build their identity over multiple platforms and media. According to this theory, society and its relation to technology and media consumption is an influential part of identity construction. The more media and technology progresses, the more society is influenced by it and the more relationships between society and technology are developed (Elwell, 2014; Bozkurt and Tu, 2016). Mizuko Ito talks about a procedure of social participation through different media channels, digital platforms and SNSs where people exchange ideas and notions of identity, taste and style in order to understand and display who they are in relation to their peers and uses

the term ‘hypersociality’ (p.7) to describe it (Ito, 2008). More specifically, she maintains that ‘Hypersociality is […] pursued among geographically-local peer groups, among dispersed populations mediated by the Internet, and through organised gatherings such as conventions and tournaments’ (2008: 8). Therefore, an individual is constructing their digital identity by making use of all the available multimedia platforms that exist, regardless of location, as long as they have access to the Internet.

Digital identity constructs a narrative of self across those platforms

The above lead to a construction of self which is narrated across the multiple platforms mentioned; in other words, the transmediated self (Elwell, 2014). A theme that emerges from the academic debate is how the expansion and augmentation of transmedia interactions has raised the construction of different selves, sometimes resulting in confusion of identity (Elwell, 2014; Fehér, 2015). Sherry Turkle (1995; 2006) maintains that a person could try out several and -eventually- hold multiple identities online using digital avatars that may change gender, age, race, and class (Turkle, 2006). This utilisation of multiple identities ‘makes possible the creation of an identity so fluid and multiple that it strains the limits of the notion one can be many’ (Turkle, 1995: 12).

Koosel (2011), inspired by McLuhan (1964), approaches the creation of multiple identities as a consequence of an ‘information overload and super stimulation of various kinds’ (p.2) that makes an individual create an extension of self in another medium or another platform/ social network. These multiple identities and extensions of the self, lead to ‘the user being the text’ as Koosel puts it (p.4), meaning that users adopt a narrative that represents themselves. Users have the chance to express themselves either at an individual or at a community level via several media forms such as photography, video, sound and the written word. This freedom and plurality of ways of expression are manifested strongly

through the content that they are producing on social media platforms. This content being themselves, ends up in an individual having multiple and fragmented digital identities online. As Koosel argues:

> In the case of digital identity narratives, it is the media consumer who has become the content of social media platforms. The technological and cultural phenomenon of digital identities is a result of contextual information shift, from the multi-sensory physical world to a multimodal virtual environment. Digital identity defined simply as an assumed online identity can be seen as the manipulation of a kaleidoscope of selves tailored to fit into different environments and roles online (Koosel, 2011:4).

To elaborate on this, with more and more technological advancements, it is the individual themselves that constitute a narrative for other users. This manifests through the development of new features of social media platforms. Different platforms provide users with several tools and ways to construct multiple and distinct versions of their digital identity. Social media platforms are set up for users to treat them differently and allow them to promote a diverse self- identity by altering their self-narrative. LinkedIn, which is set up for an individual's professional identity, Instagram is set up as more artistic because it is based on uploading visual content –photos and videos, Twitter gives you the chance to write only 140 characters so that shapes what it can be used for and so on. Taking popularly used features of two platforms, Instagram's 'InstaStories' (www.instagram.com) and Snapchat's 'My Story' (www.snapchat.com), one can observe that they both provide to the owner of the account (and therefore the identity) the opportunity to take videos of themselves talking, dancing, singing, expressing a narrative, while all users that follow him/her have access to it. At the same time, each user can have multiple accounts with different narratives (for instance one personal and private for friends only describing one's life and one public travel blog/ Instagram account).

The above can be linked to the idea of protocols used within online spaces which is a focal point of Lisa Gitelman's *Always Already New* (2006). Gitelman argues that different media come with the equivalent protocols which 'include a vast clutter of normative rules and default conditions […]and express a huge variety of social, economic, and material relationships' (2016: 7). To conclude, the structure of each social network and the protocols behind its setup, are designed to encourage the user to construct and express multiple identities in distinctive ways.

SNSs are the centre of identity construction

SNSs were one of the core Web developments of the 2000s and managed to promptly integrate into individuals' everyday lives either serving communication and interaction purposes or as a method for social learning. When talking about social networks I refer to 'web-based services that allow individuals to construct a public or semi-public profile within a bounded system; articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system' (boyd & Ellison, 2007, p. 211). I also use Selwyn's (2009) definition that describe SNSs as 'personal and personalisable' (p.157) online spaces where the users maintain a profile with personal information, interests, photographs and so on to represent themselves and are able to start conversations and share content. Scholars have recognised the importance of SNSs by talking predominantly about social media and self-representation (Harrison & Thomas, 2009).

Following the Media Ecology Theory, SNSs form part of a broader digital environment, consisting of ecosystems with all members depending on and being interrelated to each other. Within these ecosystems, 'individuals become self-aware, and they are simultaneously becoming aware of others. Conscious awareness of the self and others leads individuals to identity formation' (Bozkurt & Tu, 2016: 156). Digital identity

is a ‘social identity’ (p.157); the representation of one’s self, empowered and shaped through the online profiles one creates on SNSs (Bozkurt & Tu, 2016).

Aras Bozkurt and Chih Hsiung Tu (2016) dive deeper into how individuals manage their digital identity in SNSs by introducing the idea of an ‘idealised self' (p. 155). Individuals choose to belong to these networks by representing themselves in the way they want through a personal profile, which is usually accompanied by some personal information, pictures and an online behaviour pattern (Maranto & Barton, 2010; Bozkurt & Tu, 2016). As Bozkurt and Tu argue, developing a digital identity is the way to enter and exist in online environments; social networks encourage and facilitate the construction of various digital identities (Bozkurt & Tu, 2016: 160). Therefore, Bozkurt and Tu (2016) suggest that this digital version of identity formation is central to how users validate their identity and put themselves into different frames during their interaction within SNSs.

Social networks provide an opportunity for intimacy and immediacy, giving the chance for their members to use various media to communicate and interact (Bozkurt & Tu, 2016). Through these, they express feelings and emotions (for example the reactions button in Facebook). Bozkurt and Tu argue that digital identity formation is not limited to the use of avatars or nicknames but enables an individual to reflect on their self ‘in a conscious or unconscious way’ (Bozkurt & Tu, 2016: 162). Therefore, technological advances (e.g., the reactions buttons, likes and comments on most social media), allow for the emotional presence and expression of the user –which could be attributed as part of their digital identity.

The importance of social networks in the process of building a digital identity is evident; their existence and evolution also contributes to users having more awareness over the data they share. Users have control

over what they choose to (not) share on these social networks. Nevertheless, there is also data that an individual can't control. The risks and challenges that occur from multiple online identities in various digital platforms constitute digital identity management, a subject vastly considered by the literature presented below.

Digital Identity Management

We share our data daily on multiple occasions such as online communications, health records, booking tickets, online shopping and so on. This makes it hard to manage. During all our activities, there is a risk of self-overexposure with several hazards within online environments such as hacking, fraud, impersonation just to mention a few. Individuals' control over their digital identity is challenged by the openness of certain platforms and the risks that emerge from how others can perceive and/or use the signs of their digital identity (Mortier et al., 2014; Crabtree & Mortier, 2015). There are questions about privacy and protection of identity that are raised in scholarship around digital identity and it is evident that the literature is interested not only in risks but also the solutions to tackle them. The above matters complement the academic debate around digital identity formation and belong to a particular discussion known as digital identity management (Maler & Reed, 2008; Chaudhry et al., 2015; Fehér, 2015; Laurent & Samia, 2015; Price et al., 2015).

Chaudhry et al. (2015) argue that there are lots of potential risks, either economic or personal, associated with revealing fragments of oneself in online spaces. These risks include 'privacy infringement, personal and professional embarrassment, restricted access to labour markets, restricted access to best value pricing, and many others' (Chaudhry et al., 2015). Due to these concerns around management, risk and privacy, digital identity strategy is needed.

Fehér (2015) highlights the need for strategy development in order to

preserve and protect the transparency and authenticity of the self, as well as the amount of control individuals will want and will be able to take over their digital identity in the future. This seems to be quite an important matter to investigate further, considering the afore-mentioned overexposure of online users in social networks and the confusion between the construction of different identities. According to Fehér (2015) 'the real self receives an extra, digitalized transparent layer in addition to its real life, therefore, the self cannot avoid making decisions with reference to it' (p.133). An example of recent research around digital identity, which highlights the need for transparency and strategy is the qualitative work Fehér (2015) has been doing. It involves interviews of graduate students and business decision makers in order to map the digital identity strategy phenomenon in relation to personal goals, decisions, and behaviours in different ages and roles –capturing this way both digital natives and digital immigrants.

Computer Science and HCI scholars who raise concerns about digital identity risks and harm, provide another (more practical) solution to the issue of overexposure and multiple digital identities. They specify the need for technological tools that will contribute to creating more control over these identities and digital data. For example, Chaudhry et al. (2015) created the Databox, a user-centric tool that provides more legibility of data sharing and capturing practices, allowing for more user agency with regards to data management and more negotiability in exploring one's aspects of social data (see also Mortier et al. 2014; Crabtree & Mortier, 2015; Sailaja; 2017). They explain how:

> The Databox simply provides its user with means to understand, control and negotiate access by others to their data across a range of sites, including such currently dominant players […] (and) opens up a range of market and social approaches to how we conceive of, manage, cross-correlate and exploit ''our'' data to improve ''our'' lives' (Chaudhry et al., 2015: 2).

This might be a more technical solution but it provides an insight on how this discipline approaches the matter and which part of it is important to scholars. Digital identity management is perceived as an opportunity to provide solutions that will help manage data efficiently, reducing and exposing potential risks.

The discussion around the definition and exploration of digital identity provides multiple challenges that need to be addressed from all the disciplines mentioned previously. Identity narrative, extension theory and the way to address these strategically might be vital to the deep understanding of the cultural, and social significance of digital identity in contemporary culture (Koosel, 2015). As Atkinson (2014) highlights, this is the modern lifestyle: 'We are always on, we are always connected[53]' (p. 125). The digital data we continually share as members of a broader digital ecosystem and forms part of the construction of multiple digital identities, make it impossible to interpret digital identity as a single thing with a universal definition that applies to all fields and situations. Nevertheless, based on scholarly knowledge, digital identity consists of traces of activities performed within digital spaces through multiple digital platforms, and leads to the construction of a self-narrated identity across them. A big part of these platforms are SNSs, predominantly social media. With the opportunities of identity construction, risks are inevitable. In order to avoid them, individuals are required to manage and control their digital identities. The meaning and definition of digital identity needs to be contextualised in each environment and situation. Further discussion will be provided below to help investigate the role of digital data and digital identity in cinema-going, which to date, has received little attention from academics.

[53] Quote from the researcher's interviewee.

2.5. The role of digital data in moviegoing

Moving on to this section, it is necessary to look into how the experience of going to the cinema has been discussed in terms of the integration of the 'digital' and data in it. One of the pertinent arguments of the previous section is that due to ubiquitous computing and increased transmediality, internet users are constructing not only one but multiple identities online. Similarly, this project explores along with cinema audiences, how digital data can contribute to the enhancement of the moviegoing experience which could result in cinemagoers constructing digital identities. To do so, it draws from the academic discipline that mostly explores user experience and performance 'in the context of any system, whether computer, mechanical or manual' (Dix et al., 2004: 3), HCI. This section examines how the cinema-going experience has been examined in the field of HCI and more specifically, how scholarly knowledge discusses it within the context of data sharing.

To begin with, scholars within HCI and Computer Science have demonstrated a strong interest in researching data in terms of personalisation, in particular, personalised experiences. Early academic work discusses the general trend towards personalisation (Searby, 2003; Benyon and Mival, 2008) and web personalisation (Keenoy and Levene, 2005), which focuses on providing personalised experiences within different industries such as –but not limited to- gaming (e.g., Evans et al., 2014) and traveling (see for example Kefalidou et al., 2016). The literature suggests that the most extensively researched visitor experience in relation to personalisation, is cultural tourism and heritage (inter alia Koleva et al. 2003; Kefalidou et al, 2012; Kefalidou et al., 2015; Buchalis & Amaranggana, 2015; Fosh et al. 2015a; Fosh et al. 2015b; Egglestone- Rennick et al., 2016; Hyungsoo & Dieck, 2017; Ameshari et al., 2018; Not & Petrelli, 2018). This is evident from Fosh (2016), who designed personalised cultural experiences with a principal focus on

gifting experiences, based on the framework of interactive trajectories (Benford et al., 2009; Benford & Giannachi, 2011).

From an industry perspective, Netflix's success can partly be attributed to the accuracy of the personalisation model it uses: recommendations are mainly based on location and taste (Hafford, 2017; Burgess, 2018). The streaming service has developed 1300 'taste communities' and each Netflix subscriber can belong to more than one based on their viewing behaviours and taste (Hafford, 2017). This individuality of personalisation could also be applied to the cinema-going experience and can be connected to ideas of digital identity construction since digital data has been added to the experience of going to the cinema.

Cinema-related subjects that dominate HCI literature are technological interventions in movie reviewing (Topal & Ozsoyoglu, 2016), user modelling (Tkalcic and Ferwenda, 2018), and recommendation systems (Tintarev & Masthoff, 2007; Ruhrländer et al., 2018). In addition to Film scholars investigating this phenomenon, there is growing research exploring interactive cinema by HCI academics or artists (some of which are Dallet et al., 2006; Häkilla et al, 2014a; Häkilla et al, 2014b; Oliver, 2016; Ablart et al., 2017; Rumcharn, 2018). For example, work on sensors was conducted by Ablart et al. (2017), who implemented mid-air haptic technologies in the viewing experience, using a 3D printed box that allows tactile stimulus depending on the movie flow and carried on with capturing participants' reactions and taste with surveys on the short movies they watched, biosensors to measure their skin reactions, and visual analysis for each movie each participant watched (Ablart et al., 2017). Film technology is one of the subjects that interests the field-including innovations in film displays (e.g. 3D screens) (Mendiburu, 2012; Yang, 2016) and film processing (e.g. visual special effects) (Bottomore, 2012). Moreover, Arrowsmith et al (2014a and b), used quantitative methods to initially compare four studies on how historic cinema data are visualised and then investigated and visualised the

international flow of film screenings.

It is evident from the above that the cinema-going experience has not been holistically researched as a user journey/ trajectory and that research in the field is still limited to predominantly movie viewing interventions. A holistic approach would contribute to establish an understanding of cinema audiences' behaviour within the cinematic experience, from start to finish. The work in HCI is methodologically limited, as it predominantly uses quantitative methods such as surveys or experimental methods such as biosensing to understand cinema audiences, and as such, fails to consider the whole experience.

More recently, the literature of Film Studies has brought the ideas of digital identity and cinema-going together. Within Screen Studies, issues around construction of identity tend to be predominantly associated with fan studies (for example (Jenkins, 1992; 2006a; 2006b; Hills, 2002). However, Verhoeven (2012) opened the discussion around data in cinema and cinema-going claiming that there is a need for collaborative, multidisciplinary, and participatory work to move away from the set frame used to research film and cinema audiences. In 2018, Grundstörm, appeared to publish the first study on how cinema audiences interact with digital platforms, specifically social media; this focused on theorising movie viewing as a practice following the 'practice theory' (e.g. tagging and commenting on Facebook, acquiring information, going offline).

In 2014, Sarah Atkinson (2014) in her book *Beyond the Screen: Emerging Cinema and Engaging Audiences* underlines the fact that cinema-going is now more than the film, and talks about how this opens up spaces for digital identity construction and management. She highlights that there is an 'after film viewing' experience which implies that people's experiences related to cinema are not limited to the film itself: 'audiences extend their experience of a film and its narrative post-viewing by engaging in various elements of the "heterotopias"; by

purchasing merchandise, attending theme park attractions and the like, but most significantly by engaging in conversations centred on the film experience' (2014: 101). She calls this 'socially layered' (2014: 101) emerging cinema as different levels of sociality are produced throughout it. Within this context, Atkinson identifies that there is a wider journey of the cinemagoer which will be referred to as 'cinema-going journey' throughout this thesis. However, she limits the investigation of that journey by only referring to ideas of transmedia storytelling. Her argument leaves space for further exploration, therefore, in the following chapters of this thesis, I will emphasise on the idea that the routines of cinema-going extend past the moment of watching the film and that the cinema-going journey can be part of the cinemagoer's digital identity construction.

Another useful point that Atkinson makes is that digital technologies form a core part of the online activities mentioned above and through these, cinema audiences are able to illustrate themselves using several digital platforms related to film viewing. Eventually, these platforms and technologies allow more space for the post-film conversation among audiences, which eventually contributes to the daily, gradual construction of a cinemagoers' digital identity. This was made particularly accessible when film viewers were able to access films through mobile platforms (such as tablets and mobile phones) which has eventually contributed to the integration of film in daily life (Atkinson, 2014, p.61-95). Easy access and new media consumption patterns have enabled cinema audiences to illustrate themselves digitally through blogs or forums decoding a movie, reviewing it, talking about their experience with fellow people of a network but also logging whether they like something or sharing recommendations on systems like Netflix and Facebook. Furthermore, there are digital traces left from online activities such as buying a ticket, checking reviews, searching for movie information. The data accumulated from the above activities, interactions and engagement with

the film, its paratexts and the community around it, gradually build a digital identity of each individual filmgoer. This links back to the necessity of digital identity management as it is something that is partly under our control and partly outside of it as we cannot monitor all the digital footprints we leave behind.

This digital data is valuable to the audiences but also to other stakeholders, such as the producers and distributors of content as well as the cinema exhibitors and they can all make different use of it. Atkinson (2014) mainly gave attention to the second and third category of stakeholders: producers and distributors of content). One common practice stakeholders follow is social media data scraping. To do that, they adopt storytelling practices to create more personalised experiences with an expanded narrative. However, this is achieved usually without securing audiences' privacy and results in breaching their personal data (Atkinson, 2014). This practice benefits them significantly as they improve the relationship they have with their audiences and therefore the reputation and commercial value of their products and brand. An example of this is *Take this Lollipop* (2011) as presented by Atkinson (p. 115) where the user's data from Facebook are extracted and the 'potential killer[54]' of the movie comes towards their house. Another example is how the director of the movie *The Green Inferno,* Eli Roth used data mining and targeted marketing to discover where he should ideally promote his unique cinematic experience to get the most optimal response (Crucchiola, 2015). It is evident that existing data and databases linked to cinema and the cinema-going experience are used to facilitate movie production and distribution, and not to enhance the experience of the audience, which is something this project seeks to achieve.

[54] There is a video showing the potential killer to the viewers.

Apart from academics, the cinema industry has also given attention to the conversation around cinema and cinema-going data. During UK Cinema Association Conference 2017, @Patrick Vons Cinema Guru tweeted: 'Cinema industry is on the cusp of taking a giant leap forward in use of data says @MovioHQ' showing that the industry validates that the future of cinema-going is linked to data. Although there is not much academic work specifically related to cinema-going and data, there is available equivalent industry research. Again, the method used is surveys to look into the data and interpret the numbers rather than looking deeper into audiences.

For instance, an example of market research, which took place in 2015 by YouGov, is a quantitative study which questioned 5,000 people above 16 years old throughout the UK about cost-related issues around moviegoing (Farmer, 2015) indicating that decrease in cinema attendance is due to the high price of it as a whole experience, including the food, drinks and parking. Furthermore, Stephen Follows, writer and producer, maintains a blog where he uploads reports and articles on big data and statistical analysis related to cinema and moviegoing (Follows, 2019).

Finally, there is an emergence of new models of film consumption such as the intervention of blockchain technology in the film sector, with many start-ups -working alongside creators to help them decrease costs and increase profits (Breaker, 2018). These are only a few examples of how digital data can be important to understand, optimise and question modern cinema. In contrast with the above work, this thesis uses data to add value to the user's cinema-going experience, to the exhibitor's consideration of their audiences' needs and to the academic community's understanding of modern cinema audiences and cinematic experiences.

Data within social media spaces can be used as a cinematic storytelling

environment with cinema audiences engaging with multiple sources (Atkinson, 2014). The idea of a transmedia digital identity around cinema-going has a wider relevance and the definition of cinema-related digital data is not just about spaces where storytelling happens or about the moment of merely watching the film. This project extends Atkinson's arguments by looking into all the instances of a cinemagoer's journey where traces exist even if they are not expanded through narrative. These traces are not limited to the physical space of the movie theatre. Instead they are extended to online spaces through the use of digital platforms and mobile devices.

2.6 Conclusion

Cinema-going has been mostly explored historically and in terms of cultural memory, architecture and design. The social and communal nature of cinema-going and the idea that cinema-going is more than the film recurs throughout cinema history, and throughout scholarship on cinema. This has been understood as leading to distinct experiences at a social group level (age, class, taste) from its historical beginning until today's mobile and digital era. This chapter evidenced the way scholars have talked about the past realities of cinemagoers such as the stimuli that require attention, how cinema-going was integrated in everyday life, *'what meanings and/or pleasures are derived from use, and how people engage'* with cinema as consumers/ users (Webster, 2007:1).

Within a contemporary cinema-going landscape where data is omnipresent, there is a need to re-address what the realities of modern cinemagoers are. To do so, it is necessary to understand what the implications behind constant online use of digital platforms within digital spaces. This abundance of data is linked to the term 'digital identity' which repeatedly appears in the literature of multiple disciplines. In order to define digital identity, we need to understand that it is constructed over multiple digital platforms leading to a construction of a narrated self

across them. Additionally, this increases the necessity to control and manage our digital identities because of the growing exposure of our multiple identities in several digital channels and platforms. As already discussed, when digital data is involved, there is also a need to manage data sharing and capturing and taking into consideration issues of privacy and transparency (Price et al., 2015; Koene et al., 2016). There is an increasing amount of work implemented towards putting the individual in control of their data: 'in response to growing awareness about how our data is processed, many start-ups have formed in recent years aiming to put users explicitly in control over their personal data or metadata' (Chaudhry et al., 2015: 3). The film industry, and especially exhibitors, have not reached yet the point of respectfully, responsibly and transparently managing the data captured from their audiences. However, rapid evolution in policies concerning privacy and personal data sharing requires all industries to amend their internal policy and digital strategy accordingly, aiming to protect their customers' personal data and promote transparency and awareness. Therefore, the film industry will also have to adopt similar practices in order to comply with laws and policies such as GDPR[55].

In this context of cinematic activity and more specifically cinema-going, 'digital identity' is a cinemagoer's strategy to participate in assembling their trajectory and consists of the digital footprint they leave behind from all the online activities they engage with before going to the cinema, during their existence in the venue and after they exit the screening room. Scholarly knowledge concentrates on the role of the physical space in cinema-going but this thesis highlights how cinema-going not only happens away from the cinema but it is now increasingly virtual and intangible, expanding on digital spaces where cinemagoers form various identities. There is no timeframe that limits when one's moviegoing identity is constructed, nor limits regarding the number of identities one

[55] The EU General Data Protection Regulation https://eugdpr.org.

has. It is built by what Elwell (2014) described as an individual's 'transmediated self' who acts 'according to the aesthetics of transmedia production' (p. 233, and manifests through a self-narrative via multiple platforms. It can be mapped and potentially grouped because it is made of a person's cinema-going history which includes multiple data linked to taste and preference, use of devices, use of platforms, date and time, social interaction, and of course online behaviour. It is identified that all the above have one aim: having a 'nice experience'. The meaning and content of this experience are analysed in the next chapters in more detail. Because of the profusion of online content, media and platforms related to cinema-going digital identity in this sector needs to be empirically explored and this is what this thesis will do in the following chapters.

This chapter contributed to, and extended the 'empirically-oriented historical turn within film studies' (Biltereyst & Meers, 2018: 26) called 'new cinema history'. It primarily examined how cinema-going has been discussed and framed within the fields of film studies and digital media studies. It provided a brief chronological narration of moviegoing from its beginning to the late 2010s taking into consideration the parameters created by the academic debate and combined various sources in order to provide a deep understanding of what is meant with 'cinema-going'. Cinema-going beyond the film is in the work of film history scholars but it is also part of ideas around digital identity: experiences and identity are spread over multiple digital and physical spaces/platforms. Digital identity is linked to how our interactions with the world are increasingly tracked and more personalised. Drawing from Atkinson (2014) who is one of the academics that mentions the construction of digital identity through alternative ways of cinema/ cinema-going, I categorised the stakeholders who are interested in digital data and how the industry is making use of the data for their own purposes. Picking up on the definitional model of this chapter and questions around control and value

of digital identity and digital data, I used it in the specific context of cinema-going.

Cinema-going is not immune from the complications of digital culture and identity: digital cinema-going brings together the well-established models of cinema-going as encompassing space, other people, rituals and taste in an increasingly personalised way. The distinct experiences in film history and the methodologically limited work of HCI in the field of cinema need to give way to a framework that allows for more personalised experiences that potentially call on an array of digital spaces, technologies and platforms. New questions to be answered revolve around the user journey that a cinemagoer follows before, during and after their actual existence in the cinema –in other words mapping the current cinema-going experience before, in the movie theatre, and after going away-; where does this data go and how it could be used in a creative way so as to provide better engagement; and lastly what is the amount of trust that people have in sharing their personal data either with the venues or with the rest of film going public. A turn towards digital technologies as a way of 'enhancing' cinema-going has yet to be fully understood by scholars and will be explored in the following chapters by investigating how digital data function within more mundane routines of cinema-going following an approach of thinking digital data in the 'everydayness' of cinema-going. The next chapter provides a detailed account of how the above can be achieved, bringing design methods from HCI in a subject that primarily concerned Film Studies until today.

Chapter 3

Methodology

3.1 Overview

In the previous chapters, the reader was introduced to the broader research questions and aims of this PhD, the variety and limits of the cinema-going experience and digital identity definitions, as well as to how the notion of digital identity can be connected to cinema-going. The aim of this chapter is to describe the methodological approach followed, the studies conducted and the logic behind their development.

This project uses some established methods in HCI such as participatory design, storyboarding with personas, mapping the user journey, diaries and prototyping. It combines them with qualitative methods such as focus groups which are widely used in Film Studies in order to explore a problem that would otherwise fit under and expand the Film Studies literature. It is common to use HCI methods in order to explore research problems in other disciplines. However, there is only little HCI work done in the field of Film Studies and this is where this piece of research sits in as it examines an area that has not been explored in this way before. Simultaneously, Film Studies traditionally uses qualitative methods like focus groups and interviews, or quantitative methods such as surveys to investigate what cinema audiences do, think and like. Both methodological approaches, despite having great value also have limitations.

This multidisciplinary project uses a combination of qualitative and design methods to understand the social perspective of the activity of cinema-going, how it connects to a person's digital identity, and how the contemporary cinema-going experience can be enhanced by the use of digital platforms and data. This is where the novelty lies. These exploratory and ontological research questions are capturing participants' realities and map a contemporary leisure landscape. Addressing these questions in a society that is rapidly digitised in all sectors is important. Citizens are required to maintain digital presence

on a daily basis, which automatically leads to the construction of digital identities.

Design methods from HCI offer a new and insightful way of understanding how audiences value their moviegoing experience in the digital age. Bringing together methods from HCI and Film Studies is valuable as it results in empowering the users. They become active agents during the decision-making and design processes with a greater sense of creativity over the generation of knowledge. This leads users to meet their exact needs and understand how important their role is when creating new experiences. Following this kind of mixed methods approach provides a natural evolution to cinemagoers' ideas and level of engagement throughout the studies, and can be expanded to future empirical audience research. This chapter focuses on what these methods are, how they are implemented step by step and how they enabled cinema audiences to curate their own moviegoing experience.

To meet this chapter's aims, I split it into three parts. In the first section, I explain why I chose a mixed method approach and how it is different from others that investigate cinema-going. The differentiation mainly lies in the involvement of Broadway cinema as an industrial partner that facilitates the research and the active role users undertake in the research process. Next, I explain the meaning of the double diamond design framework (Design Council, 2015a,b; Schneider, 2015; Nessler, 2016), which is the overarching user-centred methodological approach adopted here. I also describe terms that recur throughout the thesis such as user journey, user-centred, experience-centred and user experience design. The chapter ends with a detailed description of how I planned and conducted the primary research, and how each study contributed to the PhD.

3.2 Setting and methodological approach

Every research method has restrictions and biases but combining them contributes to decreasing -if not eliminating- the final limitations and getting an inclusive perspective on the research problem (Creswell, 2003; Lazar et. Al, 2010). In this project, I address the limitations that emerge from the lack of joint collaboration between the fields of Film Studies and HCI, by combining -otherwise common for each field respectively- qualitative and design methods, conducting empirical research with actual cinema audiences drawing from the principles of user-centered design/ user experience design (defined below).

A mixed methods approach is proposed to map, define and understand in depth the contemporary cinema-going experience and explore the potential of embedding technology and the dynamics of digital data in it, to meet the users' needs and desires. According to John Creswell (2014), a mixed methods approach provides researchers with a 'pragmatic view of the world' (p.19) since they combine diverse type of data rather than exclusively quantitative or qualitative. This pragmatism allows for the use of a variety of methods, worldviews and expectations and consequently, a wide diversity in the data collection procedures (Creswell, 2014).

Traditionally, mixed methods or multi-methods approach is equalled with "triangulation" (Denzin, 1974 in Patton, 1987). Triangulation refers to the combination of different methods, study groups, local and temporal settings and different theoretical perspectives in dealing with a phenomenon. Its applications include (1) formalising the relation between qualitative and quantitative research, (2) strengthening the quality of qualitative research and (3) designing and conducting qualitative research in an appropriate way (Flick, 2014: 183). I move beyond the common use of methodological triangulation where the researcher mixes up methodologies while investigating the same phenomenon (Patton, 1987; Creswell, 2014). I also focus on the Human

Factors (HF) approach of data triangulation, which broadly refers to comparing the results of one method with the other (Kaulio and Karlsson, 1998). To define how mixed methods approach and triangulation is used in this chapter, I refer to the collection of both qualitative and quantitative data which are going to be merged and analysed rigorously in order to reach to conclusions.

Triangulation is quite recent to Film Studies but it has been used quite frequently by other academic fields, especially HCI (Benford et al. 2009). HCI researchers usually combine quantitative with qualitative data and methods, especially in studies that are related to users' experience of similar context to this project such as trajectories of users in museums and art spaces, theme parks and video games (Benford et al., 2009). Triangulation provides the opportunity for the researcher to combine qualitative with quantitative data in order to complement each method and cross-validate the results. Usually, quantitative methods require a bigger sample that eventually gets limited/ surface information and is then complemented with more complex responses and data from deploying qualitative methods (Evans, 2011b).

This project follows a user-centred/ experience-centred participatory approach that actively involves the user in the process of exploring how the experience can be enhanced with the use of digital data and digital platforms. The HCI and HF communities use many terms such as 'experience-centred design', 'user-centred design', 'experience design', 'user experience design' (Norman, 1988; Wright and McCarthy, 2010) to describe the work of researchers in designing services, products and experiences that reflect human needs and are satisfactory to the users during their interaction with those. Donald Norman coined the term 'user experience' (UX) in the mid-1990s while being Vice President of the Advanced Technology Group at Apple: 'User experience encompasses all aspects of the end-user's interaction with the company, its services, and its products' (Norman & Nielsen, nd). In 1996, Winograd et al.

highlighted the need to research and design for the full human experience and move beyond usability and productivity (Winograd et al., 1996). This piece of research aims to establish how the 'experience-centred participatory approach' is currently perceived and mention the scholars discussing it. This project follows a 'humanist' (Wright and McCarthy, 2010:8) experience-centred design procedure, which aims at creating a design that will benefit humans. Experience-centred design can and should be used to impact a person's lived experience both socially and personally (Wright and McCarthy, 2010).

What follows is the definition of the terms 'personas', 'user journey' 'journey and experience mapping', which are all part of a user-centred processes. Personas help the researcher represent and categorise different types of users and their behaviour. According to Unger and Chandler (2012), 'personas are documents that describe typical target users. […] They can paint a very clear picture of who is using the site of application, and potentially even how they are using it' (p. 130). A persona is not a person, it comes out of the patterns from many different users, therefore represents a certain group of people as a model, a template.

Personas are used vastly as a method in the industry but are a subject of debate. On one hand, what to use as content, how much detail, if biography is invented how close it is to real users, if they create polarisation and leave characteristics outside but on the other hand, they can provide great empathy which will then produce more insights and ideation towards the solutions to certain user problems. Personas will be used as a way to visualise results and uncover who cinema audiences are, what their expectations and behaviours are (Unger & Chandler, 2012). This will help vastly sharing the PhD findings with the two industrial partners as personas are quick and easy to understand by non-academic audience.

In this research project, four personas were created[56] based on the analysis of the data accumulated in the PhD studies in order to illustrate the collected data and create an easy to understand background of who the users are -in this case, different types of cinemagoers. Usually personas are created with some basic characteristics: photo, name, age, location, occupation, biography, education level, income, personal quote, online activities, offline activities, technical comfort level, mobile comfort level, social comfort level, user goals/ needs (Unger & Chandler, 2012: 137-138). They were the result of 'affinity sort' or 'affinity mapping' (Lang & Howell, 2017). This is a method frequently used in UX to make sense of qualitative data. Findings are put in post-its (one per post-it) and then put on a big wall. Then, they are grouped into thematic categories depending on the research questions or the themes that emerge through the data itself. Affinity sorting is insightful as it helps the researcher understand what patterns emerge and construct a narrative linked to the findings (Lang & Howell, 2017:150-151).

Furthermore, similarly to trajectories (Benford et al., 2009), user journeys describe 'the steps taken by a user to complete a specific task and represent a sequence of steps or touchpoints, which might involve multiple devices or channels and might take place over a few minutes or several days' (Lang & Howell, 2017: 169). Journey maps are used to show the specific steps a user has followed to complete a specific task. To do so, the user goes through some touchpoints, which are defined as "points of interaction between a person and any agent or artefact of an organisation. These interactions take place at a certain point in time, in a certain context, and with the intention of meeting a specific customer need" (Yougov, nd). Experience maps are journey maps in bigger scale that include the whole user's experience from the first touchpoint to the last, and consist of different phases that correspond to specific needs,

[56] The minimum ideal number is three but can go up to seven (Unger & Chandler, 2012: 131).

activities, interactions, devices, platforms, locations and feelings. Experience maps help to get an overview of the holistic experience and discover pain points and design opportunities but have a limitation. They are very broad and make it difficult to focus on narrowing down to specific problems, therefore I needed to focus on smaller segments of the experience that has a specific focal point.

Cinemagoers do not specifically go through an individual task but many, therefore this thesis uses a combination of the framework of trajectories along with the practical points of a user journey. Velt et al. (2017) surveyed the use of the trajectories framework to help categorise relevant work. I am mostly interested in participant trajectories which provide a way to track how users self-report their activity (Benford et al., 2009). Previous work on mapping ancient rituals has demonstrated the significance of tracking experiential journeys/ trajectories utilising psychogeography and the contextual environment to enhance cultural experiences with self-reflection methods, physiological measurements and mobile devices (Kefalidou et al., 2012; 2015). In a similar manner, cinema-going facilitates the exploration of experiential paths that synthesise impressions, interactions and personal rituals that begin before arriving at the cinema venue, while being at the cinema and after. From the diaries and the supplementary interviews, cinemagoers can be categorised based on emphasis they give on distinct elements of their experience.

The above UX and design methods and tools actively involve users in the design process, which can lead to learning from their lived experiences and help them make informed choices that would end up in embedding technology to their everyday life to make it easier, more enjoyable and more meaningful (Bødker, 2006). As participatory design usually includes multiple stakeholders, this project not only includes cinema audiences but the cinema exhibition as well; providing the complete picture with all stakeholders involved. As stated in the

Introduction chapter, my industrial partner, Broadway cinema, is actively involved throughout the whole process of primary research.

Due to this participatory design approach, there was a natural progression of participants' ideas: they generated ideas instead of being directed by me as the researcher. It also helped me explore in depth the cinema-going landscape based on the actual stakeholders that will make use of it. This piece of work is aligned with the mentality of 'designing for fun, enhancement, adventure and excitement' (Wright and McCarthy, 2010:10) and aims to use data and technology for people to live with and not just use it. It follows a holistic approach towards understanding an experience in depth, observing and being considerate about its constant interplay between feelings and emotions, behaviours, and external factors such as the physical environment (Buchenau and Suri, 2000).

To sum up, this multidisciplinary approach between HCI and Film Studies could be the expansion of the long history of the interdisciplinary nature of HCI research which started off with the combination of the fields of Human Factors, Engineering and Psychology, continued with Art and Design, and is now growing to include more and more fields (Lazar et al., 2010). Qualitative methods commonly used in Film Studies complemented with design methods from HCI along with an experience-centred participatory approach can be considered novel and add great value to this project. This is because it produces a big amount of textual and quantitative data, which when analysed, will provide a holistic understanding of the contemporary cinema-going experience, mapping where and when it begins and ends involving digital technologies and data both from an audience and cinema perspective, something that has not been looked at before. Additionally, this multidisciplinarity can lead to conclusions concerning how all those digital and physical transactions, rituals and behaviours contribute to constructing cinemagoers' digital identities based on stakeholders real testimonies and experiences. It also increases the users agency and control over how data can be used

more transparently and creatively in order for other people to be aware. The insights and challenges of this project's methodological approach could be useful to other researchers since the strategy that was followed can be applied to multiple contexts and provide a working framework for several disciplines or other multidisciplinary research projects. This chapter goes on to present how this approach was deployed throughout the specific stages of the research.

3.3 Research Design

The term 'research design' refers to the procedure of designing (=creating) the studies of a research project and all the details that it includes (Creswell, 2014). According to Creswell (2014), 'research designs are types of inquiry within qualitative, quantitative, and mixed methods approaches that provide specific direction for procedures in a research design' (p.12). More specifically, this mixed methods design can be categorised under 'exploratory sequential mixed methods' (Creswell, 2014:16) because the project started with a qualitative research phase to explore the views of the participants and after analysing those data, the quantitative phase was developed. Finally, it can also be characterised as 'multiphase' (Creswell, 2014: 16) as it was followed by an evaluation of a final product which was conducted by using both qualitative and quantitative data.

Adopting a strong participatory design approach, I chose to use as a foundation for this research design the framework that the British Design Council introduced in 2015: the double diamond design process (figure 2) (Design Council, 2015a, b; Schneider, 2015; Nessler, 2016). The creative process is iterative which means that the ideas are accessed, confirmed, tested and refined before being delivered as an end result (Design Council, 2015a,b). Usually, practical design methods such as user diaries, journey mapping and personas/ storyboarding are involved

throughout the four steps of this process (Schneider, 2015; Nessler, 2016).

In the first phase of ‘discovery', the researcher acquires an understanding of the related issue looking at it in a fresh way. In the ‘definition' phase they define how the insights gained from the first phase are applicable and they clarify the challenge. The third phase, called ‘develop' includes brainstorming and ideation, where all the ideas will be conceptualised and developed after refinement. Finally, during the ‘delivery' phase the resulting project is finalised, produced and launched. The double diamond design process has been used both by academics and the industry and is adapted to cover the needs of different projects (see for example Figure 3).

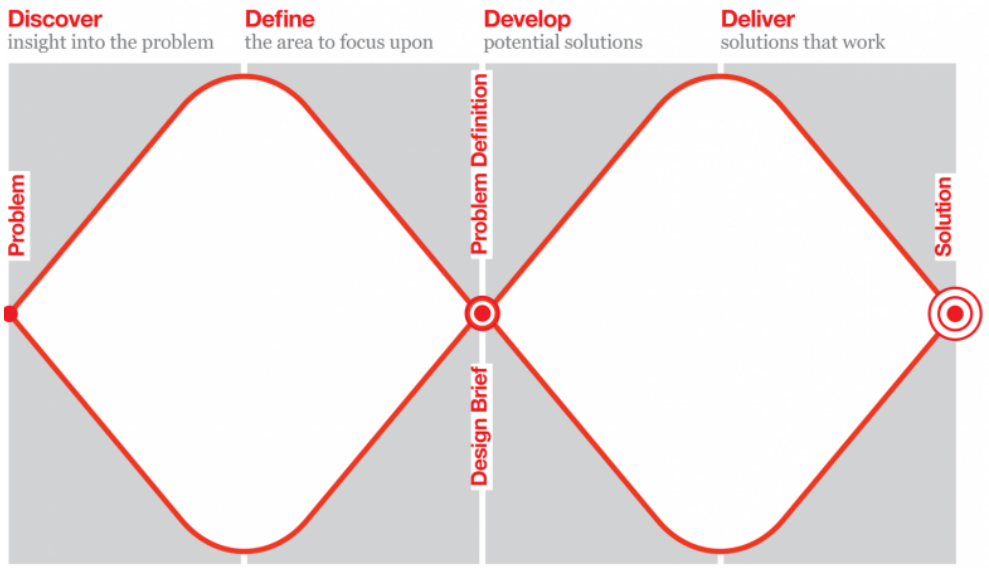


Figure 2 Design Council’s Double Diamond, image source: https://bit.ly/2GrPyOs

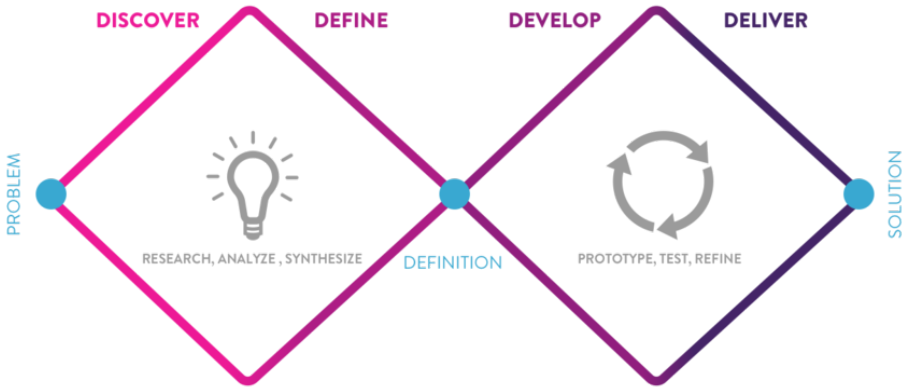


Figure 3 An adapted double diamond design process model found on The Faces of Amnesty, image source: https://bit.ly/2z6paaW

This framework is useful to the context of my investigation because divergent and convergent thinking happens twice during a design procedure: the parties involved primarily define the problem and then they create the solution. The user is the active agent of a design process and the designer's roles coincide with the researcher's as if they were one person (Sanders and Stappers, 2008). There is no point in providing a solution to a problem that does not actually exist and is not needed by the users. Therefore, going through the four phases of this framework (described below) with all stakeholders involved contributed to validating the end product and establishing a solid foundation of the problem and the area in question: the cinema-going experience.

Based on Figure 4 adaptation, I mapped the phases of my research design and created my adapted double diamond that would serve the project's purposes. These adaptations are also demonstrated in each study description within their respective section below. The research design shaped a series of studies which followed the principle of 'discover, define, develop, deliver'. These are explained in detail below

in 3.4 and took place either in booked meeting rooms of the University of Nottingham or in Broadway cinema's facilities[57].

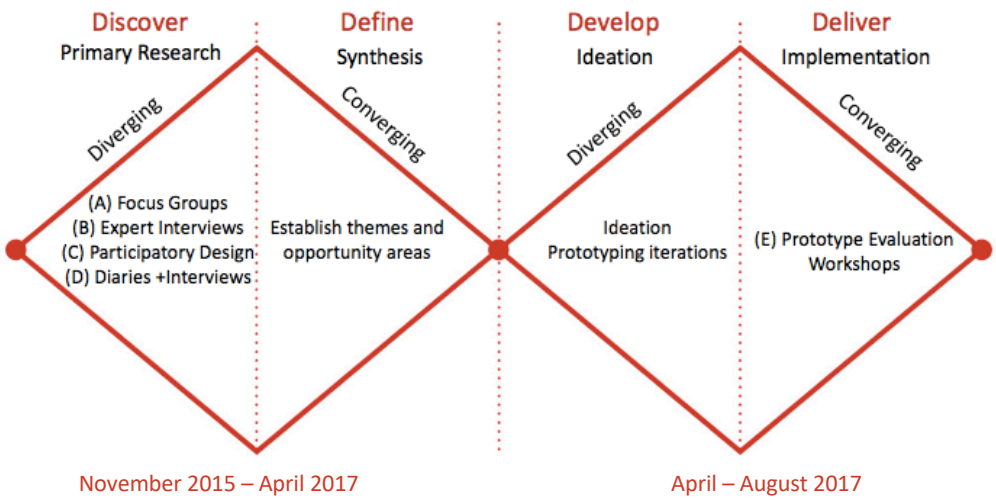


Figure 4 The double diamond model process as adapted to serve the purposes of this project

The research design of this project followed a specific chronological hierarchy. Using sequential mixed methods, each study informed the next one. Starting off in November 2015 with exploratory focus groups (Study A) that included an ideation process with the participants, I managed to set the core elements of cinema-going from the cinema audiences' point of view. How audiences think about the contemporary cinema-going experience, cinema-related practices, digital data transactions and what are their interests, concerns, likes and dislikes? In order to have a complete understanding of cinema-going in the digital age, there was a need to also get the industry's perspective. Hence, in August 2016, research went on with six expert interviews (Study B) that filled in a literature gap and built an understanding of the exhibition's

[57] Broadway cinema is a five-floor building and has multiple rooms that serve specific workshop/event purposes as explained in the introduction. Three of these rooms served as the frequent "hosting" places for my studies. They all included glass/whiteboards, and two of them also facilitated the projection of slide presentations on a big TV screen. The third room was called "the library" and was used to create a more cosy atmosphere due to its interior decoration for one to one interviews.

perception on contemporary cinema-going, concerns and issues related to cinema-related data.

After exploring the cinema-going landscape with those two studies and based on what has been previously done in the field, I verified the gap in mapping the contemporary cinema-going experience. As a result, the research carried on with a participatory design workshop (Study C) that took place in November 2016. There, participants produced an initial record of cinema-related platforms, activities and data that they use and identified key features for an ideal service/ technology that would enhance their experience. This was achieved through a session of data mapping (similar to the official 'affinity sorting/mapping' defined earlier) where I asked the participants to write down and categorise the data they share during any cinema-going related activities.

It was made clear from all three studies that cinemagoers go through a trajectory, before, while and after going to the cinema leaving digital traces behind and that this initial 'Data Mapping' recording in Study C covered only the surface of mapping the digital traces of cinemagoers. As a result, self-reported diaries (Study D) were chosen as the next method. This study was conducted from February till April 2017. The participants completed a diary with their cinema-going activities, devices, platforms, interactions and feelings for each of the last three times they went to the cinema within a 2-month period. The diaries were accompanied by one to one supplementary interviews where participants clarified their activity and diary entries, giving more emphasis to the context and the why behind each diary entry. That study greatly contributed to getting a deep understanding of different cinema-going patterns and trajectories and according to participants, made them reflect on their cinema-going related practices[58].

[58] See Appendix J1 for quotes from the participants that report on how completing the diary affected the way they think about their going to the cinema.

Lastly, I synthesised and analysed all the data from Studies A to D, conducted an iterative design process and eventually created four high fidelity prototypes described in section 3.4.5. The designing of the prototypes was a result of the participants' collaboration and their own confirmation of previous data, which reflects on the importance of adopting a user-centred participatory approach. Those prototypes were technology probes that were shown to participants in June 2017 through six prototype evaluation workshops (Study E). Cinema audiences participated in five out of six workshops and the sixth workshop was solely demonstrated to and evaluated by my industrial partner – Broadway's cinema staff. Those prototype evaluation workshops completed the mixed-methods circle of research of this project. To support subsequent analysis of the work I used audio recordings, field notes and captured photos of the activities. All studies were carefully designed to make sure they capture all aspects of how audiences go to the movies with the active participation of the stakeholders.

3.3.1. Participants and recruitment

As already mentioned, Broadway cinema played a very important role in facilitating all studies described either by hosting sessions or by promoting the call for participants through their network. As an art venue, Broadway mainly hosts a specific kind of cinemagoers, who like to visit the movie theatre for the whole experience it provides and not only for watching a film. To broaden the scope of the research, the participants of this project are not limited to Broadway's cinemagoers but also to general cinema audiences: people that like going to any cinema to watch a movie, either this is a multiplex, a local independent or a small commercial cinema.

In total, forty-eight unique participants participated in the above studies aged between 18 to 65 years old. Fourteen people participated in the focus groups, six in the expert interviews, nine in the participatory design

workshop, eighteen in the diaries and supplementary interviews and twenty-six in the final prototyping sessions respectively. Out of the forty-eight participants, some had double presence by contributing in two studies, and the final eighteen participants in the audiences' evaluation workshops were recruited from the people that had already participated at least in one study (see table 1). This number of participants was enough to collect rich data to address the research questions because during the studies the participants engaged in very fruitful conversations (Greenbaum, 2000; Preece et al., 2015). Participants' characteristics will be further described in the section below (3.4).

There was one recruitment strategy across all studies. Each study was promoted through Broadway cinema's newsletter and social media and through the university mailing lists and social media. Snowballing technique (Flick, 2014: 234) was adopted so that potential participants could also inform interested friends and family about the study. There was a prerequisite stated in each study promotion that participants should visit the cinema at least once per month. This was because I wanted to have a discussion with people who engage often with the cinema and could be characterised as frequent/active cinemagoers. The recruitment process started at least a month before every actual study took place and a necessary over-recruitment took place to prevent from having fewer participants than the ideal number due to dropouts. For the last study, I only recruited participants that have already been part of one of the previous studies. The final prototypes were the outcome of what participants had already said and asked for, therefore it was necessary to talk to people who were aware of what the project was about and who could assess if the end result addressed their needs and desires. Each participant of study A and C was rewarded with a free cinema ticket for dedicating their time to the research while each participant of study D and E was rewarded with a free cinema ticket and a chance to win 1 of 3 Amazon vouchers worth 15£ each because those studies required the

participants to dedicate more time and effort. The experts that were interviewed for study B and E agreed to voluntarily participate in the study without getting any reward.

Table 1 Total number of participants in this PhD project

Total number of Unique Participants: 48		MEMBERS OF THE AUDIENCE					EXHIBITORS			
		Focus Groups (A)		Participatory Design (C)	Diaries and Supplementary 1 to 1 interviews (D)	Evaluation Workshops (E)	Expert Interviews (B)			Evaluation Workshop (E)
		Workshop 1	Workshop 2			Audiences		Broadway	Savoy	Exhibitors
Number of Participants		6	8	9	18	18		3	3	8
Gender	Female	2	5	4	9	9		-	1	3
	Male	4	3	5	9	9		3	2	5
Age Range	18-25	2	2	2	2	3	Job role			CEO
	26-35	2	4	5	11	10		CEO	General Manager	Programme Manager
	36-45	1	2	1	3	4				Development Manager
	46-55	-	-	1	3	1		Digital Infrastructure & Marketing Co-ordinator	Box office staff	Marketing Assistant
	56-65	1	-	-	-	-				Marketing Manager
Recruited from	Broadway	4	4	2	4	N/A				Creative Director
	University	1	3	3	5	N/A		Box office manager	Box office staff	Film Hub East Central representative
	Word of mouth	-	-	2	3	N/A				
	Social Media	1	1	1	2	N/A				Digital Infrastructure & Marketing Co-ordinator
	Previous Study	N/A	N/A	1	4	18				

3.3.2. Datasets and Analysis

All data collected from participants is qualitative in nature apart from the surveys in the evaluation workshops. In total, the data corpus consists of approximately nine hours of audio data recorded from the studies, eighteen diaries (three paper and fifteen digital/in Excel format) and field notes. For this reason, it is divided in three datasets equivalent to the three studies: Dataset 1 comes from focus groups, Dataset 2 from the participatory design workshop (data mapping session), Dataset 3 from diaries and supplementary interviews. Firstly, the audio data[59] was transcribed for each dataset. Then, transcriptions and researcher's notes were transferred to Excel spreadsheets. The three datasets were thematically analysed separately (Ryan & Bernard, 2003; Braun & Clarke, 2006). Theme identification was chosen because it facilitates a focused yet quite open approach to analysis. I followed the procedure of inductive coding of the data that created patterns; I looked for interesting features of the datasets –even if latent- and identified patterns. The set of codes was then adjusted, reviewed and simplified according to phase three of Braun & Clarke (2006). Codes led to multiple predominant themes, from which preliminary global themes were identified for each study. During the next phase, I went on to create new global themes that could include data and codes from all three studies so that all data was analysed together. The above procedure took place using Excel spreadsheets and a mind map software called Simple Mind. All participants represented through a quote have been given pseudonyms to protect their privacy.

3.3.3. Limitations

Following the frequently appearing limitations of audience research projects (Evans, 2011b), the recruiting process of this project falls into

[59] Dataset 1. Focus Groups: 3h30'; Dataset 2. Participatory Design/ Data Mapping session: 45'; Dataset 3. Diary Interviews: 5h.

the trap of self-selection of participants. There was no exclusion of participants because all the people who replied to the calls for participation met all the prerequisites. However, this entails the weakness that those people already showed their interest by accepting to participate in one or more of the studies. As a consequence, it is unknown how people who are cinemagoers but have not shown interest to participate in this research project would respond and if there would be any fundamental differences in their responses. Locality could also be a limitation since all participants are currently living in the broader area of East Midlands. Nevertheless, they come from various cultural backgrounds and have lived in multiple cities in the world, hence they can be characterised as a representative sample of the population. During the discussion, participants shared their experiences from how cinema-going in other countries differs or is similar to British practices and rituals. Therefore, the results of this data collection process provide some indicators that are not only representative of a small portion of the population or that they only concern UK audiences.

3.3.4. Ethical Assurances

The above studies were all run after getting ethical approval from the Ethics Committee department of Culture, Film and Media from the School of Cultures, Languages and Areas of the University of Nottingham. My first priority is the protection of participants' information and the participants' control over their data. Therefore, each participant filled in a consent form after reading an information sheet (appendix A) on each study describing what the study is about, its objectives, which data are going to be captured, who uses this data, when, and where it is stored and who has access to them, as well as their rights as participants. They were free to withdraw from the research at any time without explanation and the right to request their personal data be destroyed at any time. Direct access to the data is limited to myself; extracts like transcripts but not the original recordings will be shared with my three academic

supervisors from University of Nottingham and my two industrial supervisors from Broadway and Digital Catapult. Anonymised data will be used in any academic dissemination such as but not limited to research reports (including this PhD thesis), academic presentations and scientific publications. Data collected are securely stored on University of Nottingham password and firewall protected network drives and in accordance with the Data Protection Act, 1998 (GDPR was not applied at the time).

In the following section, the reader can find a detailed description of each study, which includes the reasons why each method was selected, the participants involved and the exact procedure that took place.

3.4. Research Studies

3.4.1 Exploratory Focus Groups

Exploratory focus groups were chosen in order to set a foundation and understand what cinema audiences want and value from their cinema-going experience, what they like/ dislike, what they find ideal, and how, when, with whom they share their experience with. I wanted the process to be an open discussion and ideation with the participants following a participatory design approach with semi-structured aspects so that they could openly express their taste and experience (Preece et. al, 2015). The study included two workshops with different participants, and each workshop was segmented in three phases: 1) short questionnaires, 2) focus group (presentation and discussion of low fidelity prototypes: scenarios and personas) and 3) participatory design. The participants shared their experiences and taste and designed their ideal notion of cinema-going. There was a semi-structured set of questions to be covered (Appendix C1) but the discussion mainly flowed around taste, trust, value, cinema-going experience, personalisation, engagement, frequency and reasons for moviegoing, digital identity.

I needed to capture specific data from all the participants individually, something that could not be done in a group level for reasons of time management and privacy, hence I used short questionnaires. Then, I chose to conduct focus groups because they provide opportunities to delve into the thoughts and practices of moviegoers providing rich data with regards to cinema-going (Greenbaum, 2000). According to Greenbaum (2000), focus groups are very useful in the stage before creating a concept, and for understanding the "why" behind a specific group of people's thinking, attitude and behaviour, which in our case is the cinema audience. I picked focus groups over other methods (e.g. interviews) because I wanted the participants to interact with each other (Greenbaum, 2000) and as a result, brainstorm and build a stack of ideas that can prove to be rather insightful.

I used the low fidelity prototypes of scenarios illustrating cinema-going experiences during the focus group phase in order to trigger the participants' imagination. Personas have been found to be more engaging for users, helping them to understand better the context of the conversation (Pruitt & Grudin, 2003), communicate better in the group and increase the end users' focus (Long, 2009). Finally, participatory design took place because user involvement has positive effects on the outcome of the research. For instance, I could get more precise and concrete user requirements and avoid creating something that the users wouldn't need or wouldn't know how to use (Kujala, 2003). Two workshops were organised at Broadway cinema's premises in Nottingham city centre and in the University of Nottingham.

Participants

Fourteen cinemagoers were recruited in total (7 male and 7 female). Participants were native British, Europeans or internationals and came from all age ranges (five from the 18-25 years old age group, five from the 26-35, three from the 36-45 and one from the 56-65). Groups were

then divided into a 6-participant group and an 8- participant group depending on their preference in the kind of cinema (art venues or any cinema including independent, art, multiplex). Hence, 5 out of 6 participants of the first workshop that took place in Broadway cinema identified themselves as “independent cinema/ art venue fans” that only go to a specific art venue regardless of the movies it projects and 7 out of 8 participants of the second workshop that took place in University of Nottingham were self- identified as “film fans” that choose which cinema to go to depending on the film they want to see and not based on the movie theatre.

Study procedure

Each workshop lasted approximately 1h 30 minutes. Participants were first introduced to the purpose of the study and the three phases of the workshop. Then, they were asked to write keywords that define cinema-going on a whiteboard. These definitions were discussed later on. I began the workshops with the first phase which included the completion of a short questionnaire. With this questionnaire I aimed to capture how often participants go to the cinema, which cinema they most frequently go to and lastly, a question enquiring whether they self- identify as film fans (defined as the person that goes to any cinema to watch a movie) or art venue fans (defined as a person that only goes to an independent cinema such as Broadway because they love the venue and the specialised content it projects).

Throughout the second phase, I presented to the participants some scenarios of potential moviegoing experiences. More specifically, I created personas and put them in three cinema-going scenarios that I then discussed with the participants. The personas and scenarios were designed based on primary data given to me by Broadway cinema and followed the guidelines from Braz (2005) and Crothers (2011). This set of data segmented the cinema audiences into categories and involved

specific practices, which provided the basis of inspiration for my design. A printed copy of each persona was handed out to each participant and included: Printed photo of the persona; name; personal information; personal profile with the key activities related to cinemagoing; key attributes; internet usage; persona's goals (example illustrated in Figure 5). The scenarios resembled storyboards of before, while and after the cinema-going and they were presented on a big screen on the wall (example illustrated in Figure 6). The scenarios were also handed out to the participants in a paper version to annotate.

Persona No1 (figure 5) is a young international student who is very tech-savvy and uses her mobile phone a lot during the day. In her scenario, she goes to the movies with a friend and has drinks in the cinema while taking selfies to post on social media.



(picture created through VOKI)

Personal Information

NAME: Katie

AGE: 21

MARITAL STATUS: Single

LOCATION: Nottingham, UK

OCCUPATION: Media & Culture Student, Part-time retail seller.

"I need my moviegoing experience to be more fun"

Personal Profile

Katie is a 21-year-old international student living in Nottingham, UK. She enjoys dressing up and going with her friends to the movies, especially during the weekdays.
These are her frequent activities related to cinema-going:
-Search online for a movie of interest to watch.
-Search reviews and trailer of the chosen movie.
-Posts on social media picture of her with her friends in the cinema.
-Buy wine from the bar and snacks from the box office.
-Use taxi application to order a taxi.
-Write review on film websites.
-Exchange comments on film forums.

Key attributes

✓ Goes to the cinema with friends
✓ Has a lot of online interactions before, while and after the moviegoing
✓ Has free time for movie throughout the day
✓ Low income (student and part-time job)

Internet usage

✓ Super tech-savy
✓ Owns smartphone

Katie's Goals

✓ Engage in a more fun cinematic experience
✓ Simplify her moviegoing-related tasks by having them all in one

Figure 5 Example of Persona No1

Persona no2 is Sally, a middle-aged lady who goes very frequently to a specific art cinema with her husband and they usually book their tickets beforehand. They enjoy a full experience with dinner and drinks within the venue and they check in on Facebook to show their friends which movie they watched (Appendix B). Persona no3 is Frank, the father of the Green family, consisted of the parents and two young children (Appendix B). In the scenario (Figure 6), they decide to book for a movie online after giving the option to the kids to check on YouTube trailers what they want to watch, they then take a family photo in front of the film's poster to fill in their album. In the end, they have a bad experience since they wanted to eat at the venue's restaurant but there was no kids menu nor baby seats available and that is why the father gives a bad review of the venue on social media.



Figure 6 Persona No3 scenario

During the third phase, the participants individually designed their own ideal cinema-going experience and scenarios to illustrate what they like and dislike in relation to the moviegoing activity. I provided the participants with a variety of materials to use for completing their designs: colour pencils, sharpies, whiteboard markers and modelling clay. At this point, it was clarified that they should describe how they perceive the cinema-going experience: a) as individuals and b) taking into consideration the public (interaction with fellow filmgoers).

All of the above activities were accompanied by discussion with the participants. A discussion guide (see appendix C1) was prepared in order to track the appropriate time that should cover each of the main aspects I was interested in (Greenbaum, 2000). The structure of the discussion within the workshops was organised around five key themes that were identified through the review of related literature and were also based on this project's research questions: moviegoing rituals, value, taste and personalisation, trust and digital practices & identity. Under this framework, the participants were asked to comment and discuss related issues to each one of these individual themes.

The workshops were audio-recorded and photographs of the results (papers/ glass boards) were taken. Additional photos of the participants while going through the process (e.g. drawing) were taken in order to be able to present them among the team of researchers involved in the project. These workshops contributed invaluable knowledge, especially to the comprehension of how the concept of digital identity applies to cinema audiences, of how it is constructed through digital-related activities attached to cinema-going and of creating a very first rough draft of a contemporary cinema-going map that included digital data.

3.4.2 Expert Interviews

Given that this project aspires to have an impact not only on cinema audiences' activity but also to the way exhibitors function with regards to

data capturing and use, it seemed logical and necessary to also explore their perspective. Having both parties' perceptions –cinema audiences and exhibitors- would eventually lead to developing a comprehensive understanding of the contemporary cinema-going landscape. Therefore, the next step in research design was to complement the first method by approaching professionals from the cinema exhibition, that would provide an orientation and navigation towards the next phases of data collection. In relevant literature around qualitative methods, expert interviews are thought to operate as an instrument of triangulation that complements other methods rather than act as a stand-alone method (Flick, 2014).

During this study, I conducted fact-finding interviews with six experts in the field. In this case, the translated by Flick (2014) approach of Bogner and Menz (2002) was followed to define who the experts are in this area: 'Experts have a technical process oriented and interpretive knowledge referring to their specific professional sphere of activity. Thus, expert knowledge does not only consist of systematized and reflexively accessible specialist knowledge, but it has the character of practical knowledge in big parts.' (p. 228). Hence, the interviewees were chosen not for their personal attributes but for 'their capacities as experts' (Flick, 2014: 227) of the exhibition field.

Many scholars have written about the different purposes that expert interviews serve, mentioning among others that they might set a thematic structure on the issue under investigation in a new field, add complementary information to the context of a subject and finally provide a typology and theoretical foundation about an issue that has gaps (see for example Meuser and Nagel 2002; Bogner et al., 2009; Flick, 2014). This study served two purposes: the first one was to cover a gap of knowledge in the already existing literature and the second one to understand what cinema exhibition values in the moviegoing experience and how digital identity is conceptualised within this experience from their part. According to academics, it would consequently be put firstly under

the category of 'theory-generating expert interviews which aim at developing a typology or a theory about an issue from reconstructing the knowledge of various experts—for example, about contents and gaps in the knowledge of people working in certain institutions concerning the needs of a specific target group' (Flick, 2014:228) but also would belong to the second category of collecting additional insights to facilitate the understanding of a subject.

In those interviews, I was interested to explore the experts' 'interpretive' (Flick, 2014:229) / evaluative knowledge: their everyday knowledge, experience or comments on how they view the contemporary cinema-going experience and how digital data are involved in the whole cinematic process. The scope of this study would be to involve staff of cinemas with varying seniority and experience. There was a need for people who interact with the audiences on a daily basis in order to explore how physical and digital interactions between cinema and cinemagoer are shaped; who deal with the digital strategy and the management of the cinema's data in order to establish an understanding of which data is captured and how it is used; and who are involved in the management so as to examine how the executives think about cinema-going and what are the main concerns and opportunities.

Participants

Six professionals from two Nottingham-based cinemas were recruited in total. There was also contact with two other cinemas (Cineworld and Showcase) but they did not show interest to participate in the research. The two cinemas that took part in this study, Broadway and Savoy represent, as already mentioned, two different kinds of movie theatres: art cinemas and mainstream cinemas. As a result, the content of those interviews could be characterised as representative of this specific sector of the current market but excluding multiplexes. In this study, I am not interested in the demographics of the participants rather in their position

and experience in the field. The CEO, Box Office manager and Audience Development Officer from Broadway and the General Manager and two box office employees from Savoy were the interviewees. All three senior-level cinema employees have relevant work experience that ranges from 12 to over 30 years and the three junior/mid-level cinema employees work in the field from 6 months to 4 years. The interviews took place at the Broadway and the Savoy premises respectively.

Study Procedure

Each one to one semi-structured interview lasted from 45 minutes to 1hour. A discussion guide (Appendix C2) was prepared and focused on trends in cinema-going practices, engagement with cinemagoers, physical and digital interactions, data capturing and sharing practices, what can be changed from the part of the exhibition and finally, what would the exhibition want to see during an ideal cinema-going experience. The interviews started with the introduction of each expert, their relevant work experience and their current job description. The biggest part of the conversation revolved around data and digital identity. For example, which kind of data each cinema has, how it gets it, what it does with it, who are the people that have access and manage it, what value does it have and how, if at all, it is shared with the audiences, if cinemagoers are willing to share their data, what do they complain about in terms of data sharing and so on. There was also a part of the interview that revolved around their experiences of the contemporary cinema-going activity and the values they have as an institution that will go on to inform their future strategies and sectors that need to be further developed.

3.4.3 Participatory Design (PD)

After setting the foundations of the project and establishing an understanding of the main themes, interests, concerns and segments of the cinema-going experience in the digital age from both the audiences

and the exhibition part, there was a need to engage more with the audiences and increase their involvement in the design process. At this point in the design research, I identified that in order to reach a deeper connection with cinemagoers, I should give them the freedom to express themselves accordingly. For the above reason, a participatory design workshop was organised. Through it, I would provide the users with the appropriate tools so that they would be able to share their personal experiences in practice and also express their ideal "solutions".

This project not only uses PD as a method in studies but also follows some of its basic principles –mentioned further below- as an approach, considering it as 'a set of theories, practices, and studies related to end-users as full participants in activities leading to software and hardware computer products and computer-based activities' (Muller, 2003:3). According to Muller (2003), PD has been a big object of academic debate (p.5) as it is embraced as a method and used both by scholars and the industry for user involvement in several contexts, such as but not limited to political, democratic, and commercial. Its affordances as both an academic and a commercial tool were one of the reasons that it was chosen for this project which involves Broadway cinema as an industrial partner. I wanted to give the audiences augmented agency through a creative procedure; more specifically, increase their saying in what is the ideal cinema-going experience and what would be the features that would improve it. For this reason, PD was ideal because it entails co-design: the collaboration and mixing up of the roles of the researcher, the designer and the user. 'Co-design refers to the collective creativity of collaborating designers […] the creativity of designers and people not trained in design working together in the design development process' (Sanders and Stappers, 2008: 6).

In figure 7 below, the reader can see two interpretations of the classical user-centred design process. In the first, the user represents the object of study, the researcher observes the user and acquires knowledge and

the designer reports on the process and builds a comprehension of the technology and the necessary next steps in creative thinking. However, this project follows the co-design circle in the right, where the roles are mixed up: the user for whom the service/ product is under development is the 'expert of his/her experience and contributes with his/her increased agency to knowledge development, idea generation and concept development' (Sanders and Stappers, 2008: 12). Then the researcher who might simultaneously be the designer, provides the tools for expression and ideation of needs and desires. During the last stage of the process, the researcher/designer generates insights and designs for people's needs and purposes. The use of the figure below facilitates the differentiation between designing having in focus the product/ service/ technology and designing by focusing on people's actual needs.

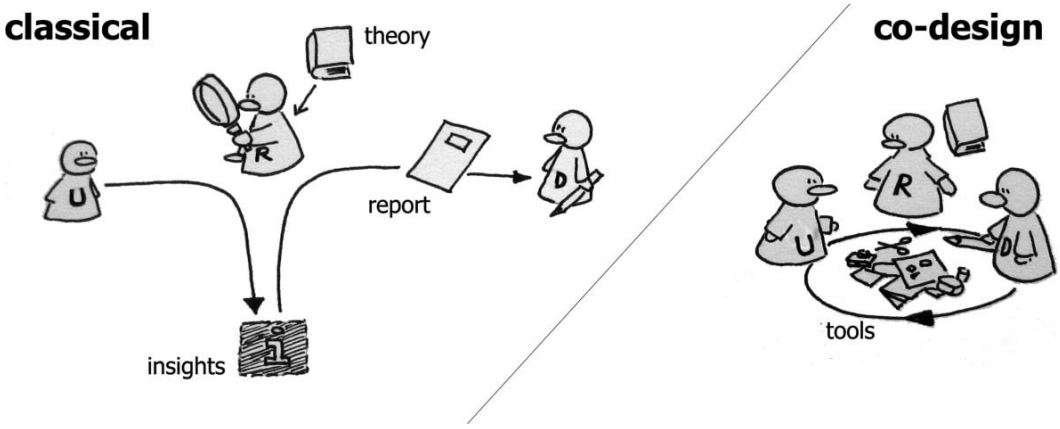


Figure 7 This project follows the framework that Sanders and Stappers (2008) introduced which distinguishes the roles of a classical (on the left) and a co-design (on the right) process.

Fundamental principles of PD mention organisation as a core part of it, referring to how workgroups are formed, how time is used and which resources are employed (Kensing and Blomberg, 1998). Below is a detailed description of how organisation was taken into consideration during this individual study. To sum up, this participatory design workshop sought to reply to the research question of how cinema audiences think their digital data can enhance their cinemagoing

experience. It targeted at getting the actual audience's perspective on the ideal moviegoing experience using digital data by increasing at the same time awareness of audiences in terms of their data sharing practices.

Participants

Nine cinemagoers were recruited in total (4 female and 5 male). Participants came from a diverse cultural background and age range (two from the 18-25 years old age group, five from the 26-35, one from the 36-45 and one from the 46-55). In this study, the variety of the participants' professional activity was also of interest when it came up in the introductions at the beginning of the workshop. There was a filmmaker, a designer, an IT employee, a product designer, a researcher. Some participants did not mention their professional status –as they did not have to- but all of them shared a passion for cinema-going and decided to take part in the study with their identity as ardent cinemagoers. In terms of their cinema-going taste, there was not any particular preference to either art venues, independents or multiplexes.

The nine participants were randomly split into three groups of three to facilitate discussion in depth. Muller et al. (1993) talked about the categorisation of PD groups (tiny as with 2-4 members, small with 4-8 members, moderate with up to 40 participants and big with up to 200 participants). The division in 3 groups of 3 was made to accommodate the equal engagement and participation of each individual participant but also to make the workshop easily manageable by the only facilitator – myself. Groups of three were selected, as three is the smallest number of participants where group behaviours are demonstrated, allowing for their interaction be more readily interpreted during data analysis (Muller et al., 1993).

Study procedure

The workshop took place in Broadway cinema's facilities and lasted approximately 2 hours. It was divided into three phases and there was also time allocated for introductions and a wrap-up in the end. Spinuzzi's (2005) approach of participatory design stages was followed with a few tweaks to adapt to the aims and objectives of the study. During stage 1 *'Initial Exploration of Work'* I presented the project to the participants and explained what it involves. The participants familiarised with each other and I familiarised with them and the way they work together as well as with the content of their discussion. They talked about what is their relation to cinema-going, why they came to the workshop and what they are interested to take out of it.

Stage 2 the *'Discovery Process'* followed. According to Spinuzzi (2005), this phase is the most interactive -both between the participants and the researcher but also among the participants themselves. During the discovery process, 'the goal is to cooperatively make meaning out of the work rather than to simply describe it' (Spinuzzi, 2005: 167). The participants were given post-it notes to write down any activities they engage with related to cinema-going, the platforms they use to achieve them and the data they need to share or they know that are captured while doing them. The platform could be any system/ digital device/ social media/ app etc. they are using and the activity included how they use/ what they do on those platforms. There were no right or wrong answers, just their preferences and experiences. After writing them down they had a look to see what others have written and discussed in their teams which ones they prefer. They then categorised those by sticking them under the responsive rows in 3 glass boards (figure 8). The participants discussed what was on the boards and collectively grouped them into smaller categories. The above activities were grouped as one when presented to the participants under the name 'Data Mapping' because what I

wanted to get out of this phase was to map which kind of platforms, activities and data are related to moviegoing.

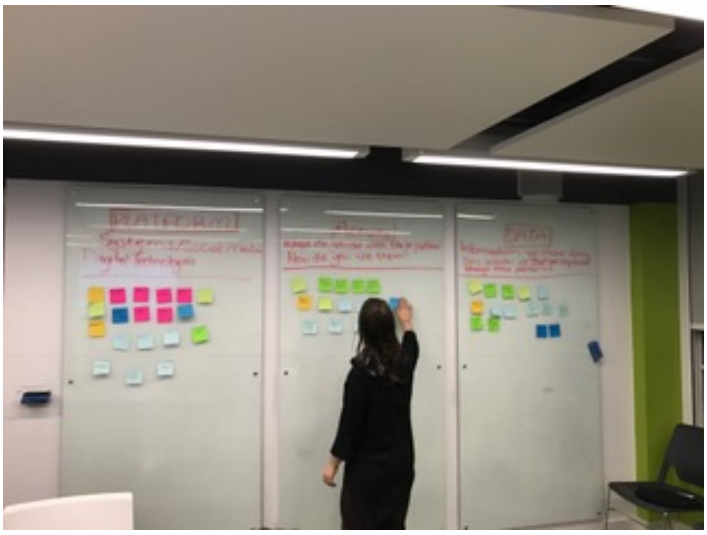


Figure 8 participant putting her post-its on the board under the category Activity

The workshop activities finished with stage 3 *'Prototyping'* where the participants were asked to sit together in groups and design an ideal cinema-going product, service, physical element. They were free to create anything that would enhance their current cinema-going experience by selecting some of the activities, platforms and data that were more relevant to their cinema-going practices. Based on the data map, they started ideating about something innovative that they think is missing from the cinema-going experience today and they used the flipcharts provided to create paper prototypes of potential creative ways of using data to enhance their experience.

The participants were encouraged throughout the process to be confident in their creativity and design something useful that they would actually need regarding their moviegoing activity. In the end, each team pitched their idea in around 5 minutes in front of everyone (see Appendix D for transcripts of the pitching and the designs) and a wrap-up discussion followed. These three designs and the discussion that accompanied their creation were very insightful in regard to what people

actually need and informed my future designing of high-fidelity prototypes. Finally, the 'Data Mapping' session gave a quite detailed first insight on which are the activities, platforms and data used throughout cinema-going and how audiences understand them.

3.4.4 Diaries and supplementary Interviews

After completing the Participatory Design study, I figured out that a more accurate and detailed method was necessary in order to map the contemporary cinema-going experience using data. Therefore, I chose to conduct a diary study which would also include one to one interviews and would help examine in depth what the contemporary cinema-going experience involves and which kind of data is shared throughout it. More specifically, I aimed to understand how cinemagoers interact with technology and how these interactions build upon their cinema-going related habits and practices. This exploration would eventually add value to how cinemagoers construct their digital identity through these digital activities.

Diary studies are a very popular method used in the fields of HCI and Human Factors (Lazar et al., 2010). A diary study includes a log of activities/ behaviours and events that happen in the participant's life over an extended period of time (Alaszewski, 2006). According to Lazar et al. (2010), diaries are very efficient to use in cases where researchers look at fluid and subjective information such as the participant's mood, thoughts etc. and allow flexibility between the occurrence of an activity and its recording. Depending on what the researcher asks for, they can contribute to the profound comprehension of users' patterns of behaviour and habits over a given timeframe. The (near) real-time reporting increases the sense of immersion in people's lives as we experience the activities 'as they happen' (Masten & Plowman, 2003).

A diary study can be a feedback study or an elicitation study (Carter and Mankoff, 2005). In feedback studies, the participant is asked to record

real-time their activities, thoughts and habits while in elicitation studies the participant is asked to capture media such as pictures, internet searches, voice notes etc. which will be later unfolded in a supplementary interview (Carter and Mankoff, 2005). The present diary study could be characterised as what Carter and Mankoff (2005) called 'a hybrid feedback and elicitation study' (p.3, 5); a mixture of the two, in order to meet needs of the research (Lazar et al., 2010): the participants completed a diary that included some predefined questions but they could also capture supplementary media to reinforce the events happening. It also included synchronous communication with me (one to one interviews).

Apart from the flexibility in the diary design and the accuracy of the data accumulated, this method was also chosen to prevent an otherwise usual limitation that other HCI methods present, that of users changing their behaviour in front of the researcher (Carter and Mankoff, 2005). Hence, the participants could in their own time and space –but within close proximity of the real time of the event- fill in the diary without the pressure of my presence. Furthermore, diaries capture details that a survey, for example, would not be able to capture –at least without tiring the participant. The participants can not only record specific activities but also put them in a time framework, a social context and by commenting on each activity, give the researcher the full picture of their activity (Alaszewski, 2006; Lazar et al., 2010).

Moreover, diaries are said to be ideal for 'understanding how individuals utilise technology on-the-go settings' (Lazar et al., 2010:129) such as a cinema or the places before and after it. Finally, this method was chosen because it gave the participants freedom to capture whatever media they found relevant and any notes that they thought were related –apart from the predefined questions- and this meant that the result was collecting user-defined data. To sum up, a diary form could give us a deeper appreciation of the activities that make up people's daily cinema-going

and enabled me to see actual examples and instances of things that might otherwise be anecdotal. Through these reports I could track events, locations, and a sense of participant's emotions across the days and weeks and over time, daily rhythms and habits emerged.

Participants

In diary studies, the goal is to recruit participants who can provide insightful information (Alaszweski, 2006). In this study, eighteen cinemagoers were recruited in total (nine female and nine male). Participants came from a diverse cultural background and many age ranges (two from the 18-25 years old age group, ten from the 26-35, three from the 36-45 and three from the 46-55). Snowball sampling (Flick, 2014: 234) was carried out, which means that some of the participants granted me access to other individuals that would be willing to fill in the diary. As a result, within the sample, there are four couples and a pair of friends. This was an opportunity to lead to more inclusive conclusions since there could be an understanding of how couple, friends and individuals cinema-going practices work. It should be also mentioned that there was also an extra prerequisite of technology usage for this study: participants should have a smartphone that can take audio recordings and photos that would be added in the diary. There was a quite mixed blend of art cinemagoers and multiplexes or any other kind cinemagoers, which added interesting insights between the moviegoing habits and practices of the two groups.

Study procedure

For this study, the recruitment period lasted approximately one month because there was a dropout and initially there were not enough participants. Firstly, consent forms and information sheets were given to the participants physically or through email. After signing them, the participants were briefed about what they need to do for the study and were provided with a paper as well as with a digital copy of the diary (an

excel spreadsheet). Each participant was asked to fill in a diary for the next 3 times they visit they cinema within a period of two months (it can be even within a week if they indeed watch at the cinema three movies). It might be that someone goes to watch two movies the same day or one movie at a time, there was no limitation in that. The study involved a 9-page diary that the participants completed. Each page repeated the same list of predefined questions but for different contexts. The participants were asked to log in their trajectory before, while and after they visit the movies. More specifically, to keep three records every time they visit the cinema: one before going to the cinema (planning), one while being at the cinema (being around the space), one after leaving the cinema (what follows after exiting the space?). This means that each participant should have a total of nine records. The diary was already designed and they just needed to fill in what is asked.

With regards to the content of each page, participants were required to list any activities related to cinema-going, any devices used, any platforms used, time of the day they were used, what kind of interaction with others happened and finally what were the feelings of the user while carrying out each activity (figure 9). More specifically, the activity would comprise what the cinemagoer did related to cinema-going, the next three categories referred to tracking down which platforms (physical or digital) and devices the cinemagoer used, where they used them and what kind of interactions they had. Their timescale of before, while and after served to set the boundaries between each experience and the listing of date and time of the day contributed to investigating when the cinema-going experience starts and when it stops. To support subsequent analysis of the work, I asked the participants to record some additional data including notes, photographs and audio recordings but this was optional. Documenting the above entries with media would enable understanding exactly what cinemagoers are interested in and how they use a platform or a device. Apart from the above data collected,

there was also an open text that allowed the participants to share any feelings, thoughts or comments on each particular activity. They could also add links related to what they were talking about. All the above is depicted in figure 9 below.

Date	Time of the day	**List Activities** (What did I do?)	**List Digital & Non Digital Platforms** (Through which platform did I do this activity?)	**List Devices and where they are used** (Which device did I use to do this activity and where was I while using it?)	**List Interactions with others** (*Who did I do this activity with?* Eg. alone, with a friend, with my partner, with my spouse, with my child, with a colleague, with the cinema staff etc.)	**List Feelings/ Thoughts** (Optional)	**Additional Comments** (Optional)	**Add Photo/ Recording** (Optional)

Figure 9 Diary questions

Participants were also informed that they should feel free to create a map of their activity or any other kind of sketch they would like to produce to help give in detail their journey. Every two weeks they were sent an email notice that reminded them to fill in the diary in case they've been to the cinema. The whole procedure should take in total 60-90 minutes for all three diaries. Each participant sent over their diary or in case it was completed in the paper form, I physically collected it. After the designated timeframe was up, I went on to conduct some supplementary short interviews of around 15-20 minutes each, where the participants talked through their diary and clarified some details that might not be clear in the diary entries (see discussion guide in Appendix C3).

3.4.5 Prototyping and evaluation workshops

Based on the results of the previous studies, I proceeded with an iterative process of prototyping. This was done by following the double diamond design process described above. According to Preece et al. (2015), 'prototypes are useful when discussing or evaluating ideas with

stakeholders' (p. 387). They manifest designs with which the stakeholders can interact and decide if they cover their user needs (Preece et al., 2015). There are low fidelity prototypes ranging from a paper-based storyboard to high fidelity prototypes, e.g. a software. Prototyping helps giving an idea of a physical presence. When ideas are ready to be presented in front of people, researchers/ designers can use rapid prototyping in order to connect with them and get a more precise evaluation of an idea.

For the purposes of this PhD, I identified the need for four prototypes: three high fidelity ones, namely a web page, a mobile app and a connected app that functioned on the cinema's tablets, and a low fidelity prototype that represented a mixed experience (with digital and physical elements). There are wireframing-prototyping tools that allow you to create interactive prototypes that mock up all the functions of a web page or a mobile app and let the user test the functionality of the end prototypes (Unger and Chandler, 2012). In this project, I aimed to show to the audiences and Broadway's staff my design thinking and check what should be changed before creating the final designs. Therefore, I used specific software "Just in Mind" (www.justinmind.com) to create digital prototypes, because they mock efficiently the experience and make it real for the user.

Unger and Chandler (2012) argue that any work that includes experience design should include prototyping (p. 260) but they claim that even a representative sample of simulating the fundamental parts of how a system works would be adequate for the user. I followed this approach but made sure to link all prototypes together so that when presented to the stakeholders, they would understand how the whole system is connected and how it functions. To answer the question of how can the combination of physical installations, digital data and personalised multiplatform experiences add value to contemporary cinema-going, I carried out some evaluation workshops that aimed at getting the actual

audience's opinion on my cinema-going related prototypes. The results from these workshops led to the final design implications.

Participants

For this study, the call for participants was only sent to the cinemagoers that took part in previous studies and have consented to be contacted for further research. In this way, the participants would already be familiar with the overall aim and objectives of this research project and with their evaluation of the prototypes they would assert me that I met their needs with regards to the prototypes. Eighteen participants were recruited (nine male and nine female) for the cinemagoers evaluation workshops and eight (five male and three female) for the Broadway stakeholders evaluation workshop.

Participants of the audiences' workshops came from a diverse cultural background and many age ranges (three from the 18-25 years old age group, ten from the 26-35, four from the 36-45 and one from the 46-55). One workshop had five participants, one had six, one had three and two workshops had two participants each. For the Broadway stakeholders workshop, I was rather interested in the job position and work experience of the participants rather than their demographics. The workshop attended eight members of staff from Broadway: CEO, Programme Manager and Development Manager, the Creative producer, two people from the marketing team, the Digital Infrastructure Co-ordinator and the Film Hub East Central representative. This mixture of professional experience in the latter workshop was ideal because the evaluation and criticism were very strongly grounded and could be characterised holistic since each participant evaluated the prototypes having in mind their department's professional aspirations. For example, what is the value of the prototypes in relation to how a cinema is run, what could attract more customers, how audiences would engage more, what should be changed

in the programme, how they would really add to the experience and so on.

Study procedure

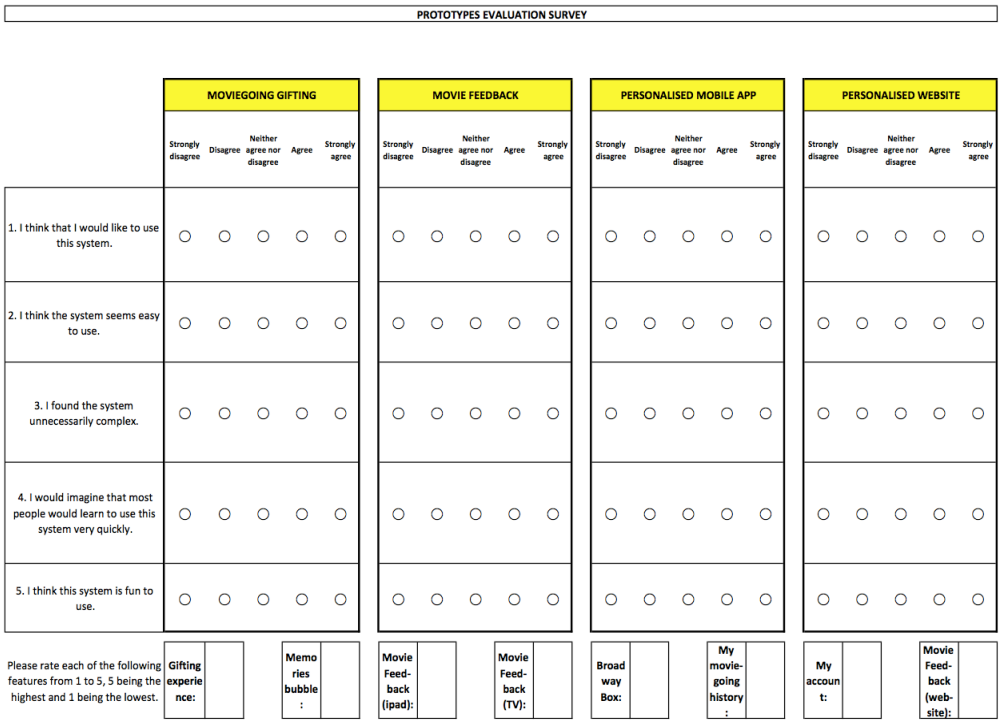
The process of designing the prototypes will be explained in chapter 6. Within this section, the reader can find a detailed description of the procedure that was followed during the prototyping evaluation workshops. As mentioned above, this study included six prototyping evaluation workshops; five with cinemagoers and one with Broadway cinema's staff. Each workshop lasted approximately 1h30'. Three of them took place in Broadway's premises and two of them in the University of Nottingham's booked meeting rooms that provided the group with a big screen.

Each workshop followed the same structure. In the beginning, during the first 5-10 minutes, each participant introduced themselves to each other, then I presented the structure of the workshop and asked participants to define the term 'enhancement' by specifically linking it to the cinema-going experience. Next, participants were presented with the four prototypes, what they do and what are their features. In order to build stronger storytelling and engage the participants with a narrative, I created two experiences using two personas from focus groups in study A and integrated the prototypes in the journeys of the personas.

In the first experience, a young international student needed to have a more fun cinematic experience, be able to communicate with her friends about movies online but also meet fellow cinemagoers that enjoy cinema as much as her, and do everything through her smartphone and therefore prototypes 1 and 2 (see chapter 6) were addressing her needs. The second experience was about a middle-aged couple who visit the cinema around three times per month and are cinema connoisseurs in that they choose films according to the director, they give attention to details, they usually enjoy a meal and drinks in the cinema because it's not just about

the movie. They are also loyal customers of Broadway cinema; they have been going there for the last fifteen years and they think it is a community of people with shared taste and interests. They would like a more personalised experience, with recommendations, a way to link to other Broadway members and simplify their moviegoing-related activities by having them all in one. Prototypes 3 and 4 (see chapter 6) were addressing their needs.

While I was presenting the prototypes for the first twenty-five minutes, the participants were given post-its and A4 papers where they could note any question or comment they would like to raise later in the discussion. For example, what they like or dislike, what is missing, what they would change. Afterwards, a discussion followed on how they found the prototypes, likes and dislikes, any potential changes, what they would do differently, if they would use them and why/why not etc. During this conversation that lasted around forty-five minutes, they were given the opportunity to browse the prototypes and play around with them. In the end, the participants were given fifteen minutes to fill in an evaluation survey by responding on 5 points agree/disagree Likert scale and rank their most and less preferred prototypes or their segmented features (figure 10). To complete the assessment from both ends, I ran the same evaluation workshop including the presentation of some results of the first 5 workshops with Broadway staff to get their perspective and expert opinion on which of these ideas could be materialised or not and why. All participants were informed that they do not need to focus on the design since this is not a design PhD, but rather on the essence of each feature the prototypes offer.



PROTOTYPES EVALUATION SURVEY

	MOVIEGOING GIFTING					MOVIE FEEDBACK					PERSONALISED MOBILE APP					PERSONALISED WEBSITE				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I think that I would like to use this system.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
2. I think the system seems easy to use.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
3. I found the system unnecessarily complex.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
4. I would imagine that most people would learn to use this system very quickly.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
5. I think this system is fun to use.	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Please rate each of the following features from 1 to 5, 5 being the highest and 1 being the lowest.	Gifting experience:		Memories bubble:		Movie Feed-back (ipad):		Movie Feed-back (TV):		Broad way Box:		My movie-going history:		My account:		Movie Feed-back (web-site):	

Figure 10 Evaluation Survey

3.5 Summary

To wrap up, this project followed an HCI methodological approach to fill in the gap of Film Studies literature around contemporary cinema-going which involves capturing and sharing of digital data and is based on the combination of physical and digital activities that complement the cinemagoer's experience. This methodological strategy is unique and innovative for the Film Studies discipline. Drawing from HCI methodology managed to turn participants into active agents in the decision-making procedure and include them in the definition of the experience as well as the design of new experiences that fulfil their actual needs. Using a sequential mixed methods strategy had a great value to make sense of the data acquired in each study and to strategically access what is missing next and with which method it would be covered.

Following the theoretical framework of the double diamond design process and experience/user-centred design, this research design first started with discovering the problem: the lack of definition of the

contemporary cinema-going experience. Through research, analysis and synthesis, I mapped the cinema-going experience and developed some guidelines to make this experience better. Focusing on the user, I developed four prototypes that would add value to a more innovative, engaging and personalised experience and asked stakeholders to assess them.

The focus of this strategic mixed discipline methodology was to provide a new methodological approach that could be used in other settings and by other scholars. More specifically, it could be expanded and adopted by traditionally 'theoretical' disciplines and fields of research such as for example opera or theatre; similar contexts where audience research is involved and participants needs are not catered for accordingly. In the following chapters, I present and discuss the findings of this research project.

Chapter 4

Mapping the Cinema Exhibition

4.1. Overview

There are three kinds of research concerning audiences and the film market: industrial, academic and audience behaviour research (Stafford, 2007: 135). 'Industry research is primarily concerned with producing data and analyses that will enable film businesses to maintain their market position and become profitable' (Stafford, 2007: 135). On the contrary, this piece of work belongs to academic research and is designed to understand audiences and how the industry functions. Chapters 4 and 5 aim to map the contemporary cinema-going experience.

Chapter 4 delves into the cinema exhibitors' perspective on the modern cinema-going landscape and the way staff from two different kinds of cinemas, an art house cinema and a mainstream cinema, use data and technology, contributing to the extension of current literature on cinema exhibition. The findings presented herein address the first part of one of my primary research questions: what is the value of data attached both to cinemas (and cinemagoers) along with the behaviours and digital traces that define the contemporary cinema-going experience? The second part that concerns cinema audiences will be addressed below in chapter 5, which belongs to audience behaviour research and explores types of audience behaviour related to the cinema visit (Stafford, 2007).

> 'Cinema-going today is an ever changing landscape and this industry needs to learn because it is quite behind'.
>
> Broadway's Digital Infrastructure and Marketing Coordinator

With the above quote, Broadway's Digital Infrastructure and Marketing Coordinator underlines three points that interest this PhD thesis: there is a vast availability of technological advances in the cinema sector; some cinemas are left behind; therefore, some exhibitors could lead the way to educate others in integrating the 'digital' in everyday cinema-going. Scholarship exploring digital identity in the cinema industry, and more specifically in cinema-going at a time that digital platforms and digital

data have a primary role in it, is very limited as discussed in chapters 1 and 2. To cover this literature gap, I conducted six fact-finding, semi-structured expert interviews with professionals working in cinema exhibition in order to establish how digital data is used within the industry in UK –given that cinema exhibitors are the people that manage cinemagoers' data on a daily basis.

Two cinemas were selected: Broadway Cinema and Media Centre (Nottingham) and Savoy cinema[60] (Nottingham branch). As already discussed in this thesis' Introduction, Broadway is my industrial partner– a non-profit art house cinema. Savoy cinema, built in 1935, is part of a regional chain consisting of four cinemas in total in the East Midlands area and, although independently-owned, has a more 'commercial' orientation and can be characterised as mainstream due to the film programme selection which includes mostly mainstream rather than art movies. Two big multiplex chains were also approached for the interviews but did not express any interest in participating in this piece of research[61].

The following section serves the purpose of understanding the main cinema exhibition strategies in terms of data use. It explores how different cinema exhibitors perceive data and its value. It draws from the interviews conducted with key people working in Broadway Cinema and Media Centre: Steve Mapp -the Chief Executive (CEO), Dave Deighton

[60] http://www.savoycinemas.co.uk

[61] Their absence can be interpreted as being very busy and participation in academic research might not be on their priorities list. At the same time, it can also raise questions with regards to the reasons behind it- maybe their digital strategy is not totally addressed to the cinemagoer apart from marketing reasons –in other words it only serves corporate purposes, or they see their processes as commercially sensitive and don't want to reveal inside information. This is totally understandable and could be marked as a limitation of the research since it only represents two types of cinema (art house, non profit cinema and independent mainstream cinema) and excludes the big multiplex type. However, it is outside the main scope of this PhD to explore in detail how cinema exhibition works including all types of cinemas, therefore it might count as a small limitation.

-the Audience Development Officer (at the time of the interview) –now called Digital Infrastructure and Marketing Coordinator (DIMC) and Adam Byrne- the Box Office Manager (BOM); as well as in Savoy Cinema Nottingham: Paul Scotton -the General Manager (GM) and Shannon and Liam -two members of staff of the Box Office (BOS1 and BOS2). The job titles of the people interviewed help the reader understand and contextualise the conversation and the implications behind it. Participants were asked to provide their interpretative and evaluative knowledge from their everyday experiences on the matter of digital identity and digital data. Our dialogue revolved around the importance of data collection, the transparency behind it, the trust of cinemagoers in relation to it, the digital data usage and the role of it in the contemporary cinema-going experience. By the end of this chapter, the reader should have a clear comprehension of the benefits of data capturing for cinema exhibitors and how their practices have changed to adapt to the rapid expansion of technology.

4.2 Broadway & Savoy: two distinct cinemas

It is essential to distinguish the two cinemas involved in this study and elaborate on their differences as organisations. Broadway operates differently than Savoy because of its 'art house cinema' label. According to my data gathering while spending time in the cinema, this means it receives funding from public sources and needs to be aligned with public funders operational policy and vision. Savoy cinema could be characterised as a local cultural landmark as it opened for the first time in 7th November 1935 in the decade of movie palaces. Savoy's General Manager reports that it formed part of Lenton Picture House Limited, a company specialising in cinemas. It is an independent mainstream cinema, with commercial purposes, therefore not publicly funded. It has four screens in the Nottingham branch which is the head office. The Savoy chain, which keeps developing -counting until 2019 four branches in the Midlands area, has made important steps to keep up to date with

the digital evolution such as being active in social media, send out newsletters and maintain digital communications with its audiences. One of its main purposes as an organisation, according to the General Manager, is primarily to gain profit and expand as a business but also to maintain a close relationship and a high level of trust with cinemagoers.

Broadway has an educational and leading role among other cinemas throughout the UK focusing on primarily developmental purposes and Savoy is a well-established, mainstream, independent organisation concentrating on marketing purposes; both, nonetheless, have loyal audiences as their staff report. The investigation within these two organisations proves to be an interesting and quite distinctive case study of how data is captured and used.

4.3 Macro-differences: perceptions around digital data and the ideal cinema-going experience between different organisations

It becomes evident from the following discussion that there are critical differences between the two types of cinemas with regards to the organisational structure, the purposes and the aims of data collection and usage. The same applies to notions around digital identity, digital data and their general vision and digital strategy.

4.3.1 Organisational structure and vision

The first and most obvious disparity between the two organisations is in their organisational structure and vision. Broadway consists of multiple in-house departments such as but not limited to Box Office, Marketing, Programming, Development, and Finance. All of them collaborate and are closely linked together, as a representative of each department attends monthly meetings to share status, progress and future steps. As a result, all teams are aware of what each department does and of an overall progress update. Additionally, Broadway has certain targets -sometimes indicated by their funders- that need to be achieved, hence

invests more in engaging multiple employees with the digital strategy and data. The Box Office Manager, the Digital Infrastructure and Marketing Coordinator and the Marketing team report data insights to the Chief Executive. Furthermore, there is a board meeting explicitly organised to address yearly data-related issues and reporting. This meeting, firstly contributes to discussing where the organisation stands with regards to sales/admissions and audience engagement through social media and secondly, to informing future strategies. Deighton (DIMC) from Broadway illustrates below how board meetings work in their organisation:

Deighton: There was a board meeting with data that we collected last year which included sales data, social media data […] this is the landscape as it is right now. There will be targets to meet after that, so we say we are here now and this is where we want to be in six months' time.

Data discussions are not only limited to board members though. Broadway functions under an 'open data culture' within which the Chief Executive shares internally with all staff the figures of each year and makes sure that a high level of cooperation and awareness in all levels and departments are retained. This happens generally under the recognition of the need to take a digital turn, and move on to increasing the 'digital capacity'.

Deighton: It's certainly a systemic problem within the industry, well within independent venues; this is something we are trying to lead on within the next couple of years. To get venues start thinking differently about it because the big problem with collecting data is that people don't understand it and are scared of doing so. And it does takes resources to come and do this and take a lead on this and actually understand a bit more about it before they can do that.

Keeping up with the latest technology trends, understanding and informing data sharing strategies, are all part of Broadway's vision of

following this ‘open data culture’ by also disseminating it to other organisations. According to Deighton (DIMC), Broadway wants to be a fully transparent organisation: ‘If someone would come in and ask us I would be willing to share data -not personal or financial information. Some venues are very mystical about that. But this is what we want to break’. What they essentially aim to do is create innovation in data transactions and digital engagement by starting a discussion about openly sharing data to promote best practice around the industry within the framework of open data culture: ‘we collect data from different areas; a different exhibitor could speak about collecting data or having a very good programme having to do with young people, or a diverse issue, that we might not have’. This would concern all similar size venues –big multiplexes would be excluded- and would eventually result in a circle of knowledge sharing between exhibitors as well as in a potential increase of audiences’ trust.

Conversely, it is clear how Savoy Nottingham branch is operation-wise different from Broadway since it is not the ‘core’ of the business where all departments are based. Instead, only the General Manager and the box office staff are based there. All policies and strategies come from the Head Office –based in another building-, which centrally handles all four cinemas of the chain. The Nottingham cinema branch does not handle much data in house. All data is sent to and analysed in the head office and in the cinema only one person is responsible for it, the GM. Despite not being in charge of creating the data policies and strategies, he is aware of all the financial/ company data and metrics such as sales and admissions and of which segment of the data is given attention or not. With regards to being open about their data and potentially sharing it with audiences, only the GM and the head office have access to it. Scotton (GM) argued that ‘it’s all for business purposes. I can’t think of any occasion that we would do that [work under an open data culture]’. This organisational structure seems to go hand in hand with the cinema’s

vision, which is more about maintaining a 'good cinema-going experience' as Scotton (GM) said, getting more customers and expand the business rather than investing in digital strategies and development for the time being.

Scotton: The only reason we don't have something like that is because we are such a small independent company at the moment, we are constantly looking at opening new cinemas. So, as long as we open 5 or 6 cinemas and become a bigger franchise we will be looking into having a loyalty card, a card where we can keep track of it and make use of the information those customers give.

To sum up, both organisations are interested in maintaining their audiences' loyalty and trust, but are quite different in their visions and aspirations, specifically towards the turn to the digital and the proper use of available data. This is illustrated clearly not only in the way they function, but also in their organisational structure and size, as in who is doing what and how many people are occupying themselves with data.

4.3.2 Exhibition's data-related practices

Moving on to data-related practices, the data captured, the reasons behind data collection and its value are different between the two organisations. It is interesting to primarily investigate each organisation's approach regarding data collection. A detailed description of which data each organisation has, how they collect it, what they do with it, what is the level of security and data sharing policy, and finally what value this data has for them follows.

Deighton (DIMC) was in charge of Audience Development in Broadway at the time of the interview and one of his main duties was to co-ordinate

the cinema's gradual digital transition[62] in terms of adopting a better digital strategy and manage audience data. This data management included the way it is collected, stored, used and looked at as well as how these affect social media and digital engagement audience management strategies.

To begin with, they have categorised the data they collect depending on the relationship that each individual cinemagoer has with the cinema and the purpose it serves. For instance, for a casual customer (website or physical customer as they call them) they collect name, email address and full address. For a member[63] they collect the above, complemented by membership information[64], contact information, modified link members[65], demographics and preferences such as birthday, marital status, household income, current occupation, educational level, preferred genre, favourite cinema, frequency of email receiving or opting out options. Through all above data, the cinema digital platform can build a member's film/activity history, of which the customer is not aware at this point as it is only visible to the cinema staff that manages the platform. The afore-mentioned information is labelled by the cinema as 'customer data' and gives insights to the cinema staff with regards to a cinemagoer's practices and preferences.

Deighton: We can tell what they bought tickets for and when, how much they spent. We can probably have a look at who is

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[62] For example, anything that had to do with the cinema's digital presence such as but not limited to the mobile app, website, box office software.

[63] A person who selects to register in one of Broadway's membership schemes in order to have some benefits.

[64] 'Membership details: which membership they signed up for, when the membership was created, what sales this member has, either online or at the box office, what level they are, full level or concession level. Membership number, when the membership expires, how they heard about the membership (friends, brochure, website, stuff like that), where they picked the card from (if they bought it online or at the box office). There is also a membership anniversary so you could say "Oh you have been a member for a year'.

[65] This feature links up to 4 members together and one can automatically buy tickets for all.

probably coming to a certain film. So information and sales transaction are the two main things we are holding as members data.

Another category is 'purchase data' which includes attendance gross (how much money each movie made), attendance numbers (how many people attended a movie), number of screenings (how many films are projected in the programme), film projections (how many times a film is projected) etc. The third and final category is 'social media insights', comprising social media reach, audience engagement, how many people like a post or comment on it and so on.

For Savoy, there is a main bulk of data collection which is similar to Broadway but is not categorised officially. In terms of which data they collect from customers, they gather cinemagoers' name, email address, and phone number. As Scotton (GM) claims: 'We take a lot of private bookings so we take a lot of people's private information like names, telephone numbers and email addresses. People hire the screens for birthday parties so we also have this data'. In terms of metrics, their data focuses on admissions and money spent at the box office for concessions either per person, per movie, per week, per year etc.

Scotton: The other information I gather is obviously admissions. We do weekly reports that run down and we have [information on] how many people came down the door this year compared to this week last year; [sales info] on refreshments as well.

Savoy cinema also collects data from the 'Meerkat Movies'[66] scheme which allows cinemagoers to buy two tickets for the price of one, therefore they also count in their total admissions how many people come to the cinema through this scheme. Additionally, they know which

[66] For more information see https://www.comparethemarket.com/meerkat/movies/.

age range their audience belongs to because of the different ticket categorisations:

Scotton: With regards to ages, we have different tickets for each age, so it's basically people 18+, then you have a student ticket for any student, ticket for families and a senior's ticket for people over 60 years old. So, you can guess from these how many people that are coming belong to which range.

Both organisations have admitted having in their possession 'underused data': data they collect but do not really use or analyse. Savoy's GM, Scotton, claimed that the data they collect could be better utilised. For instance, he admitted that social media data is not analysed because of lack of resources. Furthermore, when customers call to book movie tickets on the phone, there is a bulk of data such as names and phone numbers which are not digitally entered in their database. Broadway's DIMC, Deighton, said that there can always be some underused data but they are always mindful not to collect data if they don't know it serves a certain purpose, because they would probably annoy their audience. They should know what specific data they need to collect and what the outcome needs to be.

The interview data collected has also manifested another key aspect of cinema data handling. For example, both cinemas seem to employ different methods and approaches for their audience/movie data collection but at the same time share some similar practices. While Savoy uses special events such as the universities' fresher's fairs to collect email addresses and external partnerships, Broadway collects social media data and pays much more attention to their analytics. Operation-wise, Broadway tries to get information from anyone who buys a service or a product from them. Following on with the shared practices, both organisations collect data via online payments and website bookings, box office interaction (physical or on the phone), newsletter subscription and finally digital or physical surveys. Additionally,

Broadway is using digital surveys to collect feedback from their audience: ‘Sometimes we are also surveying our audience for specific seasons and events and we usually do that on behalf of our funders, like the BFI. We keep a copy’ says Deighton (DIMC).

According to Broadway’s BOM, Byrne, all data capturing is based on ‘a soft policy’ which means no customer is obliged to give out their data and data capturing takes place through purchase of services like cinema membership: ‘We tend not to push people and we tend to link it with membership and things like that and we are using someone’s name because that’s how you collect your tickets from the box office’. Savoy also applies an optional data capturing policy. Overall, it seems that the two cinemas follow similar data collection policy, with Broadway taking advantage of any kind of data transaction as opposed to Savoy which only uses the traditional sources such as ticket bookings. The above align with what Stafford (2007) characterises ‘industry research’ (p.135-139), validating that it usually is interested in demographic data and population profiling as well as frequency of cinema visiting.

Moreover, data security is very important for both organisations even though the interviews took place long before the GDPR was implemented. Deighton (DIMC) informs us that data is encrypted and kept in their database, only company/sales data is shared with business partners such as Europa cinemas and finally there is no data sharing of audiences’ data with third parties for commercial purposes rather than for developmental/ funding and research purposes (see below the value of data to Broadway). As Deighton (DIMC) argues: ‘All the data we collect, is only really shared with partners that are for research and development purposes and funders. So that would be someone like the BFI’. Finally, there is a deep respect for the users’ privacy as Byrne (BOM) contends and a mutual trust that data is not going to be misused. This is even illustrated by the existence of a clear choice for the user who can opt out at any stage from having their information on the system and

have as a result all data deleted. Savoy shares the same confidential policy about personal data and right to withdraw. They only share company/sales data with distribution companies and business partners as well as independent sources such as Rent Track which is an independent source that gathers figures regarding cinema admissions in the UK. The above points concerned the practices and precaution that cinema exhibitors follow with regards to data handling.

Another significant aspect of cinema exhibition and data, is how exhibitors report the response of the users regarding data collection. There is a common observation from both organisations that there is a reluctance of audience towards sharing their data. On one hand, Scotton (GM) attributes this to the fact that people hear very frequently digital information being stolen and they are therefore, cautious about where their information is and how it is being used. On the other hand, Broadway's staff attach some factors that shape this audience hesitancy: generational differences and level of privacy of personal data. 'I find it very closely linked to age. If you have a 20-year-old, they will give you anything you need to know and they won't think about it. If you've got somebody around 70 they will get initially suspicious', says Deighton (DIMC), while Broadway's CEO carries on by adding how generational differences are central to any potential exploitation of digital data. He thinks that this abundance of platforms and new media is an opportunity to add in the equation younger audiences and fulfil one of the organisation's goals: 'If we could find a way to engage more especially with the younger audiences who are used to interact digitally, we would achieve one of our targets'. Lastly, Broadway's BOM highlights the need of the audiences to know why they are sharing data, and that 'most people are OK with name, anything beyond that… like the address, they get reluctant'. He argues that it feels more natural for people to get rewards in exchange of their data, so give out their information in order to get something in return, such as a free ticket or even a membership.

The afore-mentioned data is collected to serve specific purposes that alsovary between the two organisations. Deighton from Broadway contends that they 'are immersing in a lot of different data pools and it depends on which question we are asking every time we need to find something. This data is fundamental to our aim'. Namely the value of data to Broadway is summarised below:

1. Understand and develop their audiences (for example, visualise their audiences on a map and adjust promoting and marketing accordingly depending on where they live);
2. Adapt and improve their services (specifically improve the service quality in order to maintain or develop trust between the organisation and the customers);
3. Develop communication with their audiences (for instance, contact their customers with emails that might include either a physical brochure, a digital newsletter or a survey);
4. Inform operational choices (like shifting screen projections if a movie is selling out more than another);
5. Report to their funders (such as the BFI and the Arts Council);
6. Fulfil cultural and educational purposes (as in educating other cultural organisations and institutions by setting an example on certain tactics);
7. Get a detailed overview of sales.

Unlike Broadway, Savoy has more practical issues to deal with when it comes to data collection purposes and its value. In their case, each segment of the collected data is equivalent to a different purpose as Scotton (GM) argues:

1. Looking at admissions helps to make sure they are increasing. If not, this informs research on the reasons behind the decrease;
2. Monitoring retail sales contributes to understanding if certain items are selling over other items (and replacing products accordingly);

3. Being in control of consumption and proper function of the cinema is essential to fulfil logistics purposes. For example, check that the cinema is being run correctly- that there is not too much stock going missing, or the stock adjustments are correct or that we are not giving away many free tickets;
4. Communicating with customers in case of a booking or through newsletters aims at keeping them informed about new movies, products etc.

This section has indicated that the significance that data has for each organisation varies. While Broadway mainly perceives data as a means to develop audience practices, get funding and improve their customer experience, Savoy is collecting data primarily for marketing purposes, to make sure that admissions will increase and 'get more people through the doors', communicate with their audiences and maintain their trustworthy relationship. 'Purchase data' is very important to them along with cinema metrics such as admissions (every day they count down admissions and pass them on to film distributors), bar consumption and films' popularity (which is measured through admissions and people contacting the cinema asking to project a film again). On the other hand, based on this data, Broadway informs strategic business cases for its funders, primarily the BFI. Digital data is an indispensable factor for building a foundation for developing audiences, deciding how the website looks like. In general, it serves developmental purposes, in addition to adopting and promoting best practice among exhibitors. Lastly, it helps them maintain and increase the customers' loyalty and trust and make sure that they are doing everything they can to provide their customers with a premium, comfortable and worthy experience. This last aspiration is, in fact, of outmost importance for both cinemas.

4.3.3 The contemporary cinema-going experience

The two organisations describe in different ways the contemporary cinema-going experience as shaped by the end of 2010s. Scotton (GM) from Savoy, observes that the digital takes over as most of the information about watching films is internet based and cinemagoers prefer digital platforms such as a cinema website to look what's on. He also focuses on the current physical elements that make a cinema-going experience, and particularly highlights what 'a good experience' consists of: the sense of being more personal and engage with customers with friendly and happy staff, comfortable and 'home atmosphere' environment, low prices. The box office staff of Savoy shares the same opinions, as Liam (BOS2) claims: 'It's different coming here than to say Cineworld, which is a bit more corporate; it's a bit nostalgic, it reminds people how it used to be'. Shannon (BOS1) goes on to observe that a lot of customers visit Savoy for the authentic look, they like how it's old school and cheap. Broadway's ideas of cinema-going experience in 2010s are similar and they revolve around how technology has made it easier to buy and access cinema related stuff on your phone and to plan the activity; while mobile applications have made the actual movie viewing more interactive.

However, for Deighton (DIMC), cinema-going 'is still a quite traditional art form and platform. You go to the movies, it's dark, a lot of people get popcorn. It's a refuge from the outside world. It's a thing to get away'. He goes on to argue that except for the actual equipment technology or iMax and 3D screenings where there is a lot to talk about, in terms of the actual cinema-going activity and digital technology 'there's still a gap and there's a lot to be done'. Ultimately, the discussion concludes with how interactivity is recently, closely attached to cinema-going and how the latter has gradually turned out to be 'a big experience around one event'. For instance, he mentions how Broadway as a cinema venue tries to engage cinemagoers by creating an 'all inclusive event' that

accompanies certain movies: this would involve fancy/ movie-related dress up, quiz, music, competitions.

Moving on now to examine how exhibitors perceive the cinema-going activity and what is consists of. First, there is the exhibitor's journey (figure 11) which starts from the distributors, as Deighton (DIMC) contends. Distribution advertises trailers: big films get bigger budgets and more interactive happenings during their promotion to catch the audiences' attention. Smaller/ independent films have lower budgets and are relying on exhibition venues to help with marketing. Then, the exhibitor takes on: 'marketers, researchers and bookers' choose and book films from screening days and film festivals and then promote the films through social media, posters, website, newsletter and brochure.

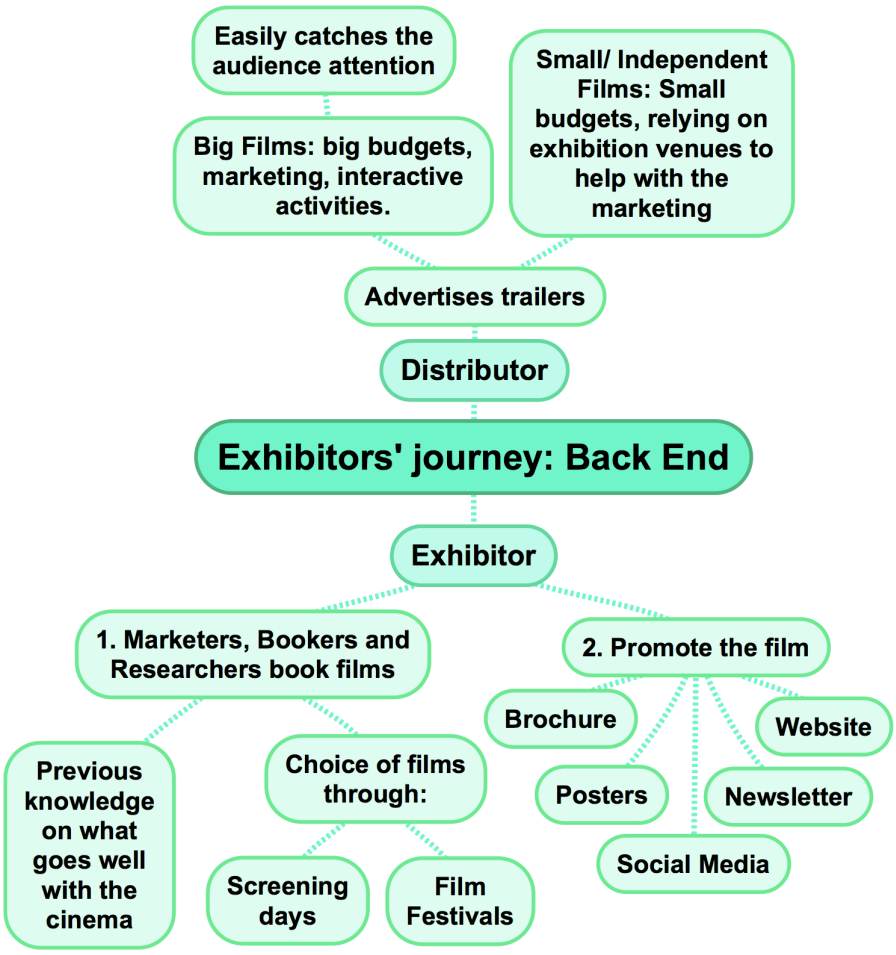


Figure 11 What happens before cinema-going from an exhibitor point of view

Below is a representation of how Broadway imagines the cinema-going journey from the user's end:

Deighton: Watch the trailer, come to buy the ticket or online, look what time the film is going to be, come to the venue, and either have the ticket or buy the ticket and have some food at the bar, watch the film and afterwards come for a drink at the bar. And that is the ideal for us because it's the full circle experience. Maybe they use the carpark where we have a discount for them. Maybe they will get the tram –and they get a discount for the tram ticket. We are very interested in the immersive experience here and how audiences engage with our venue.

For Savoy, the cinemagoer's journey starts when they are in contact with various triggers regarding a film, for example an ad on TV or a magazine, word of mouth or pages like IMDb and subsequently they look at where they want to watch a film. Then they go to the cinema, they are being served their ticket unless they have booked their ticket online or bought over the phone beforehand, and maybe get refreshments for the evening, then watch the film. The experience finishes when they have watched the film and then leave the cinema and talk about it, what kind of impact that film had on them, whether they would like to watch it again, if it was an interesting film or they enjoyed it because of the people that were in it like the actors. Part of this journey according to Scotton (GM) is the social media presence of the user: they are checking in saying they are in Savoy currently watching a certain film, commenting before a film even comes out, when they see an advertisement, that the film is coming soon and that they want to watch it. Reviews are also a core part of cinema-going which works either as a trigger to choose a movie or as an activity after watching a movie. Shannon (BOS1) and Liam (BOS2) specifically highlighted how sometimes film groups meet up in the cinema and they have critical discussions for the movies they choose to see.

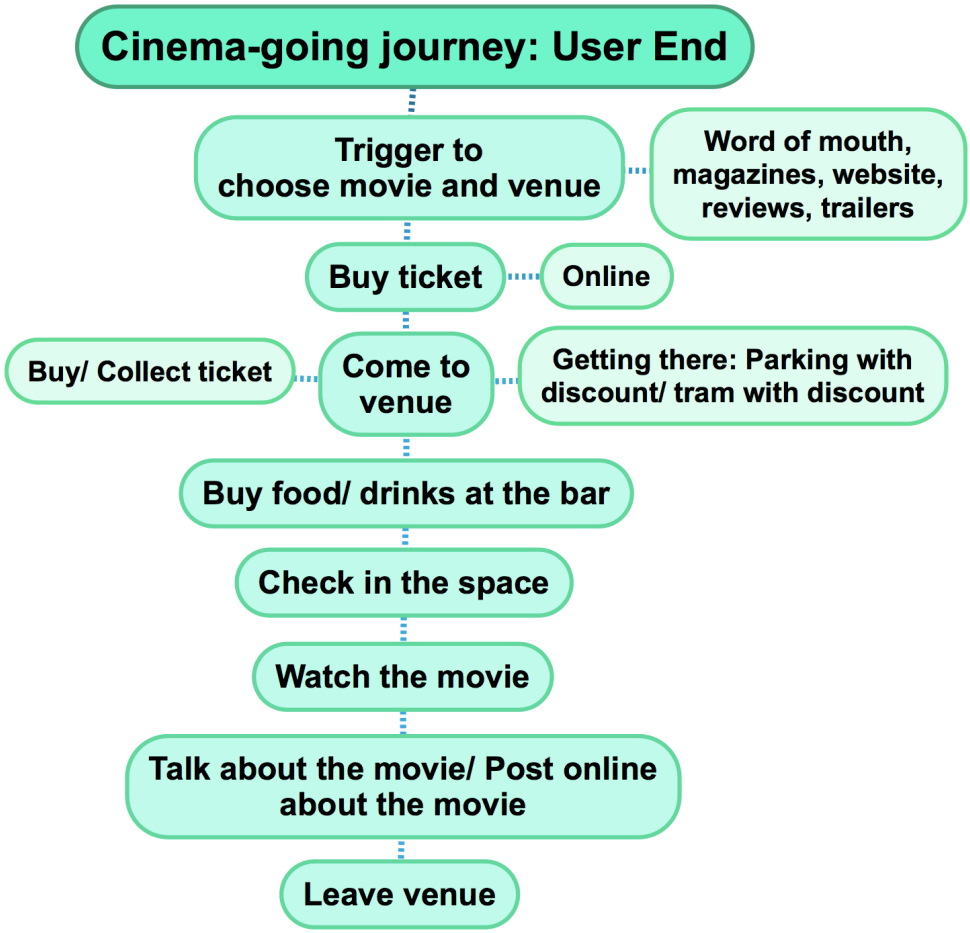


Figure 12 The cinemagoer's journey as exhibitors see it

To sum up, it seems that both organisations have a certain concept with regards to the cinemagoer's journey (see Figure 12) presented above in the diagram. It starts with a trigger that results in the movie one wants to see, post about it on social media, search trailer or review, decide which cinema to go to, buy ticket (online or physically), get food or drinks from the bar, check in the cinema, watch movie, leave the cinema –use tram or parking offer-, talk about the movie online or physically (write a review about it).

4.3.4 Enhancing the cinema-going experience using technology and data

After establishing the background on how the cinema exhibitors handle data and what constitutes the contemporary cinema-going experience

from their point of view, the conversation turned to how digital technologies could be used creatively to enhance the audience's experience. Initially, it needs to be mentioned that the word 'enhance' was interpreted differently by the two organisations. For Broadway, enhancement is linked to the users and to how cinemagoers would have a better time. Conversely, audience development and attracting more people to the cinema contextualises 'enhancement' for Savoy.

Both organisations were asked to primarily comment on how they perceive digital identity in order to carry on with exploring how digital technologies and data can help construct cinemagoers' digital identities. Savoy's GM thinks of digital identity as the digital information that exists about you in an online space such as the data you put up for example on your Facebook account.

Scotton: Digital identity? [It is] that where all people have their information stored digitally. I can remember back in the days it used to be having something like an identity card with your information but online. However, nowadays, I guess to me, it is what information about you is out there, digitally basically. I would say that a cinemagoer's digital identity is and could be further constructed and informed if we set some kind of technology that could monitor which films somebody is watching and then […] personalise their experience as in looking for something to buy and then see an advertisement of it on Facebook because obviously, it gathers the information of websites I have been visiting.

In other words, Scotton (GM) thinks that a more personalised experience through customised interests that includes a recommender system should be set in order to identify each cinemagoer's digital identity through the data each venue collects from them. Therefore, for him the digital identity of a filmgoer not only exists and unfolds through the movies they watch while they are physically in the space but also through

some activity they might engage with before or after going to the cinema. It is interesting though how he insists on the idea of digital enhancement combined with physical activities or events such as competitions. Namely, he argues that doing more 'fun' competitions which include incentives and rewards for cinemagoers along with creating the above-mentioned 'good experience' will eventually make people come back to the cinema and spend more money, which is after all what Savoy wants.

Overall, for Broadway, notions of digital identity revolve around the communication, online patterns, behaviours and technology use of an individual. However, things are a bit more complicated since there is a mixture of ideas depending on the role each person has within the organisation (explained below in 4.4). With regards to the role that digital data and technologies could play in 'updating' the cinema-going experience, many ideas came up.

First of all, a digital platform could be used to facilitate bringing people together and build stronger community ties: 'Using technology for meeting people with shared interests around cinema or other things', as Mapp (CEO) said. Secondly, investing more on the 'after' film experience because the way the experience is built now, people go straight after the movie instead of staying to socialise and discuss. Thirdly, there is an opportunity to attract younger audiences who are used to engaging digitally. Then, a loyalty scheme could be introduced where data from all the cinemagoer's transactions could be linked to one profile and at this point through gamification, each person could gain points depending on their activity. Next, the observation that most things should go digital (for instance reduce the brochure depending on existing location data) brought a deep interest in making use of all data collected in order to adapt more to the users' needs and optimise their experience through for example visualising data and embrace open data practices:

Deighton: [We are planning to start] looking at the customer experience time, looking at our website, looking at the analytics of our website which we'll change soon, looking at how our customers are using it, how long it needs for our customers on average to buy a ticket, what ticket page is the most popular, what are our search bars are logging in, how long it takes them to do that, all that kind of staff, aiming to optimise each step.

Broadway plans to thoroughly examine what their audiences say and make sure to cover all their needs, for example they identified that they should have a mobile optimised website because 'over 50% of all the viewers of YouTube are on mobile devices; you have to keep note of this stuff nowadays'. They are quite concerned with adaptability and following what their audiences tell them (whether literally or with their data), for instance they make sure that all kinds of audiences' needs are catered for. As Deighton contends: 'You can't just expect everybody to have an email address, so you need to make sure the customer service is good for everyone; it can't be the same for everyone'.

For this reason, among the multiple interesting exchange of ideas on digital development, the improvement of physical environment was also mentioned as an important factor that would enhance the cinema-going experience: 'We are looking to improve our seats and the facility, maybe improve the foyer and the bar. So all visual aesthetics places. All of these stuff are about improving the experience for them when they are coming in' says Deighton from Broadway. This connects back to the importance the physical space plays in the cinema-going experience, mentioned in chapter 2 when citing the work of Kuhn (2002) and Jones (2003) who talk about the 'awe' and 'delight' (Kuhn, 2002: 223) that a cinema space can cause to a cinemagoer. Cinema exhibitors are aware of how comfort and interior decoration are core parts of a good cinema-going experience and are a priority in their to-do agenda.

In a sense, the two organisations have a common basis, thinking that digital identity is who you are online, what you do and how you express it through social media and that processing and playing around with the data they currently collect will eventually result in a construction of the audiences' digital identity. Their ideas on using digital data to create an improved experience for the audiences lead to notions of personalisation that would allow cinemagoers to curate their experience based on what they usually do so that everything happens more automatically. Conclusively, there is an obvious need for creating a combination of both digital and physical innovation with regards to the cinema-going experience, maintaining an open data and knowledge transfer culture that needs to be expanded to fit the whole exhibition industry. Those were the macro-differences and similarities between the two distinct organisations. Below are the micro-differences that emerged from the expert interviews with people working at the same organisation but under a different job role.

4.4 Micro-differences: different perception around digital data within the same organisation

As already mentioned above, Broadway has distinctive organisational structure to Savoy. More specifically, it became evident during the interviews that even within the same institution, different positions place different values on audience data. Although all Broadway staff share the same vision and values, they follow different philosophies in terms of digital data meaning and use. When talking about Broadway staff, I am referring to the 'executive' group (i.e. who runs the whole cinema – represented by Mapp, the CEO), the 'customer service' group (who has direct relationships with customers –represented by Byrne, the BOM) and the 'marketing/data specialist' group (represented by Deighton, the DIMC) and each group plays a distinctive role in how data is managed within the organisation.

To start with, the approach that each interviewee took towards the meaning of digital identity is diverse depending on their position. For Deighton (DIMC), whose job is capturing, analysing and understanding data to use it in favour of the cinema's audience development, digital identity is how people present themselves online via social media platforms:

Deighton: If I am online, my identity online is probably driven by what I see on social media and also what I post on these. I think only if you are on social media and talk to people and share my thoughts when at the same time I am an ardent cinemagoer, that's how I think I would construct a digital identity.

The Chief Executive of Broadway with an experience of over 30 years in the industry primarily contends that the meaning of digital identity is different from generation to generation.

Mapp: There is a generational issue here! To me, it would mean a sense of identifying through data analysis how often and what I watched when I came to the cinema, simply! I think it is using digital technology to communicate with other people who also want to communicate with you, so it's less about, you know, a kind of finding an identity, it is less about knowing the kind of person you are and what you do and more about just meeting, using technology to meet people with shared interests around cinema or other things.

He goes on to argue that what's important to the exhibition in relation to the promotion of filmgoers' digital identity is to understand cinema-going, find what is special in it and provide an actual space and place for it to be expressed and developed.

Byrne (BOM) expands the same argument about the construction of different digital identities depending on the generation factor because an

older person would not post much but a younger person is more active through their online activity and participation in the online community:

Byrne: A younger person is much more likely to express themselves on those platforms and produce a digital identity, but again on our Facebook page it depends on the product we are promoting every time, because we can also see older people liking many pictures –maybe more than the younger ones.

He thinks that a social platform, either new or an already existing one is necessary for moviegoers to construct and express their digital identity. Both Broadway representatives, think of the generational differentiation of technology use important. However, while Byrne (BOM) focuses on social media use and sees a cinemagoer and their digital identity as a consumer from a marketing point of view, Mapp connects digital identity to its physical elements of a cinemagoer as a social and cultural being wanting to meet and share the experience with others.

Moreover, the purposes that data serve as well as its value, differs among these three different groups within Broadway. Byrne (BOM) is more interested in sales and customer service. According to him, 'data collection contributes to programming, filling capacity of the rooms, staff scheduling and more daily routine things from a box office perspective'. For Byrne (BOM) and Deighton (DIMC), the priority is making the best use of data and understanding it in depth in order to produce the highest level of experience to the customer and consecutively to similar organisations through sharing best practice. Byrne (BOM) argues that making good use of data is…

> […] part of our remit since we were created 25 years ago as an educational cultural kind of force really, and we do have commercial aspirations that feed into that but it's not with view to making a profit. It's with a view like the more people that know

about us, the more we are fulfilling their cultural needs on a broad spectrum really.

Additionally, according to Deighton (DIMC) ‘audiences are telling us what they want us to do through this data’; and this is what will eventually lead to enhancing the cinemagoers’ experience: programming would be more attractive, digital engagement will increase and the customer experience satisfaction will be raised as well based on what the audiences say. While Byrne (BOM) and Deighton (DIMC) are looking at this with a more technical and concrete approach, Mapp (CEO) holds a broader knowledge about data-related practices and is not aware on its day-to-day micromanagement. His main concern is to maintain the trust and engagement of Broadway customers and create value for them while they share their data, as well as achieving the BFI and other funders’ goals:

Mapp: We get various data from our customers. Cinema is using digital technology to help people communicate. We want to use new technologies to get our customers to meet new people with shared interests and taste. Collecting data from our customers has great value for us. It helps us understand better our audiences, keep them engaged and of course increase our engagement with them in the future. Additionally, it is an indispensable and concrete source of reporting back to our sponsors and funders such as the BFI and the Arts Council. Finally, we can analyse how audiences are changing and the potential of developing new ones.

Drawing from that, it is evident that Broadway has a distinct remit and cultural function and is directly connected to the national funders’ goals such as broadening of cinema audiences. This is part of what Deighton (DIMC) talked about earlier on, in undertaking an educational role by providing the example that others will follow.

The CEO positions the future of cinema-going within the importance of customer experience and the community. He noted that in an era of multiple ways to engage with film content, what is special about cinemas and cinema-going is the sense of community, watching a movie on the big screen that provokes your emotions, it's an evening out, you can have a chat within welcoming and comfortable surroundings, at a reasonable price. Going forward for him would be 'building on that sense of community' through the use of technology and data that is already in their disposal. He especially valued this in order to create a meaningful 'after the movie' experience, which is a sector that lacks attention at the moment. Mapp views data as playing a crucial role when supplemented and merged on the physical experience; he adopts a more romantic perspective towards the importance of data in the future of cinema-going.

Conversely for Deighton (DIMC) who is being more pragmatic, looking into details with regards to data capturing and handling, the future appears to be a bit more technical:

Deighton: What I am looking to do in the future is doing more stuff on digital engagement, this would be Facebook pixel tracking for transactions, match someone's transaction all way from Facebook to our website and then looking at the customer experience time, looking at our website, looking at the analytics of our website which we'll change soon, looking at how our customers are using it, how long it needs for our customers on average to buy a ticket, what ticket page is the most popular, what are our search bars are logging in, how long it takes them to do that, all that kind of stuff.

Deighton is rather interested in investing on technological advancements such as data analytics tools that would provide deep insight into customer behaviour. Drawing from these, he would see how a cinema could create a more customised experience, tailored to fit each

cinemagoer's unique needs. To conclude, Deighton thinks of data as an opportunity to delve into a cinemagoer's mind, leading to better understanding them and being able to fit their needs while also gaining commercial profit.

The above views and opinions from people working in the same organisation, showed how vision and aspirations might be common within the hierarchy of a cinema but discrete roles indicate how each professional perceives and approaches what is digital identity, which data the organisation has, what is its value, which purposes it serves and how this data can be creatively used to enhance the transparency and relationship of trust with the customer as well as the audience experience. For a detailed review of the comparison between the organisations and job roles see table 2 below.

Table 2 Comparison of data on mapping the exhibition

	BROADWAY																			SAVOY								
	Executive group (CEO)				Customer Service group (BOM)				Marketing/data group (DIMC)											General Manager								
Which data do you have?	Subject covered by the DIMC				Subject covered by the DIMC				Customer data (physical customers, website customers, members)		Purchase data			Insights on social media						Personal data (name, email, phone number)		Purchase data			Admissions			
What do you do with it?	Send information to customers				Inform operational activities				Analyse it through software or data analytics company											Send newsletter				Contact customers			
How do you collect data?	Not being familiar with data collection	Supposes through the box office and through credit cards and bookings			Soft policy on data capturing: never push people over data collection	Subject covered by the DIMC			Online payments	Box office interaction	Website bookings	Social media	Purchase of other services	Digital/ physical surveys						Website	Newsletter subscription	Special events such as Freshers' fair	Phone bookings	External partnership (eg. meerkat movies)	Surveys		
Data Security/ Sharing	Not responsible for this				Respect privacy				Encrypted and Kept in database	Opting out choices	Third party sharing: no data sharing for commercial purposes, only for research and developmental purposes. Also, economic/ company data to Europa network									Share with distribution companies		Rent Track (tracks figures on UK cinema-going)		Optional data sharing/ right to withdraw			
Digital identity	Generational differentiation: use of digital technology to facilitate connecting with others (social purpose)				Generational differentiation: younger people are in general, more active on social media				How people present themselves online via social media platforms: what I see + what I do		Digital identity is enhanced by building things around digital practices		Online expression of yourself	The age factor						All people have their information stored digitally				One's social media accounts			
Value of data	Understand audiences	Develop audiences	Analyse changing audiences	Report progress to stakeholders	Sales	Fulfill cultural & educational purposes	Link all transactions to facilitate service provided (programming, staff scheduling, rooms capacity)	Make good use of the data to produce the highest level of experience	Understand audience locality	Develop communicat ion with customers	Answer questions	Form case studies for fundraising	Improve service quality and audience trust	Improve operational choices						Marketing/ inform economic balance and sales				Increase admissions			
Most important data	The ones that help meeting funders' priorities				Email, name, phone number: practicality of contacting customers	Meet organisation's aims			Name, address, email, to understand who our audiences are											Sales, which will inform future programming and strategy							
Underused data	Not responsible for this				Not responsible for this				Only collect data for specific reasons so that 1. to avoid annoying your audience and 2. being aware of what specific data you need to collect and what the outcome needs to be					Some datasets are not used						Social media data is not analysed			The data they have could be analysed more				
How do audiences share their data?	Not responsible for this				Need to know why they should share	People give out data more easily compared to the past. However, some are still reluctant	Data sharing in exhange with rewards	Younger audiences share data less reluctanctly	Not responsible for this											Reluctancy in data sharing usually" audiences being cautious and concerned							
Future of cinema-going	Using technology to facilitate bringing people together	Build stronger community tights	Invest on the 'after' the film experience	Attract younger audiences	Loyalty scheme for all				Need to take a digital turn	Understand and inform data sharing strategies		Visualise data and embrace open data practices	Understand the customer journey path and usability	Match demand with suppy						Do more 'fun' competitions (interactive events to reward customers)		Create a good experience to make people come back		Customise interests with recommender systems			
									Keep up with the tech trends	Personali-sation	Digital over physical preference	Improve physical environment	Create a Broadway platform to bring audiences together															

4.5 Summary

The main point of the above section was to provide an understanding of the ways digital identity and digital data are thought about within the context of cinema exhibition. The same data is valued and used differently by staff in different organisations but even within the same organisation. An art cinema that is funded by the public sector has different priorities and acts more responsibly towards data capturing and handling, undertaking an educator's role for other organisations compared to a local commercial cinema. There is a clear strategy and many people deal with the data from different angles. For instance, the CEO views data as an extension, a supplement to the physical cinema-going experience, while the Customer Service team sees it as numbers and economic figures and the Marketing department values data hugely as it helps them have impact and meaningful design of future strategies with regards to audience development.

Overall, the above findings provide grounding for the practical implications behind digital identity and its importance for the future of cinema-going as well as a map of the existing industry landscape. The integration of digital data and its creative use through technology in the activity of cinema-going is a challenge that can bring radical changes in the cinematic industry. The above discussion with cinema exhibitors suggests that there is a necessity for more empirical research that will match the needs of the industry (exhibition) with the actual needs of the audience. Moving on to the next chapter, which will try to establish an understanding of the experience from an audiences' perspective.

Chapter 5

Mapping Cinemagoers' Journeys

5.1 Overview

This chapter complements Chapter 4 by mapping the contemporary cinema-going experience from the perspective of cinema audiences. It answers questions that revolve around the cinema-going experience in the digital age. How do audiences define it? Which activities does it consist of and what is the role of digital platforms and data in it? Hypothesising cinema-going is a holistic experience that is not limited in the cinema space but encompasses what happens before arriving at the movie theatre and after leaving it, I describe how the increasing integration of digital data shapes the cinema-going experience. The results presented below are the combined analysis of findings from the exploratory focus groups (study A), the participatory design workshop (study C), and the diaries supplemented by one to one interviews (study D). When I use quotes from the participants, I add letters A/ C/ D next to their pseudonyms depending on which study they took part in[67].

The chapter begins by introducing the trajectories framework used in HCI to describe user journeys. Then it unpacks the cinema-going journey and its three segments: before going to the cinema, during one's presence at the cinema and after leaving the movie theatre. In an effort to bring together all the examples and details of the journey presented, the following section showcases four personas that represent different types of cinemagoers with distinct trajectories. A reflection of the above follows, indicating the most prominent elements of contemporary cinema-going, and pinpointing any challenges that might impact negatively on the cinemagoer's experience. The chapter ends with the main conclusions that emerged from the analysis in relation to the contemporary cinema-going experience.

[67] In case a participant took part in more than one studies I indicate all the studies representative letters. For example, a participant that took part in focus groups and the participatory design would be signposted as Pseudonym (A+C)

5.2 The trajectories framework

The trajectories conceptual framework, hereafter called trajectories, is a frequently used contemporary HCI theory (Rogers, 2012). Benford et al. (2009) developed the concept of trajectories to address the challenges involved in investigating the integration of multiple digital media, technologies and interfaces into physical artefacts, people and locations during cultural and leisure experiences. They initially created four user experiences, which connected physical and virtual spaces where the user undertook multiple roles and went through journeys (Benford et al., 2009). Their research revealed that although user journeys traverse diverse places, times, roles and interfaces, they are continuous and part of a connected whole (Benford et al., 2009). This led to the definition of a trajectory as 'a coherent journey through a user experience' (Velt et al., 2017: 2093), which I follow in this chapter.

To date, several studies have adopted the trajectories framework to understand and design 'artistic, entertainment, leisure, heritage and social experiences' (Benford et al., 2009: 709). Some examples of its application to cultural experiences similar to cinema-going would be museum experiences (e.g., Egglestone et al., 2016; Fosh et al., 2013; 2016), concert experiences (Velt et al., 2015) and musical performances (Hazzard et al.; 2018). Velt et al. evaluated the trajectories framework by analysing 60 research papers. They reported that it is a strong concept (Höök and Löwgren, 2012), positioned between theory and design practice and has been used for various purposes such as 'situating research work', 'analysing and describing an experience', 'designing an experience' and finally, 'discussing and building concepts' (Velt et al., 2017: 2094-96). Furthermore, they categorised existing research work in four concepts: trajectories as a framework, the global idea of trajectories as a user journey, mentioning specific components of the framework, and detailed instantiations of components (Velt et al., 2017: 2096). Although extensive research has been carried out as illustrated by Velt et al.

(2017), there are no studies that examine cinema-going under the scope of trajectories. This chapter, falls under the category of what Velt et al. (2017) identifies as 'analysing and describing an experience' and under the 'global idea of trajectories as a user journey' and aims to unfold the cinema-going journey. To do so, it perceives cinema-going as a trajectory and maps it on some of its fundamental components mentioned below.

A trajectory is a continuous journey primarily guided by the user but at the same time, by the narrative that an author attaches to any spatial, temporal and performative structures (Benford et al., 2009). The user can interact with these narratives and undertake this journey as an individual or as part of a group. The user journey is defined by a 'hybrid structure of user experience' (Benford et al, 2009: 712), which consists of four components: space, time, roles and interfaces. Distinct user journeys of two or more users might overlap, creating interesting instances of isolation or encounter (Fosh et al., 2013).

Turning to the cinema-going experience, the user translates this journey as a member of the audience. A cinemagoer goes through 'transitions' from one place/interaction/interface to another (Benford et al., 2009) either on their own or along with other users who do not necessarily undergo the same experience but rather different journeys with distinct components. These transitions include a beginning and an ending; leading us to wonder when and where the cinema-going experience starts and ends for each user. Additionally, there are transitions between roles and interfaces; cinemagoers can undertake several roles. These roles are linked with the kind of interfaces (platforms, devices) they engage with and how. Benford et al. (2009) underline the traversals of a user between physical and virtual worlds. Likewise, cinemagoers go through similar transitions by engaging in online social activities such as discussions about a movie, or practical activities such as booking their tickets online in order to physically attend a screening.

The cinemagoer as a user is in control of their journey; they curate their trajectory. However, they may encounter moments when the narrative of their experience is defined by the author, in this case, the cinema exhibitor and consequently the staff of the cinema. Therefore, users are put in a position where they can manage their trajectories (Benford et al., 2009). This also relates to the fact that there might be interweaving trajectories among users (Benford et al., 2009). Benford et al. (2009) describe how interweaving trajectories take place when an experience involves collaboration between participants, especially in a public setting. In the case of cinema-going, cinemagoers go through interweaving trajectories too as their journeys coincide and might be influenced by each other's. To give an illustrative example, the way a cinemagoer perceives and manages their cinema-going journey while in the physical space of the cinema might cause distractions or interruptions to the journey of another cinemagoer that has a different ideal cinema-going trajectory. There is, however, great interest in the implications of interweaving trajectories, and that is why researchers such as Fosh et al. (2013) and Hazzard et al. (2018) consciously design experiences that drive their participants together but also steer them apart to also go through parts of the experience in a more isolated way. Having discussed the trajectories framework and its application to the context of cinema-going, the next section describes the cinema-going journey in detail.

5.3 The cinema-going journey

5.3.1 Demarcating the cinema-going journey

Providing a single definition of the cinema-going experience is a difficult mission as its meaning varies greatly among cinemagoers. However, drawing from the participants' data, it is evident that there is a unique factor in their definition, as they segment it into three sub-experiences: before, during and after. This section of the chapter is concerned with how the trajectories framework maps onto the idea that cinemagoers see

their activity of going to the cinema as a journey with transition points from before to during and from during to after, while interacting with other users and interfaces/platforms within digital or physical spaces. It also provides an understanding of the limits of this trajectory. How do cinemagoers delimit their cinema-going journey? To answer this question, I deconstruct the whole experience and present three kinds of limits depending on how audiences interpret their experience. I explain, in detail, which activities cinemagoers carry out before, during and after going to the cinema. I also explore which platforms and devices they use, which kind of data they share while using those platforms and finally, the feelings that they develop throughout the process.

Cinemagoers choose different parameters to delimit when, where and how the cinema-going experience begins and ends. After analysing the data, I categorised the limits they use under 'temporal', 'spatial' and 'activity-based'. All three types of limits are somehow overlapping and the lines that separate them are blurred. This is because cinemagoers do not have clear boundaries among those three kinds of limits; one can talk about spatial limits while simultaneously mentioning temporal limits. The term 'spatial limits' refers to the bounds that cinemagoers create when they define the cinema-going experience as something that is mostly limited to a physical space. 'Temporal limits' relates to demarcating the cinema-going experience based on dates and time. For instance, a cinemagoer can start their cinema-going experience months before actually watching a movie and end it after days or weeks when they eventually forget the movie. Finally, the term 'activity-based limits' describes when cinemagoers mark out their experience based on the activities it includes. To provide the most representative example of my sample, the experience begins when someone starts planning ('before'),

the ‘during’ is when they are watching the movie, and lastly, the discussion about the movie is considered part of the ‘after’[68].

5.3.2 Before going to the cinema

Having defined the different types of limits cinemagoers use for the cinema-going journey as a whole, this section investigates the ‘before’ division of the experience. This might refer to any physical or digital space before stepping in the cinema space/ venue (spatial limit), the moment in time an individual decides to go to the movies (temporal limit) or the activities they carry out before visiting the cinema (activity-based limit). With regards to the activity-based limit, Sheldon (D), one of the diary study participants, presented an interesting perspective arguing that the action should be initiated by the cinemagoer in order to be consciously counted as the beginning of the experience.

Sheldon: The beginning of the experience marks an action initiated by me. When you see the trailer on the cinema you didn’t choose to see it, and the cinema decided to show the trailer to you, so it wasn’t an action I initiated myself. It starts when you start looking up the movie and I think when you buy the ticket, the before part ends.

As Sheldon describes it, the journey starts with his choice to decide on a movie. Even if he first saw it on a trailer in the cinema, he claims that it was not his own choice to watch the trailer. On the other hand, if he had chosen to watch the trailer on YouTube, then that would be the start of his experience. This is especially thought-provoking from a design point of view because it indicates that the start of the journey cannot be forced unless it is a conscious user’s decision. Cinemagoers want to have control of their experience, which relates to the role they decide to undertake within their journey (Benford et al., 2009).

[68] For quotes on demarcating the experience see Appendix J2.

In relation to the 'before going to the cinema' segment, the main activities identified by the participants can be divided in three categories: a) choosing movie, b) planning: choosing the date, time and venue of the screening, booking and communicating with others, and c) logistics related to the experience. Throughout these activities cinemagoers use digital interfaces but also engage with 'physical platforms', which could be better described as artefacts. The most frequently mentioned were Google search and Google maps, the cinemas' website, Facebook and Facebook Messenger, and in terms of physical ones, the cinema brochure. The devices they used to access those interfaces were: PC/ laptop, tablet, mobile phone/ smartphone, telephone, TV, radio, printer. The locations where these activities took place varied from one's home, office, or university, to the street (while walking or using some means of public transport). To complete these activities, cinemagoers interacted with family members, their partners, colleagues, neighbours, and cinema staff, in addition to online and offline friends. Some participants reported that they sometimes carried out these activities alone, without any human interaction –just with the help of digital interfaces. This reveals the vital role that digital platforms/ interfaces play for completing this segment of the journey and how much they are integrated within their everyday lives, that they even use them while on the road.

Furthermore, participants listed the data they are aware that they share while carrying out cinema-related activities[69]: a. personal information (email, name, phone, age, location, bank details, location routes, personal social media profiles), b. their opinion (what they think of movies/cinemas/artists, user reviews, ratings), c. taste (the movies they like), d. preferences and practices (times and dates they go to the cinema, which is their preferred seat, number of tickets they book, what they view), e. social information (who they go with, who their

[69] This list is accumulative, it does not mean that all participants were aware of all this data being shared.

friends/family/partner are, followers or online friends), and f. analytics/ social media insights (likes, comments, how long they spend on a website, which website pages they visit more, browser history, hashtags etc.). The data that cinemagoers share consciously before going to the movies represents their digital identity. Accumulating and looking into this data could contribute to understanding their tastes, practices, sociability and consequently, patterns related to them. As a result, this would enable them to manipulate their practices and patterns in order to optimise their experience. Moving on, I describe in detail the content of each sub-category of activities.

A. Choosing the movie

To begin with, choosing the movie is related to one's personal taste, and being inspired by external triggers in physical and digital spaces. Cinemagoers might decide they want to go to the cinema regardless of knowing which movie they want to watch, in which case they usually consult the cinema's website, newsletter or brochure.

Tom (D): In terms of before, I will think 'I want to go to the cinema this week, what films are available?' So, I will look at the website, maybe at a trailer, then I will decide OK, this is the film.

Alexa (D): When I go to the café I will pick up all the brochures, and that will put it in my mind 'Oh so, there is one I should go and see!'.

Accessing the brochure is part of the physical triggers cinemagoers can experience, along with seeing a poster of the movie, asking recommendation from a friend, reading a relevant book or an article, or watching a trailer before a movie starts. Browsing the website or YouTube for trailers is its digital counterpart.

Digital triggers dominate participants' discussions. An interesting finding that came up a lot from different participants was the central role of SNSs

in choosing a movie. Some examples include following online news about Oscar nominations, looking at which movies others have watched on social media, and being reminded on social media there is a movie they want to see. For instance, Rose (A) follows lots of films on Facebook and Instagram and keeps up with what they post. Among others, participants mentioned receiving recommendations from friends on WhatsApp, Skype, Facebook and Twitter, following online conversations, such as those within Facebook film groups.

Another element of choosing the film, relates to researching it: looking for specific information about the film such as synopsis and cast, watching the prequel or listening to its soundtrack (developing in this way a levelled relationship with the movie), watching the trailer on platforms such as YouTube and Vimeo, checking reviews and scores on related websites such as IMDb, Rotten Tomatoes, AV Club, or listening to professional film critics on BBC radio, Radio/ Channel 4. Along with choosing a movie, planning is important to the cinema-going experience.

B. Planning

Planning is carried out carefully as it holds a special role in cinemagoers' experience: 'Planning the visit is more important that choosing the film', says Shandy (D). Melodie (A+D) also pointed out that 'even buying that ticket is going to be forever part of your moviegoing experience'. Planning involves choosing the right cinema, checking the programme in terms of convenience (date, time and location), booking, and communicating with other people. For example, Philip (C+D) adopts a certain behaviour with regards to choosing the time he visits the cinema. He enjoys a 'less busy' screening room: 'I like checking to see if the film I want to see is busy and I base my decision on that. I prefer it when it's not busy'. Carrying out the above, he leaves behind his 'traces' through his cinema, location and time preferences.

After choosing the movie and time, communications and booking take place. Coordinating with others is one of the recurring aspects of planning. This involves checking and choosing seats, searching online for ticket offers or memberships, buying tickets online, commenting on a movie Facebook feed, posting on a Facebook wall about the movie schedule, and so on. Many participants were members of groups on digital platforms, which were created exclusively to arrange social get-togethers at the cinema or to hold cinema/movie related discussions. Jerry (D) reported having a specific WhatsApp group with friends to plan going to the cinema and discussing about movies: 'this WhatsApp group is only for movies to arrange going to the cinema and discuss about it, everything about movies'. Kiara (D) was also involved in a similar group:

Kiara: I first got a group Facebook message from some university friends who wanted to know if I would join them to see the film Moonlight on Friday at 20:00 at Broadway cinema. A friend put it together, cause she wanted to see if I wanted to see a film with a friend and maybe another person.

Stefan (A+D) also talked about how he uses Facebook to share his intention to go to the movies and plan with someone that wants to join him:

Stefan: Sometimes I will post with the local student film group of University of Nottingham that I am a part of, or sometimes I post on there, and say Hey does anyone want to go I am going to see this movie?

Kathrine: I use Instagram to a certain extent, like I come here for the Horror Mayhem festival and Japanese Film Festival, for that we use Instagram to advertise it to our friends because I am trying to make it more widely known.

Kathrine (D) uses Instagram to promote any festivals she might watch with her husband, not only to find people to join them but also to make the festival widely known to her Instagram friends.

Turning to booking online, the process depends on which movie one will see and where. Participants report that when there is a very popular movie in cinemas like Cineworld or Savoy they have to book online through the cinema's website. Paying the online booking fee was characterised as a negative necessity. Harry (D) books his tickets online when he goes to the movies with his kids, however, he admitted 'it gives me a bad feeling to have to pay booking fees to buy cinema tickets'. The above activities and testimonies are part of cinemagoers' digital and physical traces and define how their trajectory is structured.

The following subsection will mostly focus on choosing a cinema, which was one of the most important parts of cinema-going planning according to participants. As already discussed in the Introduction, cinemas are divided into three categories: art venues, mainstream independent cinemas and multiplexes. This distinction becomes evident also to participants who differentiate the experience they have when going to a multiplex, to an art cinema and to a local mainstream cinema. In Nottingham's case, that would be Cineworld or Showcase, Broadway and Savoy respectively.

Melodie (A+D): I can't explain why these are two different things in my head, but like, Cineworld is like, just to watch a movie, but Savoy or Broadway is like a cinema … experience.

Cinemagoers choose which cinema they visit, based on which type of experience they would prefer to have. This comprises several criteria such as location, cost, movie variety, and desire to support, small, local cinemas.

According to participants, the cinema-going experience at a multiplex is expensive, includes big screens like the iMax and offers 3D capability, provides allocated seating on comfortable and expensive seats, and projects all blockbuster movies. It is also fun, centrally-located and associated with refreshments, including fresh popcorn and nachos with

cheese. In terms of demographics, it is the place where most adolescents, young adults and families with small children would go for their cinema-going experience.

The art cinema is usually thought to be a social place that provides its audiences with warmth, nice decoration, a friendly atmosphere, and a café-bar for food and drinks extending the cinema-going experience out of the screening room, and creating a community of people that cinemagoers can relate to and be part of. Diana refers to the demographics of cinemagoers by highlighting that it differs because it is not full of children and noise and she feels 'it is a place that people go to enjoy the film, art, […] the setting. I can always rely on going and having a good experience, I never had a bad experience there'.

Within the spectrum of cinema-going experience provided by different types of cinemas is additionally the local mainstream cinema type. These kinds of venues are cheap compared to multiplexes but also art venues. They show quite a vast selection of movies, both blockbusters and independent, offer allocated seating, a warm atmosphere and friendly staff. In terms of demographics, it is a place for all but also has lots of students due to cheap prices and the types of movies.

Stefan (A+D) –who reported that he visits any cinema depending on his cinema-going needs and purposes– sums up how he sees different types of cinema experiences according to cinema choice:

Stefan: Locally, I prefer the Broadway and Savoy, I think the big multiplexes are kind of sold. Broadway is clearly a place where they care what their programme is and it's all around an arty kind of place, it's a very good venue in so many ways. It is a place where I am happy to go and be a part of that even more than just a centre. You know it's a cinema but it also has the café and pub, it's a good place to meet people, it's an all around social place, and the fact that I

could watch movies there is good too! The Savoy has a lot of character, it tends to have a bit more student audiences which is fun. I like the classic style, red seats. Not as much after they remodelled it actually. And Cineworld is overpriced, the rooms are too big, I suppose the seats are nice but they feel so sterile.

Alexa (D), a self-characterised cinemagoer who would go to any cinema to watch a movie/ not attached to a specific venue, sums up how these three types of cinemas are different to her opinion by adding an analogy.

Alexa: We've been at Cineworld, the Savoy and the Broadway and they are all so very different. You can really tell while you are there. The Savoy feels like a dive bar, it's what you call some place that's really like dirty and what they serve it's cheap and the people there are maybe dangerous but it's got a really cool vibe, you enjoy it there! [laughs]. The Broadway, feels very artsy but then also cheap in some ways because they don't have vast amounts of money because they invest it in things that won't necessarily make them a million dollars. So Savoy is like a dive bar, Broadway is like a Wholefoods super market, and then Cineworld is just like Tesco; you can get things that you really want, that you really need, it is very big and very flashy.

Below I explain in detail participants' distinctions.

Participants differentiate going to the movies for 'entertainment' and for something 'more serious'. Fun is separated from seeing a beneficial movie for Yunie (D), who argues that she would go to a multiplex 'for the fun, not to get something out of the movie'. Conversely she would go to an art venue with a different mentality, more 'serious', ready to reflect on the movie and benefit from the experience. The importance of choosing the cinema correlates in this case with the previous analysis of the

significance of choosing a movie and more specifically, the movie variety a cinema offers.

Cost is also a crucial factor to decide which cinema to choose and relates to the value cinemagoers attach to their cinema-going activity. There are cinemagoers that go to multiplexes to take advantage of offers and loyalty cards[70]. Otherwise, big multiplexes are considered expensive and as Sebastian (D) mentioned, 'a waste of money'. On the other hand, local cinemas usually have offers for specific demographics, such as students, as Melodie (A+D) argues: 'I usually go to Broadway because of the low price of tickets for under 25s, and also Savoy!'.

Furthermore, cinema choice and cinema-going frequency is influenced by location. This is true for many participants that mentioned that their cinema-going habits change depending on location. A very illustrative example is that of Sebastian (D):

Sebastian: We go to the cinema approximately 1/month with my wife now. Before, where we lived we would go twice per year because now we moved to a more "urban" setting, more "like a city", where somehow it felt more accessible.

The more an urban area offers social and cultural activities, the more people have a motive to visit the cinema.

Supporting a local cinema to ensure that it continues to exist and function in the area is another factor influencing cinema choice:

Sebastian (D): The Savoy isn't an arts cinema but […] it's nice to support it as an independent local business, and we go there because we want it to continue to be there,

[70] An example of that would be a big chain's latest offer for 'unlimited cinema', a loyalty card that provides the cinemagoer with the opportunity to watch as many movies they want, as many times they want, and they also get 10% off the price for snacks and drinks and its cost starts from £17.99.

> they don't have the same resources as a big national chain.

It is a matter of idealism, when cinemagoers choose to support a specific cinema because of the struggles it can get exactly because of its state of being a small, local cinema with far lower revenue than big chains.

Based on the above findings, it is clear how different types of cinemas attract different types of cinemagoers. Therefore, there is the 'art cinemagoer' whose taste leans towards art venues and independent movies and the 'mainstream cinemagoer' who usually goes to either local mainstream cinemas or multiplexes. It was observed that art cinemagoers are more 'loyal' to their taste and choice, while 'mainstream cinemagoers' usually have a focus on the movie and other criteria presented above, therefore are not really attached to a movie theatre, but rather the act of cinema-going. However, this does not mean that there is a clear distinction between one or the other.

C. Logistics

Participants reported that the following actions are part of their logistics with regards to what they may do before going to the cinema: print tickets, check public transport options, ask friends if they need a lift towards cinema, look up parking restrictions, buy crisps from the supermarket, drive to the cinema. Consequently, the above are also part of their overall experience.

Factors that shape the 'before' segment of the cinema-going journey

Drawing on the above, I came to some conclusions that relate to this thesis' research questions on cinemagoers' behaviours, specifically with regards to the 'before'. First, the role of the digital in shaping and facilitating the activities that are included in the beginning of the cinema-going journey is evidently crucial. Digitisation of services makes the experience quicker and easier, and simplifies the way cinemagoers plan,

book, pay, and communicate both with others and with the cinema. Mobile cinema apps and cinema websites have been constantly progressing and upgrading but still need a lot of improvement to keep enhancing the user experience. A cinemagoer engages with a range of activities using the cinema's own digital services. These activities extend to using a lot of third party digital platforms that help moviegoers perform cinema related activities.

Secondly, a theme that came out of the above data is that their social circle can shape the choices, taste and preferences of cinemagoers[71]. For example, there are peer influences (family, partner, friends) that can shape a cinemagoer's taste and preference. Diana (D) and Tom (D) are a couple that have been interviewed individually but have stated from the start that cinema-going is something they usually do together. Reportedly, Tom does the research and gives his partner the opportunity to choose between one movie or the other.

Tom: I would have heard about a film, I will watch the trailer, then I will watch it with my partner and say have a look at this trailer, do you think you 'd like to go and watch this?

Diana: My partner influences me quite a lot on what films we go and see. […] Normally it is him who organises it. He says you need to see there three trailers and decide what you want to go see!

This shows that within the couple, there are different roles. Tom could be characterised as the active user that guides Diana through her trajectory, but they both go through the same transitions eventually, as they both watch the trailers before deciding.

Children might also cultivate their relationship to cinema and cinema-going from a young age; they might create an interest in cinema if their parents also have an interest in it. This is part of their identity growing up.

[71] The term 'social circle' refers to family members, a partner, a friend/ a group of friends, colleague.

It is interesting to use the example of Shandy (D), a diary participant whose identity interacted with digital aspects of cinema-going and formulated a single cinema-going identity.

Shandy: My dad was always really into films so he brought me up being interested in cinema but I actually didn't become someone that actively went to the cinema all the time until about 3-4 years ago. It was actually because I had a boyfriend who was into film and I was like 'Oh I am into film too!', so I started going to stuff that I thought maybe weren't exactly my taste.

Shandy's example stands out because she admittedly shaped her cinema-going related tastes and practices both from her father and her boyfriend. After realising she enjoys cinema-going she became a frequent cinemagoer, now going to the cinema even more than four times a month in 'Oscar movie period', as she says. Being an ardent cinemagoer is part of her physical identity and is manifested through certain activities. The cinema-related activities Shandy carries out in a digital space (among others she mentioned looking online for movies to watch, news on her favourite cinema directors, actors and events), constitute part of her digital identity and extend her physical identity.

Lastly, there is an agency attached to cinemagoers to take control of their trajectory. They are aware of the different types of experiences they can choose from and the responsibility lies on them to choose which kind of experience they will have.

Sebastian: Going to the cinema is not always the same experience when you think the buying process, the choosing process, the booking and so on.

Choosing the right trajectory is important because the 'before' segment can determine how the whole cinematic experience will unfold. Participants were asked about the most important part of the experience

as a whole and some of them answered that it is the 'before'. This relates to the intense feelings it includes. Throughout the completion of the 'before' activities, there is a spectrum of feelings. Some participants mentioned negative feelings for the planning process, such as frustration that showtimes did not fit with what they wanted to see. They also experienced annoyance with having to print tickets rather than store them digitally, disappointment that a friend cancelled and they needed to go alone, worry about being late, and tiredness after planning and booking.

However, the majority of the feelings reported were positive: cinemagoers were pleased to have come up with a plan and excited to see a movie and have a relaxed experience. Before going to the movies, cinemagoers are full of excitement and curiosity towards the movie and those who they share the experience with. A sentiment of anticipation and interest builds up until the actual visit to the cinema. Planning meticulously plays a big role in how positive an experience will be:

Philip (C+D): Probably the before; checking the times is a big part of it. Also checking how busy it is! Because I will base my decision on who I am going to go with, how I am feeling, how busy the cinema looks, how convenient the cinema is.

Tom (D): The before [is important] because I want to make sure I am watching an interesting or a good film. So it is important that I do the research before, look up the trailer, maybe look up one or two reviews on the Guardian website and then decide to watch that film.

Both those positive and negative feelings can be used to design better cinema-going experiences; the negative could be used to eliminate existing problems in the experience and the positive to further explore the potential elements that provoke them, and design new experiences based on those.

In conclusion, this section showed that the experience can change depending on external factors such as choosing the movie, planning, and

carrying out the practical activities needed to proceed to the actualisation of the experience; choices that would make the experience pleasurable. Whatever choices a cinemagoer makes, it is evident that the 'before' part of the journey is crucial to the overall cinema-going experience[72].

5.3.3 During one's visit at the cinema

In this section, the segment of 'during/while being at the cinema' is defined by spatial limits, because the audiences positioned it in the cinema space. Most of the participants identified entering the cinema space as the beginning of the transition from 'before' to 'during'.

Sebastian (D): I interpreted the while being at the cinema as literally being at the cinema, we were located at the movie theatre.

Tom (D): During… Just taking it in and understand the film, do I like the film?

While Sebastian demarcates this transition through spatial limits, Tom uses activity-based limits, referring to movie watching, and what he does during that. This pattern of demarcating the 'during' using activity-based limits unfolds throughout the journey of the cinemagoer while they are located in the cinema space.

Cinema-going is reportedly a leisure activity, a form of entertainment with a distinct sense of togetherness given that it takes place in a public space where people share the same room for a few hours. Audiences do not always go to the cinema only to watch a movie but also for its social aspect. The data suggests that being in a movie theatre involves a strong element of sociability. The cinema and its physical architecture play an important role in building a community where people can socialise with strangers, friends, family, or partners in a space that nurtures that. The cinema as a public space is used to provide an experience that includes a movie, food and drinks, interaction with the staff and other

[72] Please see Appendix J3a for more participant quotes on the 'before'.

cinemagoers. The following section explores the different transitions of the 'during' phase of the cinema-going experience. This experience can be the result of continuous spatial transitions: from the online to the physical space. These transitions can be categorised as happening outside of the screening room and inside the screen. In both cases, a user interacts with the cinema staff (as they identified: box office staff, cleaners, café-bar staff, ushers) and with other cinemagoers that go through their own journey in the space and might be either known (the people they go with) or strangers.

Cinemagoers mostly use their smartphones while being in the cinema in order to access social media, namely Twitter, Instagram, Facebook and Facebook Messenger for communication purposes. For instance, to talk with people that are joining them or to check who else might be there, but also to post pictures, check in the space, and to inform online friends/followers where they are and what they are watching. For example, Rose (A) uploads on Instagram 'pictures of film festivals when the screen looks nice'. Some of the data involved in using these platforms as participants reported it, is personal data like location, mentions, social media insights/analytics, hashtags, followers but also the data that the cinema system holds: what one watches, timestamp, and number of tickets.

A. Outside of the screening room

The experience of a cinemagoer outside of the projection room consists of different touchpoints (Kalbach, 2016; YouGov, nd).Three potential touchpoints are identified based on the findings: 1. Box office/ ticket machine and concessions area, 2. Café-Bar (in cinemas that there is one), 3. Foyer/ Hallway/ WC.

<u>Touchpoint 1: Box office area</u>

The box office area in some cinemas is also the place they sell concessions like candies, popcorn and snacks and in the case of multiplexes where the automatic ticket machine is placed. This is the point that can cause negative feelings such as impatience, anxiety, and annoyance because the QR codes don't work properly in the ticket machine, the design of the space is not warm and easy to navigate or the interaction with the cinema staff is bad. At this touchpoint, a user could buy cinema membership, buy or collect tickets from the ticket machine or box office, buy concessions, meet with friends, or chat about the film.

Touchpoint 2: Cinema's Café-Bar

At this touchpoint, participants reported they have dinner and/ or drinks or buy drinks to take inside the screen. The meaning of "a social night out", an "evening out", can be attached to cinema-going, referring to combining the movie with food and/or drinks in the cinema space –if available. This is an interesting cultural phenomenon of seeing cinema-going not as a leisure activity on its own as in going in the screening room to solely watch the movie but pairing it with food and drinks that add value to the overall experience. Watching a film requires some to be in a 'relaxed mood' as Grigory (D) contends and a cinema that has a café-bar can help in building the right mood:

Grigory: It's going to an evening out and I do like to be in a fairly relaxed mood when I go to see a film. I come here and I go to the bar. Generally speaking, I will go alone, I will have a meal, I will have a couple of drinks, one of which I am taking in the cinema and then go in.

This highlights again the notion of cinema-going as entertainment, an enjoyable and relaxing activity that will ease one's daily routine.

Many participants talked about how they relate cinema-going to a social evening out that contains dinner and drinks as part of the experience. Melodie (A+D) says that when she has not met with her friends for a while

‘doing a whole dinner, drinks, movie is a big deal’. To add to that, Shandy (D) stresses the importance of this evening out if she shares it with somebody else and Anna (D) talks about the café-bar as a social space:

Shandy: It’s usually part of an evening where we would be doing something else, like going for some food. it’s part of a bigger evening if I am doing it with somebody.

Anna: The café-bar is a social space and they incorporate that into my cinema-going experience so it’s very, contained within the time of the movie.

When the cinema offers the premises to create a broader experience such as have dinner and drinks in the venue itself rather than just watch the film, cinemagoers make good use of it and embed it in their cinematic experience, resulting in cinema-going becoming ‘an evening out’ either they go alone or with someone else.

<u>Touchpoint 3: Foyer/Hallway</u>

Cinemagoers reported carrying out a set of activities before going in the movie, which usually takes place in the foyer/ hall of the cinema. This is the moment they would use social media to post they are in the cinema, check their phone to see the time and if friends arrived or see who else is there.

Diana (D): Before the film starts, I browse Facebook to see if other people –because usually our friends are going to the cinema in the weekend, Friday and Saturday- are there, so I was looking to see who else is in the cinema. Normally, I am also interested in seeing what other people are going to see.

Additionally, this is where they read the brochure, take a look at film posters, go to the restroom, have a chat with cleaning staff while screen is being cleaned, and have tickets checked. Participants who enjoy a certain cinema atmosphere talked about how there is currently a

miserable, empty environment between the concessions stand, the hallways and the screening rooms. This area is the most traffic-heavy space in terms of people passing by, yet so uninteresting that it just makes cinemagoers want to go inside the screening room. The role of the cinema in creating a warm and welcoming space will further be discussed below.

One of the main themes that emerged and concerns all three touchpoints was the service of the cinema. Cinema staff and their interactions with the cinemagoers can result in a good or bad experience where the staff is either warm and friendly or uninterested. When members of staff, specifically the ones that engage with the public, are friendly, kind, welcoming, knowledgeable about what is on, and in general, provide good customer service and 'care for you' as Chloe (A) said, then this adds to the experience and cinemagoers value it. In the absence of the above, cinemagoers can have a disappointing experience or 'get annoyed when they mechanically do their job' (Chloe).

Ananda (A): […] people who work there would seem really interested, like they would have seen the film, they would want to see the film or at least know something it. I get frustrated when customer service people don't give me customer service, and they are like aggressively friendly. Staff should be adding to your experience.

Kathrine (D) comes up as a highly sociable and respected person in the cinema community because of her self-reported frequent attendance there. She and her husband interact with the cinema staff during various touchpoints and consider them to be part of the cinema community as much as other members of the audience.

Kathrine: I have to say that in most of the cinemas we know the staff because we go so much. So as soon as we enter, generally people talk to us, they greet us, they ask what we are watching today and they actually ask recommendations

> from us, have you seen this, do you like this? We talk to the staff. Then, we, I would say always, go to the café and buy a drink and have a chat there with the staff, and then when we move to go to watch the film we usually have a chat with the person that takes the tickets. So, it's very much of a social experience, we most of the times know the people that we interact with.

Having discussed how the trajectory outside of the screening room is shaped by cinemagoers' transitions and interactions, the following section will move on to examine what happens in it.

B. Inside the screening room

This part of the journey is related to comfort, environment and space design, as well as the social etiquette in the room. Entering the screen, participants usually search for seats, check that their phone is on silent or turn sound off, watch trailers, maybe take a picture of the screen and upload it on social media, watch the film, or eat snacks and drinks. There are cases where they attend special events such as sing-alongs in a movie or talks as part of a festival or a Q&A with a director/movie related person in which case they might again use social media like Twitter to tweet something the director said in the Q&A.

Cinemagoers refer to the moments of being in the screening space mentioning its magic and immersive nature. These are already explicitly showcased by Kuhn (2002), Haines (2003), Jones (2003) and Hanson (2007) who use it in their description of the activity of going to the movies in distinct decades. It is evident in the data that cinema-going still retains this magic sense coming from the big screen, in a dark, emblematic room, with comfortable seats that allows no space for interruptions and distraction.

According to the participants, cinema-going is 'a cultural experience'

(Anna-D); ‘that immersive experience of being at the cinema with turned off lights’ (Bruce-A) where ‘it’s guaranteed, just you and the film’ (Ananda-A). In other words, ‘the experience of immersing yourself into this storytelling and that sort of sitting there in the dark and the story just unfolds in front of you’ (Kathrine-D). ‘It’s a sacred place, you’re in the dark, you’ve got a special seat -it’s quite sacred in that kind of idea of experiencing a story’ (Ari-A) ‘on the big screen’ (Brixley-A), with ‘no interruptions’ (Charlotte-A). ‘It’s very physical, immediate. I have a friend with me, I want to share an experience sitting next to them and go through this. […] feeling the seat, seeing who is around me, how it sounds really loud’ (Alexa-D). This paragraph made by participants’ quotes, highlights the meaning of the activity of watching the movie.

Some cinemagoers address going to the cinema alone like some kind of indulgence a luxury that they allow to themselves once in a while:

Kiara (D): It was like, I don’t know, like a treat. I am just going to sit here and focus on the film, not going to worry about anything else, I will put my phone away, going have a glass of wine, and I am going to watch this movie by myself and it’s going to be good.

This is also an example that illustrates how a cinemagoer can choose the exact interactions and transitions that will form their trajectory. The magic lies in the physicality of going to the cinema and sharing the experience with other people in the room. What happens though when this magic is interrupted?

Going back to interweaving trajectories (Benford et al., 2009) discussed in 5.3.2, one’s journey can coincide with another’s and in the case the two users have distinct ideal journeys, at least one of them might result in a negative experience. This relates to social etiquette in the screening room. In other words, the etiquette that is followed within the cinema

space with regards to audiences' behaviour[73]. This project's findings report that participants share the same 'code of conduct' in the cinema as Evans has already discussed in the case of exploring art house audiences in the East Midlands area, who share the same etiquette and therefore, feel they are 'like-minded' (Evans, 2011). The motive for participants adopting a socially considerate behaviour is to make sure they don't annoy others sharing the same screening room out of respect but also because not doing so would be something they dislike and would result in a negative experience for them. People who follow the social etiquette turn their mobile off, do not talk in the screening room and try not to bother others when choosing seats. This kind of socially ethical behaviour results in a positive cinema-going experience and as reported by participants tends to happen in art venues and small independent cinemas:

Bruce (A): I think it depends very much where you are, I think in this environment at Broadway generally, there is a sort of social ethics among people. Either way there will be people to use their phone or talk during the adverts and so on but in a lot other places… and this is the reason I wouldn't go to these big multiplexes.

In the above example, Bruce talks about social etiquette, distinguishing once again the social ethics that exist in different cinema types.

Moving on to what a positive and friendly atmosphere in the screening room can add to the experience, Ella (A) believes that the screening room can be used to 'talk to other people even without knowing them'. Belle (A) adds that there is a common sentiment, which brings you closer to other cinemagoers:

Belle: You are watching […] with other cinemagoers that you don't necessarily know. For example, if they are laughing

[73] With fellow cinemagoers, I refer to the audiences that are situated in the same screening room during the projection of a movie.

> for something, maybe this will be contagious to others as well.

This introduces an overarching theme that emerged from the data: the importance of the physical space in creating a communal social experience. Moving on to the next section, I describe how audiences perceive the cinema's agency in creating this shared experience.

Agency of the cinema in building a community

Cinema-going is a good option for going out for someone who wants to spend their time in a warm environment with like-minded people:

> Kathrine (D): I don't drink, so I don't go out to bars […] Cinemas to me have always been very welcoming spaces to me. Especially when you go to sort of film clubs, they happen often in really welcoming and warm spaces.

The cinema space works as a social space for film and cinema lovers to meet; it hosts film clubs, university film groups, and film fan meetups to mention some of the reasons the participants referred to during discussions. It is used for socialisation not only among people who know each other and go to the movies together or meet through film clubs, but also for cinemagoers who just happen to be in the cinema space. The physical architecture of the cinema creates a particular kind of communal space.

Community was dominant in participants' discussions; especially the ones that declared that they prefer to go to art or local cinemas compared to multiplexes. Some of the common characteristics of members of such communities, as described by participants, are expressed in the following ways: they characterise themselves as cinephiles, they usually buy cinema memberships, they like the film programming and they want to have control of what is projected, they feel they belong to a certain group of cinemagoers and talk about a certain type of people. They think the community behind art and independent movie theatres is cinema-going's

heart, and should be developed and expanded in many ways. One of the reasons the art cinemagoers feel this sense of belonging to a community is the atmosphere in art venues. An art cinema equals a certain environment, architecture and decoration. It is a friendly and cosy environment, and it 'feels like home' as some participants stated; it provides comfort and immersion not only in the movie but also to the whole cinema-going experience.

They explained what the social implications of cinema-going were and how these had an impact on them when they went alone compared to when they went with friends/partner or as part of cinema's community.

Rose (A): Community: talking to others before and after film. I think I really like going for the community, even though I might not talk to anyone there, it's just still this kind of experience; I just love that sense. Alone: I see a lot of films on my own & enjoy the time on my own but usually surrounded by other film fans. Friends: Catching up with friends by seeing a film together.

Rose explained that she feels the cinema is a community because one gets to speak to strangers before or after the film due to sharing the same interest, and that is also one of the reasons for her frequent cinema-going.

A specific conversation among members of the focus groups involved questions addressing the role and duty of cinema as an institution towards organising and facilitating, a higher level of socialisation among the members of the cinema community. They identified that the movie theatre has an active agency, a sense of responsibility to bring cinemagoers together and form a community of like-minded people.

Ari (A): The cinema is a community builder, a communal thing […] it's about bringing communities together in a communal place […]I was thinking has the cinema itself got the responsibility and duty in a way to serve that community?

You know set up that time and that place to be able to do that but also maybe to support it [...] by providing some resources that would lead to discussion or resources that would lead into why people saw this film or films like that.

Chris (A): There are groups that do meet now, like meet up.

Tinj (A): What if the venue could promote that?

Ari (A): I've been to some film courses and a lot of people say they would certainly be interested in that kind of thing, there is definitely the interest, the need for that.

Participants talked about the need for a cinema-initiated gesture that would provide the space, resources and work out the logistics in order to bring together members of the audience. Evans (2011) argued that in the cases of art cinemas, the venue usually acts as the initiator of a social experience and adds social value to the act of watching a movie. Linking this back to the trajectories framework, the authorship of the narrative of this shared experience -i.e. the curator of the experience belongs to the venue itself according to the participants.

In summary, for some cinemagoers the 'during' of going to the movies is the core part, and the main reason for going out, because 'it represents the whole experience' as Yunie (D) said[74]. Most cinemagoers have positive feelings like excitement, pleasure, impatience, calmness and happiness because they enjoy a good, social experience; either they are sharing it with someone or are going alone to the cinema. Audiences think of cinema-going as a social experience with the movie theatre being a physical space where social interactions take place, either concerning one's social circle, either the cinema's staff, or strangers with whom one shares the same room and therefore probably the same screening room experience. Among others, the feelings of intimacy, warmth and familiarity emerge both from art cinemagoers as well as mainstream

[74] Please see Appendix J3b for more participant quotes on the 'during'.

cinemagoers regarding the community and its importance. At the moment, this fragment of the cinema-going journey is dominated by physical elements but there is an opportunity for the cinema to use digital data and specifically explore cinemagoers' behaviours within the cinema space aiming to work on its agency in serving as an initiator of socialisation and bringing together cinemagoers. It was apparent that cinemagoers are indeed digital media users and heavily use social media related to cinema-going, therefore these could be used to facilitate their experience and enhance it through this intense sense of the community. Participants confirm this community significance on many occasions, which is also obvious in their design ideas, which are presented in the next chapter where the shared experience provided to users in a cinema is going to be discussed further.

5.3.4 After visiting the cinema

Leaving the cinema space signposts the 'after' segment of the experience which can be divided in activities happening exactly after one leaves the venue, activities extending the experience and reviewing/recommendation-related activities. Some participants use spatial limits to demarcate the after, while others contend that there is an unknown ending to the experience because they might talk about it for a long time.

Sebastian: After is after the event's finished, from the point of leaving the cinema, like stepping out of it.

Maria: After is if I do something else and then maybe in a few hours or next day I chat with my friends, I will still remember the movie but I will slightly be in a different mind space, I won't be "in the movie" so to speak.

Alexa: It's a continuation of after so it doesn't really end.

The 'after' journey involves the same devices used by participants in 'before' and 'during' but in terms of platforms they mentioned new ones

that can be divided in three categories: research (Medium.com, Wikipedia, Google, Google maps, YouTube, Cinema website, Spotify), reviews, ratings and recommendations (IMDb, Rotten Tomatoes, Film Affinity, Guardian Online, Blog, Macguff.in, Facebook), and communications (WhatsApp, Facebook Messenger, Twitter, Reddit). With regards to data, this is what participants think they share in while going through their 'after' part of the journey: personal info (name, age, location, email), opinion, rating, reviews, taste, log in information, date and time, views, comments, personal profile, friends, followers mentions, likes, hashtags, browser search history, and being subject to sentimental analysis on social media. The following is a brief description of the activities related to 'after'.

First, there are some activities that cinemagoers do exactly after leaving the space such as continue their night out, by going to a restaurant or a bar. Within this set of activities, there are transitions from the physical to the digital space as participants reported that they might check the cinema's website for film times of a movie they just saw on a trailer, search with Google maps where to go next or how to get back home (buses/trains timings) while they are outside of the cinema space.

Secondly, audiences extend their cinema-going experience by talking and thinking about it, recording it, and getting more attached to the film they watched. Among others they mentioned: learning more information about the movie, watching movie-related videos, searching related news, looking up the movie to see the cast, watching interviews, liking/following film pages on social media, showing pictures of vacation used in movie scenes to friends, or searching for something that stimulated them such as the music or composer.

Kiara (D): As I especially like the music in the films I see, I try to find it and that's really nice and quite fun, it's sort of the aftermath. It extends the experience, the way the film makes you feel.

The Internet and more specifically, YouTube and search engines like Google play an important role for cinemagoers that want to engage with film music after going to the cinema. They also find this a good way to expand their musical taste and knowledge. Furthermore, the diary study took place after the Oscars so some participants also mentioned that they would watch the ceremony just to see if the movie they watched got any awards and then they would message their friends to talk about it. Keeping a movie diary was mentioned by participants as a way to keep a memory of what they saw. It might be digital like Shandy (D) who logs the movies she watches on Film Affinity, or physical:

Yunie (D): I keep the tickets from the movies since 1995 in a small photo album, so each page has one ticket with the movie and if not, I write on the back the actual screening that I've seen.

Some people like Yunie, see this kind of movie remembrance as an art form that they like to look back at with nostalgia.

Finally, another set of activities that takes place in the 'after' fragment of the trajectory is associated with recommendations, ratings and reviews. A cinemagoer might be the receiver or sender of those. In both cases, the predominant theme emerging from the data is the role of movie discussion in the experience.

Movie discussion as central to the experience

The conversation that follows watching a movie is a crucial part of the cinema-going experience and does not have temporal or spatial limits: it can take place right after the film or a month after watching it when you come across someone else who has seen it over the phone, on Skype, across the globe or in person; it can be facilitated greatly by digital media use. It works as a way to share the experience with people with similar taste, people that one saw it with, or people that one knows have watched it in general. Furthermore, conversation for a movie works as a

general discussion subject when you want to recommend a movie to someone, when a cinemagoer is catching up in person with a friend, a family member, a partner, a colleague. That is why it is interrelated with a cinemagoer's social circle, because this discussion is one of the ways in which cinemagoers create bonds with each other.

There are multiple ways in which cinemagoers discuss a movie. As Robert (C) suggests: 'You watch something new, it's under discussion online, under discussion with your friends, you can go to the pub afterwards and talk about it'. These different kinds of transition of the movie discussion from the physical space to online spaces leave behind traces that can be used to build up on one's taste and preference, functioning as a way towards personalisation and consequently, an understanding of one's identity as a cinemagoer. Facebook is one of the main digital platforms that is used to discuss movies. This happens either through movies or cinemas' pages/groups, film fans groups, a group chat in Facebook Messenger or in cinemagoers' personal profiles as a post which people comment on and start a conversation. Philip (C+D) uses Facebook to communicate with others and discuss a movie he watched: 'If I go on my own I will probably post it on Facebook and if people respond there will be a discussion. It's usually letting somebody know that I've been and I've seen something that I liked'.

Cinemagoers also use WhatsApp (groups) to discuss movies. Sometimes those chats are rather general and movies happen to be part of general discussions among friends, family and partners and other times they are created exclusively for movie related purposes, as happens with Facebook groups. Twitter is also used to express a cinemagoer's impression about a film in 140 characters. An illustrative example of social media use for movie discussion would be Rose (A) who posts on Facebook what she saw, trying to create a film review and ultimately recommending her online friends to watch it. While this seems to be more about sharing the experience, it can also be categorised

under the broader memory keeping and curation concerning her cinema-going practices and history because she shares what constitutes 'a meaningful experience' for her, as she reports.

The film discussion is not only digital though. The need to share the experience in person with someone is valuable and plays a role in creating a positive experience; it contributes to understanding and reflecting on the film, by hearing others' opinion about it and digesting the art itself. It seems to be part of the cultivation of a cinemagoer.

Yunie (D): The discussion with husband and friends about the movie itself is what really adds up, the 'after' experience. The feeling it gave you, how you interpret some feelings, what was the hidden meaning of something, which depends on how good or bad the movie was. So this reflects back to the art itself. So, this discussion will only be a personal conversation with my husband or friends -not online.

For Yunie, it is important to have this discussion because it is her way to digest the movie and think about how it fits her life philosophy; it doesn't matter if the movie was good or bad according to her taste, as long as she has a productive dialogue about its meaning and technical characteristics.

Movie discussion revolves mainly around the content of the movie, its technical characteristics (such as but not limited to photography, cinematography, music, costumes and so on), its meaning, acting, comparison to other movies or participating actors' other jobs, but also the overall cinema-going experience (positive/negative features, any incidents that happened). It is an invaluable, complementary part of the cinema-going experience and adds great value as it extends it.

The 'after' is formed by research on the movie, the social part of the experience but also by the reflective part of it. It makes the cinemagoers feel nostalgic, happy, reflective, and sceptical. The social aspect of their

journey entails an impactful and stimulating essence that makes the 'after' bit very important for cinema audiences.

Kiara (D): I would say the social aspects afterwards; just because of who I was talking to about the films, who I spoke to afterwards, and what I liked about it. Because it was more social and impactful, I remember it. The stuff that happen before the cinema I don't remember, I forget about them. And then the stuff during the cinema I don't think about it because I am sort of watching the film but it seems the stuff afterwards like what pictures I posted, or who I called or texted to tell about it, I remember that I did more so I guess maybe that's why I think that's more important.

Participants' comments about the memorable sense of the 'after' segment of the cinema-going journey, is what makes it special[75]. This section contributed to addressing research question 1, regarding the mapping of the contemporary cinema-going experiences by presenting the perspective of cinema audiences on their behaviours in an increasingly digitised landscape. In the next section, I will present the two themes that emerged from the studies and concern the cinema-going experience as a whole.

5.4 Reflecting on the contemporary cinema-going

Participants talked about the construction of cinema-related digital and physical identities as performed across their cinema-going journey. This manifests through the emergence of rituals and habitual behaviours that should be accounted for. This section reveals the two main themes that came up from the analysis of the findings and are associated with cinemagoers' behaviours, traces and identities: the ritualistic nature of cinema-going and cinema-going as part of one's identity.

[75] Please see Appendix J3c for more participant quotes on the 'after'.

5.4.1 Cinema-going related rituals

Cinema audiences carry out specific, small-scale activities related to cinema-going which could be characterised as rituals because they happen repeatedly and have a routine sense. Although they could be considered part of the general cinema-going journey, they have a unique meaning for cinemagoers. The word 'ritual' occurs frequently in participants' discussions, and is used here to talk about the importance of their cinema-going related acts performed repeatedly and with sentimentality. This thesis pinpoints that the nature of cinema-going rituals has multiple facets; cinema-going entails physical and technology-driven rituals and can also be perceived as a couple ritual. Film Studies scholars have been repeatedly interested in cinema-going as a ritual (Corbett, 1998; Kuhn, 2002; Jones, 2003; Jeacle, 2009; Pušnik, 2015). For instance, Jeacle (2009) talks about the sentimental attachment of a cinemagoer with the act of cinema-going; the paradox of constituting a part of everyday life with very strict etiquette, but simultaneously an investment towards routine escapism:

> The act of "going to the movies" constitutes not only an evening of light-hearted entertainment. It is a ritual of everyday life, a cultural phenomenon bound up in the pursuit of leisure. It is a forum where the audience both escapes from the everyday and is at the same time captured by a disciplinary regime, a regime that dictates appearance, mannerisms and commodity choice. (Jeacle, 2009: 678)

Hubbard (2002) characterises going to the movies as a 'ritual of consumption' (p.1245), a 'social' (p.1246) and 'collective ritual' (p.1247) and underlines the lack of research in contemporary cinema-going rituals (p.1250). The findings from this research project below, aim to cover part of this gap.

Physical rituals

Physical rituals refer to any repeated activities related to cinema-going that participants go through without having any interaction with technology. One such activity can be related to maintaining a physical artefact as a memory of cinema-going as briefly mentioned in 5.3.4. This memory can be illustrated in the form of individuals' collection practices: cinema brochures, movie tickets. Some participants reported that they retain the tickets of every movie they have been to in a form of scrapbook of their cinema-going history.

For others, looking back at their cinema-going scrapbook also fulfils the purpose of comparing cinema-going in different times and locations; a physical representation of how tickets and brochures are in London, in Nottingham, in other places around the world, and how they have changed throughout the decades. There are others that like to use this ticket scrapbook as a game 'down the memory lane' (Anna), to see if they can remember all what they have seen:

Anna (D): I collect the receipts in a scrapbook since 1999. I want to remember and retrospectively I want to go and look back to what I 've seen in the cinema and see if I can remember it. It's like a memory game that I play once in a while.

Bruce (A): Some of these art cinemas in London would have a flyer, an A4 sheet which goes with the film, which I always enjoy keeping. You know, this is a kind of scrapbook element of here's my ticket of that time and see how things have changed over time.

The above ritual of collecting physical objects to remember one's cinema-going activity has a sentimental value to cinemagoers since it reminds them different phases in their life. Given that the participants that mentioned collecting the tickets are people who have lived in different countries and cities around the world, this ritual acquires a nostalgic

sense and looking through their collection represents the different life experiences they have gone through.

Another activity that frequently arises in the findings is that of taking time to go through the brochures and choose the movie one will watch. It is a very specific ritual that cinemagoers go through to make sure that they will dedicate their time to the correct movie and that their choice will reward them. This refers as much to individuals as to couples. Tinj (A+D), spends time with his wife skimming through the cinema brochure accompanying their breakfast:

Tinj: We use the Broadway brochure almost routinely […], always have it on our kitchen counter. Usually during breakfast we skim through it and if we see something we enjoy we decide to go and watch that particular film.

The above quote links back to Evans (2011) who talked about the brochure reading being part of a ritual as well as functioning as a 'taste guide' (p.333). Reading the cinema brochure and any relevant film or festival promotion leaflet is part of the cinema-going journey but occupies a special place in cinemagoers' routine as it is the physicality of skimming through the pages and eye scanning the paper that adds sentimental value to it.

Technology-driven rituals

As much as physical rituals are part of the cinemagoer's routine, there are still many rituals that are facilitated by technology. Technology-driven rituals are the ones that cinema audiences follow throughout their cinema-going trajectory and require devices with internet like a mobile phone, a desktop, laptop or tablet because they include the use of apps, social networks, film-related platforms or email. To follow on with the brochure reading to choose a movie, participants also discussed a digital equivalent in the form of going through all cinemas' newsletters. That is

what keeps Kathrine (D) busy every week when she wants to decide which cinema event she is attending:

Kathrine: I think part of the planning also includes […] getting all the emails from Reel Cinemas and Savoy etc, so every week I would go through everything –Oh that sounds so geeky when I listen to myself-! I would look at all the films that they show and then choose from there.

Additionally, another physical ritual, that of keeping a cinema-going artefact such as movie tickets to remember one's cinema-going history has its digital counterpart. Participants report various platforms to record and track their cinema-going activity for remembering what they have watched, if they liked it or not, or for sharing it with their friends online. For instance, Tinj (A+D) logs every movie he sees in IMDb (the international online platform Internet Movie Database) so that he has 'a recollection' of the things he has watched. Shandy (D) not only keeps an online log of all the movies she has watched at the cinema but also rates them on a platform called Film Affinity (an international online platform for film rating and reviewing) as mentioned above in 5.3.4. Last but not least, Ari (A) uses Facebook with a sense of a ritual, logging the movies he has watched, and at the same time sharing his taste with his online friends with the potential of starting a fruitful film dialogue:

Ari: For me Facebook is my scrapbook of my life. I know that it's just like putting your little bit in your scrapbook, as your cinema tickets where you went and sticking in saying that's where I went on that time, on that day, and then you're able to share that with people, so that you know that if there are film friends will enjoy, you know, that starts sort of dialogue.

Social media are the protagonists of many cinemagoers' rituals as they are used in conjunction with the cinema-going experience and as its extension.

Cinema-going as a couple ritual

Cinema-going rituals can be not only physical or technology-driven but also social. The most distinct example of social rituals related to cinema-going is when it is perceived as a ritual for couples. Corbett (1998) analysed home or cinema movie-watching behaviours of this specific demographic, married and dating couples and how it forms part of their relationship as a social act. Some of my findings specifically apply and extend how this particular demographic goes to the cinema[76]. Cinema-going can be a leisure activity, a big part of the relationship, a favourite pastime and finally a bonding occupation for couples. Reportedly, the participants themselves characterised the cinema-going journey as a ritual they like to share with their other half:

Tinj (A+D): Right now it's only me and my wife going to the cinema together [...] because it's kind of a ritual that the two of us have as a couple. It's a very strict process I would say.

Respectively, his wife, Yunie (D) claims that she felt excitement because 'we are going to the movies together with my husband so that's always a nice thing to do. It is something that we really enjoy, it's a lift for our emotions'.

Unlike Corbett (1998: 38-39) who identified 'content issues' after interviewing fourteen couples claiming that usually there is different taste in movies according to participants' sex, my participants' common movie taste was something that increased their relationship bond.

Diana (D) and her partner, Tom (D) claim to be very busy people and go to the cinema almost exclusively with each other, because it is important for them to spend time together; going to the cinema is special because they share the experience with each other. Likewise, Alexa (D) and her husband, Sebastian (D) travel a lot so cinema-going 'ends up being a big

[76] Within my sample, there are four complete couples, two married and two in a relationship.

deal. Like I am going to see a movie and I am really excited'! Both examples reinforce Corbett's (1998) argument that planning can be labelled as 'practical use issues' (p.39) of watching a movie while the anticipation of doing this activity together entails a kind of specialty, which he specifically characterises 'symbolic use issues' (p.41).

Cinema related behaviours such as the above, are tied to 'ritualised media consumption' that Pušnik (2015) talks about while examining past cinema-going rituals in Slovenia. These particular habits and behaviours of my participants are translated into 'meaningful patterns' (p. 52) because of their repeated nature. As a result, 'cinema-going can be understood as a ritualised practice' (Pušnik, 2015: 67). Although cinema-going today is not a special event (Pušnik, 2015) in that cinemagoers do not dress up for it or think of it as having the glory of the 1930s (Kuhn, 2002; Jones, 2003), this does not mean that the importance of cinema culture is diminished, but rather transformed. The new ritual practices presented above are 'far more interactive, mediated and indirect' compared to the past, as Pušnik argues (2015: 71), and still involve a sense of anticipation perceiving cinema-going as a communal, shared, immersive and relaxing way of entertainment which is now facilitated by digital technologies and interfaces.

5.4.2 Cinema-going as part of one's identity

The ritualised dimension of cinema-going is interconnected with how cinema-going constitutes part of one's identity and how cinemagoers can construct different identities through adopting different behaviours and practices. This is one of the most important themes that emerged from the data, mainly due to the fact that it is closely linked with this thesis' aim and research questions, to explore and understand cinemagoers' digital identity. Within the following subthemes, I describe in detail how cinema-going can be part of a person's identity, expressed in various ways through performative identity, through collective or differentiated

identity, demonstrated in actions that imply that it can be a solitary activity, or play an important role towards personal development.

Performative identity

Cinemagoers develop a performative identity, which they adopt and follow during all cinema-related activities. It might be expressed through cinema-related practices and taste in several ways: talking about cinema when one talks about themselves, defining which type of cinema they go to, who they go with and why, differentiating themselves from people with other tastes, keeping up with the film industry, having a certain online presence on social media and other cinema-related online communities and spaces.

To begin with, if a cinemagoer self-identifies as an "art cinemagoer", it means that their taste in art venue content defines how they are expressing this part of their identity. The way they communicate their cinema-going activity online is also a part of this performative activity and what they want to show to their social environment. In the following quote, Tinj (A+D) demonstrates this behaviour and sums up the discussion among all participants:

Tinj: I am sure that all of us have enjoyed films that are not as, hmm I don't like the name… "artistic", but in a website that is all about artistic filmmaking, we wouldn't point out that we liked a non-artistic film, so I believe that it has to do with this as well, I believe this is the identity we create. Identity has to do with what we create, at least at the digital space. It is not only related to the literal meaning of create but it has to do with what pictures we use for our avatars for example or what names we decide for ourselves [online] or of course which movies we point out that we like. The digital and the real, the physical are two sides of the same coin basically. […] I would say that it's part of ourselves that we

> project in the digital, which is very broad. […] I believe it's context-sensitive basically. On Facebook, we stay close to what we really are, but on videogames we might go bananas. we need to define a context first and then talk about our identity and how we project ourselves.

Tinj, who categorises himself as an art venue and independent movie fan, argues that cinemagoers construct different identities to adapt to the online social circles they interact with and adopt certain behaviours to fit in social groups. According to him, it seems legitimate that for example, many people who characterise themselves art cinemagoers, have enjoyed some 'not-so-artistic' films in the past but depending on the context (i.e. an artistic filmmaking website) they would not admit it to others.

Moreover, it was suggested that performative identity can be demonstrated by defining one's taste in terms of which cinema one goes to. Yunie (D) and Tinj (A+D), both expressed that their taste is independent films and involves particular venues: 'Our patterns are the same out of 35 movies maybe even more we've seen 95% of the times we go to the cinema we go to a certain art venue'. This preference of which cinema one usually chooses, is also evident in Alexa's (D) words: 'I had a friend coming to visit from USA and I knew it would be fun to take her to Broadway cinema'. This is actually quite important because Alexa thinks of the specific cinema as a cultural landmark which her friend that visits from the US has to see definitely, so it seems quite a big deal to her.

Additionally, the experience changes depending on who you go with. Harry's cinema-going journey depends on who he goes with; if he goes with his wife and kids he goes back home directly after the movie. If he is with friends they will go for drinks afterwards to talk about it. Same with Sebastian (D) who chooses different types of films to go with his wife and

with his kids. Depending on that, he also chooses different venues: ‘There are some films that my wife and me will go and see together and other films which she does not really want to see but I will probably end up seeing with my sons’. Chloe (A) also seconds that differentiation of the experience. She adopts a different journey when she goes with friends and different when she visits the cinema with her family:

Chloe: I think it depends who I am going with, if I am going with friends, then… If these are people of my age, they ‘ve looked up the trailers, what’s going on online but if I go with my family, my mum and dad, we’ll probably go for the film and we will discuss it.

Furthermore, some participants mentioned that they have specific people they go to the cinema with either because ‘that’s something we do together and it’s a thing’ as Grigory (D) said. A cinemagoer’s identity changes responsively as a consequence of the above; cinemagoers adapt different behaviours and follow different cinema-going paths because of their taste and who they go with.

Lastly, some of the most prominent behaviours that cinemagoers present and have to do with their performative identity are their online cinema related engagement and interactions. Maintaining an active online presence was noted among many participants. More specifically some of the activities those participants mentioned were among others: watching buzz movies, keeping up with the film industry news, participating in film forums, following cinemas’ social media, reviewing online etc. These participants used cinema to explain who they are as a person, cinema and their cinema-going related behaviours characterised their whole personality. As a consequence, they also showed big commitment and responsibility towards their cinema-going activity. Performative identity forms the basis of a hypothetical pyramid where all other expressions of identity -that are presented below, are based.

Collective versus differentiated identity

During the studies, a thought-provoking comparison came up; that of collective vs differentiated identity. However, diving deeper into participants' accounts, I found out that cinemagoers might express characteristics of both kinds of identity, but this co-existence is still quite contradictory. In the case of collective identity, a cinemagoer would think they belong to a group of people with similar characteristics, maybe taste, preferences and practices with regards to cinema-going. This is reasonable since as mentioned before, almost everybody feels that as soon as they enter the cinema they enter a social space where people around them share at least one interest: cinema. As a consequence, they become part of a group/community. Despite that, at the same time, some cinemagoers hold some traits of a 'differentiated identity', meaning that they differentiate themselves from people with dissimilar taste. However, a cinemagoer's collective identity mostly includes people that are probably strangers to them but collectively enjoy the same movies, cinemas, directors, cinema atmosphere and so on; whilst a cinemagoer's differentiated identity involves people of their social circle and is usually accompanying reports of frequency of cinema-going and movie taste. Below are some examples that make this collective/ differentiated and private/public paradox more comprehensible. The above expand Acland's (2003) argument on the iterative negotiation of cinemagoers with private and communal viewing, always within the scope of locality.

Firstly, there is the example of Kiara (D) who says 'I am going back to the same people –and the same people are interacting with me about the films that I like and films that I've seen'. Simultaneously, she avoids asking friends to join her in specific types of movies because she is afraid that they won't like them. To expand on that, while she develops a collective identity as a cinemagoer by reporting that she interacts with specific people because she knows they share common cinema interests, she also presents traits of a differentiated identity by being

proactive and thoughtful about her friends and think ‘oh they might not like what I want to see’ and thus doesn’t ask them to join her.

Secondly, below is a clear example of someone who is aware of their differentiated identity, ‘weirdness’ as they call it themselves with regards to cinema etiquette and movie taste but on the other hand, has proceeded into action by choosing to only visit the cinema with like-minded people such as his wife, and that can be characterised as Tinj’s (D) expression of collective identity.

Tinj: I am very weird when it comes to the cinema, I want people not to talk inside the screen and I tend to go to the cinema only with the people that I know I can hang out with easily in it. Many of my friends do not share the same taste in movies; not many people will enjoy the movies that I enjoy, and for that reason I don’t go with others; mainly with my wife.

Finally, the examples of Kathrine (D) and Shandy (D) hold a different trait of differentiated identity; they think of themselves as different, ‘unusual’ comparing to people of their social circle. As Kathrine said: ‘I might be slight unusual in a way, because I go to cinema a lot and it is a very central part of my life’. Shandy also shares the same sentiment that her cinema-going frequency mystifies her close environment:

Shandy: I can go to two movies per week and that’s not weird for me. Other people are like ‘why do you go to the cinema all the time?’ […] I end up going alone a lot of the time just because I watch I guess slightly off the beaten track films quite a lot.

Again, in this example, the participant talks about two features of differentiated identity. She feels different than her social environment not only because she enjoys going to the cinema very frequently but also because admittedly she holds an ‘off the beaten track’ movie taste. The

latter case, is presented in detail below, explaining how differentiated taste can be associated with a cinemagoer's solitary identity.

Cinema-going as a solitary activity

In the previous section, I discussed how cinema-going can bring out one's 'collective identity' because it is something that usually occurs having many people around. Nevertheless, cinema-going can also be a solitary journey and cinemagoers can have a side identity; that of the solitary cinemagoer who prefers to visit the cinema alone. Many cinemagoers report going alone to watch a movie because it gives them some kind of freedom; they can have a break, fully immersed in the dark room in front of the big screen, preventing any interruption between themselves and the movie. A cinemagoer would visit the cinema alone to unwind and escape from routine and daily life concerns or to avoid discussion and have the opportunity to reflect on the movie on their own. Rose (A) likes going alone because it helps her reflect better on the movie and Anna (D) also argued that going alone makes her enjoy more the film because in this way she avoids having any discussion about the movie with anyone, so that eventually she digests it better.

Additionally, going alone to the cinema can be a result of one's very particular movie taste compared to their social circle. There is the difficulty in finding people to go with you either because of planning and communication struggles or because they don't share the same movie taste with you. This occurs in multiple instances and is expressed in different ways such as in the case of Sheldon (D) who goes to the cinema alone quite often because his friends delay their decision whether to go or not and he is worried that he is going to miss the movie because tickets sell out quickly:

Sheldon: This happens sometimes just because they don't really know whether they want to watch it or not so I just want to get the tickets already and just buy the ticket for myself.

That usually happens on shows that the tickets might sell quickly or there is a limited amount of screenings.

Cinema-going's solitude does not exclusively refer to going alone without people one knows but also concerns the solitude that can be encountered in the screening room which depending on how busy or not it is, provides cinemagoers with this sense of seclusion.

Cinema-going as an opportunity for personal development

Following from the solitary cinemagoer's identity, comes the subtheme of cinema-going as an opportunity for personal development. Audiences cultivate their personality and construct their cinemagoer identity through going to the cinema. They find it to be an effective way to understand themselves, learn new things, experiment and broaden their taste. This was reported more by participants that often go to the cinema alone; without excluding the fact that cinemagoers who enjoy going to the cinema with others aren't interested in personal development through cinema-going. For Tinj (A+D), 'a film is about learning your own self and exploring what makes you, as well as learning in general, especially from historical movies'. Moreover, Shandy (D) contends that since starting going to the cinema more frequently, she tried to pay more attention on which directors made which type of films, what kind of films are worth seeing, although it might not suit her taste. Nonetheless, she saw it as a chance to expand her taste, experiment with her limits and develop a broad knowledge on directors and diverse type of cinematography and waves of cinema. Her activity of logging in Film Affinity every movie she saw and rating it, contributed a lot in that:

Shandy: I guess because I try to build a bit more knowledge and awareness of films and what I've seen and what the connections are between films. So, having a rating system to say ticked that off, I've seen that and I've seen it then

and I felt like this and in five years go back and say 'Oh I have seen that and I quite liked it'.

Another interesting example that depicts how life changes have an impact on one's cinema-going trajectory is that of Philip (C+D), who shared a stimulating story:

Philip: '[…] changing lifestyles… I've stopped drinking, so I don't like going to the pub anymore, I want to find other things to do that aren't going to the pub, and going to the cinema is one of those'. For Philip, going out to the pub was a frequent leisure activity that he decided to stop doing along with deciding to change his lifestyle and quit drinking alcohol.

Cinema-going came up as a nice alternative that would fill up this space.

To wrap up, the above examples were only two out of many mentioned by participants during the studies. Cinema-going can be used as a means of reflecting on one's self, broaden one's perception about the world and major importance issues related to politics, economy, psychology, inequality only to mention a few, increase one's knowledge about cinema and as a consequence extend one's taste and awareness of the film industry. Overall, it serves as a way of constructing a self-aware identity, where the cinemagoer knows what they want, what they don't want, what they like and what they don't, what they feel and what they think[77].

This section reflected on how cinemagoers can construct several physical or digital identities which sometimes relate to the ritualistic nature of cinema-going. It contributed to addressing research question 2 regarding how audiences understand and construct digital identities within their cinema-going activities. After describing each segment of the experience separately and then reflecting on the whole cinema-going

[77] Please see Appendix J4 for more participant quotes on identity.

experience, the next section puts these three fragments of the journey together, presenting four personas and their corresponding user journeys that were created based on the analysis of the data and the themes that emerged.

5.5 Illustrating cinemagoers' journeys through personas

To illustrate how the 'before' connects to the 'during' and the 'after', I created four personas and their journeys. The use of personas aims to build empathy and prioritise different sets of user needs (Lang and Howell, 2017), but it will also contribute to profoundly understand the cinema-going experience as a connected trajectory. The personas show that cinemagoers perform their cinema-going journeys according to what identities they choose to adopt.

After trying out several combinations of the data through applying the "affinity mapping" or "affinity diagramming" –a method of grouping related data in clusters created by Kawakito Jiro[78]–, some repeated characteristics came up as useful to create the personas. The personas could be grouped together and categorised by different attributes such as who they go with or which type of cinema they prefer because behaviours change according to that. Participants follow certain social behaviours that match particular attributes, hence, they adopt equivalent identities as cinemagoers–with or without knowing–; this is how the personas were created (see persona template in Appendix F). Initially, the thought of creating personas based on who one goes with to the cinema emerged: alone, couples, family with kids, friends. After realising that there were some gaps in this process and there could not be analogy in separating the personas' journeys, I decided to group the users' data according to the most prominent characteristic that all participants talked about: the social experience. In the meantime, the question "who they go

[78] See https://www.nngroup.com/articles/affinity-diagram/ but also methodology chapter 3.2.

with" was included as only one part of establishing the personas' characteristics.

The result of the procedure were "Connoisseur Damian", "Solitary Chloe", "Casual Audrey", and "Meticulous Lucas" (figures 13-16). Each persona follows a distinct cinema-going journey (tables 4-7). All of them have the same touchpoints: choosing movie, place and time, booking and planning, collecting tickets/being at box office area, being at the foyer/café-bar, watching movie in the screening room and after watching the movie. Throughout these touchpoints which were created based on the journey mapped already, they engage with different activities using different channels. "A channel defines the opportunities or constraints of a touchpoint and is any medium of interaction with customers or users: print, the web, mobile, voice calls, and brick and mortar locations" (Yougov, nd). In this case, the channels are: the web, mobile phone, laptop, social networks, newsletter, cinema brochure, tickets, cinema staff (bar/ box office) (table 3).

Table 3 Explanation of icons present in user journeys

Digital channels		Physical channels	
	Mobile phone		Conversation with friends
	PC		Brochure
	Booking online		Physical ticket
	Google Maps		Screening Room
	WWW		Bar
	Social Media		Box Office guiché
	Newsletter		

Connoisseur Damian

Damian is a cinema-going aficionado, knowledgeable about the film industry, going to the cinema at least 4 times per month mostly with his wife and likes talking about it a lot (figure 13- table 4). He is married with one child and usually goes to art cinemas with his wife. He is interested in meeting like-minded people and participating in cinema events that would increase his cinema and movie knowledge. His main problems are rather practical, related to his personal planning and movie watching journey.

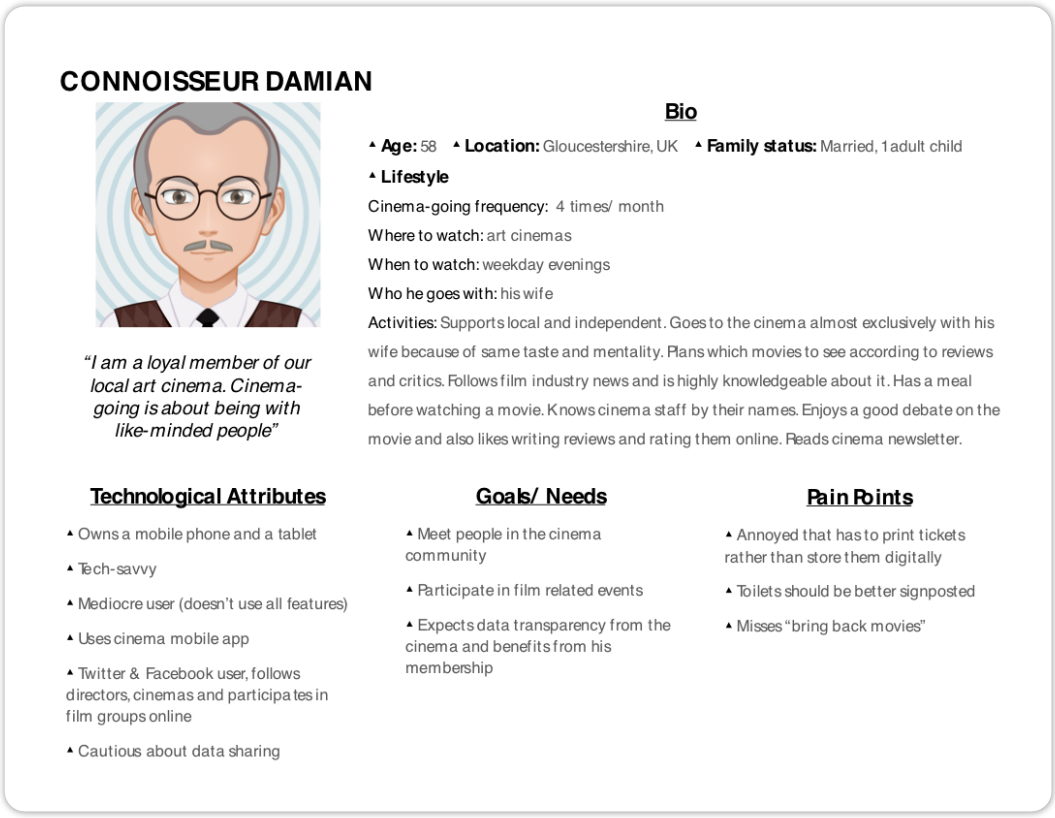
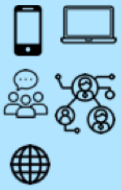


Figure 13 Persona "Connoisseur Damian"

Table 4 Damian's cinema-going journey

DAMIAN	TOUCH-POINT	Choosing movie	Choosing place+time	Planning/ Booking	Collection/ Box Office	Foyer/ Café-Bar	Movie Watching	After movie
	ACTIVITY	▲Read cinema newsletter ▲Read BBC reviews ▲Doesn't watch trailer ▲Have a list of movies according to movie news	▲Always choose specific cinema ▲Always choose weekday evenings to avoid weekend crowd ▲Browse timings through the app	▲Book online only in special screenings ▲Plan to arrive at the cinema earlier to take advantage of the meal deal for members	▲Buy tickets at box office ▲Have a chat with box office staff ▲Check in at Facebook stating which movie he is watching	▲Have a meal with wife ▲Buy drinks to take in the screening room ▲Browse Facebook to see if others friends are at the cinema	▲Select prefrered seats ▲Avoid irritating others already sitting ▲Complain to people chatting during the movie	▲Have a chat with wife about movie ▲Write review on IMDB ▲Participate in online conversations at film groups/ forums
	CHANNEL							

Solitary Chloe

Chloe likes the physical side of cinema-going rather than the digital and usually goes alone because she does not share the same taste with her social circle. She enjoys stealing a few hours to feel a sense of freedom in the cinema space (figure 14- table 5). She prefers small cinemas to big multiplexes but equally goes to mainstream and art venues. She is tech-savvy and uses all cinema's features. She cares about getting rewarded because of her loyalty and cinema-going frequency.

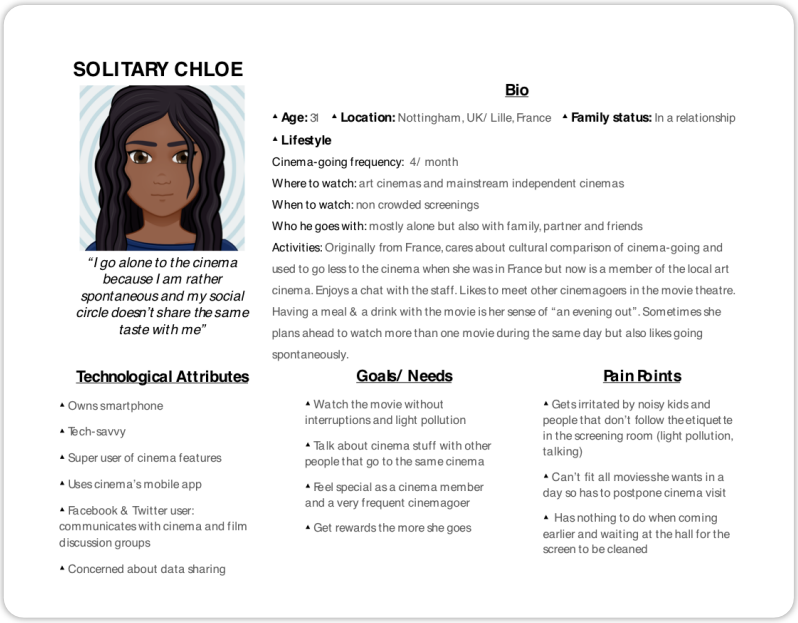


Figure 14 Persona "Solitary Chloe"

Table 5 Chloe's cinema-going journey

CHLOE	TOUCH-POINT	Choosing movie	Choosing place+time	Planning/ Booking	Collection/ Box Office	Foyer/ Café-Bar	Movie Watching	After movie
	ACTIVITY	▲Read reviews ▲Browse cinema website ▲Watch trailers ▲ Read brochure	▲When spontaneously visits, she just watches what's on ▲Carefully fit two movies in a day so needs to know exact finishing time	▲Plans commuting and sometimes fits it in with shopping	▲Buy tickets from box office ▲Have a chat with box office staff ▲Check out posters	▲Have a meal ▲Buy drink to take in the screening room ▲Wait for the room to be cleaned/ has a chat with cleaning person	▲Choose comfortable seat ▲Drink wine	▲Talk to other cinemagoers ▲Call partner to talk about the movie ▲Keep a log of the film and rate it on Film Affinity
	CHANNEL							

Casual Audrey

Audrey sees cinema-going as a social activity to go out with her friends, does not like watching adverts and does not use any cinema platform (figure 15- table 6) although she is a super tech-savvy and internet user. She cares about getting 'value for money' experience and get an as much easy and smooth experience as possible, from receiving good customer service to have all cinema and movie details along with her usual preferences all in one application. One of her most frequent problems is that she does not have someone to go to the movies.

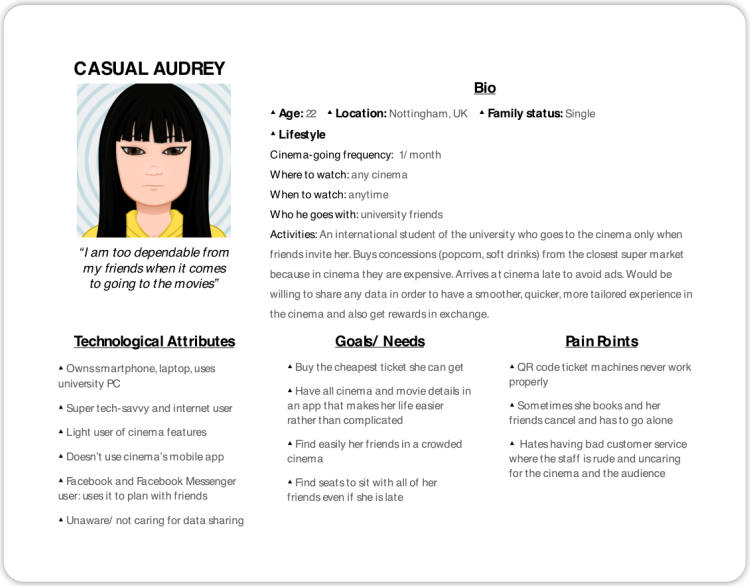


Figure 15 Persona "Casual Audrey"

Table 6 Audrey's cinema-going journey

AUDREY	TOUCH-POINT	Choosing movie	Choosing place+time	Planning/ Booking	Collection/ Box Office	Foyer/ Café-Bar	Movie Watching	After movie
	ACTIVITY	▲Get invited on a facebook group by university friends to go to a movie ▲Asks friends about the movie	▲Discuss schedules and friends choose the most convenient cinema and time to fit everyone's schedule	▲Friends book tickets online ▲Look for price discounts on compare the market	▲ Look for friends	▲Doesn't go to café-bar	▲Ticket QR code doesn't seem to work ▲Can't find friends in the crowded cinema ▲Eat popcorn she bought from supermarket	▲Dicusses about the movie with friends ▲Looks for places to go for drinks with friends
	CHANNEL					-		

Meticulous Lucas

Lucas is all about planning and wishing to combine the ideal kids' cinema-going experience with that of his own using most of cinemas' online features and services (figure 16 -table 7). He is a parent who compromises about what to see, but has fun during the activity. Planning is important and there is always a discussion on agreeing what to see and where. Usually the experience includes having food and many practical matters like buying tickets online. He faces multiple challenges that are related to a high cost of a family cinema trip, missing the film because of traffic, not enjoying the movies he wants to watch because of having to accompany his kids to the cinema.

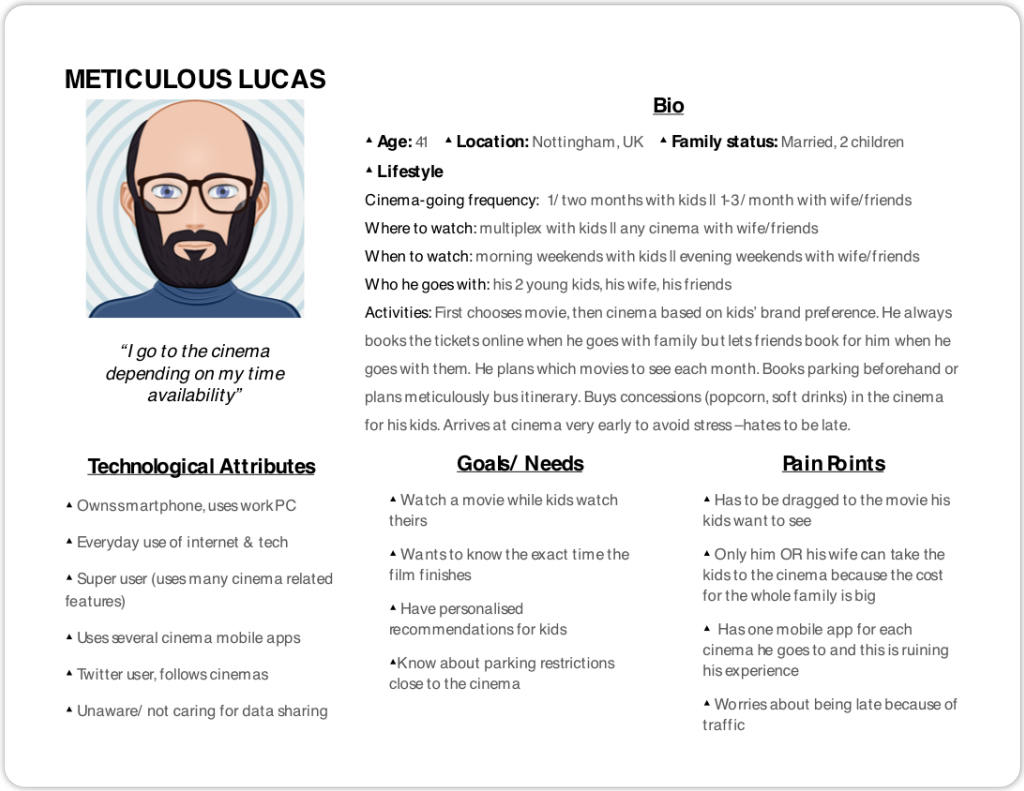


Figure 16 Persona "Meticulous Lucas"

Table 7 Lucas' cinema-going journey

LUCAS	TOUCH-POINT	Choosing movie	Choosing place+time	Planning/ Booking	Collection/ Box Office	Foyer/ Café	Movie Watching	After movie
	ACTIVITY	▲Ask friends for recommendations ▲ Research on which movies are on for adults and kids ▲Watch trailers with kids to choose which movie they want	▲Chooses cinema his kids want or lets friends decide if they are going together	▲Look for offer combos on cine app ▲Books tickets online using credit card ▲Check nearby parking space and parking offers ▲Check traffic on Google Maps	▲Arrives early at the cinema ▲Collect tickets from box office	▲Waits in the long queue to buy popcorn and soft drinks ▲Kids drive him crazy until movie starts and needs to keep them busy	▲Eat popcorn ▲Think about how much he doesn't like kids movies!	▲Go back home
	CHANNEL							-

To conclude, talking with diverse users has contributed to comprehend all the activities, interactions and transitions they experience during their cinema-going journey. The amalgam of those was depicted in those four personas and their journey maps presented above. The reason the personas were created was to facilitate the understanding of how the experience unfolds and more specifically how the cinemagoers

experience it. The personas reveal what is important, the user needs, the pain points, the opportunities for improvement. They highlight that a cinemagoer can construct distinct digital and physical identities by following different cinema-going journeys which consist of multiple digital technologies. Being able to see the traces these identities leave behind can lead to the user understanding better themselves, and the service providers (exhibition, researchers, designers) to optimise the users' experience. Cinemagoers' identity manifests through diverse rituals, habits, behaviours and digital traces but it is also challenged by moments that make the experience difficult and interrupt the smooth flow of the journey. In the following section, I present some of the challenges currently present in cinema-going as reported by the participants.

5.6 Pain points

As mentioned above, cinema-going is an experience conceived as a form of entertainment, hence it needs to be pleasurable, smooth and easy for audiences to take part in it. The experience, however, might be disrupted by external factors, barriers that prevent it from being easy. It is important to identify these challenges and difficulties, herein called 'pain points', because they can also reveal design opportunities to improve the cinema-going experience. 'A pain point is a problem, real or perceived. Entrepreneurs create opportunities for themselves by creating solutions to those pain points' (Carter, 2012). These pain points divide in different categories, related to digital pain points that have to do with accessibility and usability and pain points of the physical space.

5.6.1 Digital pain points

Digital pain points are related to accessibility and usability and include simple problems like a QR code of a cinema ticket that does not scan through the machine, or a website that is very confusing and annoys participants that try to find a specific piece of information. Participants

reported that people behind the development of the cinema website or mobile app should be considerate about the aesthetics and functionality of the website so that it is user friendly and as simple as possible. Additionally, it should be designed to attract the interest of the user and provide something new and innovative instead of being boring. That was mentioned because many cinemas design mobile apps without facilitating the user and covering the actual user needs and cinemagoers do not appreciate that; they want to have a digital service that really adds value to their experience and not some extra 'gimmick' (word used by participants in focus group). Furthermore, any recommender system used to suggest movies of interest to cinemagoers should be presented in a more "human" way that doesn't make them feel they are watched and bombarded with unwanted stuff.

5.6.2 Physical pain points

Physical accessibility is equally mentioned by the participants. From parking restrictions (when a cinemagoer has to look beforehand where they can park in fear of arriving late at the movie) to space navigation within the venue (such as not finding the toilets easily because they are not well signposted) but also to practical issues such as the space structure within the screening room (first row being uncomfortable) and facilitation for people with motor impairments (for instance wheelchair users).

More specifically, Chris (A), who happens to be a wheelchair user, said that he needs to call and ask the cinema staff whether they can accommodate nearby seats for his friends as well, otherwise he may end up sitting in the wheelchair users designated space by themselves and away from his friends, which might also cause neck pain.

Chris: I tend not to go to Cineworld, because I am forced to sit right in the front because that's where the disabled sit, which is a problem because then you end up with a really

> stiff neck at the end of the film and it's just not a good experience. Showcase in the other hand, it's not bad. It could be better, but at least you are not sat right on the front, you're about 6-7 rows back, so, it's not too bad. And then at Broadway, it's brilliant because most of the screens you're sat at the back so you don't have to look up.

Ari (A) also reported that his long legs create a problem for him when he wants to go to smaller cinemas because there is not enough space around the seat. Therefore, he usually chooses to go to multiplexes because they have more space and the seats are more comfortable for him and he is also able to pre-book his seat so to make sure he will find the one he wants. These examples are associated with the theme that appeared above about the physical space and how the cinema environment needs to be welcoming and make the experience smooth and pleasurable.

Furthermore, the experience might also be negative when the environment is not clean, without a cosy atmosphere, with dirty floors sometimes full of popcorn. Additionally, cinemagoers not complying with the social etiquette may result in a frequent challenge audiences face during their cinema-going activity, Cinemagoers can be irritated and their experience might be distracted by noisy children, people talking in the screening room, the noise of food like popcorn, and/or from mobile phones that might ring and/or cause light pollution from their screen light. During the participatory design workshop, one of the groups reported that something they really dislike in cinema-going are distractions that happen during the movie projection, hence they created something to minimise nuisance mobile phones are causing within the screening room (see 6.2).

There are also some challenges that might affect the physical experience but could be resolved with a simple digital solution. There are mostly

practical pain points. Some are related to planning: one participant reported that they missed an intended show because they didn't include traffic time within their planning, some reported on their need to plan thoroughly so that they know exactly what time the film finishes or how long the ads and trailers last, and someone else talked about how because of the confusion of availability of 2D/3D projection they chose to postpone their decision to go eventually.

Arranging a group cinema-going outing might also be challenging. Some examples of these pain points are: losing one's money if they book with many people and someone doesn't come eventually. In the same scenario, if one books with someone else and this person cancels, they are left alone. Finally, it's hard to find friends in a crowded cinema especially when the lights are out, if seats are not allocated; if not all people have booked their seats it is challenging to sit with your group of friends. The lack of availability of seats during ticket booking, especially with bigger groups was a challenge that drove one of the participatory design workshop teams come up with their idea[79].

Other practical difficulties involved the annoyance of printing tickets in some cinemas that don't offer the option to store them digitally, and losing little tickets before entering the cinema because their size is very small. Last but not least, pain points related to memory were also regularly mentioned. People tend to miss films because they didn't realise they are on, or because it was too busy at the time; others cannot remember what they have seen and are afraid that their memory might fail them.

In summary, having distractions, planning problems, a badly decorated environment, confusing user interaction with digital services and lack of comfort would prevent any cinemagoer to enjoy and be entertained

[79] Instead of going halfway through the ticket booking process to see seats availability, they talked about being able to see seats available and then start booking.

through this experience, in other words would not let cinema-going serve its purpose. By mapping the cinema-going journey, I managed to identify the challenges that a cinemagoer might face, these pain points that fit in the idea of transitions of the trajectories model. These moments need to be looked at so as to design more coherent journeys.

5.7 Takeaways

This chapter revealed how the contemporary cinema-going experience is shaped in the late 2010s, answering to research questions 1 and 2, on how cinema audiences behave and which (digital and physical) traces they leave behind while also constructing distinct identities as cinemagoers. More specifically, it provided an understanding of the cinemagoers' engagement with digital platforms, of how these are part of the cinema-going journey and what are the main opportunities and pain points to enhance or to ruin a cinema-going experience. Establishing a map of how the experience is formed with the digital element in it is important because technological developments are integrated into daily life increasingly and the cinema-going experience has not been be revisited.

Going to the cinema remains undeniably a cultural and social activity, with movie watching being its central point. However, the experience a cinemagoer has while in the movie theatre is extended by a vast availability of digital media and platforms. The cinema-going experience is either a planned or a spontaneous journey, a trajectory with a beginning, a duration and an ending with the movie being its most important part. It can be demarcated by temporal, spatial and/or activity-based limits. Each segment of the journey, includes touchpoints within which, cinemagoers engage with different activities, using certain devices at specific locations, through particular platforms that oblige them to go through data sharing and result in causing cinemagoers various feelings. While following this journey consisting of both physical

and digital interactions, cinemagoers can construct different identities that correspond to their physical and digital trace.

There are different types of cinemagoers, and this was showcased by creating four personas that illustrated the different kinds of cinema audiences and user journeys that a cinemagoer might follow. There are obvious distinctions among different types of cinema-going and this became evident during the discussions because each type of cinemagoer focused on different interests and aspects of the cinema-going experience. However, it was common ground that 1. a positive experience would include quick and friendly service; 2. the opposite would result in a negative experience along with not following the social etiquette of the screening room; 3. art cinemas appeal to specific audiences because of the movie variety and special treatment to audiences, giving them a sense of belonging to a certain community; 4. multiplexes might offer more comfort and the 'big screen experience' but this comes with a usually higher price. By reconnecting the before, during and after it became obvious that rituals can come up and this habitual behaviour is closely associated to cinemagoers' identity. There is a need to design for such opportunities that participants identified as important but also for the challenges that they face and obstruct their satisfaction from the experience.

The findings affirm the sense of community that exists among cinemagoers and extends it, implying that technological enhancements are needed in order to strengthen this community's bonds and provide a more enjoyable, practical and user-friendly personalised cinema-going experience. In terms of value and taste, the results indicate that members of this community are interested in using digital tools that could solve matters of practicality such as not losing tickets or an alert to inform them of a coming-back film, or matters of connecting with fellow cinemagoers such as alerts to launch a group conversation after a movie screening. What is evident is their need to have something new that will truly add

value to their experience rather than being an additional mobile app in the market. Participants would be willing to pay for an extra feature that would make their life easier and their experience more unique.

In the next chapter, I take the above user needs into account and explain how the participatory approach that I adopted helped design an enhanced, personalised experience using data in favour of the users.

Chapter 6
Designing for enhanced cinema-going experiences

6.1 Overview

In the two previous chapters on mapping the contemporary cinema-going experience, I deconstructed the cinema-going journey with the help of audiences and exhibitors, creating a chart of cinema-going related activities and data transactions. Understanding this journey from both perspectives resulted in the discovery of challenges and opportunities of the cinema-going experience. Those results indicated the need to provide technologies that focus on the improvement of the community and the physical space. Additionally, it became evident from the findings that exhibitors claim that cinemagoers need to be given more control and agency over their data: from data collection to management and consumption. This can be achieved with increased transparency, which will eventually raise their awareness of which data they share, with who, when and why. Cinemagoers reported their need to self-reflect. As a result, they will become more conscious about the online presence of their self, in other words, their digital identity (/-ies).

This chapter explains the design process that was followed to address those needs. As previously discussed, the chronological order that was followed to inform one study after the previous one is evident in the structure of the chapter. The first section consists of the design opportunities that emerged from the data collected during the focus groups, diaries and supplementary interviews and the participatory design workshop. The second section includes the development of prototypes as potential solution to address cinema-going challenges and opportunities. I resulted in one interlinked system that consists of a desktop and a mobile platform in addition to physical elements that complement it. To assess the prototypes and understand their value to the users (audiences and exhibitors), the third section proceeds with presenting the results from prototypes' evaluation workshops. The last segment of the chapter illustrates the key implications for designing new

cinema-going experiences building on feedback from all data collected in this project.

6.2 Opportunities in designing enhanced cinema-going experiences

In chapter 5.6, I presented some challenges that cause moments of discomfort to cinemagoers while they experience their cinema-going trajectory. This section focuses on how these difficulties can be translated into opportunities and result in a pleasurable and improved cinema-going experience. These latent design opportunities, were thematically grouped according to participants' suggestions. What do audiences value in their experience? To address this question, I firstly present the results and my analysis of the participatory design workshop[80]. The experiences/services/products that participants came up with during the workshop revealed some core themes as being important to the cinema-going experience, which supplement the themes that came up in chapter 5. Cinema audiences want products and services that are useful and usable, enable accessibility and inclusivity, build up on establishing and enhancing the communal nature of cinema-going, adapt to their personal needs, and finally, make use of their data transparently.

6.2.1 Overview of the participatory design workshop findings

As already described in chapter 3.4.3, participants of the workshop, were divided in three groups and each group created one design aiming to enhance the cinema-going experience. This section is concerned with the results of the participatory design study.

The product of Group 1, is a ticket booking app, a 'before' going to the cinema service, that aggregates data to give updates on seat availability

[80] For the full analysis of the participatory design workshop see Appendix D.

in various cinemas of the movie one wants to watch. The participants focused on choosing platform and thinking about how the info would be disseminated to the user: email, text or app. The app is about available seating versus the cinemagoer's personal preference; it has a login action and it stores data about the user and their preferences once they use it. Additionally, it recommends films based on knowing what one likes about the physical space of the cinema, for instance, a quieter screen or some particular seats. In this study as in previous ones presented in chapter 5, the physical space appears again on top of the participants' list of interests. Finally, the app has an intense social element, linking friends who want to go together to the cinema but without being annoying and sending push notifications. Everything is optional in terms of privacy and who can see what.

Members of group 2 preferred the digital not to ruin the physical elements of their experience and concentrated on the 'during' segment of the journey. They talked about how they share same sentiments of nostalgia about old emblematic cinemas, past experiences that were extravagant in terms of interior decoration and atmosphere and tried to explore how technology might be integrated in the physicality of the 'during' experience. Their first idea is a pre-screening, shared experience that brings 'a realisation of cinema-going as a communal experience' through interactive screens that inform what's going on in a screening, project trailers based on who is in the cinema and works as movie feedback space. They highlighted the importance of cinema as a space and suggested to tailor what is displayed in the screens based on current visitors at the venue. Besides the dynamic interactive space, participants talked about how cinema should be a comfortable, cosy and inviting environment like a living room, inviting people to gather outside the screening room while waiting to go in for the movie. The focus on the space is a recurring theme that participants are interested in exploring as a way to enhance their experience. Their second product

is ‘Digital Sweetbox’, a timed box that might have sensors, or just be programmed according to the movie plot to track noise. When it is very quiet in the screening room, it does not open up to eat whatever is inside (popcorn or sweets) aiming to prevent distractions, or time-records specific parts of the movie so as to eat with breaks.

The idea of Group 3 members is called ‘Moviematch’. It is a social, mobile app that can be used before and after cinema-going. Inspired by Tinder (www.tinder.com), it helps match people with the same movie taste to go together to the cinema in a specific location and meet new cinema buddies. Its focus is on location and locality, aiming to help people in the same area meet and go to the cinema together, taking as a fact that cinema is a public space, therefore secures safety to meet strangers. Interestingly, the user of this app would be able to see how they compare with their matches (e.g. movie taste). Table 8 summarises the main points that came up from the groups’ discussion and how they are map onto the main five themes of the overall analysis that follows: usability and usefulness, accessibility, personalisation, shared experience, and transparency. Participants referred a lot to the comparison of distinct type of cinema experiences (e.g. Broadway vs Savoy), which was described in the previous chapter, and therefore discussion on it is limited in this chapter to avoid repetition.

Table 8 Design opportunities themes from the Participatory Design Workshop

Themes	Usability & Usefulness		Accessibility	Personalisation	Shared experience	Cinema types' differentiation	Privacy/ Transparency	
	Location/ Locality	Design/ Visual features			Interactivity and connectedness		Security, privacy, authentication	Authenticity
Group 1	Synchronicity between user's location, seats availability and cinema maps.	1page interface with what will be on the app (eg.know before booking what screen the movie will be at).	Platform and device availability.	App learns user preferences & behaviours & builds profile with tailored recommendations.	Connect with friends on the app: book together/ join them.	Repeatedly talking about differentiation between cinemas: Broadway, Showcase, and multiplexes.	No push notifications. Enable opt in/ out choice for pop-up recommendations.	N/A
Group 2	Space should enhance the experience: how many different spaces there should be; another space to go in the movie and another to go out in order to differentiate the experiences around each segment of cinema-going.	What will be on the interactive walls.	Physical and digital combination addresses cinemagoers of all ages, as there is no need to have a smartphone or be digitally literate.	Changeable interactive space: Tailoring the displays in the pre-screening space based on who is there currently.	Interactive wall where one can leave/ read movie feedback, anything happening inside the screen would be live-fed and visible to the people at the foyer/ coffee bar area so that people can share the experience. Eventfulness: adaptation of the room decoration to themes for specific films eg. Halloween.	Realisation of different cinema types according to interior decoration, atmosphere, screening rooms. Savoy: certain old-fashioned atmosphere/ décor which makes one feel nostalgic VS Broadway= get their drink inside the screening room.		
Group 3	Info such as updated cinemas in the area, what movies are on/ most popular genre in the area, where people travel from compared to the user illustrated on a map.	What will be on the app: date and time, name, age, location, photo, bio to talk about self.	*Cinema reach*: one cinema? All local cinemas? Nationwide cinemas?	The app should be about a personal storytelling of the user's cinema-going activity through well visualised statistics. *Ratings*: rate the movie and see how the other person one went with rated it –compare taste (limitation: one could lie about taste).	*Social reach and Friends levelling*: Who knows you, common friends with other cinemagoers. Create "favourite people" to come up on the top of the pile if you both want to watch the same movie and when you go very frequently with a specific person.	N/A	Anonymous? No, Facebook or Twitter login to create a new account that will authenticate that the person is real. Concerns and doubts for safety because of photo, "creeps abuse".	Concern about users putting on their true identity, movie taste or pretending to be someone else.

Below, I analyse the five main themes that emerged from what users reported to need from a new cinema-going experience intervention.

6.2.2 Usefulness and Usability

The first criterion that needs to be fulfilled when designing for cinema audiences is creating a useful and usable tool to facilitate and enhance their experience. Usefulness and usability are broad terms and may be linked to a vast spectrum of elements. Usability is determined by 'effectiveness – whether users can achieve what they want to do with the product; efficiency – how long it takes them to achieve it, and satisfaction – their feelings and attitude towards the product' (Nenonen et al., 2008:3). This project's findings suggest that these two terms refer to locality, inventiveness, functionality, planning and platform access.

First, locality is important because it is necessary to provide users with wide access to many cinemas instead of only one, so that cinemagoers can gather all their data in one system. This would give them information and real insights by accumulating data from their cinema-going activity as a total[81]. Kunal (A+C) specifically talked about this: 'I would want an app that combines all cinemas. If there was an app that was more like geo-location, "alright so, here what's on in the city". As a customer that would be the most useful'. Tracking and syncing location would be essential in this app.

Then, inventiveness is something that participants reported as currently missing. They do not want something new that will 'reinvent the wheel' as Tinj (A+D) argued, just for the sake of creating something new. They need something that will cover their needs and will not spoil their current experience. For example, the new potential design should not interfere with the film projection itself. When talking about the Cinime app of Odeon, Stefan (D) highlighted how intrusive and distracting it is for a cinemagoer to interact with the app and characterised it having been

[81] See Appendix J5 Quotes on Usefulness and usability.

created with ‘lack of inventiveness’ rejecting the creators’ effort to produce something different.

A current problem reported is functionality in platform access. Participants find it difficult to complete their activities on existing digital cinema platforms because they are problematic and in some cases not user friendly or easy to understand. For example, when a cinemagoer wants to book tickets for a film, they need to browse the website easily and find the basic information they need such as timings, screen, price without navigating too much:

Ananda (A): In terms of booking or looking for films, I would use an app as long as it was good and it worked… I couldn’t just figure out when the film was on from the website and I just was like ‘I’m just not going to go’, so annoying. I just don’t believe they are user-friendly at the moment!

To give context about usefulness, participants talked about a very practical matter, that of planning. They agreed that digital technology could be used to create a system that will facilitate and speed up their planning with regards to cinema-going. This system would include traffic/route optimisation depending on which means of transport they use, seat searching for multiple people using location data to show where friends are seated (in case someone came late). With this system users could book online collective tickets (for all of their friends) and add on their calendar the movies they want to watch from the digital brochure automatically, with the push of a button.

Melodie (A+D): Basically an app version of what they have in paper and just compare to see ‘Oh, that’s the best time for me to see that film’.

Chloe (A): Integrated calendar that sort of interacts because that brochure has a calendar, a physical one, of what’s on each day and what time, if you could have the electronic copy of that, and if you were “Yes I want this to my calendar”,

then you could click on it and it would appear to your calendar.

Another participant, Belle (A), conceived and described a concrete idea around enhancing planning to go to the cinema with friends. In her introduction, she outlined what she designed, who are her users/ target audience and the context of her product:

Belle: Mine, is more about the planning of going to a movie. So my scenario is that there are five friends that live in a really big city and they graduated from the same university together, now they are dispersed in different locations in the city. Now it's difficult to get people together to ask them when it's the best time to go together. So this is a mobile app for them.

Then, she explained how the app functions and where it draws data from so as to understand the users and match their taste. This happens based on Facebook posts, check-ins, movies they have watched and a list of things the app asks you once you download it so that it can build accurately one's profile.

Belle: It will have access to people's Facebook feed, so there are many feeds live, for example "I really want to watch movie X" and the other friend says "I haven't watched this" or "I have watched this, it was terrible" and others say different things and this app will select/ filter all those movie-relevant feeds and analyse them. And then the app interface will allow you to tick several criteria like positive reviews, bad reviews and friends wanting to see a film, friends who have already watched it, so that you can get a list of friends that actually can watch the movie with you. And even though there is no recommender system, that [filtering] can see whether you share similar taste.

Another function of the app links users directly to planning, joining data from connected friends' calendars:

Belle: There is another function of this app that will have access to some calendars of these friends who opt in to share their calendar together, so that you can identify a slot and enter it to an automated scheduling system. So, then you can for example see that this person is available for this time and the other for this time and then a time slot will be identified. This way it's an easier experience!

Finally, she mentions the importance of privacy and the importance of the option to make your preferences/ opinion public or private and how this would affect your social circle. Talking about a 'continuous experience', she thinks that a profile that builds up the user's activity over time can find their 'perfect cinema-going match'.

Belle: People have different preferences of sharing the experience.[…] If you have a function to filter out this information, it will make those interested in this kind of information to have access to them, then everyone would be willing to share whatever they want, and the other person who doesn't want to see it, won't actually see it. It's a continuous experience, like your last movie watching experience will influence your next choice anyway. So, if you have a profile for what you have watched in the past, what you enjoyed and what your friend enjoyed, maybe you can identify the "best cinemagoers" to join you.

The app she created was a combination of connecting friends locally, and facilitating their planning, connecting to other social media platforms they might be on, and suggesting the best solution which is convenient for everyone with respect to what to watch, taking also into account movie taste and preference. The result was an idea on finding the 'best cinemagoers' based on building a personal film history, logging in your

movie taste, your friends' movie taste and availability[82]. Belle's app is directly linked to the importance of planning as an activity that belongs to the 'before' part of the cinema-going journey. It is interrelated with how cinema-going is a social activity, shared with people of one's social circle. The above findings illustrate that the cinema-going experience can become smoother and quicker using the capabilities of digital technologies and data.

Last but not least, an important part of usefulness is data value. By 'value of data' I refer to what value participants think data has both to them and to the cinemas and which kind of data they would appreciate seeing during their cinema-going activity. Something valuable for cinema audiences would be, for instance, to see movie related data at the end of movies to extend the 'after experience' and extend their knowledge as cinemagoers. Participants care about data having human input, and not only be based on numbers. More specifically, by human input they mean the importance of qualitative data that supplements the quantitative data, that a venue shouldn't just know if they liked a film/ an experience or not, but also why they liked it or not. As they argued, it is about the grey between black and white, the interaction that gives meaning to the activity.

Bruce (A): This information about individuals is what rather than how or who and why and any contextual information. I think perhaps things are moving now, contextual data and its representation because of the power of computers and some cloud programming.

[82] Something similar to that idea was realised by Atom Tickets (Shu, 2018) after this study took place. The service Atom Tickets is a social app that allows users see and share information with friends while poll them about what they want to see and pay for tickets separately.

Ari (A) has a negative approach and thinking towards value of data and what constitutes digital identity. He translates it into something binary and most probably quantitative but not qualitative:

Ari: Digital media and the internet and computers and all those kinds of things, they are either this or they are that, there's no grey, there's no colour, no definition, no nuance, whereas your real life identity can do all of that. So, digital identity says you saw that film, it doesn't say yes, but I hated it . if it was a binary thing, you know a tickbox, I saw these films, it doesn't say anything, it doesn't say oh you know I saw….and if you then write a review, what's gonna be the nuance, isn't it? Because that's your interaction and you wrote that. But, something that you know, that was purely binary and digital, it's this or that, and it doesn't have that flavour, and that nuance and it is yourself as a human identity isn't it that adds that review later on.

What he says is that just a list of what he has seen or not, does not mean anything without putting a little bit of himself such as a review to give it a personal identity. Therefore, stakeholders should be careful about drawing conclusions on members of the audience before designing new experiences.

The take-away message is that there is an opportunity for stakeholders (cinemas, designers, researchers etc.) to please audiences and enhance their experience by something that is useful and usable. This new concept should apply to all local cinemas and have the provision to track activity of the user in other locations. It should be innovative, inventive, different rather than replicating something already done before –people don't like having multiple apps that cover similar needs. As a result, it would add new value to the activity of cinema-going by combining many features that are above all, easy to use even for low digitally literate people. it should simplify planning by accessing personal and friends' calendars and optimising the cinemagoer's transitions

within a journey. Finally, the system should be based on user needs and address what users value in terms of data handling.

6.2.3 Accessibility

To achieve an ideal cinema-going experience, it must first be accessible. Participants need accessibility to enjoy their cinema-going activity. ‘Like usability, accessibility is a quality –in this case, it means how easily and effectively a product or service can be accessed and used’ (Horton & Quesenbery, 2013: 3). Accessibility was translated by participants as comfort, platform access, device access, and access for people with physical impairment.

Comfort is necessary for participants’ experience: the first row should provide equal view to the screen as other rows and should not cause someone a stiff neck. Additionally, in terms of the space of the screening room, all sizes should be considered. In the previous chapter, the case of Ari (A) was mentioned: a very tall man that reported feeling uncomfortable and anxious when he does not have many options for sitting because of his height; not finding the right seat would prevent him from actually going to the cinema. A solution for this would be to mark on the website and physically on a screen map where seats with larger space are located and how many are available so that cinemagoers can check the seating arrangement and be able to choose where to sit.

Additionally, there should be diversity in device access. Cinemagoers are currently using their mobile device which is either a tablet or a smartphone as well as their computer to engage with any cinema-going related activities. They want to be able to have availability on both desktop and mobile device so that they can equally access the cinema’s platforms whenever they are depending on what activity they need to

do[83]. An exception to the rule would be Charlotte (A) who stated that she exclusively prefers mobile apps because they are less time-consuming:

Charlotte: I would prefer a mobile app because I don't have time or I put on my list the things to do and go online... it's never get done, too many more important things are there.

This could translate into the need to make any cinema's desktop website responsive so that it is quickly and easily accessible on the go.

Accessibility is synonym to inclusivity for disabled people, either this refers to those with a hearing impairment, a cognitive, sensory, intellectual or physical disability; cinemas' systems should cater for everyone and avoid excluding any group of people from coming to their cinemas. Chris (A), who is a wheelchair user and frequent cinemagoer has observed the benefits and drawbacks of each cinema in his local area regarding wheelchair users. Below is his suggestion based on his experience so far:

Chris: If there is a way to add that on the digital side of things [booking collectively], on the booking system, or if for members once you created your profile and actually state that you are a wheelchair user and then depending on the number of tickets you're buying, then they will reserve as many seats for you.

His main challenge was already stated in chapter 5: in some cinemas he is obliged to either sit at the front or last row, where there is space for wheelchair users. Unfortunately, this equals to either having a stiff neck or having to sit separated from the people he came with, which automatically create a bad experience. He suggested to make a pop-up window with a textbox when buying the tickets online, in case someone wants to make a special request with their booking. This is an example

[83] See Appendix J6 Quotes on Accessibility for relevant quotes from participants.

of using digital technologies to make the traditional journey 'better' rather than designing new experiences for the cinema-going journey.

In summary, when designing a new intervention in cinema-going, focus should be given to increase accessibility and inclusivity for people with motor or other kind of impairments, for people of all sizes, providing access in multiple devices and platforms so that a wide audience can be reached. Before designing to provide innovation in an experience, it is of major importance to make sure the already existing experience runs as smoothly as possible and all existing problems are eliminated.

6.2.4 Sharing the experience

Sharing the experience of going to the cinema was a dominant point discussed during all studies. My data demonstrate that cinema-going as a social activity overshadows its other aspects; participants held long conversations around how the communal side of cinema should be developed to result in a better experience. Their discussion revolved around socialisation, physicality and eventfulness and leaning towards the digital side: with crowdsourced data and recommender systems.

Despite focusing on the digital side of things, cinema audiences appreciate and want to maintain the sense of physicality in their cinema-going experience. This might be through the embellishment of the physical space which came out very clearly in chapter 5. For instance, participants were interested in an activity for people waiting to go from one movie to the other –a pastime to kill their time between screenings. Another example would be to take advantage of the hallways for people who might be waiting outside the screening rooms. In general, there should be balance between the digital and the physical and the 'during'

phase of the cinema-going journey might be the one to receive the most physical emphasis[84].

The improvement of the physical space to highlight the importance of the shared experience can be linked with eventfulness, which can be divided in interactivity in the movie and eventful cinema-going. On one hand, there is the opportunity for specific events, e.g. accompanying a movie with live orchestra or create experiences such as live cinema as Ari (A) suggested that it is something emotionally moving:

Ari: Secret cinema […] you act and interact with all those kinds of things and then you get your seats to get on transportation to go to the next place [...] it was amazing, I wanted to cry, I am not embarrassed to say so, it was amazing! You know, certainly a very special experience.

On the other hand, there can be eventful cinema-going, meaning that the movie itself can be surrounded by multiple related events such as themed nights with dress up and food as Rose (A) suggested.

Rose: Stuff associated with specific food or drink that has been associated with the film, or a site themed with the film so people can go and talk about the film while drinking or eating something that's associated with it. In this way, cinemagoers could simultaneously 'geek out' with their favourite movies while meeting fellow cinemagoers.

This eventfulness is tied to sharing the experience with the people a cinemagoer shares the cinema space with. Experiencing the same series of events can stimulate their sense of belonging, generate common feelings, leading to bringing them closer as members of the same group –that of a specific cinema community.

[84] See Appendix J7 Quotes on Community and the Shared experience.

This brings us to the next feature discussed: socialisation, which was extensively mentioned in the previous chapter. According to the participants, cinemas should play an active role in enabling socialisation among cinemagoers. After all, cinema-going is predominantly a social experience (see Kuhn, 2002, Maltby et al. 2007; Evans, 2011; Kuhn et al.; 2017). Participants mentioned that particularly a cinema such as Broadway should focus on the community, e.g. take advantage of the fact that it was a church before as Ari (A) mentioned –because 'in many ways it still fulfils the same sort of responsibility and duty in a way, bringing people together'.

When talking about art house cinemas, Wilinsky (2001) underlines their influence on audiences on 'what cinema should and could be' (p.3) and their sense of a 'tight community […]; the bond formed by their participation in this unconventional and marginalised community' (p.9). The cinema could include in a newly-built system, the opportunity to share the experience with someone, addressing people who go alone but want company or people whose friends cancelled. This could be achieved by matching them with others with similar taste and intention to watch a movie. Ticket booking could link them with other people that have booked to watch the film or that have seen the film so that they also have an opinion to share. Cinemas could enable interactions between people, discussing about the film.

This is also linked with the feature of locality that participants referred to: locals will meet locals. Movie discussion online and offline was of major importance to participants. Some of the ideas they came up with was an app with location tracker for tracking location of the user when they are in the cinema venue. It would then send alerts saying, 'Would you like to discuss the movie you will see?'. Depending on the answer, the user would receive an alert by the end of the movie saying 'People are gathering at this space of the venue, go to this particular spot to join discussion'. Participants kept returning to the a need to talk with each

other especially after the movie and admit that ‘this is a very take-away message for all of us, because you know, there is no after the film experience’ as Bruce (A) claimed. Curating a communal activity after the movie is finished would also extend the ‘after’ segment of the cinema-going experience, which was identified by the participants as the one that doesn’t offer much at the moment. As they put it: ‘Right now we go to the cinema for the social aspect and we don't socialise’. Within this frame, there was also an opportunity to use this for bridging the generational gap that appears in some cinemas with specific demographics: either middle-aged and older people in art cinemas or very young people in multiplexes and mainstream cinemas. This hybrid digital/physical system could attract both kinds of audiences to different types of cinema resulting in a mixed audience.

Turning to the more digital aspect of creating and developing strong bonds of a communal space through cinema-going, there is the idea of crowdsourced data and recommender system. These two features would come from cinemagoers of each cinema rather than cinema’s data/ staff itself. More specifically, audiences that prefer to visit small cinemas where the sense of locality and community is more intense, are interested to see content creation by other cinemagoers related to movies currently playing, popular movies of the week depending on people’s preference (combined with admissions data such as ‘the TOP 5 movies that most people watched this week was this’), and other cinemagoers’ movie recommendations. The ‘starting point would be the recommendation’ from another cinema community member as Bruce (A) quoted, and then they would be up to choose if they see the film or not. In other words, cinemagoers can be seen as taste gatekeepers – a humanised recommendation system.

There is a strong desire to bring the human aspect and keep a human quality into something that has become associated with algorithms – recommendations. HCI literature has talked about the ‘human-in-the-

loop- framework and how it can be applied to compare the results of computational algorithms in a system with its results having computational support by humans (Kefalidou & Sharples, 2016; Sheila et al., 2016; Kefalidou, 2017). Kefalidou (2017) argues that maintaining a human to support computational algorithms in a system results in optimality and flexibility. In the case of cinema audiences, they want people to be part of the cinema community because as Evans (2011) argued, their communal identity is based on taste. This leads to the natural development of trust in movie recommendation from fellow cinemagoers compared to an algorithm that feels rather intrusive.

The above data could be tied up with Evans' discussion of how cinema audiences function as 'indirect communities' (2011: 339) since participants share a common ideology, taste and behaviour. They perceive digital technologies as a way to create increased and better communication; as an enabler of sharing their experience. This opposes to what Evans identified in her indirect communities members who were characterised by 'limited interpersonal interaction behaviour' (2011: 344).

The opportunity of investing on the cinema community can be translated to devoting time to improve the interior decoration both physically but also with digital elements such as data boards, memory corners etc. so that it becomes cosier and provide an interesting pastime for cinemagoers. Cinema-going can become more eventful before, while and after the screening while also facilitating locals meeting each other and going together to the cinema. Organising communal activities after movies end and developing a local crowdsourced recommender system where cinemagoers suggest movies to each other and meet up with similar-taste people, would extend the duration of the experience.

6.2.5 Personalisation

In this section, I present how participants perceive personalisation and what are the ideal features that could be added to enhance their experience by personalising it. Personalisation as a theme emerging from the data, consists of four subthemes and connects to the theme of sharing the experience. These subthemes are personal profile, memory, reward, and recommendations. An ideal personalised system would gather data from a cinemagoer's activity, habits and interactions and would create their personalised profile[85]. It would contain elements regarding their movie taste, consumer behaviour, people they go with, preferred cinemas etc. If this system existed, the participants would like it to give non-automated recommendations[86] based on what they have seen in the cinema in the past. This goes back to what was previously discussed in audiences distrusting algorithmic structures by stating their preference to a 'more human' recommender system.

The personal profile would show statistics of one's activity, people one matches with according to movie taste and would also compare it to other cinemagoers. An example of the two above features would be a recommendation such as this: '60% of the people you match with saw X. Have you watched it yet?'. This would be an effective way to encourage cinemagoers to follow the suggestions of the system. Kefalidou and Sharples (2016) claim that having a tool that feeds the user with recommendations can be a simple way to respond and reflect upon them: 'Participants, if in an appropriate time and place, are willing to accept and act upon push suggestions as long as the number of suggestions is not overwhelming' (2016: 21).

[85] See Appendix J8 Quotes on Personalisation

[86] Many participants talked about how the system does not know them and it has to be a more sophisticated way of recommending stuff.

Memory is something that definitely needs to be addressed as participants had recurring discussions about it. The problem is that people forget what they saw, what they want to see or they might miss something. Therefore, they think there should be special features to solve this problem. They would like a personal film record and stakeholders should design it to be easy to fill in. One should log in their profile, and let it say automatically that they went to the movie if they bought tickets by being linked to the box office system. It should allow the user to add pictures or text in each section of a movie, if they liked it or not. This is how the system could do more accurate recommendations and find other users one has similar taste with. This movie log feature of the personal profile would be some kind of cinema-going diary. Based on that, the cinema could send movie reminders or alerts about when a scheduled movie one is interested in is projected, or even have a QR code in trailers within the screening room to automatically add them to one's watch list:

Melodie (A+D): I have got a list of movies I want to see. So if there was an app that you could put that immediately, so that you don't forget later.

Ananda (A): If there was an app, like I saw this film, I liked it, then I get an email going 'Oh, there is another film by that director, like this film that you saw', like Netflix.

Additionally, cinemagoers expressed their preference in the feature of 'bringing back movies' where some cinemas ask their audiences which movies to project again. This seems to be a service that all cinemas could easily adopt and the ones that already have it could improve it by adding an alert to remind cinemagoers that the movie will be projected again and if they want to book tickets they now can. All the above points, would somehow increase engagement with the venue through helping cinemagoers' memory using technology.

The above type of personalisation would require a certain openness of users in sharing their data. Cinemagoers report that they do not want to give away all of their data without any exchange. They have talked about being rewarded in different ways through this personalised system. They introduced this conversation with Ananda saying 'I don't mind anyone having my data, I don't really mind, I have any kind of loyalty cards or various things, in exchange of freebies I am willing to give people all of my data!'. Then, they ideated[87] and concluded on how there could be a point system to give you points every time you visit the cinema and spend money; this could be translated into ticket price discount, free drink or food, birthday freebies, just to name a few[88]. The idea of designing an app to reward people for not using the phone in the screening room to prevent distraction was introduced and was embraced by the participants when they were talking about etiquette and how annoying they find light pollution and use of mobile phones within the room. Lastly, some people connected rewards with membership and thought that having a membership should mean something extra, should put you in a special position of deserving more respect and therefore perks that the cinema would give you to show its appreciation to one's loyalty as a cinemagoer.

Many interesting points were raised during this discussion:

Chris (A): Maybe if you are a member you could buy your seat in your film courses like 24h in advance or even more or similarly to other events.

Rose (A): Or if you go to meet ups, you should be alerted in advance to be sure that you will have a spot.

[87]Ideation is the creative process in design thinking where participants/researchers/designers generate lots of idea: https://bit.ly/2FQJd0D

[88] This is something that some cinemas started doing already (for example Showcase and Odeon).

Bruce (A): Yeah, it's got to be something distinctively extra, which you don't get at the moment without signing in and I think that's definitely what would drive me to it.

Ari (A): If I don't get my membership for Cineworld, I will only go and see the films that I know that I want to see, where there is no risk involved. And my best filmgoing experience was these moments when I've kind of heard about but as I kind of paid it already, I've gone and I really, really enjoyed it and it takes that risk away. I would take more risks and I could be rewarded by that!

The above tie up and unpack Sailaja's et al. (2017) argument about users maintaining a positive stance and appreciation towards media personalisation and extend the need they identified to 'accommodate and support users' offline social interactions' (p.4) by applying it in the field of cinema. To sum up, cinemagoers are willing to share their data with the cinema as long as there is trust and reciprocity. Some would like to feel there is transparency (which will be discussed further below) while some others just want to have something in exchange. For some, this 'something' can be translated in a very practical reward related to economic profit such as a free drink. For others, it can be their chance to know ahead of new film courses or new meetups to come, or giving incentives for risking in choosing movies out of one's usual taste. Reward either in a point system or a membership scheme would mean that cinemas show their respect and appreciation to their audiences and maintain the relationship of trust that has been built between them. Above all, providing the user flexibility through personalisation, by giving them the space to tailor their experience according to their preference and taste is a major design opportunity that would increase audiences' engagement with the cinema and the digital platforms used.

6.2.6 Transparency

After bearing all the above in mind, when designing new experiences for cinema audiences using data, one should have in mind that transparency should be prioritised. Mortier et al. (2014) argue that many data capturing systems lack legibility and users are not able to understand which kind of data they share during the data collection process: 'it is not enough simply to make these processes transparent: they are often technical, complex and the implications of the data collected and processed are incomprehensible' (p.6). Hence, they suggest the improvement in legibility. In the case of cinema-going –a leisure activity, it would be more efficient to use playful ways to raise users' awareness and feed the data back to them.

According to participants, transparency is related to being aware of a cinema's data practices and data capturing. Some talked about how inevitable data sharing is when online and others highlighted that data usage is important and that it can increase trust and therefore engagement with a specific brand which affirms Sailaja et al.'s (2017) correlation between transparency and trust: 'providing more transparency and control helps improve trust in the organisation and foster a better data exchange scenario' (p.4). Having control over one's data, the necessity of being enabled to opt in or out of services and public or private data sharing were also mentioned. Participants Kunal (A+C), Ananda (A) and Melodie (A+D) argued that everyone has access to data and they would be willing to give it out since they know 'they've lost the game':

Kunal: I wouldn't care to give them any of my data, cause by now we've lost our game! [Ananda and Melodie nod to agree]. If I trust Google with my data, I know it's all over. And the cinema already buys it without you knowing, without your permission'.

As mentioned above, some users seem willing to accept any data capturing because they think technology has beat them. Sailaja et al. (2017) found that 'users attributed this genuine paucity of trust in the present day data economy to the current lack of transparency in data exchange mechanisms' (p.3). They go on to claim that most users would request transparency through 'dashboards and visualisations' in order to understand any data exchanges.

Following on from that, the participants' discussion revolves around control over the data one shares, which data is to be made available publicly and which privately. They concluded that for instance, bank details should never be shared under any circumstances, while personal data such as email address, name, phone number etc. can be shared with the cinema. Movie taste and going to see a certain movie should be also an option to choose if it will be presented in a public profile where other people have access to it. Ananda (A) specifically made the point that she might watch 'something really embarrassing' and she would like to have the option to hide it. This differentiation between her actual behaviour and her act of hiding something she considers 'embarrassing' to share, is what Goffman (1959) and Turkle (2011) talk about multiplicity of identity (Turkle, 2011: 194), being something but not revealing all of it, hiding the parts one wants to hide and maintain a certain negotiation with her identity. This does not have to do with the user being transparent towards the system but rather in this way the way they present themselves are 'fluid and undefensive' (Turkle, 2011:194). Other than that, she wouldn't mind sharing information on her public cinema profile or be connected with social media so that other people see which film she saw on a certain day, she just needs to feel she owns control of her data.

Ari also talked about the importance of opting in or out of data sharing: 'I think if you could opt in and be proactive about your ownership and your permission, I suppose it would be nice to know from before [which

data is captured]'. Tinj (A+D), Ari (A) and Bruce (A) claimed that data capturing without awareness of the user is a real problem, but transparency would make any service provided more interesting.

Tinj: When it comes to data, I believe the most important thing is transparency because we can't escape data. I believe a recommendation system would be very interesting as long as it was very transparent, like as long as we know exactly where the data goes and how the data is used.

Ari (A) differentiates the intention of 'I want to sell you something' with 'I know you want this thing that we don't have right now; when we do, we will let you know'. He does not want the system to think that it knows him and recommend irrelevant services or products that might be good. He wants the system to directly identify his user needs and address them. This might eventually lead in trust in the service.

Social media communication may also elead to increase of trust, therefore the relationship between client and venue depends on it. A perfect example of that, is Chris' (A) report: 'There are certain companies that are good and they respond to you positively using Facebook. I think you get more attached to those companies'. The participant feels the need to be heard. He dislikes management of social media by external companies. He feels distant when this happens, and "deceived". Transparency in communication hence results in trust development.

To conclude, transparency is a design opportunity because in a world of inevitable data sharing in exchange for digital services, cinema audiences will trust more the brand/service that keeps them in control of their data and enables them to choose what to share publicly or keep private for themselves. In the meantime it involves them and feeds back to them what the data they share mean (creating summarised

information of e.g. their cinema-going related practices) and finally, rewards them for their loyalty and trust.

6.2.7 Summary

The aforementioned results from the focus groups, diaries and interviews and participatory design workshop led to some conclusions with regards to what needs to be considered when designing for enhanced experiences for cinema audiences. What is enhancement of the cinema-going experience after all? According to participants, an enhanced experience firstly takes into account pre-stated cinema-going dislikes and problematic segments of the current experience such as last minute ticket booking, unwelcoming environment/ space outside the screening rooms and inventiveness so that the new product/ service doesn't 'reinvent the wheel' but uses existing platforms or databases to eliminate a previous problem and present a solution to what caused it originally.

With regards to the device the digital component should be built on, although people answered that they would want a system to be both mobile and desktop-based, they mostly talked about apps when they were ideating about their ideal technological intervention that would make their experience enhanced. Meaning that mobile apps make the service provided quicker and easier.

Above all, in order to be characterised enhanced[89], the system should be simple, usable and useful, acting as an activity facilitator, promoting accessibility and inclusiveness, providing quick and easy to understand interaction with the user, and well-designed features that make it visually attractive and comprehensible, and should be addressing the needs of the users rather than the aspirations of the designer/ researcher. In other words, an enhanced cinema-going experience is a simple, easy, quick,

[89] See more on how participants defined enhancement in Appendix J10.

hassle-free as in a 1-click, genuine, more automated experience that addressed both the digital and the physical; online and offline is integrated. It is targeted to satisfy each cinemagoer's different needs as an improvement to the existing one. The enhancement preferably takes place before and after watching the movie; not during[90]. It gives audiences something extra, added on the routine activities related to cinema-going, provides options, access to data, convenience, recommendations, entails a competition element and rewards the user. Finally, an enhanced cinema-going experience makes one feel surprised adding something that was not planned and making it integral to the experience because of a cinemagoer not knowing what they want. Kefalidou and Sharples (2016) talked about the delight that surprise recommendations might bring to the user:

> The more obscure and slightly off-topic the suggestions were, the more interesting and unexpected they were perceived, identifying the need to move from a pure recommendation system platform to a more sophisticated and less 'specific' suggestions tool. Surprise appears to be a positive element for further connection-making (p. 12).

It also makes one feel valued, special, part of something such as a community and invites you to participate in it.

The concluding argument of this section, deriving from all studies mentioned above, is that not all cinemas are the same; they have their own context, character, and identity as well as audience. One needs to have in mind that when designing something for a small, local cinema it might not be as successful for a big, multiplex, chain cinema and vice versa. In other words, there is a need to have a unique product or service identity and a specific target audience in mind. Each cinema has its

[90] That would ruin the experience as movie watching is the heart of the cinema-going experience and needs to be just what it is: immersive with no distractions from the film.

audience but many cinemagoers cannot be categorised as ‘art cinemagoers’ or ‘multiplex cinemagoers’ because they go to cinema based on the film they want to watch and not based to the cinema type, as long as they know they will get an experience tailored to their preferences. This is where personalisation comes in the discussion. Participants of all studies talked about how personalisation is part of the enhancement of the experience. In their opinion, personalisation is inextricably connected with personal data build up: a system accumulates data from the users’ behaviour and history and therefore works towards well targeted recommendations and presentation of profile so that the user gets exactly what they want without the clutter.

In terms of handling the data, the new experience should make sure that there is transparency and reassure the users that a high level of security is applied so that their privacy is valued and protected by letting them know which kind of data they share, with whom and why, and also reward them either by creating a point system or different levels of membership scheme. Within this, authenticity can be guaranteed up to a point, but cannot be promised in cases where the user has to input their opinion. Furthermore, pricing and costs should always be well thought-out in order to make the service/product sustainable for the provider but also value for money for the user. Location and locality are two elements that were mentioned unanimously from the participants as something to be measured and synchronised with any new experience provided.

Socialisation is one of the ultimate goals of cinema audiences with regards to cinema-going. Either they talk about atmosphere and common space, about eventfulness, meeting new people, creating a shared/ communal experience, cinemagoers seem to care a lot about the social aspect of cinema-going and how this can be highlighted through a new experience. Above all, I conclude the system I designed should focus on the community and combine the physical with the

digital[91]. In the next section, the reader will have the chance to explore how I took into consideration all the above opportunities, while simultaneously trying to tackle the challenges identified by creating prototypes of potentially enhanced cinema-going experiences.

6.3 Prototyping enhanced cinema-going experiences

In previous chapters, the reader was presented with how the contemporary cinema-going experience is shaped in the digital age. In the above sections, I went through a participatory, user-centred process to ask audiences what they want from their cinema-going experience and co-designed products and services that would enhance it. Based on the design opportunities and implications that emerged from cinema audiences, I followed an iterative process of prototyping: I prototyped some new products and services that would address the audiences' needs and would provide innovative experiences to the users, by creatively utilising their data. The section below unpacks the final result that was presented to the participants.

Throughout the iterative prototyping process, I had in mind the following research question: how can the combination of physical installations, digital data and personalised multiplatform experiences add value to contemporary cinema-going? To answer the question more easily, I set some objectives drawing from previous findings: the prototypes should build into the community and strengthen cinemagoers' bonds, enhance the cinema-going experience emphasising on the 'after' segment, and finally, increase (frequency of) attendance. My ultimate aim and concerns were how I can stimulate instincts and emotions of cinemagoers so that they go to the cinema because of the specific experience I created (and not only because of the film) and if the cultural value of cinemagoers' data changes depending on whether it is an

[91] Quoting Charlotte: [The digital] 'could make the experience easier'.

individual/ communal experience, whether they have control of it or not. Then, I accessed the prototypes through evaluation workshops with audiences and stakeholders and created a final list of design implications to serve the community of HCI/ Film scholars, cinema exhibitors and designers. The section below is dedicated to presenting the first version of the prototypes.

6.3.1. Presentation of the prototypes

The system

I created high fidelity, interactive and functional digital prototypes that could be used for exploration and test (Preece et al., 2015) using a prototyping software called *Just In Mind* (https://www.justinmind.com). I consider the prototypes to be part of a system because each prototype is connected with and supplements the other. The system is built mainly around the personalised profile of the user and consists of the following four prototypes: a renewed cinema website, its equivalent mobile app, a movie feedback platform that exists in the cinema space and memory clouds which is a purely physical prototype but can be created upon request only if one is a member/user of the system.

This system is not trying to suggest a breakthrough in terms of functions but was created to guide the reader into how personalisation and new functions will affect the cinemagoers' experience positively and will facilitate related activities. The user can opt in or out of all functions, depending on which data they want to share or not. As a result, the user has full control over the data they share[92]. This is clearly a system for someone who likes personalisation and wants to understand their patterns as a cinemagoer by having control of their privacy at the same

[92] For instance, people who do not like recommendations could choose to not receive recommendations.

time. With regards to location reach, for the time being, the system only concerns one cinema.

Prototype 1: Cinema Website

The cinema website is the first of the series of prototypes the system has. Within it, I present various features such as the personalised profile of every user, the movie feedback page of an individual user and of other system users and the gifting experience. After signing in the user gets to the main homepage and can engage with various features. Below are the main three:

- **My account (figure 17):** this can be used to create one's own avatar to look like them, they can allow the cinema to store their favourites, from seats, movie timings and preferred movie days to things they usually buy within the cinema such as popcorn, chocolate, drinks so that the user does not waste time to select those. Additionally, users can connect with their friends' profile and invite them for a movie, book tickets together, see their reviews, plan together a visit to the cinema, but most importantly create a gifting experience for them on a special (or not) occasion (see 'gifting experiences' feature below).



Figure 17 This is the main page of going into "My account"

- **Movie feedback (figures 18-21):** This is specifically designed to address audiences' need for recommendations that are not automated but are rather made by people in the broader cinema community. Here, the user can browse by category (by movie/ month/ user), click on any month to see reviews about movies that came out on specific months, check reviews by clicking on a specific movie they want to watch and finally check reviews by other users: for example most popular reviewer (the one with the most likes), most frequent reviewer and so on. The user can also click on a specific user they usually like to see reviews from, and see all of their reviews and movie feedback stats. Many users will be featured on the main page of this feature because they either have many likes on their reviews or they are reviewing very frequently. This aims to encourage users to be more expressive and participate more in this process to know each other and each other's taste. They can also submit their own reviews and access their review history with clicking on "my movie feedback" button. Finally, they can get rewards, badges such as most frequent reviewer and become popular and hence, connect with others from the cinema community. There is an interactivity between cinema members in this feature because users are able to like each other's

reviews or explore a user's profile depending on their privacy settings.

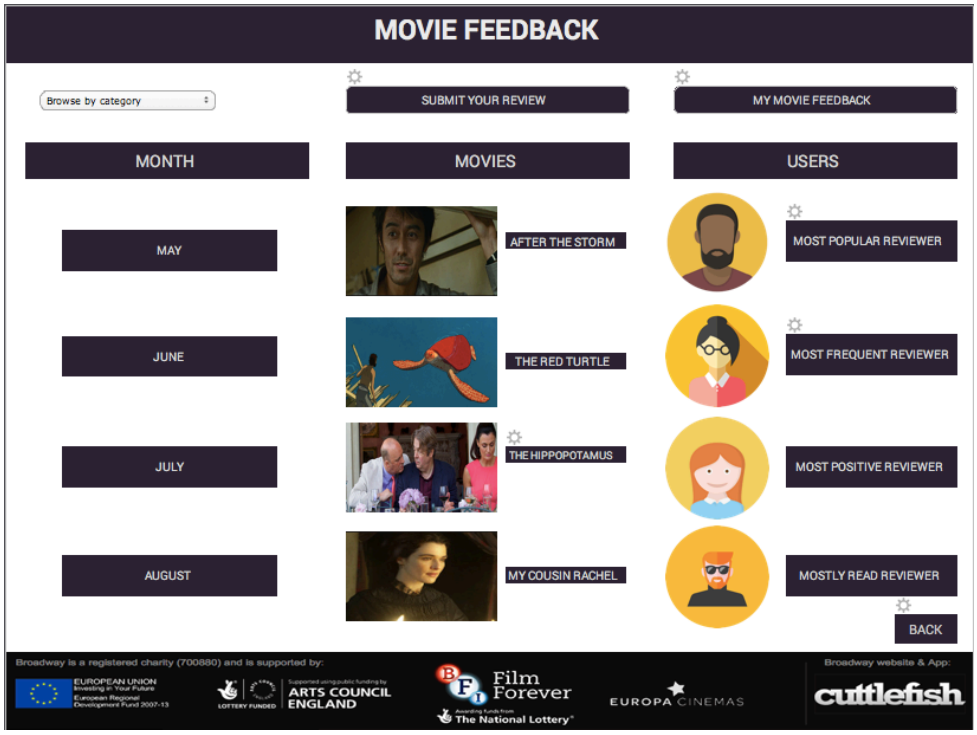


Figure 18 Main page of "movie feedback"

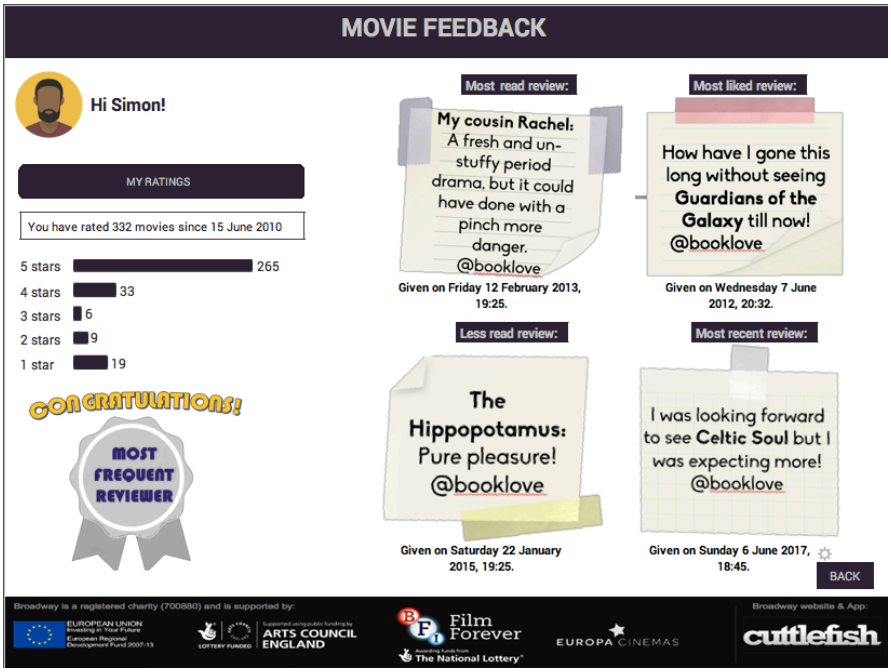


Figure 19 My movie feedback selection of reviews. Here the user can see their badges depending on their reviews, al the ratings and reviews they have given and their most successful reviews

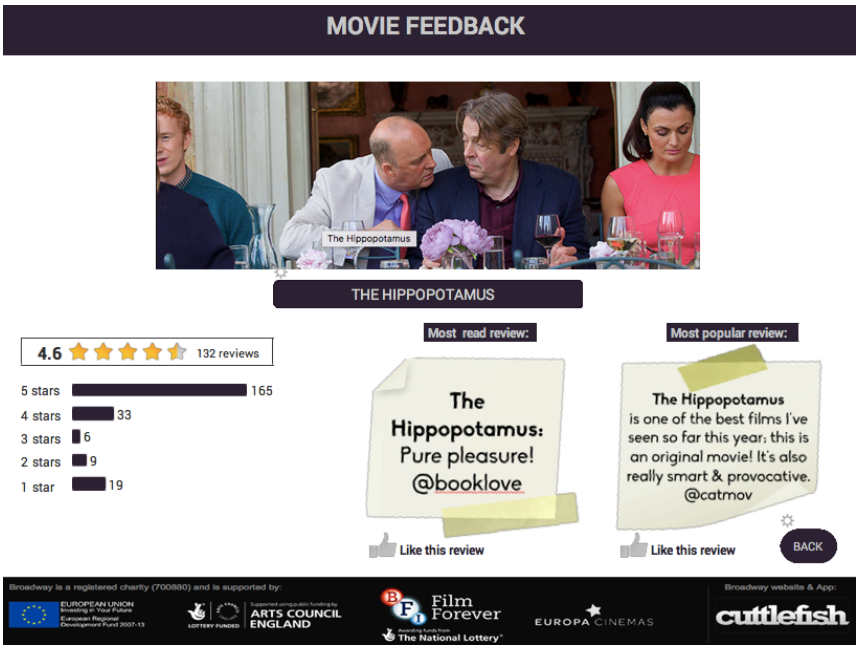


Figure 20 Here the user can click on a movie and see its reviews and overall rating

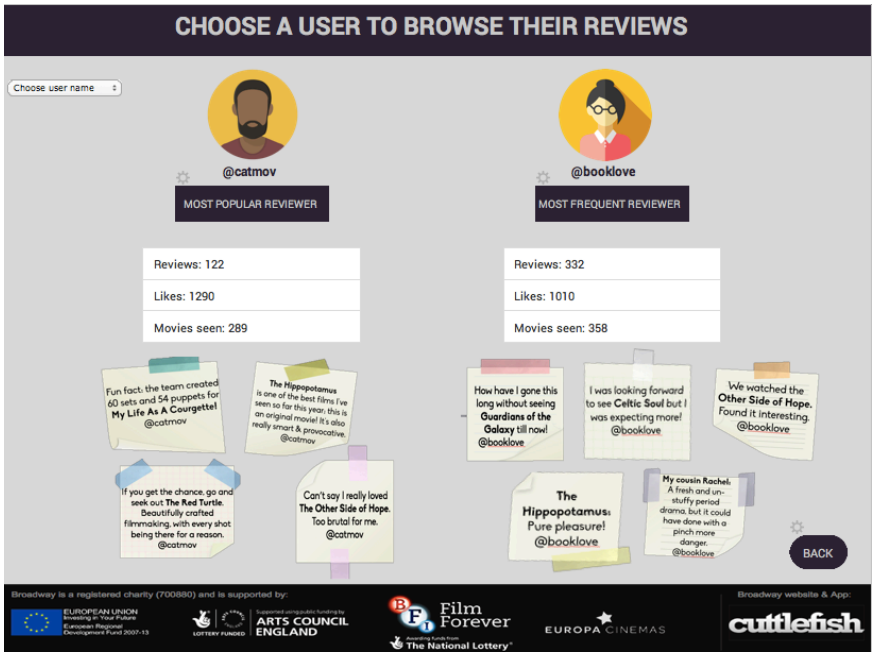


Figure 21 The user can choose another cinema user to view their reviews

Gifting experiences (figures 22-23): This feature enables users curate and gift an experience to a loved one. Cinema-going is above all a social experience; a shared activity that cinemagoers engage with. Hence this feature is perfect for celebrating a special occasion, or for surprising a friend or even someone that one has met in the cinema as a fellow

member of the cinema community. The system accumulates cinema-going data from the user one has chosen (obviously must be a friend on the system otherwise there can be no access) and recommends bespoke experiences. The user can then choose from a variety of features such privately booking a screening room, write personalised wishes on the big screen, create a memory bubble to put up on the cinema's walls, along with gifting meals, tickets, drinks, a tailored playlist for the user to listen to on their way to and from the cinema in collaboration with other companies (ie. partner up with Spotify). Fosh et al. (2013, 2015a, 2015b) have thoroughly talked about gifting personalised experiences in another cultural setting, a museum:

> Our gifting method is a powerful approach for generating experiences that are both personalised and socially coherent. Sociality is first embedded in the content that visitors design for one another and is then negotiated in a shared group visit. That said, our findings suggest the success of our approach lies in its flexibility: first in designing an experience restricted only by the structure of the template and not in choice of content, and secondly in choosing and ordering how to use the experience as a group. (Fosh et al., 2015b).

Gifting experiences have been a successful service cultural venues can provide to their visitors (Fosh et al, 2015b; 2016). My prototype of a personalised gifted experience included the flexibility that Fosh et al. (2015b) describe so that audiences could feel the gift receiver has more agency over the manipulation of the gift. That would lead in the receiver's satisfaction and delight. Kefalidou et al. (2012) talk about the delight a user can get from a good user experience. According to them, delight incorporates an element of physical, operational or emotional satisfaction (Kefalidou et al., 2012). These three facets of delight can emerge from gifting a cinema-going experience.



Figure 22 Pop up window explaining what this service offers

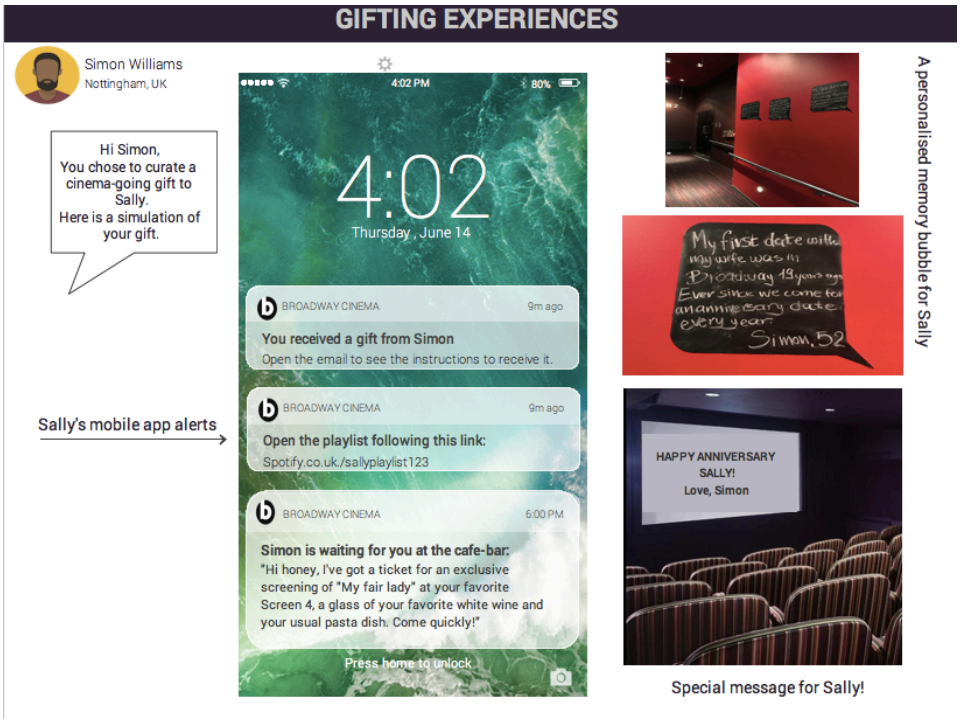


Figure 23 A curated gifting experience[93]

[93] Here is an example of the experience the imaginary user below chose to curate for his wife on their anniversary. He gets a simulation of the experience to review it and confirm details: his wife will be alerted that she received a gift from Simon. By opening the email she will get access to a playlist he curated for her. Then she will get another

Prototype 2: Mobile App

The second prototype is the cinema's mobile app, the equivalent mobile version of the website which differentiates a bit because tasks accomplish in less steps and is more visual. In this app, users can log in to see their profile. This profile is intended to be built upon data from every time the user visits the cinema and watches a movie. By logging in, the user has access to the homepage (figure 24) where the following actions are available:

- **What's on: "**See what movies and other events are on". This feature includes seeing all info of a movie including a trailer.
- **Booking: "**Book seats to any movie you want". The system automatically recommends specific seats that you usually choose to book.
- **Movie Feedback:** "Give and get feedback from other members of the cinema community on latest films". This feature is the equivalent of the website movie feedback.
- **My moviegoing history: "**Browse your film history and stats around your cinema-going activity from the first day you joined the system". This contains a list of all the movies you have seen, which date, who you went with (if you choose to record it -if booked together, it is shown automatically unless you opt out), your star rating for each movie, and accumulates stats of your cinema-going activity presenting them in bubbles which open and show more detailed charts and diagrams. For instance: which genre you mostly watch,

push notification with a personal message for her that her husband is waiting for her in the café bar to enjoy a nice meal and drink and that they will next watch her favourite movie on an exclusive screening for her. Once in the cinema, on their way to the screen, Sally will be able to see the memory bubble on the wall and by entering the room she will see a "Happy anniversary" message on the big screen.

movie origin, how many movies you've seen, what do you consume, when do you usually go, who do you usually go with etc (figure 27).

- **Alerts:** This is all the alerts that one would get depending on which services they would opt in. For example, the system adopts the new service of "Bringing back movies", which is a crowdsourced system: the user enters and votes for which movie they want the cinema to bring back. There would be a selection of movies, like a poll, created by the cinema, but there would also be an empty textbox for people to express their personal choice of movie to be brought back. As a result, the user would be alerted once the movie they requested was back as shown in the first notification of picture on the right: "The movie you requested came back! You can now book tickets for *Metropolis*". The second notification is a new mixed (digital and physical) feature that would complement the cinema-going experience and would address participants' need for extension of the 'after' experience and for more socialisation: The Film Discussion Hub. This comes from the participants' idea of creating a space where they could gather right after the movie to discuss with fellow cinemagoers and exchange opinions in 'all-things-movies'; share their passion for cinema-going basically. Thanks to this alert, they would be able to participate in a specifically decorated space at the Mezzanine of Broadway, full of books about movie stars, films, directors and the film industry, posters, cinema-related games and maybe even a costume corner where they could dress up for special events.
- **Broadway Box: "**Submit your movie related creation and browse other members' creations". This is a crowdsourced platform where cinemagoers can submit their movie/cinema fan-related activity such as fan art (figure 26). It should be something they created: a poem, a drawing, a song, a text, a meme; all related to movies. These can be categorised by adding tags on every contribution. Broadway Box is supplemented by its physical box located at the box office area.

- **Contact:** Contact details of the cinema.

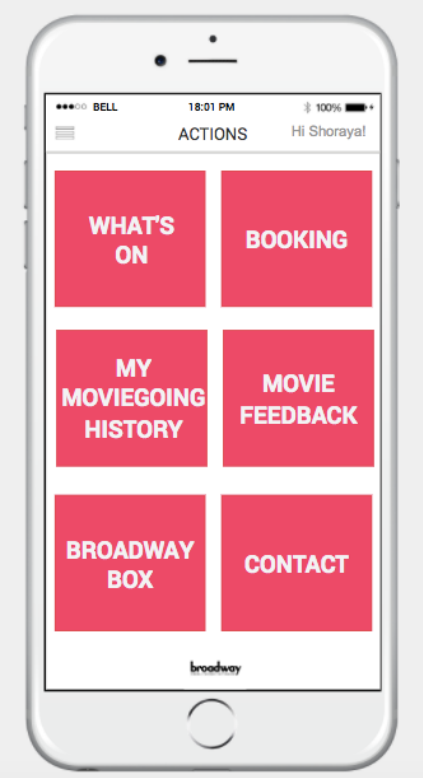


Figure 24 Homepage of mobile app

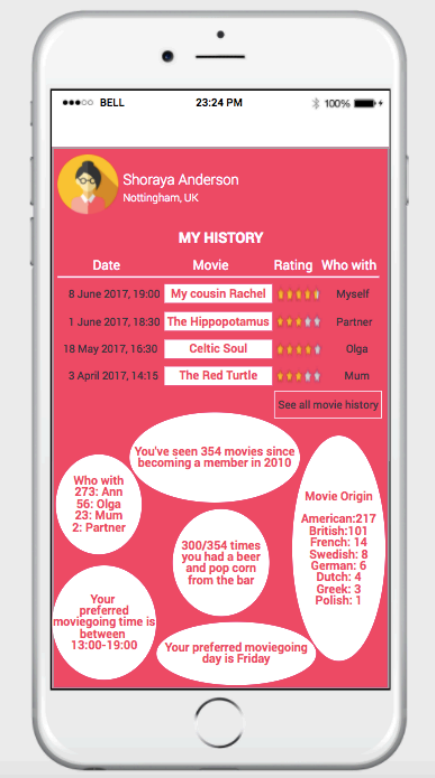


Figure 25 My moviegoing history page

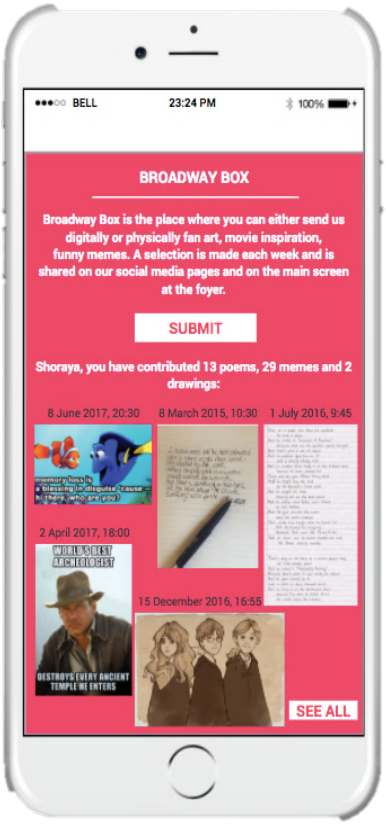


Figure 26 In Broadway box one can submit fan art or browse others'

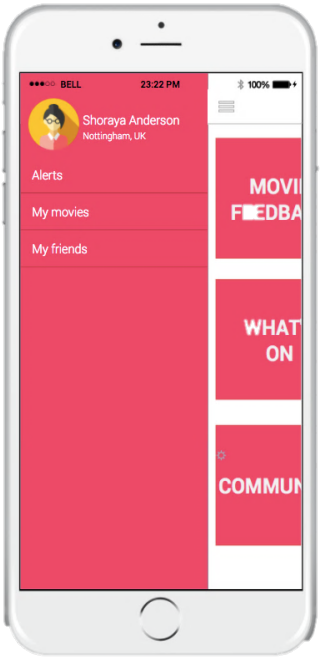


Figure 27 Left slider shortcuts to what one uses the most. By swiping right when at the homepage, the avatar of the user appears along with some shortcuts: Alerts, My movies, My friends. My friends is not showcased here, it supposedly contains all connected friends through the system and depending on their privacy settings you can see some of their activity as well or book movie tickets together.

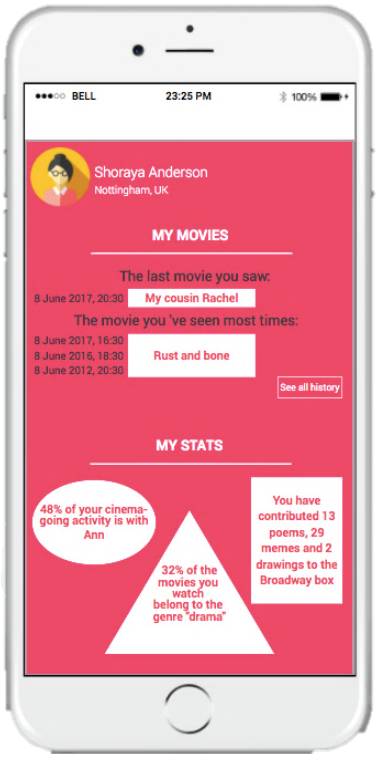


Figure 28 "My movies": This is a summary of one's moviegoing history that shows specific stats that the user might want to keep up with, like how many pieces one has contributed to Broadway box, the movies one has seen many times, recent movies, stats of the person one mostly goes with to the cinema and so on.

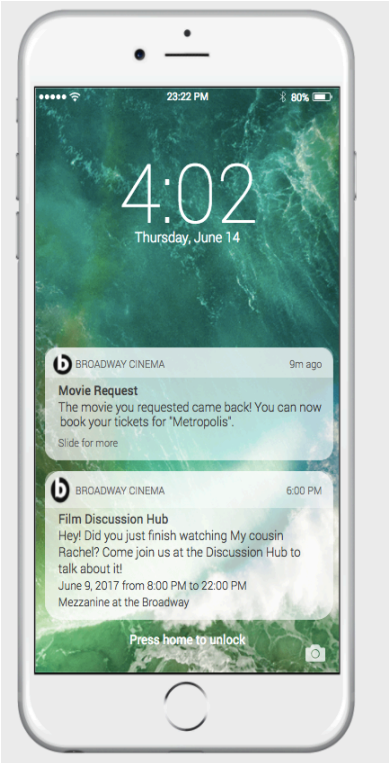


Figure 29 "Alerts" for special features the cinema provides

Prototype 3: Movie Feedback at the cinema

The function of this prototype is quite simple. It is a platform for people to give and read movie opinions and ratings. Its function is as follows: there are multiple tablet stands in the venue; one outside each screen, one at the café-bar and one at the foyer/ box office area. These tablets can be used to enable cinemagoers rate or review a film they just saw (Appendix G). The platform provides an easy multiple choice format to choose one of the movies currently available (figure 29). The user then gives their summary of their review, the review itself, the rating, and if it contains any spoilers[94] and submit. If they log in, this links to their personalised profile and is saved automatically. The platform saves the reviews and the ratings from users which are then projected on a TV screen on the wall of the main foyer (figure 30). The software filters out bad language. Activities facilitated by this platform are divided in two different categories: interactive and individual where the user inputs feedback on their own interacting with the tablet and non-interactive and communal when they read the TV screen with movie comments from all cinemagoers, being in the cinema public space, potentially along with other cinemagoers, which could hypothetically sparkle a conversation between strangers who are engaged in the same activity at that moment.

[94] In case users add a spoiler, they tick the spoiler button and the system adds a spoiler warning label on specific reviews. An obvious limitation of this is that if reviewers don't tick the box with the spoiler, the system cannot automatically recognise the spoiler.

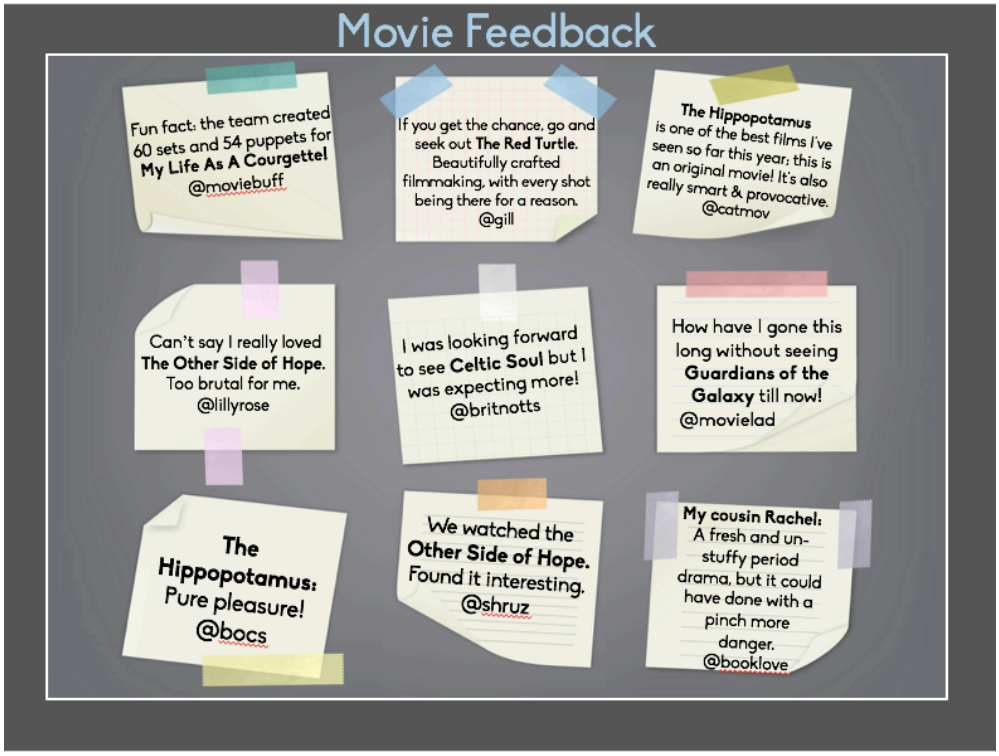


Figure 30 This is the TV screen that projects all approved feedback for the movies

Prototype 4: Cinema Memory Bubbles

Cinema memories comes from people's desire to have an emotionally warmer, welcoming environment and get some pastime outside of the screens. The memory stickers on the wall (figure 31) are a low fidelity prototype and are supposed to be stories created by members of the cinema that share their personal connection to the cinema itself. During the studies, many participants reported having a special, sentimental relationship to the cinemas they choose to usually go, with some reporting going there for years or having connected the cinema to personal events in their life. Therefore, with these cinema memory bubbles, I mainly want to bring out this feeling of nostalgia that some cinemagoers feel but also create a home-like atmosphere, embellish a bleak space, and help cinemagoers empathise and identify themselves and their personal connection to the cinema.



Figure 31 The cinema memory bubbles as seen through walking towards Screen 2 in Broadway

Summary

To wrap up, the above prototypes were created to answer the needs of cinemagoers on personalisation, transparency, accessibility, usefulness/ usability and interactivity, memory and community enhancement[95]. Table 9 describes how each prototype and its features map onto the themes identified as opportunities of designing enhanced experiences for cinema-going.

[95] For more screenshots of all steps of the prototypes see Appendix H.

Table 9 How prototypes map onto design opportunity themes

Prototype	Usability and Usefulness	Accessibility	Shared experience	Personalisation	Transparency
1. Cinema Website	My account presents to the user only with a few visuals their experience & how they can personalise it	Available on mobile app as well	The feature 'gifting cinema experiences' enables sociality	Personal profile	Control over public/private sharing
				My account	Opt in/out in-app features
				My movie feedback	
2. Mobile App	Alerts covers the issue of memory	Easy, quick interaction	Broadway box empowers cinemagoers' creativity and social participation	Personal profile	Control over public/private sharing
			Film Discussion Hub is a physical social service bringing together cinemagoers enabled and encouraged by a digital platform	My moviegoing history	Opt in/out in-app features
				My movie feedback	
3. Movie Feedback at the cinema	Tablets feed the reviews to the screens that help users choose movie	Easily accessible tablets within the cinema space	Follow/meet fellow users that one likes their taste/reviews	My movie feedback	Control over public/private sharing
					Opt in/out in-app features
4. Cinema Memory Bubbles	Cinemagoers ask for warmer, welcoming atmosphere	Everyone can see- Enhance physical space	People feel part of a community	Personal memories	—

Personalisation is realised through the personal profile that is built for the user and can be accessed throughout prototypes 1-3. Interaction is achieved through the digital prototypes 1-3 with which users can have several levels of interactions. Community enhancement is accomplished by features embedded in the system such as the Film Discussion Hub, the Movie Feedback digital platform and cinema screen, the Broadway Box. Additionally, the last prototype of memory bubbles in the cinema is a prototype that addresses the theme of memory and nostalgia, the need

of cinemagoers for a more “cosy”, welcoming environment, that is at the same time developing bonds among cinemagoers by enhancing their sense of belonging to a community. In addition, the system was designed to be user friendly, give control to which data the user wants to share and which they don’t, understand all data captured through presenting them transparently as stats for personal activity. Last but not least, most of participants’ desires were addressed since this system includes a recommendation system which is more humane (with other cinemagoers’ recommendations) and less automated and brings them closer to each other (movie feedback prototypes); a warmer, more personal environment (memory bubbles and Film Discussion Hub); a place where they can meet and discuss with like-minded people (Film Discussion Hub); a quicker way to book tickets (through the app); alerts to not miss again any movie they want to watch and a movie diary log (my movies); and a digital/ physical place to feel they can express their love for cinema and movies (Broadway Box). Following on from the presentation of the prototypes, the reader will have access to how cinemagoers evaluated the above prototypes.

6.3.2 Evaluation of the prototypes

To assess the prototypes, I conducted evaluation workshops with previous participants from the project -eighteen cinemagoers and eight stakeholders (see details in Methodology chapter, section 3.4.5 and table 10 for the stakeholders’ names and roles). This subsection of the chapter is dedicated to present and analyse how they evaluated the prototypes; how they responded to them and what this means. It carries on with mentioning challenges/limitations, strengths and weaknesses and new ideas that participants identified related to the prototypes.

Table 10 Participants of Stakeholders Evaluation Workshop

Name	Job Role
Andy	Coordinator of Film Hub Central East (a project hub in Broadway, support exhibitors in Central East Region to support their audiences)
Caroline	Programme Director
Dave	Digital Infrastructure and Marketing Co-ordinator
Melissa	Press and Marketing Co-ordinator
Charlotte	Marketing Assistant
Steve	CEO
John	Development Director
Lee	Creative Producer

Below, I describe the main findings of the prototypes' evaluation. Besides assessing the prototypes in a conversation as discussed in chapter 3.4.5, participants[96] were asked to complete a survey and rate each of the prototype features from 1 to 5, 1 being the lowest and 5 being the highest, therefore 90 being the best score a prototype could get. Next to each audience participant's pseudonym, I signpost which workshop they participated in (from W1 to W5). Stakeholders' quotes are signposted separately. The curation of a "gifting experience" got the 1st place of preference with 76 points, followed by "my moviegoing history", the personalised feature that provides cinemagoers with stats about their moviegoing activity. "My account" where participants can save their preferences and create their avatar and "Movie feedback (website edition)" shared the 3rd place. The feature of providing cinemagoers' reviews on TV screens within the cinema came 4th, followed by the crowdsourced platform "Broadway Box". "Memory bubbles" and "Movie feedback" (tablet version) were the two least preferred features of participants coming penultimate and last with 52 and 49 points respectively (table 10).

[96] Only applies to audiences. Broadway staff were just asked to note their favourite element and why they prefer it over others.

Table 11 Feature preference during prototype evaluation workshops

Prototype Feature	Points
1. Gifting experience	76
2. My moviegoing history	68
3. My account	60
3. Movie Feedback (website)	60
4. Movie Feedback (TV)	56
5. Broadway Box	53
6. Memory bubbles	52
7. Movie Feedback (tablet)	49

Equally, the 'modernised version' of gifting a cinema experience drawing from data accumulated through one's cinema-going activity over time and the personalised elements of the app and the website such as my moviegoing history were Broadway's staff favourites and more probable to be deployed in the future. With regards to the personalised app and website, they thought it indeed 'create a personal journey' and would generally cover user needs but should work across all cinemas so as to be commercially viable. Nonetheless, this would need all cinema exhibitors giving access to the system to capture the data otherwise the user should input their activity manually. They thought it is vital to somehow link all these ideas with existing platforms and argued that personalisation is the future and should be adopted in a more updated

cinema model: ‘It is the personalisation that drives what cinemagoers are trying to find out about things and how they are doing this. We should make it easy for the customers’.

In addition to choosing their favourite prototype element, participants replied to a series of questions related to the usefulness and usability of the system. I asked the same 13 questions for each one of the 4 prototypes presented in chapter 4.3.5. Generally, people thought the system was good and they would use it: ‘Overall, I thought it was great, the whole system all linked together’ (Gabriel, W2); ‘I am really impressed by the prototypes and I can’t wait to use them!’ (Alexandre, W4). Below is the table (table 12) that summarises specific elements that the participants thought as benefits or limitations of each prototype. A detailed description of the discussion and assessment is in Appendix J11.

Table 12 Summary of evaluation workshops

Prototype	Strengths	Weaknesses- Challenges
Gifting experience	1. Link to a music playlist	1. Be considerate in order not to embarrass someone (publicly available?)
	2. Accessible without needing to go to the cinema	
	3. Big screen personalised message	
	4. Possibility to curate the experience	
	5. Can resemble to live cinema experience and be eventful	
	6. Perfect idea for a gift for all ages, all acquaintances (kids, partner, friend, landlady were mentioned)	
	7. 55.5% mentioned it as their favourite prototype	
	8. 89% would like to use it and 83% think it is easy to use	
Broadway Box	1. Enables reading and scrolling through after seeing a movie	1. Privacy and intellectual property: copyright issue if people copy paste materials. Who owns rights?
	2. Get to know cinema communities' members	2. Motivate people to contribute by providing incentives (free ticket)
	3. Share with friends (if something is funny, eg. meme)	
Movie Feedback	**REVIEWS SLIDER- TV SCREEN**	Overall, the multiplatform feature of movie feedback will have no users initially so could be built up on an existing platform.
	1. Comments on movies from other cinemagoers would help decide on movie	**TABLET**
		1. If the movie finishes too late, people would be tired/ prefer to go home/ in a rush to catch a bus
	WEBSITE MOVIE FEEDBACK	2. There would be a flow of people coming out of the screening rooms and it would take time to put a review on a tablet so people wouldn't queue to complete it
	1. Trustworthy to write reviews	3. Complex system one would have to log in and then remember to log out, which brings issues of breach of privacy and security
	2. Develop a preference for some members of the community and trust other people's reviews	4. Important to have the choice to be anonymous
	3. Enables meeting other cinemagoers and their taste	5. Typing on a tablet is troublesome, especially if it has to be done in a public space and doesn't give you the option to draw or be creative
		6. Many people want to digest what they saw first, collect their thoughts and write something as personal as a website based review in the comfort of their own space and time.
		REVIEWS SLIDER- TV SCREEN
		1. Potential spoilers
		2. Unhelpful comments/reviews
		3. Digital looks cheap -prefer pen and paper
Personalised mobile app and website	1. Enhances memory -remind history/ wish list (alerts)	1. Avoid too much stats, let the user tailor what to see and what not
	2. Facilitates better planning	
	3. Data-based/ people-based and surprise movie recommendations to exploit the potential of the taste spectrum of each cinemagoer	
	4. Data shown should be around the film: movie titles and film types/ genres, language of the film, director, and year of release would be very interesting to see	
	5. Film Discussion Hub helps meeting like-minded people	2. System might make wrong inference/ interpretation
	6. 56% would like to use both prototypes	
	7. 94% think the website is easy to use	
	8. 89% think the mobile app is easy to use	
	9. The personalisation part (my account, my moviegoing history) were participants' 2nd and 3rd favourite	
Memory Bubbles	1. Creates nostalgia	1. Publicly available= potentially embarrassing
	2. Brings something old in the atmosphere, therefore important/ interest	2. Looks ephemeral, somebody can erase/ edit/ vandalise it
	3. Nice way to decorate an empty space like 'authorised graffiti'	3. Someone might write something uninteresting
		4. 33% said it was their least favourite prototype

The above table highlights how different features of the prototypes were liked or disliked by or even concerned the participants, what value they

bring, if they fulfil their purpose and what was left out and should be included. It is out of the scope of this chapter to describe in detail the participant's criticism or approval, but rather to understand the implications behind the prototypes' assessment and what lessons it can teach us to better design new cinema experiences in the future. Accessibility, transparency, usability and usefulness, the shared experience and personalisation, themes that previously came up as design opportunities through this project's studies, kept emerging and being discussed in these evaluation workshops. Using the prototypes as a trigger for discussion, participants expanded on the prototypes' concepts by pointing out additional things that could be done either to overcome existing challenges they identified or to further enhance the experience. These ideas were thematically clustered along with the main points of the discussion under the following themes: engagement with the system through membership and loyalty, data management and identity, flexibility in tailoring personalisation, empowerment of cinemagoers socialisation.

Engagement with the system through membership and loyalty

The 'system engagement' theme was closely linked to membership, loyalty, costs and reward towards loyal cinemagoers, loyal meaning that they visit the cinema frequently. Participants indicated there should be different membership levels and a clear boundary between member/ non-member so that the membership is not devalued. They also highlighted the importance of rewards and the competition element that would be a motivation for participating more actively in the system, for example with regards to the movie feedback feature, the cinema could give a gift such as a free ticket to the person that is the top reviewer of the month. Following on from that, to also increase engagement, after the day of the film projection one has booked, the system could keep a level of interaction with the user, for example ask 'Do you want to rate the movie you saw?'.

More specifically, participants of workshop 1 and 5 talked extensively about membership and loyalty schemes, though the first focused on the importance of a clear distinction between free members of this system and paid members and the latter were mostly interested in rewards as an exchange for their loyalty, which would consequently make them feel valued.

Rewarding a cinemagoer with points would be as if thanking them for their preference to a specific cinema and would keep their engagement level high. Airi (W3) explicitly talked about the importance of a point system and how getting points would be based on loyalty and cinema-going frequency. For instance, she suggested that when you buy two gift experiences you can get 1 for free. Additionally, in the following conversation of Workshop 5, cinemagoers seem to appreciate a loyalty scheme in the cinema of their preference because it would encourage them to go more and feel valued, happy and rewarded for their loyalty.

Agnes: I think there should be in your first page, where you could see how many movies you've been to, something like you have been here for 5, the 6th is for free for example.

Alice: Like loyalty cards.

Agnes: Exactly, to distinguish you from another user, so that you have a gold membership, not because you paid it but because you are here a lot. It's good to feel rewarded by just going to the cinema. […] So if you know you are treated nicely, you will increase your happy levels when you are going to the movies.

Elsa: Giving a free ticket on your birthday. It makes me happy.

Agnes: Being valued.

Elsa: Yes being valued, you get your friends with you, there is a nice celebration, you do something nice! So it's a loyalty scheme […].

Agnes: I think this should be on top of the loyalty scheme. You need something to push you to go to the cinema, you know to say 'Oh Wednesday, it's cinema day!'.

Alice: Yeah, it's a motive.

Mariana (W1), as a paid cinema member herself talked about how the prototypes are not creating clear boundaries between paid and free members and that would maybe disengage paid members.

Mariana: The whole thing that you showed us, I feel as it blows the boundary between member and non member, […] if you have everything and you are not a member, your experience is so intensely bound to the cinema because it's making it really personalised that it would almost feel that you are a member but the only difference would be that you haven't paid 40£ to get some money off, and I just feel, it almost makes me think [sighs] I don't know, could you make everyone a member? And then get rid of what membership is now? Or how does this fit in with what membership is and what is special about being a member? Because this is what makes you feel special and part of Broadway but you don't pay anything. So it's kind of giving you the member experience, does this make sense? You know what I mean, it's making those two things very close and it almost makes you think, couldn't you just have everyone pay to be able to login and come here and win the membership. Like a paying cinema and you get all of this and everybody gets it. Is that too prohibited? I don't know. It's making me think what it means to be a member versus a casual user.

Sofia (W1): It's sort of devaluing the membership as it is.

There is something special about being a member and Mariana expressed her concern on how a system like the prototyped one would maybe risk this feeling. Therefore, differentiation/levelling of membership and loyalty scheme and a point system would address this issue and help all cinemagoers feel valued. Loyalty scheme is also something Broadway has tried in the past but moved forward for reasons that weren't disclosed. Currently, from Broadway's part, there is a plan of getting back to having different levels of membership, with more highly paying members getting more points compared to other members. Overall, this addition of several levels of membership, tailored to the cinema audience's needs would potentially lead to higher levels of engagement and would bring people more frequently to the cinema. A point that could be made here is related to how a cinemagoer can be defined as an individual by their engagement with the cinema (and the cinema community), and more specifically how much time and money they invest on it.

Data management and identity

In terms of data management, participants emphasised the need for being able to manage one's history so as to be able to handle what they can keep/ hide/ delete. They talked about how the prototypes would affect their identity as cinemagoers. With regards to digital identity and data management, Sofia (W1) introduced with the following quote how important it is on one hand, to see all data collected because it is a reality that data is captured everywhere, every day but this doesn't mean that she wants to see it all 'in front of her face': 'This kind of data transparency would cause awareness but also would make me 'apprehensive'.

Airi (W3) argued that these metrics are important and useful to some people to make self-assessment of their moviegoing activity and reflect on what they do: 'Some people are invested in data and what they do'. Her teammate replied that he would just use it for a record to see 'if there

is a pattern. Like, am I only watching action films or drama'? Other participants shared the same opinion, thinking that the data that they want to see would help them 'understand patterns, connect the dots' (Mariana, W1) and develop as cinemagoers. Such an example is also Alexandre (W4): 'These personalised prototypes would affect me because I could see trends in my behaviour, maybe sometimes you want to change something, maybe you want to stay the same'. Through telling the user about what they want to learn, the cinemagoer could see 'if there is any commonality on what I liked so that I know that these are the directors, actors, writers I've enjoyed previously and there's a good chance I would enjoy again' as Gabriel (W2) argued.

Workshop 1 stated that creating such a personalised tool would be especially useful for someone not very knowledgeable about films and the cinema industry, someone who would like to learn and develop their cinema understanding. 'Probably it wouldn't be too useful as it is now, for someone who watches everything' (Teresa, W1). Victor shared this view: 'I see a lot of rubbish films because I have an unlimited movies monthly membership, therefore the system would construct a view of me that says I like rubbish films. My moviegoing is indiscriminate'. This seems to be related to what people think about themselves and how they actually act. It also relates to the issue above about how nuanced the data is –if they were able to log opinions of films they wouldn't be as associated with 'bad' film choices. There could be times that there is a 'discrepancy between what you think and how you present yourself and what you do' (Samuel, W1). An example of this would be to be identified by the app as the 'American movies only cinemagoer' (Sofia, W1) which would be eventually 'counter-intuitive' (Mateo, W1) and would drive and motivate people to 'do something else' (Mariana, W1).

Furthermore, Kaito (W4) raised the point of changing 'your approach on being an audience member' through these prototypes, bringing as an example the reviewing feature: 'It's going to encourage write reviews,

especially if you get rewards. That would change how you approach watching a film because you will be think more critically when seeing a film because you might share something publicly'. Another interesting argument related to how these prototypes would have impact on a cinemagoer's identity was that of Airi (W3). She claimed that specifically the friends section (who you go with) of the moviegoing history feature could make someone more aware that they have not seen people so often compared to the past when supposedly they were going frequently, so it could even lead you to recognise symptoms of depression and somehow encourage you to see your friends by sending a simple message such as 'You haven't been to the cinema with your friends for a while'. In parallel, not having a 'passive interaction with this feature' (Airi, W3) as in just looking at the stats, and having instead different levels of engagement would motivate cinemagoers to set challenges and goals to themselves and say 'I will see 3 foreign films this month' and as a further result get badges if they reach their goals, for which we will talk below in rewards and membership.

There is a point here about self-policing and how future cinema behaviour could be constructed based on data shown even through one's cinema-going practices. In other words, access to digital histories of cinema-going would allow audiences to police and manage their future cinema related behaviour.

On the other side of the coin, workshop's 5 participants were the most critical and sceptical towards the prototypes, apart from Alice who said the prototypes would affect her ('I would go again and again'). Elsa (W5) thought that the prototypes would help her keep a memory but she wouldn't go into any deep analysis. Oliver and Agnes share the same opinion, they would use the features as some kind of diary but especially for Oliver 'it wouldn't change the perception of who I am'.

Finally, an interesting argument came up when participants of Workshop 5 talked about the differentiation of people's behaviour within the public and the private sphere:

Louis: It depends on if stuff is public. Because you might want to project something else.

Alice: I don't really care what other people think so I wouldn't.

Lilly: If it was public, I wouldn't share! I don't want people to think I saw Fast and Furious 3 times! [laughs]

Oliver: People think they are more clever by projecting they are going to the independent movies.

Participants are aware of a kind of 'pretentious' behaviour of some cinemagoers and some adopt it as well, differentiating what they share in public with what they actually do, hiding what they really watch. This ties back to Goffman's (1959) argument of performative identity.

Additionally, data management was also mentioned in Broadway's evaluation. Staff made the point that enabling people deleting and managing their own history is under the responsibility of the cinema. The system 'is storing something that becomes quite personal and important to people, it's their lifelong cinema history. And that takes a certain level of responsibility' as Caroline argued.

Flexibility in tailoring personalisation

Another take-away message from these evaluation workshops is be flexible and enable users to customise their experience. Participants presented several ideas that had to do with personalisation in practicalities and logistics of cinema-going such as deciding on movie, planning, paying and so on. The overall argument was to leave space for the cinemagoer to tailor their experience and not give them pre-set options only according to their data. Some of the ideas that came up from participants were:

1. Create several gifting packages to choose for kids, for parents, for someone one knows but not so closely and could include special gift bags to welcome the gift receiver.
2. Introduce a feature of how many people are at the cinema right now to see if the cinema is quiet or not: 'I'd like the enhanced system to recommend the most empty screening according to people's preference' (Gabriel, W2).
3. Everybody loves and uses cinemas' brochure. Create a 'living brochure' where movie updates/ programming are automatic.
4. Enable splitting pay for collective booking instead of having to book and pay for all friends.
5. With regards to alerts, connect them with the calendar so that one can add an alert after booking. Also, according to what's on and what one usually watches and when, create an alert/recommendation feature. For example, alert a parent for kids movies only during the weekend, when specific directors' movies come to the cinema etc.
6. Similarly, add a button to bookmark future events and have alerts for when the bookmarked stuff are coming.
7. Allow the user to create and be able to share a tailored music playlist for a specific movie.
8. Permit the user personalise the app interface (edit colors, view and so on).
9. Wishlist/ Watchlist/ Programme manipulation: Recommend alternative times/dates when there is a film one stated they are interested in seeing but can't go and make the recommendation crowdsourced so that people vote for an alternative screening.

Personalisation to the extent as the one presented in the prototypes, provides more than an experience: "it leads you build that infrastructure of 'you've seen this so therefore, this is interesting" (Andy, Broadway, Coordinator of East Film Hub). Broadway's staff concluded in

personalisation being invaluable for the future of cinema-going, specifically stressing the importance of the availability of a service through multiple platforms, where desktop and mobile would provide two different experiences. From the above, it is evident that there are lots of different cinemagoers and personalisation can't mean the same thing for all. A parent cinemagoer has as a priority to be alerted when the kids movies are on, during the weekend, a lone cinemagoer prefers to know when the cinema is quieter, a social cinemagoer wants to be able to split pay with their friends, a planner cinemagoer needs to have all updates live and be alerted according to their schedule. To conclude, what this tells us is that personalisation enhances the cinema-going experience when it accommodates the cinemagoers' identity and behaviour.

Empowerment of cinemagoers' socialisation

A key to enhance the experience is facilitating socialisation among cinemagoers. As much participants liked the social features of the prototypes like the Film Discussion Hub and the Broadway Box because they would urge them to be more sociable and realise they have something in common with fellow cinemagoers, they also developed new ideas on how to adapt the prototypes to their social needs. The main point was to be able to share their activity with their social circle, for example provide a 'share everything button'; share when one watches a movie (Messenger, Facebook, WhatsApp), when one books the tickets, but even when one even thinks about going to a movie and looks at the programme. This would simplify their whole process of asking people individually if they want to join, recommend or not a movie if they have seen it and so on.

In addition to that and related to the film discussion hub, some participants talked about the need to also take the conversation to a digital level and not only make it physical. More specifically, they suggested adding a pre-show discussion, with a live twitter tag for

people to follow and interact with while waiting for the show to begin. Many people come alone or wait for their friends and don't have something to do before the movie starts. Hence, there could be a Twitter hashtag for every movie to follow what's on or start a conversation before the movie starts and that conversation could become obvious on a public screen at the foyer area for other people who wait there and don't use Twitter. The twitter hashtag could be for instance #broadway_movietitle. Broadway's staff also liked the Film Discussion Hub idea because that would indeed extend the after experience and keep audiences longer in the cinema to socialise with others. They highlighted how Broadway as a community, is not faceless, therefore that social element would bring people closer but they should make sure to also cater for those who like to engage in a conversation at their own time and space (for example on Twitter).

Broadway's staff also explained the challenges of trying to encourage cinemagoers' socialisation. They admitted that they had previously a digital tool called 'Be social' that gave the opportunity to Broadway cinemagoers to rate films and write reviews. Eventually people didn't use it. That is because most probably this kind of service tends to need huge numbers of people contributing all of the time to constantly keep it updated. After that, they were 'overtaken by social media because that's what people did, if they were commenting they were doing it on their Facebook, Twitter or Instagram' as Caroline (Broadway, Programme Director) noted. Hence, if something like that comes back, they have to encourage people using it by providing a motive, an incentive, for example points and by using it themselves in the team. 'Especially the box office people and the ushers, who are those who deal with customers on a daily basis, cinemagoers know them and as pointed out in the audiences' evaluation workshops, they trust them and their opinion' as Meli (Broadway, Marketing) said.

The conversation ended with Dave (Broadway, Digital Infrastructure) also noting down the practical challenges behind doing something like this: 1. The organisational burden would be high: staff should moderate in any case what people say and if they are being insulting or inappropriate; 2. The cost of collecting and storing big volumes of data is big and requires collaboration with third party software organisations that allow for having big databases and edit of data.

In summary, workshops' participants were interested in and embraced the social elements of the prototypes but at the same time thought that nothing should be 'forced' rather than leave users some space to feel free, be creative, and appropriate the final outcome of such an effort. The stakeholders' experience has shown that in order to build a strong digital socialisation system that works, there should be heavy use by many users so that the database would grow and facilitate communications and interactions. Due to the challenges of achieving this, it would be better to keep socialisation to a physical level by encouraging interaction and discussion among cinemagoers in the cinema space but also building on already existing platforms to develop the existing community.

To wrap up, different group dynamics in each workshop concentrated on different issues but it seems that the main points described above were common, which means evaluation fulfilled its purpose since participants' answers didn't have big deviation. The overall conclusion is that this system has some very good features such as the 'moviegoing history' and 'gifting experience' features and with a few additions or adaptations would indeed enhance the users' experience and make them reflect on their identity as cinemagoers and might even cause them change their behaviour based on their data.

Nevertheless, the system should not reinvent the wheel but rather integrate data from massively used and established platforms such as

Twitter, IMDb and Facebook and should highlight the importance of feeling valued through a well curated loyalty scheme. Despite of entailing many risks and potential challenges, the main argument would be to provide flexibility and investigate how users appropriate the services provided. The section above served to understand the key ideas and themes that cinema audiences concluded to when they were shown the prototypes. With regards to Broadway staff's evaluation, their overall feedback was positive about the ideas presented in the prototypes and their view overlapped this of audiences'. The biggest differentiation was that the stakeholders were thinking and integrating a lot more the financial element and the business model in the conversation but above all, their discussion pinpointed that they are interested in maintaining audiences' trust and increase cinema-going frequency by creating innovative experiences that make their customers happy and aware of what they are doing with regards to their cinema-going activity.

The paradox of making cinema both personal and collective lies in the heart of the above findings. Cinema-going is a particular kind of experience that is both very individual and very communal as scholarship has already indicated when talking about being in a dark room and sharing the same experience with others (for example Kuhn, 2002; Jones, 2003; Evans, 2011; Biltereyst & Meers, 2018). With the integration of digital data and technologies, the nature of going to the cinema is changing and has added value to how cinematic experiences will be formed onwards. Gifting a cinematic experience according to one's practices and taste was one of the most successful features liked both by audiences and exhibitors. This can be attributed to the fact that gifting an experience is about sharing a pleasurable means of entertainment and changes the nature of cinema-going; it potentially alters from a service to a product. It involves a digital and operational element but also provides physical satisfaction to the user (Kefalidou et

al., 2012). This aligns with the new era of experiences that dominate the field of HCI (Fosh et al., 2014; 2015a; 2015b; Kwon, 2017; Spence et al., 2019) and therefore, is a new contextual contribution about the value of gifting experiences.

6.4 Addressing users' needs: lessons learnt

Technological innovations should be designed bearing in mind to increase the trust between the audiences and the venue, as well as the transparency in data capturing so that users know where their data goes and that they are in control of it. This constitutes a unique opportunity to raise users' awareness around data sharing and understanding of how they curate their digital identity.

This chapter came to the conclusion that one person cannot design for all audiences or all cinemas because users' needs are hugely diverse. Instead, I decided to do something broader: provide a list of design guidelines for new cinema experiences with various technologies, including ideas that might be materialised in another project. The purpose of this list is to serve as a summary of what has already been discussed and form the foundation for future projects that want to intervene in the cinema-going experience. For example, a researcher that specialises in computer vision can run a project with tracking audiences' reactions within the cinema and link this on screens outside the screening room for the general audience to see. Likewise, a product designer with their team could create the 'Digital Sweetbox' and another team could create the 'MovieMatch' and so on.

This list can also be used and integrated as a marketing tool in a cinema exhibitor's strategy, taking for example the ideas for physicality or events and embedding them in their cinema culture. What is of outmost importance is to fit the users' needs and go through trial and error to end up with a refined outcome. Any initiative related to intervening in

contemporary cinema-going should somehow involve personalisation, transparency, community, usability and usefulness and accessibility.

1. *Cinemagoers are not numbers but people with dynamic behaviours*

Provide a product/service but do not expect users to use it as you expect, allow them to appropriate it and take advantage of this by developing it towards their benefit. Data might be telling us many things about cinemagoers as users of a service but they do not tell us everything. Automation and making assumptions just from quantitative data might cause a negative experience. Cinemagoers must be talked to and asked what they want. By observing them, one can see how they make use of the technology that was created for them, adapt responsively and create systems that recognise them as people. This maps onto the theme of personalisation and identity.

2. *Choose platforms and devices according to the audience*

According to participants, mobile is easier to use, faster and instantly accessible, nevertheless some people think it would be worth downloading another app only if it is sophisticated and provides a unique service. An app is on the go, while a website needs the user to sit and have more time to engage. Email is a good way to communicate what you want to say, for example through a newsletter, for those who are cinema lovers they would take the time to read it. In general, the conclusion from participants' talk was that they want a combination of physical and digital in terms of availability of devices and platforms in order to choose every time according to their appetite. Consequently one should think about the target audience, provide one platform that combines many features and make it accessible both on mobile and desktop devices when it comes to digital and have whenever possible, its physical equivalent tool. Additionally, think about accessibility as

access for the disabled, as comfort, as a prerequisite for a system that works across all cinemas.

3. *Transparency increases users' trust*

Consider the heavy data usage burden a user goes through every day and focus on the value of data by including human input and qualitative data that supplement the quantitative. Think about data management and give control to the user over what to show/hide in terms of their data and online activity (public/private data sharing). Always provide the right to delete history and account. Make use of the connection between data sharing and reward. Cinemagoers are quite keen to share their data if they know they are going to be used for developmental purposes and not for commercial ones and that they will also provide a reward such as a free ticket, food, drink.

4. *Give cinemagoers space to tailor a product/service*

Personalisation is something that audiences want and stakeholders think is the future of cinema-going. When focusing on personalisation, one needs to think about etiquette, for example prevent distractions in the screening room, reward with point system and provide an optimised levelled loyalty scheme based on activity data; or maybe combine both and create an app that rewards users for not using their phone in the screening room. Moreover, take into consideration memory; some examples could be creating movie alerts, automated calendar addition when booking, movie log/diary, QR code in trailers to automatically add them to your list to watch. Last but not least, the biggest design opportunity would be a unique personal profile. For example this profile could allow the user to customise their account, add their friends, memorise their favourites, provide knowledge development as a cinemagoer, matches the user with other users, entails some element of surprise as well. This would be linked to automated and non-

automated recommendations (for example, staff's pick, based on one's movie taste, surprise recommendations).

5. *Invest and build on the cinema community*

Cinemagoers love the cinema community, either this refers to fellow cinemagoers or to the staff of the cinema. This community spirit could be enhanced by taking advantage of the following opportunities: 1. Be eventful, such as in live cinema events, themed nights with food, drinks, quiz and costumes; gifting experience where users can tailor their gift/ cinema-going experience; memory bubbles special events where cinemagoers contribute their memories from the cinema; create something similar to Broadway box prototype and organise competitions among participants (for instance, Choose a day e.g. a film launch day and have people create relevant content beforehand); special events within the movie such as having live orchestra in the film. 2. Use crowdsourced data, where cinemagoers contribute their content creation. Alternative examples would be using technology to track reactions to show how people interact with the movie real time on screens outside the screening room or create interactive walls/ touch screens that show what people said going out of the room. 3. Embrace physicality. Make use of the opportunity a movie theatre as a space provides and embellish the physical space, make it cosier with a space that brings cinemagoers together like the Film Discussion Hub and creates a pastime activity while cinemagoers wait. 4. Develop a recommender system within the cinema community members and the staff. 5. Enable and encourage socialisation, either this refers to facilitating movie discussion online and offline, enabling users to share their experience, matching them with others with similar taste/ practices. In general, explore what is the cinema's agency in socialisation.

6. *Do not overwhelm the users if not to provide something useful*

Sometimes there is no need for constant creation of apps and new products that might be facilitated by existing platforms; an app could be instead a well-designed, responsive website, something that is inventive and functional. Think about designing for solving existing problems rather than add another app in a user's pile of apps. Two potential sectors of interest to cinema audiences are 1. locality, something that enhances one's local involvement and 2. cinema-going planning, something that would provide maybe traffic/route optimisation to reach the cinema, that would facilitate group booking, maybe a whole ticket booking app around planning. Above all, whatever one designs, should be usable, meaning easy and simple to use for even non highly digital literate users.

This chapter contributes to determining the design opportunities that should be taken into consideration when co-designing new experiences for cinema audiences; what interests users, what they do not like, how they prioritise their needs. The above key principles address research question 3 on designing enhanced cinema experiences using data and are my contribution to HCI. The role of the participatory, user-centred methodology that was followed, should be emphasised. This approach aimed at raising awareness on data sharing and privacy issues and giving the chance to members of the audience to shape their own experience. If these guidelines are taken forward to development, they can nurture a collaborative discussion towards the development of new cinematic experiences with the user in the centre. Creating a cinema hub that provides personalised experiences based on users' data, prioritising data awareness, can potentially reinvent the way we go to the cinema.

This novel approach can also be adopted by Film and New Media scholars that want to try innovative ways for investigating audiences. In current literature, there is no wide understanding of digital media, data and cinema-going. The above findings revealed that through this

methodology, cinema audiences can understand themselves and their digital identities better, and potentially alter their behaviours. They also indicated that the integration of digital data in the cinema-going experience comes with issues and opportunities that need to be addressed. This is modern cinema-going and this project contributes in understanding it.

Chapter 7
Conclusion

7.1 Overview

Cinema is a profitable sector of the creative industries (Statista, 2019) with rising popularity among audiences (Grater, 2018; BFI, 2019). It has been the centre of discussion among Film Studies scholars. HCI academics have also experimented with it using technological interventions that are however, limited to the screening room space. Critically, the mere activity of going to the cinema within a rapidly growing digital environment has not been adequately explored in the literature, thus remaining an under-researched field of Film Studies and HCI in comparison with films, directors, genres, movie viewing, just to mention a few that have gained vast scholarly attention.

Throughout the activity of cinema-going, a big volume of cinemagoers' data is gathered and remains sometimes underused or serves no purpose. In order to understand this data and its relation to the social dynamics of cinema-going, two main challenges needed to be addressed: firstly, there is limited work in existing literature that defines what is the contemporary cinema-going experience, what it consists of and consequently, little investigation of the data related to it. Secondly, the established methods of Film Studies (qualitative such as focus groups and textual analysis or quantitative such as surveys), would not reflect in detail the different perspectives of cinema-going in the digital age. Therefore, a multidisciplinary methodological approach would help empathise with the users and involve them in this research journey. This is the value of this thesis, exploring a Film Studies subject drawing on methods from HCI.

Mapping the contemporary cinema-going experience from the cinema audiences' and exhibitors' perspective, through bringing together the fields of Film Studies and HCI offers a new way of understanding users' needs -in this case cinemagoers- and design implications that could serve in enhancing and renewing the experience. Notably, this

multidisciplinary thesis addresses three principal research questions: 1. Which are the behaviours and digital traces that define the contemporary cinema-going experience within an era of ubiquitous data? 2. How are cinemagoers' digital identities conceptualised and understood by cinema exhibitors and audiences? 3. How is digital data valued by both cinemas and audiences and how can it be used to enhance the cinema-going experience? This thesis established, with the help of Broadway cinema in the role of the industrial partner, how the contemporary cinema-going journey is shaped within an increasingly digital reality. It also explained how the digital traces left behind from cinemagoers' activity can be used to promote transparency, support accessibility, deliver personalised content while also addressing the need for communal experiences.

To address these research questions, this thesis first examined existing academic work, limitations and methods to understand cinema audiences and cinema-going. Chapter One unfolded how existing Film Studies literature helps us develop a vast narrative and understanding of how cinema-going started as an individual experience and how it became a social activity, how it is linked to political, spatial and economic factors, what is the role of audiences in it, what cinema audiences like and how they develop rituals around their activity. Cinema-going is a social experience that unites friends, family, and strangers in the same dark room, with cultural elements that can educate audiences, architectural elements that underline cinemas' importance as public spaces that sometimes form part of cultural heritage (e.g. movie palaces), and economic elements related to the type of cinema-going an individual engages with.

The recurring argument of Film Studies and cinema history scholarship concerns cinema-going being more than the film and having a dominant social and communal nature which distinguishes cinematic experiences according to social group levels (age, class, taste) (Kuhn, 2002). Nevertheless, cinema is going through a profound transformation both

as a medium and as an activity (Tryon, 2009) with the constant integration of using digital technologies in the cinema-going experience and Film Studies scholarship has barely touched upon this area of research. Film history needs to be renewed and leave space for determining the array of digital spaces, technologies and platforms that modern cinema-going involves (Biltereyst et al., 2019).

The chapter went on with unpacking the concept of digital identities as consisting of data which describe an individual as part of their relationships with their digital environment through commercial, educational, cultural, social or other kinds of interactions. More specifically, an individual's identity is characterised by some 'attributes, preferences and traits' (Minuchin, 1974: 9) expressed within digital spaces; those traces form multiple narratives of self across platforms, most notably social media, and users are required to manage that self to avoid risks. Academic work has given attention mostly to producers and distributors of content but not audiences and cinema exhibitors. Moreover, most work on personalisation and media has been associated with newer, digital and portable technologies (and to a certain degree, TV), rather than more traditional forms like cinema. Chapter One argued that the movie theatre can be used for testing new experiences, giving a new dynamic in the definition of digital identity and the potential of its construction by blending a rather traditional form of medium, cinema, with new digital media and the potential of data being used in personalising the cinema-going experience.

To accomplish the afore-mentioned goals, a participatory, user-centred methodology was adopted, explained in detail in Chapter Two. This approach aimed at raising awareness on data sharing and privacy issues and giving the chance to members of the audience to be more actively involved in the research and shape their own experience. More specifically, to address the research questions, a sequential mixed methods approach with five studies was followed: each study and its

findings were utilised to pin-point what is missing and what should be the focus of the next study. The implementation of the double diamond design theoretical framework (Design council, 2005) contributed to the discovery and definition of the cinema-going experience along with the stakeholders: cinema audiences and cinema exhibitors. The initial four studies (focus groups, expert interviews, participatory design workshop, diaries and supplementary interviews) completed the first circle of research: analysis and synthesis. Based on the findings from those, an iterative prototyping process followed which explored, questioned, tested, and refined the prototypes along with users, through six evaluation workshops. Those led to the delivery of a list of final design implications on how one can design enhanced cinema-going experiences using data. Using design methods, commonly used in HCI, proved to be valuable in capturing both audiences and cinemas' needs and their perspective on the contemporary cinema-going experience including data.

The findings from this mixed methods approach were presented in three chapters. The two chapters on mapping the contemporary cinema-going experience examined how cinema-going can be described in the latest part of 2010s including data transactions and digital interactions from the perspective of cinema exhibitors (Chapter Four) and the perspective of cinema audiences (Chapter Five). Chapter Six built on this data and provided a solution that addresses user needs in relation to enhancing the cinema-going experience.

Chapter Four addressed research questions 1 and 2 by helping to define the cinema-going experience and the value of data in the construction of digital identities from the perspective of cinema exhibition, –notably with Broadway and Savoy cinema staff used as experts-. It managed to deepen the understanding of customer activity, figuring out how relationships traditionally built on trust can be maintained and understand how to use creatively data in order to enrich cinemagoers' experience. It

became evident that there are clear distinctions between these two cinema types in terms of internal organisation and structure, data management, digital identity perception and strategy objectives. Broadway gives more attention to data management and identifies the need to turn to innovation and update of cinemas' digital capacity. This is illustrated in practice through a. Broadway's various employees that deal with those issues and b. monthly and weekly cross-departmental meetings of information exchange on data insights such as sales/admissions and audience engagement through social media that eventually inform future strategies. Cultivating and maintaining an 'open data culture' within the cinema exhibition sector is one of Broadway's visions. This culture would entail a circle of knowledge and experience exchange where different venues share their specialised insights. As a result of this dissemination of knowledge, cinemas will be transparent towards their data capturing and usage practices, ultimately leading to the increase of audiences' awareness with regards to data. This chapter elaborated how, compared to the above, Savoy is a different type of cinema, having a smaller size of people occupying themselves with data (the branch consists of the box office staff and the general manager locally). Although Savoy's General Manager is aware of data such as admissions and sales, there seems to be no circular exchange of the data within the organisation, therefore proving that there is a need for data awareness and efficient use from the part of exhibitors. Their vision concerns mostly business purposes, such as expanding the business and increasing sales, while maintaining a 'good cinema-going experience' and audiences' loyalty, leaving outside experimental audience development.

Chapter Five answered research questions 1 and 2 from the audiences' perspective. It illustrated how cinemagoers demarcate the cinema-going experience using temporal, spatial and activity-based limits, which have no clear boundaries and sometimes overlap. Cinema-going is a cultural

journey with a beginning, a middle and an end that can take place in different type of cinemas, a multiplex, a mainstream local cinema or an art house venue but also in one's home, the pub, the bus, the car on the way to the cinema, the online sphere. These three segments can be called 'before', 'during' and 'after' and form the cinema-going trajectory. Cinemagoers are active agents and have control of how they construct their segmented journeys within their cinema-going trajectory.

Cinema-going can be a social or a solitary activity that is part of a person's identity and takes ritualistic forms in different occasions. This chapter argued that throughout this journey, a cinemagoer engages with a variety of physical and digital activities such as choosing a movie, planning, socialising etc. The experience alters according to how a cinemagoer chooses to perform. By synthesising the data collected, the chapter maintained that audiences have different agendas as how they represent themselves as cinemagoers within digital spaces and the physical space of the cinema. The presentation of four personas that were developed based on participants' data, depicted four different experiences and types of cinemagoers from the beginning till the end of the journey. However, participants revealed moments of discomfort within the cinema-going experience which were demonstrated and explained as pain points. This chapter identified people as wanting cinema to be this balance of a very personal experience that they control and manage in terms of both what they do and how they represent themselves versus a sense of wanting to be part of a wider community of like-minded cinemagoers. This is achieved with the co-existence of transitions of the users between online and physical spaces.

Having explored and established the cinema-going landscape in the digital era, Chapter Six addressed research question 3, suggesting ways to use the value that digital data has to enhance the cinema-going experience. It pinpointed how the challenges faced in the activity of going to the cinema can be translated into opportunities. The main argument

of this chapter was that balancing this personal and communal experience is a key part of audiences' cinematic experience (or should be); it is very personal but also very community-driven. This chapter proposed a strategy to facilitate both a personal and communal experience by intervening in it through a prototyped system. One of the most innovative design features that was vastly recognised by cinema audiences and exhibitors was the use of data to create personalised gifting experiences and raise awareness of a cinemagoer's digital identity through the personalised account/ movie history feature. The suggested design strategy to address this opportunity was to 1. promote transparency -let people know which kind of data the cinema has because when seeing their data cinemagoers might want to modify their behaviour; 2. generate personalisation -provide users with a very broad spectrum of tailoring the experience from not at all to having everything tailored taking into consideration accessibility and usability; 3. embrace the shared experience -facilitate strangers getting to know each other either by providing a shared platform through gamification or eventfulness. The paradox of the cinema-going experience turning into individual -back to where it started- through personalisation and technological advances came through clearly in the argument of this chapter.

Each of the above chapters built up on the argument that Film Studies and HCI can learn from each other because neither discipline fully looks at cinema-going as a cultural activity that has a wider context beyond film and movie viewing in the digital era. As already mentioned, cinema audiences leave behind digital traces of their cinema-going related activities which builds a digital identity. These traces can be used by cinemas and researchers to enhance cinema-going by offering them the freedom to curate tailored experiences and bring the cinema community together. This would address the paradox of personal and collective that is going on in contemporary cinema-going and is manifested in the

design opportunities of Chapter Six. These experiences should highlight the importance of a sense of self, that is very individual. At the same time, it should support cinemagoers to express and understand their digital identity: what kind of cinemagoers they are as individuals, how they are part of a wider community of like-minded people who bond with some kind of social connection and how they represent themselves online. Cinema exhibitors seem to share similar concerns with cinema audiences. The value of trust comes out as a crucial element that cinema exhibitors are pursuing and are concerned with in answer to audiences who share the requirement for transparency when it comes to data collection.

7.2 Limitations

This section highlights the limitations of this research project so as to be considered and addressed in future work. First, the participants of this research project belonged to mixed cinema audiences, hence, this thesis covered the experience of going to all different types of cinemas (multiplexes, mainstream independent, art house cinemas). However, the personas and the four different types of cinema-going journeys they followed were not exhaustive. The above findings cannot apply to all cinemas and address all cinemagoers' needs – one cannot design for all because cinemas as working environments and users' needs are hugely diverse. This is because a crucial group of cinema audiences is missing from the sample: teenagers and young adults. It is unknown how the findings of this project would apply to this age group and how the results would be different, especially in terms of establishing their behaviours and digital traces. Secondly, the limitation of not researching 'in the wild' should also be mentioned. All participants might have followed certain behaviours because they knew they were in a structured research study. Finally, this research project only investigated the expert perspective of art and mainstream cinema exhibitors but not multiplexes.

7.3 Contributions

Beyond these limitations, the primary research presented in this thesis contributed to both disciplines of Film Studies and HCI. Emphasis should be given though, on the fact that its major contributions belong to the Film Studies discipline and can be considered a breakthrough in literature and future research of the field. At the same time, the contribution to the discipline of HCI is rather contextual, since cinema-going has not been explored before in such detail by HCI scholars and is indeed a sector where users increasingly interact digitally, therefore needed to be investigated. Below is a detailed list of the most important contributions of this PhD:

1. *Methodological Contribution: Using HCI methods to explore a Film studies subject –cinema-going*

In Film Studies literature there is little or no mention on using design methods. Deploying this kind of research strategy allowed audiences to have more freedom and agency to tailor their own experience. Given that usually audiences and stakeholders do not work collaboratively, it is considered a novelty that participants of studies came from both these groups and were given more agency over their involvement in the research through an iterative, participatory approach aiming at mapping the contemporary cinema-going experience. This collaborative methodological approach could be widely used from Film Studies academics conducting audience research as all media consumption is increasingly digitalised and participatory design can capture all aspects of audience behaviour.

2. *Theoretical contribution to Film Studies: Extending new cinema history*

By answering to research question 1, this thesis has added a valuable extension to new cinema history, unpacking how people value and

understand cinema-going within an increasingly digital landscape in late 2010s. Navigating the cinema-going experience through this paradox of personal-private versus communal-collective experience led to the realisation that a cinemagoer is an individual on their own but at the same time co-exists with other people and belongs to groups. The reality of contemporary cinema-going is a combination of physical and digital but no one has thoroughly talked about it and how it is done. This thesis can work as the basis for someone who wants to touch on the subject and elaborate on specific fragments of it as the requirements of audiences for personalisation, usability and usefulness, transparency and the enabling of a shared experience is new to the field of Film Studies.

3. *Contextual Contribution: Extending HCI literature in an under-explored sector*

Following on from the above, the application of HCI methods in a context that hasn't been explored before such as cinema-going is a research gap that needed to be filled as cinema-going becomes increasingly digital and includes data transactions as part of everyday life. Existing work from HCI academics is limited in intervening with technology in the movie viewing activity whilst this research project mapped cinema-going holistically as a user journey, created personas that can be used as a foundation by other designers and HCI academics that want to build enhanced experiences for cinema-going and resulted in designing a prototyped system that was eventually evaluated. Addressing research question 3 with the design implications presented herein, served as a contribution to the HCI community.

4. *Theoretical contribution: Extending digital identity literature*

Last but not least, this thesis extended literature with addressing research question 2 on what is digital identity in cinema-going which interests both Film Studies and HCI. Digital identity is constructed via cross-platform use. The way people use multiple platforms illustrates

how they (want to) represent themselves within online spaces. The personas that came out of the data and presented in chapter 5, represent the different types of identity that a cinemagoer can adopt: four ways that people use digital technologies within a cinematic context but they are not exhaustive. The field of HCI, and specifically the realm of my research under the "My life in data" label, was interested in reaching a deep comprehension of the circle of digital data transactions in a cultural sector such as cinema. Mapping the cinema journey adds valuable knowledge on how the cinema landscape has shaped in the digital era and how audiences perform differently according to which type of cinemagoer they belong to or they want to belong to. Many people wanted to show something different than they are/do and this informs the academic conversation around digital identity and more specifically Sherry Turkle's (1995, 2005, 2011) argument about different online experiences challenging how an individual sees themselves under the umbrella of the term 'identity'.

5. *Commercial contribution: Prototypes serve as triggers for cinema exhibitors*

In addition to the academic contributions of this thesis, the final prototypes, design implications, as well as the implications of the collaboration between a researcher and an industrial partner can be further used by other cinemas or cultural sector organisations to explore notions of personalisation and strategies around privacy, data, as well as audience development.

Reflecting on the academic collaboration with Broadway after the closing of this PhD circle, some guidelines/limitations need to be documented to inform future research:

- Writing should be short and written in the 'industry' language rather than follow academic exemplars.

- Clear and concise visual illustrations of data such as charts, diagrams, infographics and pictures are always more useful and easy to read quickly and understand.
- All ideas discussed should be recorded so that credit is given in case something is deployed in a commercial level from the industrial partner. Academic research is sometimes difficult to be translated in immediate and tangible commercial results. Interpreting its benefits into potential palpable products or services for the organisation is key in convincing the organisation to trust the researcher and allow them to take initiative and letting the industrial partner understand the importance of long research projects such as a PhD.
- During collaboration with an industrial partner, a researcher should be adaptive and flexible.
- In the occasion of a conflict between the researcher and the industrial partner, it is recommended to reach an agreement which profits both sides but always prioritises and does not undermine the academic contribution compared to the industrial outcome.
- Finally, a researcher should be patient and persistent: the industry works in far more quick rhythm and therefore, during this project, not getting an answer or having someone forget important bits of the research was a limitation but was overcome through patience and determination.

To conclude, following a participatory approach with the practical support of Broadway cinema and its staff during those 4 years, this thesis accomplished its ambition to not only include cinema audiences in the process but also cinema exhibitors. As a result, this collaborative effort allowed to first, get insights from what is really happening in the industry, and secondly to expand the validity of the project results not only to an academic context but also to a real, industrial/commercial environment.

7.4 Future work

Whilst this thesis revealed how the contemporary cinema-going experience is shaped by digital platforms and data and how these can be used creatively to construct different digital identities related to cinema-going, a number of topics were identified that could be implemented and explored in the future.

First, it would be interesting to deploy the approach including the prototypes 'in the wild' in the future, with audiences that visit the cinema in real time. This type of guerrilla testing could result in significant observations regarding whether cinemagoers would indeed use new technologies on the go and how that would affect their cinema-going experience.

Secondly, the data collected in this project, illustrate cinema audiences as an integrated user group and leaving out of the scope the distinction of art cinemagoers from multiplexes cinemagoers. Consequently, it would be interesting to see future research on comparing the value of data for cinemagoers that exclusively prefer multiplexes in relation to the ones that only go to art cinemas. Extending this area of work on types of cinemas and cinema audiences, future work could also extend the perspective of cinema exhibitors. It would be interesting to answer questions such as what is the approach of multiplexes on data collection and usage? How do they use data to enhance their audiences' experience?

Another matter of interest, based on the findings, would be to examine if there is a correlation or a conflict among cinemagoers wanting to build a community, sharing information and learning about people around them and cinemagoers who want to protect their privacy throughout the process of cinemas' digital transformation.

Finally, the novelty of the adopted methodological approach can be expanded and applied to other cultural sectors and users' experiences such as opera and theatre-going. Media and audience studies, can also benefit from it in order to involve effectively and increase the agency of members of the audience when it comes to understanding their experience. In the field of HCI, a key consideration for upcoming research would be to design new experiences and technological interventions based on this thesis' design implications.

The results of this PhD thesis on the importance of data and the integration of digital platforms in the cinema-going journey provide a solid grounding of how the digital era and the technological advances that come with it, not only do not threaten the future of cinema and cinema-going but indeed set an exciting time where cinema-going is reinvented and sets the user in the centre. Taking a mixed methods, participatory approach by bringing methods from HCI to the study of the contemporary cinema-going experience validated that exhibitors and cinemagoers share the same aspirations towards the enhancement of the experience and are taking steps towards working together into claiming the experience they want and deserve. The adoption of the same methodological approach would vastly contribute to answer similar questions about the value of data and digital identity in other cultural sectors but could also be extended to audience research, especially since movie watching at home is dominating current academic discussions. The most stimulating action that would take the value of this thesis forward would be the actual use of this piece of research in real life by carrying out the development of new products and experiences.

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APPENDICES

APPENDIX A: Materials for the studies (Participant Information Sheet and Consent Forms)

Participant Information Sheet
"My digital identity goes to the movies"

Research on audience interactions with domestic or portable technologies and the construction of digital identity through social media are growing fields within screen studies, but the position of cinema-going within digital culture remains an underexplored aspect of that research. Digital identity emerges from a chain of online interactions, which leave a digital trace behind and consists of data, which describe us as an individual but also through our relationships with our online environment; this refers to a number of daily online interactions including commercial, interpersonal, professional and educational activities. Cinema-going equally can be conceived as a path with a start and an ending which leaves traces of digital identity behind such as watching a movie trailer online or writing an online film review, creating a potential to explore the role of digital data to answer questions around the value of cinema-going and its role in the construction of a cultural digital identity.

This study seeks to explore filmgoers' perception of digital identity, and how it can be constructed and expressed through their moviegoing experience. Moreover, it focuses on researching the ideal cinema-going experience in order to create a more entertaining and personalised engagement.

With your consent, the study will involve the collection of various types of data to help us develop a detailed understanding of the ideal cinema going experience and how it can be enhanced. These will include audio recordings, photographs, field notes and video. The audio and video recordings will be used only for transcription purposes and will be deleted afterwards.

Only the researcher will have direct access to the data. Extracts of the data will be shared with the researcher's academic and industrial supervisors, and may be presented at academic workshops and conferences. Only anonymised data will be used in academic dissemination.

The data will be stored in accordance with the 1998 Data Protection Act on a password protected computer in a secure facility. The data will only be processed by the researcher.

You may suspend data recording and/or withdraw from the study at any time during or afterwards and have your data deleted from the record.

INFORMED CONSENT FORM

"My digital identity goes to the movies"

Objectives of the research: The proposed project seeks to understand what filmgoers value in their moviegoing experiences and how digital identity is conceptualized within this experience. The research is being conducted as part of the researcher's PhD research project at the University of Nottingham.

Data to be captured: The study will involve focus groups discussing the cinemagoing experience, definition of digital identity, trust to the cultural venue in relation to the use of digital data, and engagement with the whole moviegoing experience. To support subsequent analysis of the work the researcher would like to record data including notes, photographs and audio recordings.

Please tick the boxes below to indicate your consent (if none is given, data will not be gathered or used):

Field notes Audio Photographs Video (purely for transcription purposes)

Please note that the researcher will not disclose your identity and the anonymity of all participants will be guaranteed to preserve their privacy.

Use of the data: The data will be used by the researcher, Tatiana Styliari, her supervisors assoc. Professors Liz Evans and Boriana Koleva and Dr. Genovefa Kefalidou, and her industrial supervisors in Broadway and Digital Catapult, to develop a detailed understanding of the ideal experience of cinema-going and the notions of moviegoing connected to digital identity. Anonymised data will also be used in any academic dissemination such as but not limited to research reports (including the researcher's PhD dissertation), academic presentations and scientific publications.

Reuse of the data: If the data is used in subsequent research projects, consent for reuse will first be sought by the researcher.

Who has access to the data: Direct access to the data is limited to the researcher Tatiana Styliari; extracts like transcripts but not the original recordings will be shared with her supervisors, Liz Evans, Genovefa Kefalidou and Boriana Koleva and her industrial supervisors from Broadway and Digital Catapult.

Storage of the data: Data collected will be securely stored on University of Nottingham password and firewall protected network drives and in accordance with the Data Protection Act 1998.

Your rights: Participants are free to withdraw from the research at any time without explanation and any personal data will be erased. Participants have the right to request that personal data be destroyed at any time. The researcher can be contacted on: Tatiana C. Styliari ll Tatiana.styliari@nottingham.ac.uk ll 07492189405 ll B47/49, Trent Building University Park, Nottingham, UK

Consent Agreement (please tick as appropriate)

All participants *must* sign this consent form.

Yes ☐	No ☐	I confirm that the purpose of the study has been explained and that I have understood it.
Yes ☐	No ☐	I have had the opportunity to ask questions and they have been successfully answered.
Yes ☐	No ☐	I understand that my participation in this study is voluntary and that I am free to withdraw from the study at any time, without giving a reason and without consequence.
Yes ☐	No ☐	I understand that all data are anonymous and that there will not be any connection between the personal information provided and the data.
Yes ☐	No ☐	I understand that there are no known risks or hazards associated with participating in this study.
Yes ☐	No ☐	I confirm that I have read and understood the above information and that I agree to participate in this study.
Yes ☐	No ☐	I confirm that I am over 16 years of age.
Yes ☐	No ☐	I confirm that my anonymised data can be used in any dissemination such as research reports, presentation and publication/ conference purposes.
Yes ☐	No ☐	I confirm that I can be contacted again for further workshops, interviews or focus groups.

Participant's Details
Name:
Email:
Date:
Signature:

Participant Information Sheet

'Mapping contemporary cinema-going'

Research on audience interactions with domestic or portable technologies and the construction of digital identity through social media are growing fields within screen studies, but the position of cinema-going within digital culture remains an underexplored aspect of that research. Digital identity emerges from a chain of online interactions, which leave a digital trace behind and consists of data, which describe us as an individual but also through our relationships with our online environment; this refers to a number of daily online interactions including commercial, interpersonal, professional and educational activities. Cinema-going equally can be conceived as a path with a start and an ending which leaves traces of digital identity behind such as watching a movie trailer online or writing an online film review, creating a potential to explore the role of digital data to answer questions around the value of cinema-going and its role in the construction of a cultural digital identity.

This study seeks to map the contemporary moviegoing experience by involving diaries where cinemagoers self-report their cinema-going related activities. Each participant will be asked to log in their trajectory before, while and after they visit the movies for the next 3 times within 2 months. This diary involves listing activities related to cinema-going, devices and digital/ non-digital platforms used, time of they day used, feelings and thoughts. To support subsequent analysis of the work, the researcher would like the participants to record some additional data including photographs and audio recordings.

How to fill in the diary: You have the diary both paper-based and in digital form. The space provided is only indicative and you could use more/less according to your activity. The more exact your record of activity is, the more accurate the results will be and therefore the cinema-going activity map too. Please look at the sample diary to get an idea of how 1 completed diary should be.

Photos: Please try not to take photos of people, rather than screenshots of your screen while you are engaging with an activity, eg. watching a trailer.

Audio recordings: These are valuable for the researcher as you can audio record all your additional thoughts or an event that happened that you need to take note of eg. you were treated impolitely by the cinema staff.

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Tatiana.styliari@nottingham.ac.uk

The University of Nottingham

INFORMED CONSENT FORM

'Mapping contemporary cinema-going'

Objectives of the research: The proposed project seeks to understand how cinemagoers perceive contemporary cinemagoing and what is the role of digital data and digital media in their experience. The research is being conducted as part of the researcher's PhD research project at the University of Nottingham.

Data to be captured: The study will involve diaries that the participants will fill in with their consent. They will be asked to log in their trajectory before, while and after they visit the movies for the next 3 times within 2 months. This diary would involve listing activities related to cinema-going, devices used, digital platforms used, time of they day used, feelings and thoughts. To support subsequent analysis of the work the researcher would like the participants to record some additional data including photographs and audio recordings.

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Participant Information Sheet

Prototyping Evaluation Workshop

Research on audience interactions with domestic or portable technologies and the construction of digital identity through social media are growing fields within screen studies, but the position of cinema-going within digital culture remains an underexplored aspect of that research. Digital identity emerges from a chain of online interactions, which leave a digital trace behind and consists of data, which describe us as an individual but also through our relationships with our online environment; this refers to a number of daily online interactions including commercial, interpersonal, professional and educational activities. Cinema-going equally can be conceived as a path with a start and an ending which leaves traces of digital identity behind such as watching a movie trailer online or writing an online film review, creating a potential to explore the role of digital data to answer questions around the value of cinema-going and its role in the construction of a cultural digital identity.

This study seeks to present a series of prototypes which were created after combining data from a variety of studies and capture the participants' evaluation on mainly what they like, what they don't, what is missing and what could be changed.

With your consent, the study will involve the collection of various types of data to help us develop a detailed understanding of how those prototypes would contribute to creatively enhance and personalise the cinema-going experience. These will include audio recordings, photographs, field notes. The audio recordings will be used only for transcription purposes and will be deleted afterwards.

Only the researcher will have direct access to the data. Extracts of the data will be shared with the researcher's academic and industrial supervisors, and may be presented at academic workshops and conferences.

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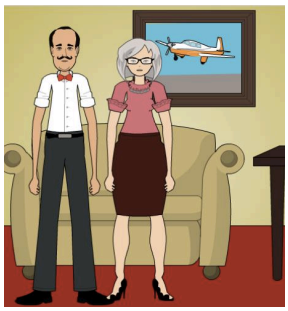
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APPENDIX B: Personas used in focus groups

Persona No2 and No3: Sally and Frank



(picture created through PIXTON)

Personal Information

NAME: Sally

AGE: 57

MARITAL STATUS: Married w/ Josh

LOCATION: Suburban Nottingham

OCCUPATION: Managerial positions

"I need my moviegoing experience to be more convenient"

Personal Profile

Sally and Josh are a middle-aged couple, living in a suburb of Nottingham. They love going to the movies, especially to their favorite independent cinema venue. They have made friends in the cinema because they consider themselves members of the venue's "community" and are sentimentally connected to this place. The staff knows their names. They remember their first date there, the time they went there for the first time after being married, the first time they took their son to watch his first movie. They love going through the brochure, see what's on and decide which movie to watch and when. They usually hang out in the venue's café-bar before or after the movie and check-in in social media to share which movie they watch. Finally, they like searching online to learn the story behind each film.

Key attributes

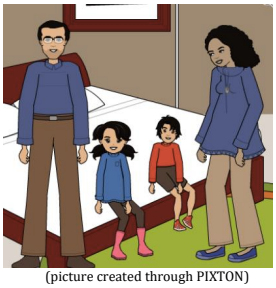
✓ Visit the cinema at least once per week
✓ Attend special events in the weekends
✓ High income

Internet usage

✓ Tech-savvy
✓ Own smartphone
✓ Use Broadway app

Sally's Goals

✓ Engage in a more personalised cinematic experience (eg. curate their own film history)



(picture created through PIXTON)

Personal Information

NAME: Frank (married to Jenny and has two kids: Annie & Elliot)

AGE: 41

MARITAL STATUS: Married

LOCATION: Suburban Nottingham

OCCUPATION: Senior positions

"We need our moviegoing experience to be more kid-friendly"

Personal Profile

A typical family whose weekly entertainment is taking kids to the movies but would like a more kids-friendly environment from the movie theater. They love going to the family matinees. When it comes to their cinema-going related behavior, they usually:
-Search which cinema is playing the movie their children want to watch.
-Book tickets online.
-Buy sweets for the children.
They have an album of family pictures next to the cartoon posters of all the movies they 've been to and they usually share them online as well. It is a frequent phenomenon that they complain about some features of the cinema venues, which are not kids-friendly. In that case, they usually write negative reviews online.

Key attributes

✓ Visit the cinema at least once per month
✓ They like attending special kids events in the weekends
✓ Average to high income

Internet usage

✓ Tech-savvy
✓ Own smartphone
✓ Use Broadway app

The Greens' Goals

✓ Engage in a more family-friendly cinematic experience, especially for their young children

APPENDIX C: Discussion guides

C1. Discussion guide for focus groups

Questionnaire

-How often do you go to the cinema?

-Which cinema do you usually go to?

-Do you consider yourself a film fan?/ A Broadway cinema fan? Both? Other?

Keywords

-Write on the board keywords that you relate to the moviegoing experience.

Discussion

Moviegoing

-What are your moviegoing practices, what path do you follow?

Value/taste

-What do you value in the cinema and the experience of cinema-going?

-Create scenarios of like and dislike of an experience (in which cases you would dislike the moviegoing experience)?

-Design how the ideal experience would be for you: a) as an individual, b) taking into consideration the public (e.g. Interactions with fellow filmgoers).

→ Would you share this new ideal experience? How? Would you use social media?

-Would you like your experience to be more personalised?

→ What would make it more personalised?

-Would you like the use of mobile integrated into this experience (e.g. A mobile app)?

→If yes, how would you imagine it? When would it take place (before, during, after the screening)?

→If no, why?

Digital identity

-What kind of data is important to you?

-How do you like your digital data to be used?

-How much data would you be willing to share? What kind of data? Which of these would you prefer to share just with Broadway personalised system and which with fellow filmgoers?

Trust

-How do you feel about data collection from Broadway/ another cinema setting?

C2. Discussion guide for Expert Interviews

- Which data Broadway has? How did you get it? What do you do with it? What value does it have? Is there part of it that is being unused/underused?
- Did you ever share with your audiences? How, why?
- With another organisation? How, why?
- Which kind of data is important to you and why?
- What's the relation of data usage/capture and trust among u and your audiences?
- What do you think will engage more the filmgoers?
- What do you think they want to see?
- How could I use this digital data to enhance their experience?
- Are filmgoers willing to share their data? Which kind are they more and less willing to share?
- How do they like their data to be used?
- What do you think digital identity is in general?
- A corporation has a perspective on what a person's D.I. is from the database they have. According to you what is it regarding filmgoers?/ Do you think some kind of digital identity could be constructed throughout the moviegoing experience?

C3. Discussion guide for Diaries' supplementary interviews

1. If I asked you to map down your cinema-going experience what would you do differently (than the diary you have been given)?

2. Could you please define the limits of each segmentation of the experience?

3. Can you tell me which is the most important part of this experience and why (before/during/after)?

4. Can you be more specific about what makes each part of your cinema-going journey so special?

5. What about the time you spent in the screening room? What happened there?

6. Could you note down a list of the platforms you use in general and are related to your cinema-going activity? These might not be mentioned in the last 3 times you visited the cinema.

7. How often do you go to the cinema per month/ per year?

9. Did filling in the diary affect your thinking about your cinema-going patterns?

APPENDIX D: Participatory Design Workshop materials

Transcription from participatory design workshop team product pitches

1st group

The first group consists of Harvey (28), Rachel (26) and Robert (31).

R: So, we came up with a booking system app that we think would be nice as a web app and also be able to use on an ipad or an iphone or just on the website. It was to kind of tailor recommendations for films that you go to a lot, or for specific screenings or specific seats. The thing we got is that it would have a window that shows kind of the film info you are kind of looking at and you could just search in that for a specific film. If you chose to login, it could track what you are doing within the app so the next time you logged in, it recommends stuff for you, like looking at the location and the cost and it would have some icons to show you: 'Oh this is actually the seats that you usually book so maybe that's your fist choice'. And then you can just click, book, you can choose the location, choose your seats, and booking would take you straight at the payment screen at the cinema. So this would integrate all of the cinemas but into one app so you wouldn't have to click through. It could either just update, we said the data that you would share would be location or hometown, so you can just select to focus on one particular city or it could follow on your location, because what's the point of getting notifications for your home city if you 've gone to Bristol for the weekend or something. You could put your favourite cinema in there, so it would always have that as your first recommendation point, or your previous booking data would be opt in by logging in with the system so you could use it without having to login; it just wouldn't have any of the data to tailor it for you. And then the number of people that you usually book for, so it would actually recommend seats that are in chunks together so you can actually if you always use this as a family or just a couple or if you are looking for single seats that are in the best location, it would prompt you with those. So, it would learn from your interactions but it would also potentially have these optional alerts, so if you had this open on your desktop and you logged in, even if not, it might just prompt you to say oh there is a cinema

screening for this particular film which is like films you've watched before or we know that you've looked at this film, it's available tonight, these seats are free, we know you like these seats, do you want to book now? And then you would click through and it would go straight ahead to booking. So, yeh, that's what kind of what we thought as something to make the whole thing a bit easier! And the film info would have your IMDb rating, the general film info, maybe a trailer and stuff so that it's fed in to it from there.

Researcher: Is there going to be any interaction between the data you share with them? Can you see other people's data?

R: No, we thought it would be best if.. we didn't necessarily tie social media into this because this is personal preference so we thought whilst it is sometimes nice to see other people's thoughts and opinions on the film, you get that sort of the IMDb info, but actually this is about what you like and your preferences, so that you don't have to search about this in other websites that sometimes can kick you out of a booking screen and then you go back and those seats are gone, so avoid that nightmare.

Rob: I suppose it depends on how you book tickets, because when I book for me and my partner tickets, I book them, so that would work for us and it would work for me because I book seats based on our preference. But if you do it with friends, you mix up who buys the tickets, you'd have to implement something so that your accounts are linked so that it aggregates your preferences across the two or three accounts because if each time a different person books the tickets, it can't understand the preference for all.

R: Yeah, so maybe if you select your hometown and your preferred cinema, maybe you could select other accounts you interact with, so maybe add them, for people who would go and look at that and say Oh so and so is going to see this tonight. Maybe you'll be like Oh they are going to the same cinema that I am!

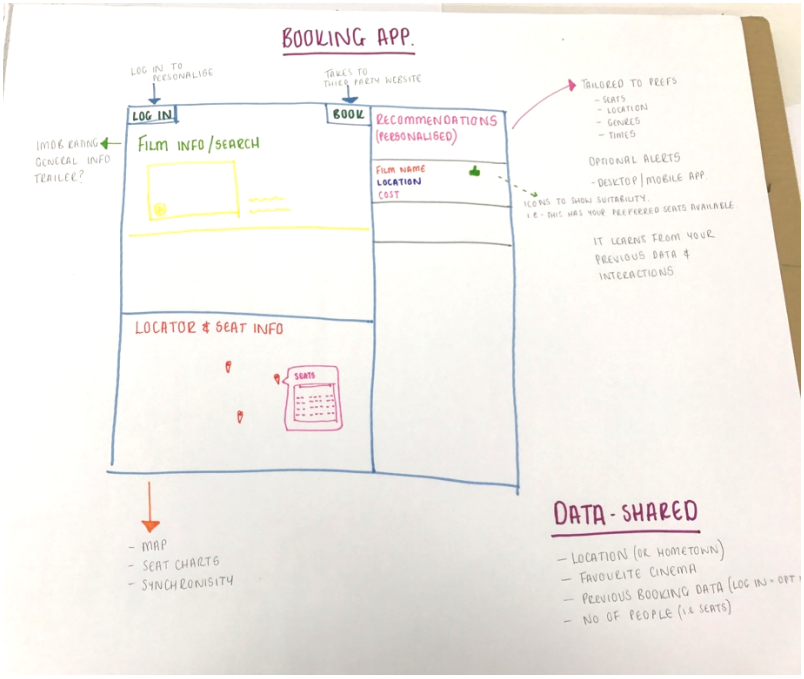
Researcher: Maybe you could have a private option to have as on and off.

R: Yeah, so if you wanted to share, you could do that.

Selected Quotes:

Rob: But Broadway is also different and every other cinema copy pastes screenings.

R: I think we are almost resigned to the fact that if it's not a picture house or boutique cinema, then the experience is different. Like you get the blockbuster films and then maybe you get the bigger screens or the biggest sound or the iMAx but you don't really get the same level of service.

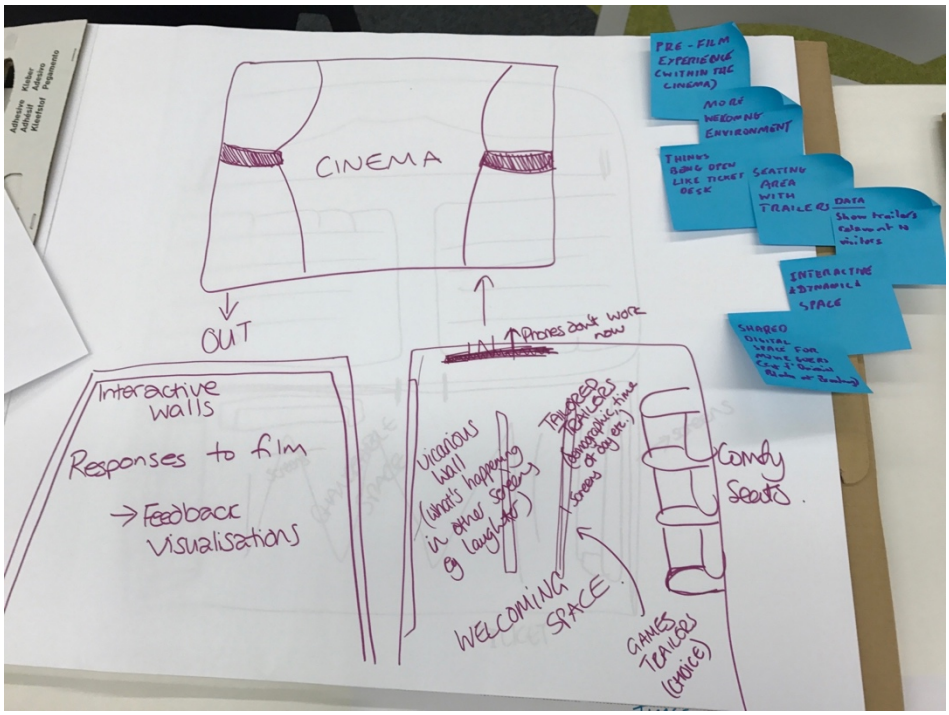


2nd group

The second group consists of Isabella (32), Olivia (48), and Philip (37).

P: The fact that they are very depressing, bleak spaces, sort of these big open places, with popcorn troubling the floor. So the experience that you get is very much in and out. So, we were thinking of how to enhance that experience, separating in two things: the in and the out. Thinking more about the in, making it more of a welcoming experience, more of a social experience, so one way of doing that is obviously making it more comfortable, so having chairs, sofas, but also having some interactive elements. So, the screens around you allow you to interact with other people here in the cinema, they could be sharing trailers or things based on what movies are on at that time, estimates of what kind of people there are in. For example, Saturday morning it shows kids trailers, later at night horror films and stuff like that. But then, the 'out' experience is something we borrowed from something that is happening now at the Broadway like I, Daniel Blake. It's people sharing their thoughts on post it notes as they come out of the screening room. So have a digital experience that allows that. That was the cinema specific. And that is the screen specific. It is the same idea but because you know it is related with just one particular screen, so you know you have the vestibular area outside, with some kind of dynamic setup. Think about Halloween, have some type of haunted house theme as you are going in and then that space can be dynamically configured while you are in the film so you get something different as you come out. That's our idea!

Researcher: And what about the data you are going to use in the screens?
P: It's more about thoughts and opinions. Mostly your sentiment.
Selected Quotes:
I: I don't know if I care about any of the personalised stuff because I go in and I have such a wide taste in films. I might go and see romance and a horror film in the same movie. It has to be in the cinema's best interest to make as you actually want to be there outside as much as inside of the screen. And also I don't want all these recommendations and trailers, I want to be surprised because I don't want to know what the film is about. It is even worse in America, they would show 20 minutes of the film in TV to advertise it! I don't want that!
P: Realising that there are people in the cinema. So the realisation that it is more of a community thing, a shared space.
I: It's not for people in the movie but you could have something, you could project it on the Broadway bar, you know the white wall, things about what's happening in the movie. Like everyone was laughing, could have some kind of graphic, so that people at the bar waiting can experience things with them.
P: Like carers.
O: I mean Broadway is different again, you can take your drink inside.



3rd group

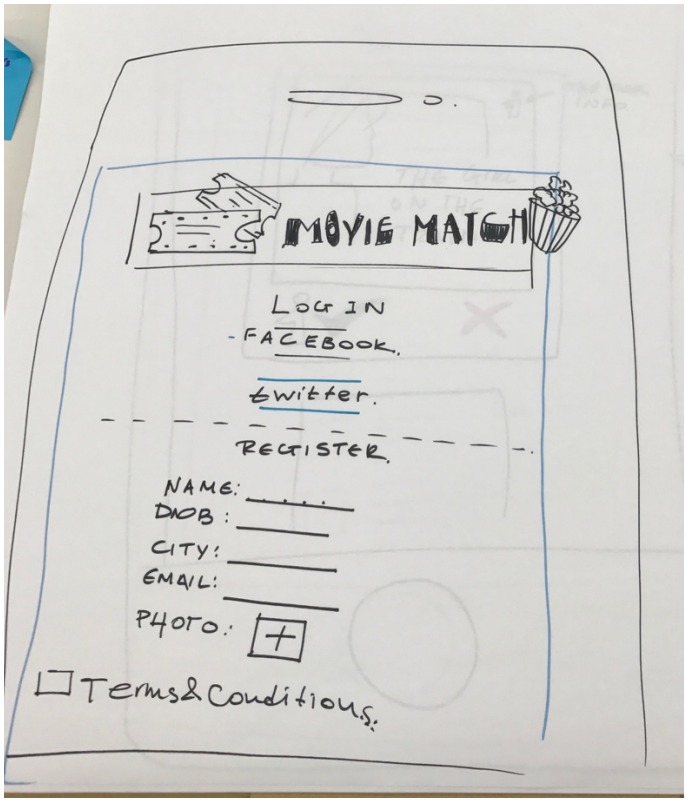
The third group consists of Alessandro (34), Amelia (21), and Luka (24).

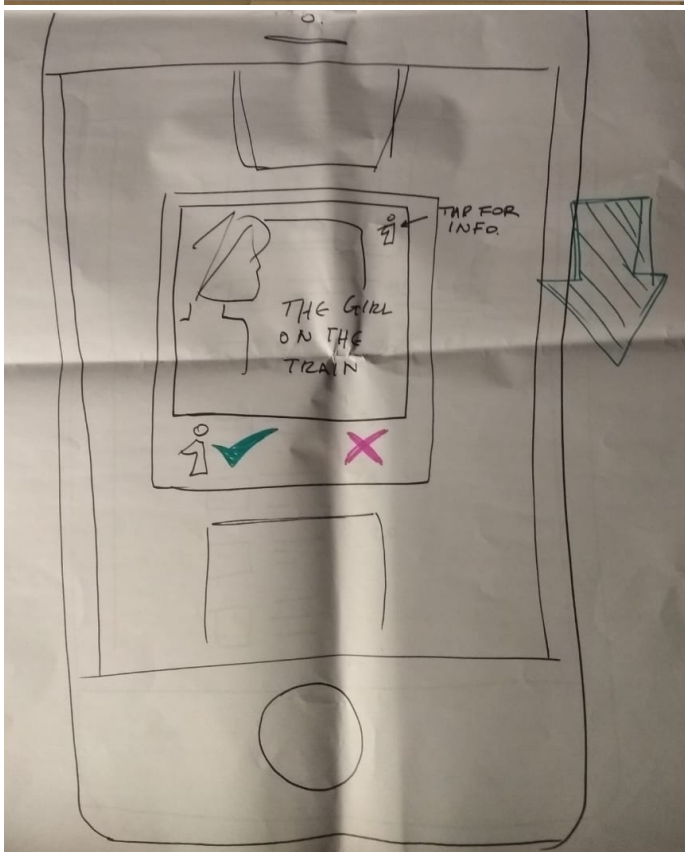
L: We came up with this idea, it's a phone app actually. It's called "Movie match". I think everyone has heard of Tinder. Or most of you. It is something like this but it is built on making new friends as you decide to go to the movies. So first of all, here is the 'login screen' as you can see, where you login with your Facebook or Twitter, or you can create another account if you are not registered on Facebook or Twitter yet. The purpose of this is to see what kind of people and who is going to watch the same movie as you are going to watch. So, next here, you can see all the movies that are projected in the cinema, based either on your GPS location or your hometown, or another location that you can input. As you have all movies here that are currently played in the cinema you can swipe left or right, to watch a movie, or there is going to be another filter, depending on the type of movie you want to watch, like horror, romance, whatever else you might like. So as soon as you like one movie, "the girl on the train" this one, you tap it and you see some description of the movie. If you like the movie and you pressed the green button, you are prompted to another page here where you can see these other people that have decided to watch the same movie with you. It is based on making new friends, to highlight this. [Everybody laughs]. Information that is shared here is location, photo, age, your name and the location you are currently in. You can see who is going to watch the same movie as you and you can communicate with this person either to arrange a meeting before going there or doing something afterwards. So you can see if they are going to the same cinema. After the movie, you will be able to become friends with this person you went to the movie with, and maybe see when you can go to the movies again sometime. If you accept this friend let's say, you will be able to see their preferences and more data.

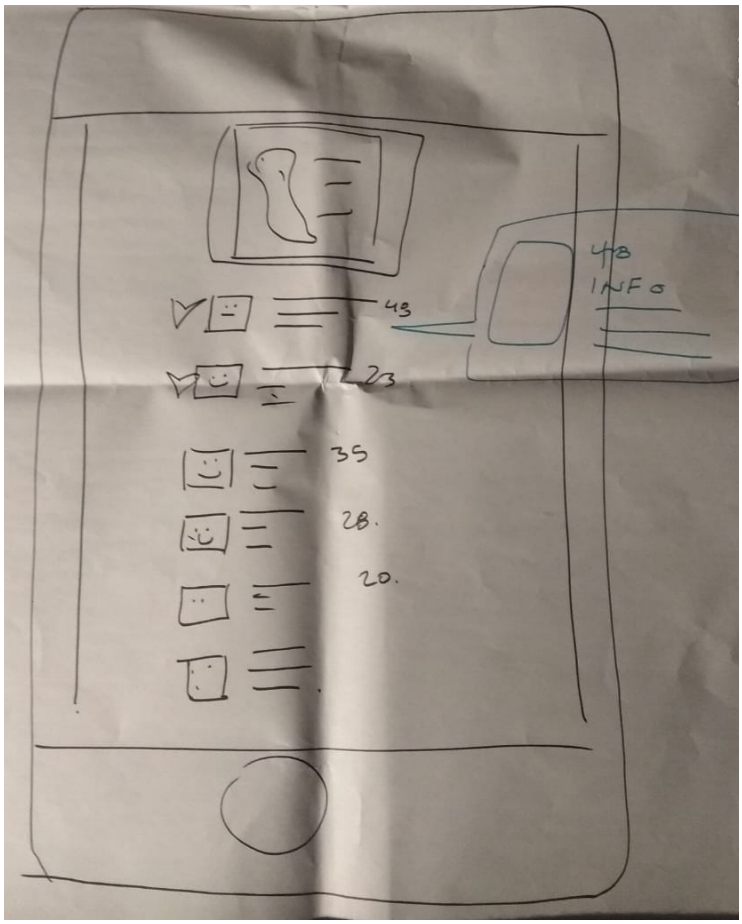
Am: It's like building up a profile, so every time you are choosing one kind of a movie, you are building your own profile with your interests and stuff and keeps your history, all the movies that you watched. Maybe it might have like favourite people as well, people you 've been before with and are on the top of the list. Having a chat as well as a message platform.

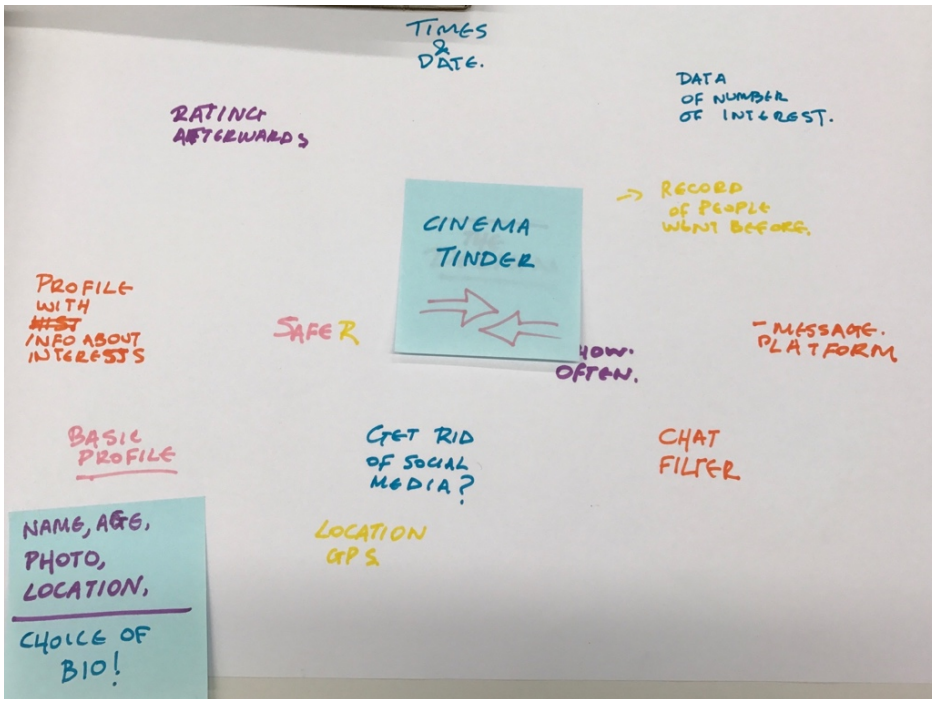
Al: I think the point is you can be as interactive or not interactive as much as you want, in terms of how much data you want to release and how much you get back. I think this is one of the key features. And yes, it slowly builds a profile of you based on movies you go and see, it can use that data to target you. You can say you went to the Broadway 45 times to watch so many movies. You could save 52£ if you became a

member and stuff like that. It can do all this sort of things like that. It could do, based on your moviegoing profile of yourself and then use that to find similar people but still have the control of whether you want to.






48
INFO
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23
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20.


TIMES & DATE.
DATA OF NUMBER OF INTEREST.
RATING AFTERWARDS
RECORD OF PEOPLE WENT BEFORE.
CINEMA TINDER
PROFILE WITH ~~HIST~~ INFO ABOUT INTERESTS
SAFER
HOW. OFTEN.
- MESSAGE. PLATFORM
BASIC PROFILE
GET RID OF SOCIAL MEDIA?
CHAT FILTER
NAME, AGE, PHOTO, LOCATION,
CHOICE OF BIO!
LOCATION GPS

Main features of the three groups' designs in Participatory Design Workshop

Features	Group 1	Group 2		Group 3
Overall description	Ticket booking system(takes the user to 3rdparty website to book)	A. Pre-screening, inside cinema experience	B. Sweetbox: a timed box to make sure you eat your food with the right intervals in the screen	A social, cinemagoers matching app
When?	Before	During	During	Before and After
Platform used	Cross-media app: Web app and mobile app	Physical space: live screens.	A smart device (the 'sweetbox' itself)	Mobile app
Target Audience	Cinemagoers that like to plan in advance/ cinemagoers that go to the cinema in groups	All cinemagoers	Cinemagoers that enjoy having food during the screening	Those who want to go to the cinema but have no one to go with, couples who want to go with other couples, people with same movie taste.
Cost-related logistics	Flexible Pricing-> low ticket price= many empty seats, high ticket price= a few empty seats. motivation.			Film production companies would pay for the selection of the trailers. Trailers would be boosted from cinemas so that they gain more audiences.
Data shared/ captured	Name, email, location/ hometown, favorite cinema, previous booking data (log in= personalised profile), number of people going, preferred genres, seats, timings.Cinema-wise: map, seat chart, synchronicity.	Opinion for the film, reaction to the movie scenes, number of the people in the room, films projected in each room.	Noise tracker, intense action minutes of the plot, ads time, trailers time	FB or Twitter login (contacts+public info), register with new account (email, username), GPS location, movies projected at the location, movie taste, age, photo, name (username), history of movies watched. If you make a new friend you have access (optional) to their history, taste, age,

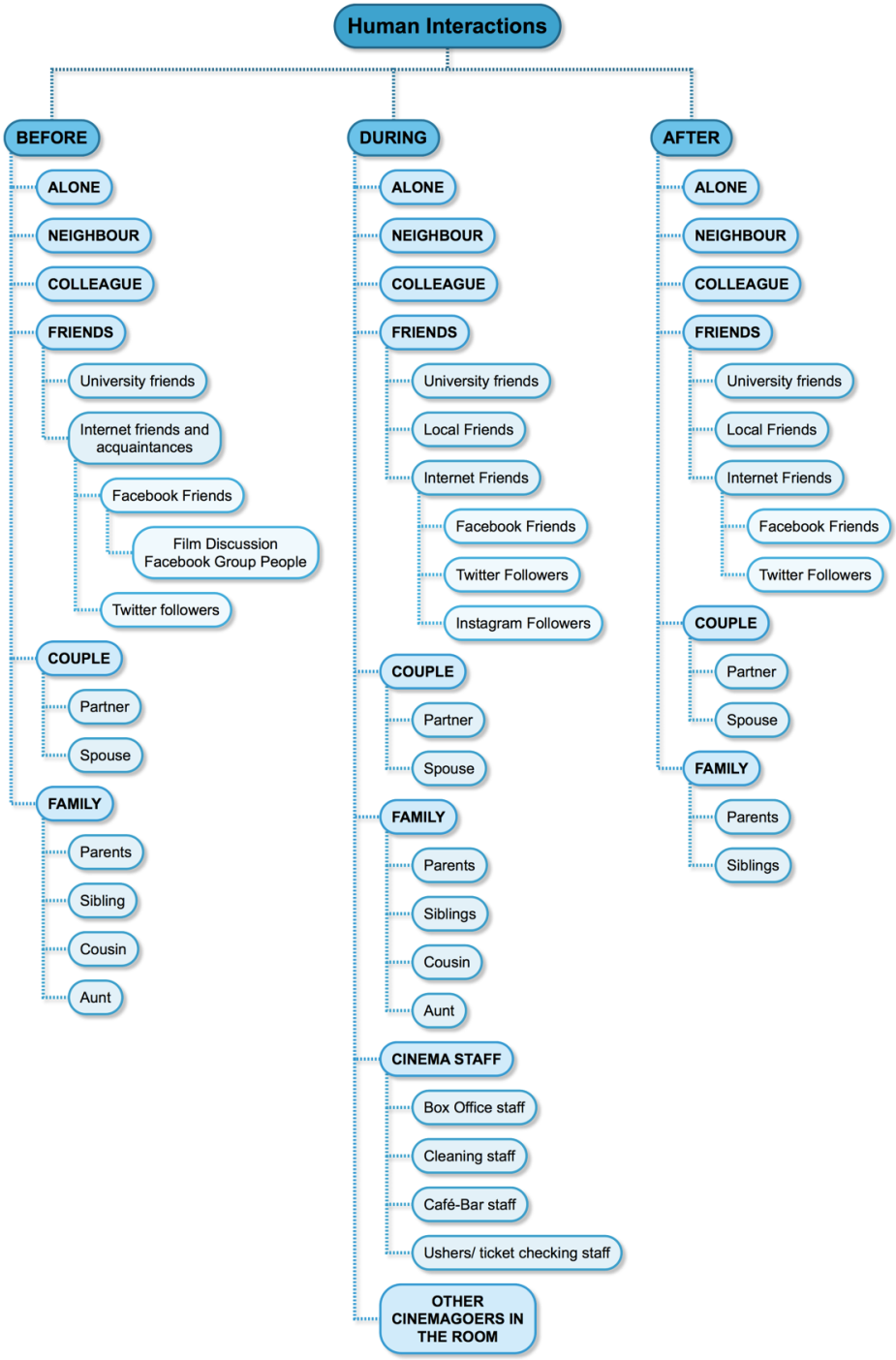
APPENDIX E: Comparison of data on mapping the exhibition

	BROADWAY																				SAVOY						
	Executive group (CEO)				Customer Service group (BOM)				Marketing/data group (DIMC)												General Manager						
Which data do you have?	Subject covered by the DIMC				Subject covered by the DIMC				Customer data (physical customers, website customers, members)			Purchase data		Insights on social media							Personal data (name, email, phone number)		Purchase data			Admissions	
What do you do with it?	Send information to customers				Inform operational activities				Analyse it through software or data analytics company												Send newsletter				Contact customers		
How do you collect data?	Not being familiar with data collection	Supposes through the box office and through credit cards and bookings			Soft policy on data capturing: never push people over data collection	Subject covered by the DIMC			Online payments	Box office interaction	Website bookings	Social media	Purchase of other services	Digital/ physical surveys							Website	Newsletter subscription	Special events such as Freshers' fair	Phone bookings	External partnership (eg. meerkat movies)	Surveys	
Data Security/ Sharing	Not responsible for this				Respect privacy				Encrypted and kept in database	Opting out choices	Third party sharing: no data sharing for commercial purposes, only for research and developmental purposes. Also, economic/ company data to Europa network										Share with distribution companies		Rent Track (tracks figures on UK cinema-going)		Optional data sharing/ right to withdraw		
Digital identity	Generational differentiation: use of digital technology to facilitate connecting with others (social purpose)				Generational differentiation: younger people are in general, more active on social media				How people present themselves online via social media platforms: what I see + what I do		Digital identity is enhanced by building things around digital practices			Online expression of yourself	The age factor						All people have their information stored digitally				One's social media accounts		
Value of data		Understand audiences	Develop audiences	Analyse changing audiences	Report progress to stakeholders	Sales	Fulfill cultural & educational purposes	Link all transactions to facilitate service provided (programming, staff scheduling, rooms capacity)	Understand audience locality	Develop communicat ion with customers	Answer questions	Form case studies for fundraising	Improve service quality and audience trust	Improve operational choices							Marketing/ Inform economic balance and sales				Increase admissions		
Most important data	The ones that help meeting funders' priorities				Email, name, phone number: practicality of contacting customers			Make good use of the data to produce the highest level of experience	Name, address, email, to understand who our audiences are												Sales, which will inform future programming and strategy						
Underused data	Not responsible for this				Not responsible for this				Only collect data for specific reasons so that 1. to avoid annoying your audience and 2. being aware of what specific data you need to collect and what the outcome needs to be					Some datasets are not used							Social media data is not analysed		The data they have could be analysed more				
How do audiences share their data?	Not responsible for this				Need to know why they should share	People give out data more easily compared to the past. However, some are still reluctant	Data sharing in exhange with rewards	Younger audiences share data less reluctanctly	Not responsible for this												Reluctancy in data sharing usually" audiences being cautious and concerned						
Future of cinema-going	Using technology to facilitate bringing people together	Build stronger community tights	Invest on the 'after' the film experience	Attract younger audiences	Loyalty scheme for all				Need to take a digital turn	Understand and inform data sharing strategies		Visualise data and embrace open data practices	Understand the customer journey path and usability	Match demand with suppy						Do more 'fun' competitions (interactive events to reward customers)	Create a good experience to make people come back			Customise interests with recommender systems		
									Keep up with the tech trends	Personali-sation	Digital over physical preference	Improve physical environment	Create a Broadway platform to bring audiences together														

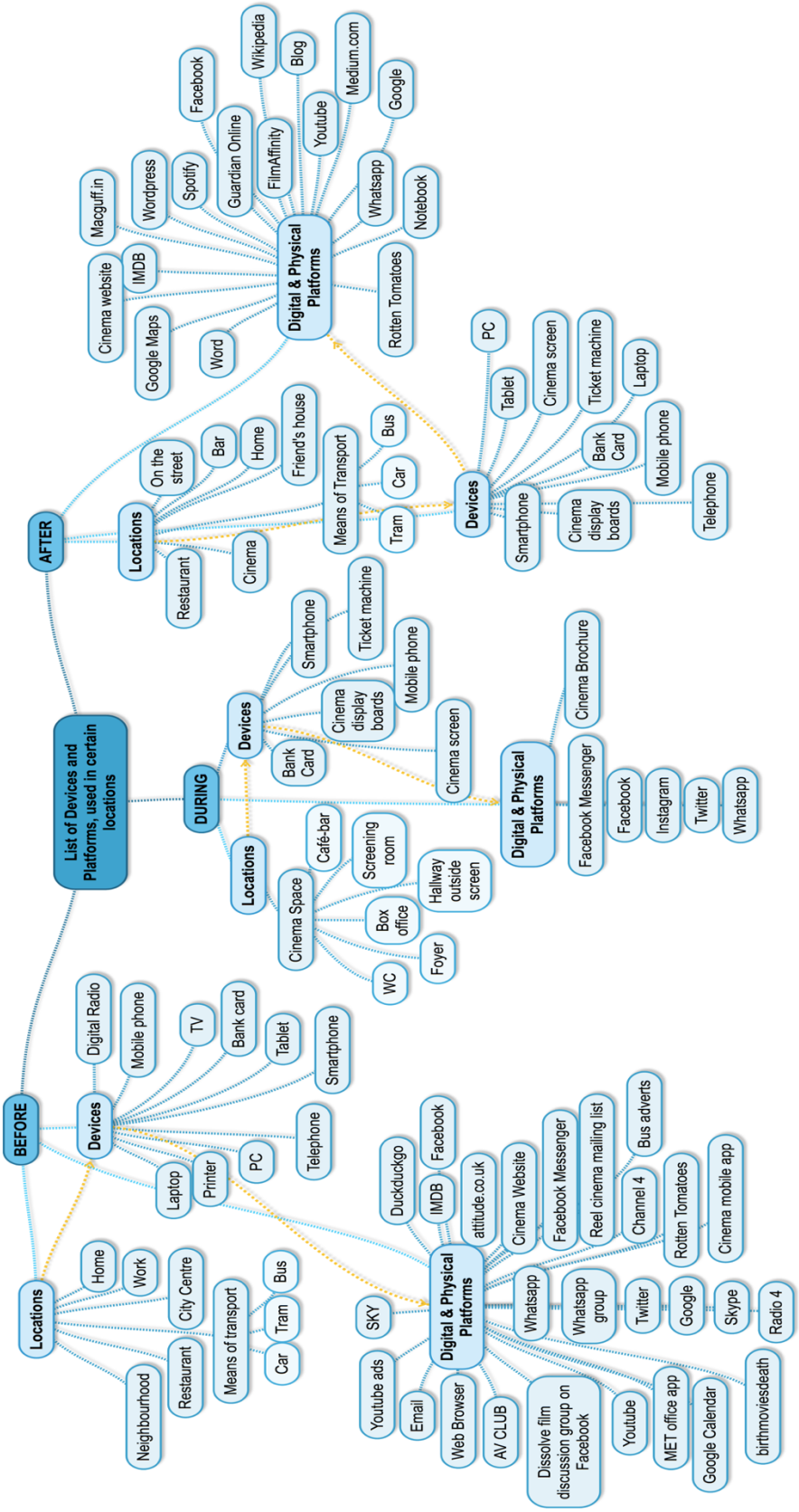
APPENDIX F: Experience map diagrams

Below are several diagrams that were created while trying to figure out the different cinema-going journeys. Their content comes from the participatory design workshop, diaries, interviews.

Cinema-going Human Interactions



List of Cinema-going related devices and platforms used in certain locations

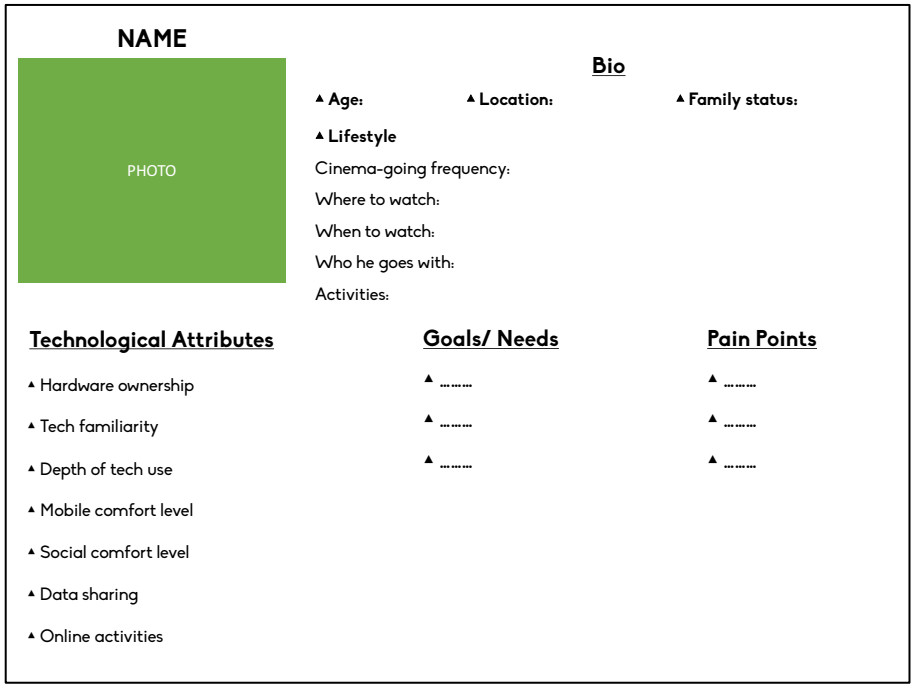


List of cinema-going experience related feelings

FEELINGS		
BEFORE	DURING	AFTER
Willing: to support independent cinemas	Impatient: to see the film	Interested in friend's opinion/ Delighted to share the same view
Curious: about films that are out now	Pleased: staff are kind	Nostalgic: film songs are the type of music I grew up with back home
Hopeful: that somebody will join me	Anxious: if the box office staff will swap my ticket	Happy to share thoughts on film
Surprised: movie was still playing	Satisfied: to do something fun with kids	Relieved to catch the bus back home
Excited: to see chilled movie+meal+drink	Calm+happy: to be early at the cinema	Thoughtful /Reflective
Pleased: to see the tram offer from cinema	Chilled out: when watching the movie	Intrigued and sceptical when discussing
Pleased: to have come down with a plan	Chatty	Relaxed
Interested: thought about others that would want to see the movie	Happy: had a chat with staff	Not upbeat mood because film was melancholic
Worried: about being late	Anticipating: to see trailers	Tired
Apprehensive: not to cry in front of my friends because of the sad movie	Mindful: to sit at the side so as not to disturb the people in the middle	Mixed feelings when reading reviews (not a light reading, politically charged and opinionated)

Tired: after planning+ booking	Hopeful: to interest others in the festival	Disappointed: film was incredibly dull
Not feeling adventurous: for going to a cinema I haven't been before	Hopeful: that no one will appear and put feet up	
Disappointed: friend cancelled last minute	Not impressed: studio not adequately cleaned	
Frustrated: showtimes this evening don't fit what I want to see	Bored: waiting for the movie to start	
Scared: with a trailer I watched before movie	Annoyed: not easy to find toilet	
Annoyed: that I should print tickets rather than have them digitally	Annoyed: with someone talking during movie	

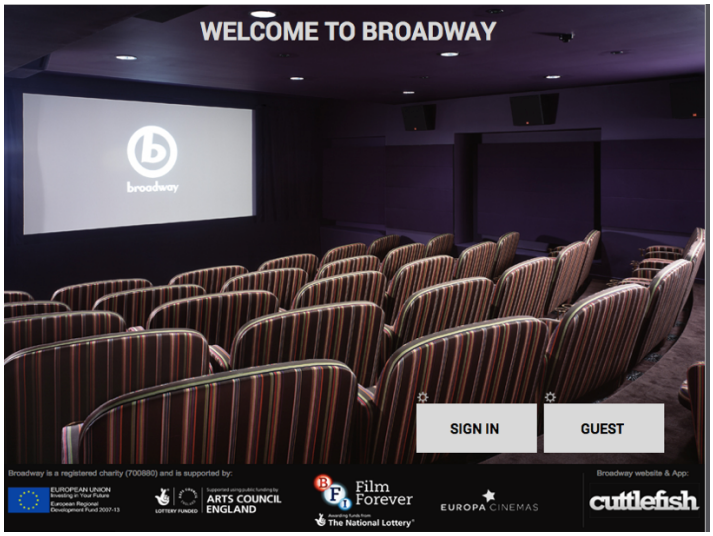
APPENDIX G: Persona template I created

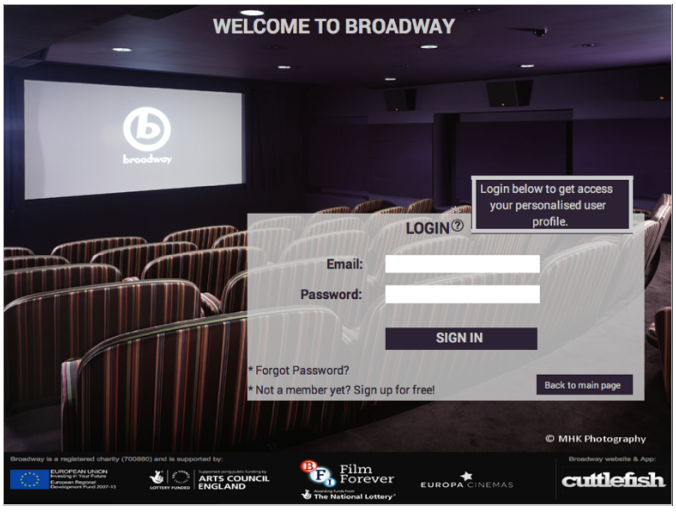


APPENDIX H: Prototypes presentation

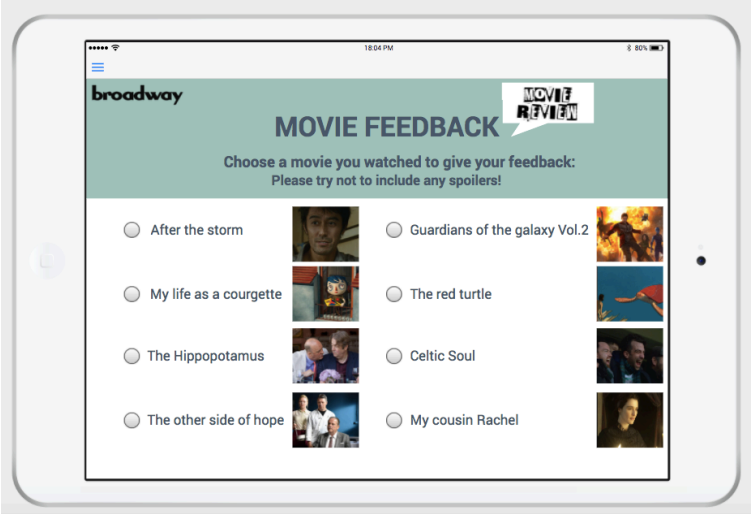
Prototype 1: Cinema Website

The presentation begins with the Homepage where a user can either sign in or continue as a guest and continues with the page of users who want to sign in. If users press the "?" they are informed that with logging in they get access to their personalised profile

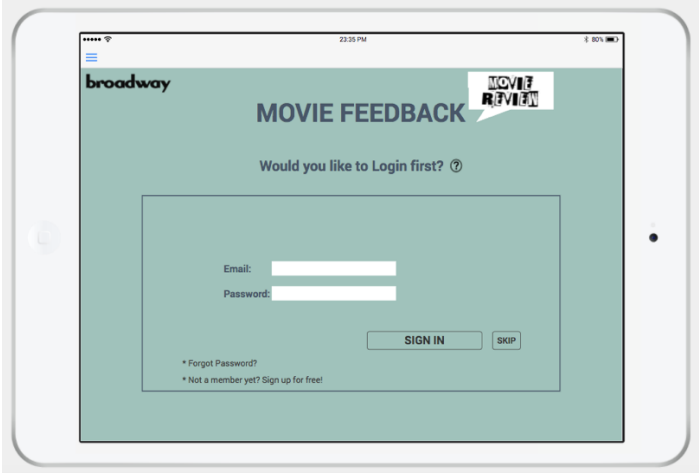




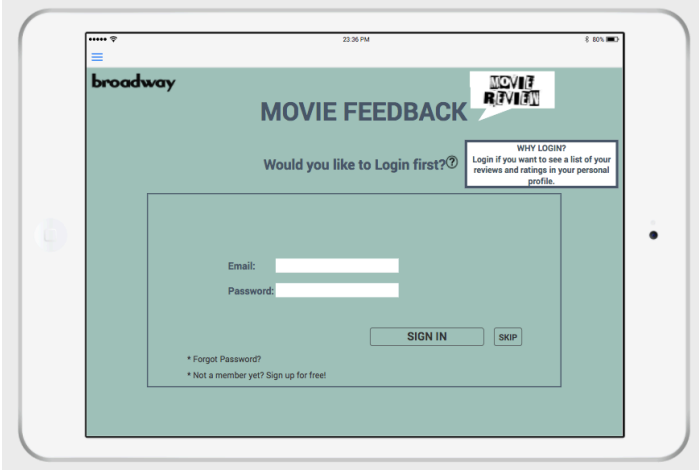
Prototype 3: Movie Feedback at the cinema



Front screen of Movie feedback.



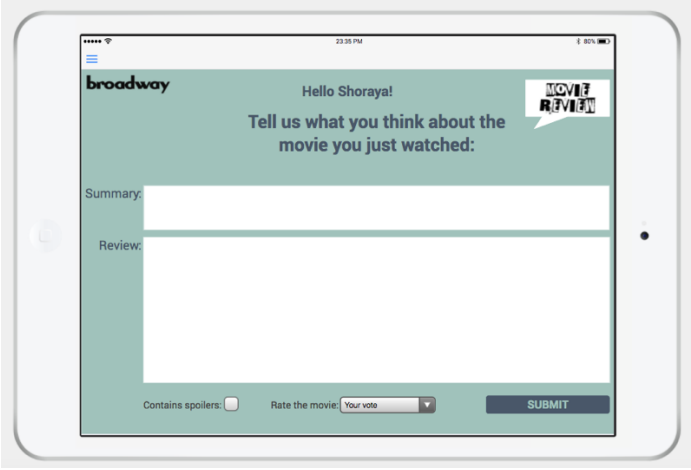
Option to log in so that the user can automatically save their review in their personalised profile.



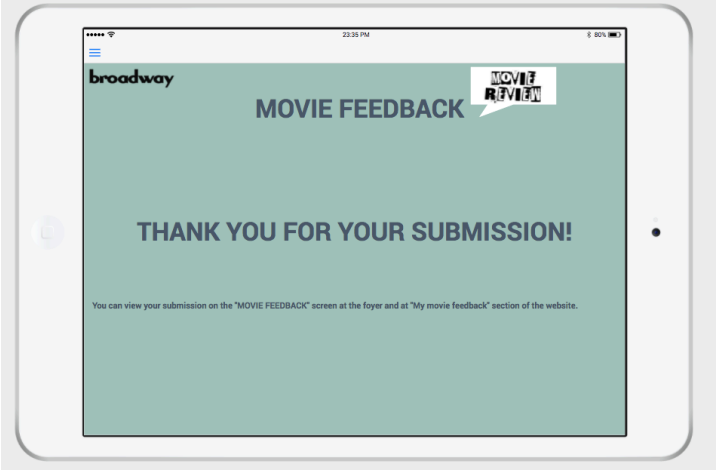
The system explains to the users why it's better to login.



Page where users give a summary and their review in full for the movie they watched.



Same screen but the platform recognises you when you login

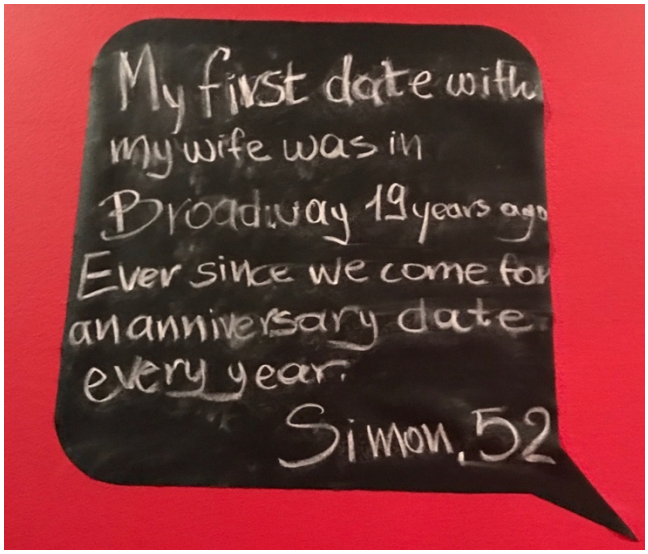


The platform thanks you once you submitted feedback and informs you on where it is available

Prototype 4: Cinema Memories



The cinema memory bubbles as seen walking towards the exit



Memory shared by Simon, 52

APPENDIX I: Presentation of quantitative evaluation data

PROTOTYPES EVALUATION SURVEY

	MOVIEGOING GIFTING					MOVIE FEEDBACK					PERSONALISED MOBILE APP					PERSONALISED WEBSITE				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I think that I would like to use this system.	0 %	11 %	0 %	50 %	39 %	0 %	22 %	11 %	50 %	17 %	0 %	22 %	22 %	17 %	39 %	6 %	11 %	28 %	17 %	39 %
2. I think the system seems easy to use.	0 %	0 %	17 %	39 %	44 %	0 %	0 %	11 %	39 %	50 %	0 %	6 %	6 %	39 %	50 %	0 %	0 %	6 %	50 %	44 %
3. I found the system unnecessarily complex.	39 %	44 %	11 %	6 %	0 %	50 %	33 %	6 %	11 %	0 %	44 %	33 %	17 %	6 %	0 %	56 %	28 %	6 %	11 %	0 %
4. I would imagine that most people would learn to use this system very quickly.	0 %	6 %	11 %	61 %	22 %	0 %	0 %	6 %	50 %	44 %	6 %	0 %	6 %	67 %	22 %	0 %	0 %	22 %	44 %	33 %
5. I think this system is fun to use.	0 %	6 %	28 %	50 %	17 %	0 %	6 %	44 %	44 %	6 %	0 %	17 %	33 %	33 %	17 %	6 %	11 %	39 %	28 %	17 %

	MOVIEGOING GIFTING					MOVIE FEEDBACK					PERSONALISED MOBILE APP					PERSONALISED WEBSITE				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
6. I think this system will make my cinema-going experience more personalised.	0 %	17 %	11 %	44 %	28 %	0 %	22 %	6 %	50 %	22 %	0 %	0 %	33 %	44 %	22 %	0 %	0 %	17 %	50 %	33 %
7. I think this system will urge me to go to the cinema more frequently.	11 %	33 %	17 %	28 %	11 %	17 %	22 %	22 %	33 %	6 %	6 %	11 %	22 %	28 %	33 %	6 %	0 %	44 %	33 %	17 %
8. I think this system will strenghten my bonds with people I go to the cinema with.	0 %	0 %	39 %	28 %	33 %	0 %	28 %	22 %	50 %	0 %	0 %	11 %	39 %	50 %	0 %	0 %	6 %	39 %	50 %	6 %
9. I think this system will strengthen my bonds with fellow cinemagoers (whom I don't know but are in the same space).	22 %	39 %	33 %	6 %	0 %	0 %	6 %	28 %	56 %	11 %	6 %	6 %	56 %	22 %	11 %	0 %	17 %	39 %	33 %	11 %
10. I think this system enhances the general cinema community spirit.	0 %	11 %	28 %	61 %	0 %	0 %	0 %	0 %	50 %	50 %	0 %	0 %	44 %	50 %	6 %	0 %	11 %	28 %	50 %	11 %
11. I think this system will make me feel part of the cinema community.	0 %	22 %	28 %	44 %	6 %	0 %	0 %	11 %	67 %	22 %	0 %	11 %	33 %	44 %	11 %	0 %	0 %	33 %	50 %	17 %
12. I think this system facilitates my cinema-going rituals.	6 %	22 %	28 %	28 %	17 %	0 %	17 %	28 %	50 %	6 %	6 %	22 %	0 %	50 %	22 %	0 %	11 %	11 %	50 %	28 %
13. I think this system makes me more aware of the data I share.	0 %	39 %	28 %	22 %	11 %	0 %	17 %	17 %	28 %	39 %	0 %	6 %	22 %	39 %	33 %	0 %	6 %	22 %	44 %	28 %

APPENDIX J: Selected quotes from participants

1. Quotes from the diary study's supplementary 1 to 1 interviews about what effect completing the diary had on them:

Grigory: It prompted me to go more often. I suppose I went to see some things I wouldn't have gone. I was pushed a bit out of my comfort zone to be honest. It's been interesting!

Kiara: It made me think how I go to the cinema beforehand. I guess because usually I think about seeing a film, I look at a film and I kind of put it away for a week or so and then maybe come back to it. I never actually thought that was part of the experience because it happens so far in advance. Ehm but because you are sort of tracking it and doing it this way you realise it's actually part of the experience as well even though it's quite far in advance. Yeh it does make you think about it more.

Christopher: I think when you put down in a paper or a file what you have done, you reflect on the things you went through, what you have discussed with friends, what you read online etc.

Philip: I guess it made me think about that before process, what made me want to go, and what made me want to go on that specific time on that specific film.

Stefan: I think the fact that there are some little snippets of talking about film that shows up in person and online conversations, I was a bit more aware of that and tried to delineate that or tie it up to a specific movie or trip to the cinema I don't know if that quite captures the flow of the way, you know conversation or life works per say but I think trying to separate that out, is again chase that long tail of where it is where does the movie extend to you.

Anna: It affected in some respect my opinion of how I am settling here, it has made me see the changes that have happened –as I said it's not very similar to my previous cinema-going experiences. The diary has made me a lot more aware that I am, I don't want to say pickier-, a lot more reluctant maybe?

Kathrine: I enjoyed very much doing this diary, because I am so close to cinema and cinema-going that I don't get time to reflect on what my

practices are and writing things down through this project made me realise what I do and be more aware of it.

Melodie: The diary made me realise that I depend on other people to go to the cinema!

2. Quotes from participants on demarcating the cinema-going experience

Temporal limits

Anna: The before can be a quite long event or short. For example, I know Guardians of the Galaxy comes out in August; I know I am going to see that one, so there is a very long before period before. Whereas Young Offenders, I didn't know it was shown in Nottingham, I was in the cinema, I picked up a brochure so there was a week, a week and a half window. So, it depends on whether I know when the film is coming out, either it's rather spontaneous –that's probably the wrong word- or if it's a coincidence if it's a movie I wanted to see.

Sheldon: The after is after you leave the cinema and typically it would stop at the end of the day that you watched the movie, except if it's something that you are really passionate about and you sort of rave on and on about it and you want to watch it again.

Activity-based limits

Anna: The during experience stops a bit after the credits finish because if it's a full screening and you wait for people trying to leave that's part of the experience. So, it would be once you 'd be out of the screen and disconnect from the experience. And leaving the screen is the beginning of the after, the discussion doesn't start yet because you pick up your stuff, you navigate through the stream of people and then you are talking.

Mixed limits

Grigory: The experience for me begins when I enter the cinema, the space. The first thing I will typically do is buy my ticket, and usually have 30-45 minutes before I go into, I have a meal, I chill out a bit and then I go in [the screening room]. The during is when I enter the screening room. In some respects, after… that begins as I leave the cinema to be

honest. After is sort of when I am getting home, maybe the weekend after, I would bump into people and have a chat about films I've seen.

Kiara: I don't know if there is an end to that actually.

Tom: And then afterwards, if it's a good film, you talk about it, if it's a rubbish film you talk about it, I think if it's an OK film you don't really discuss it much.

Below, Tinj uses a combination of spatial limits ('the moment you walk in the room') with activity-based limits ('getting the tickets, ordering a pint' etc.) and temporal limits ('the moment I stand up'):

I believe the actual cinema experience starts from the moment you walk in the room, the cinema, getting the tickets, ordering a pint, having food or something like that. That is definitely part of the cinema-going experience for me at least. Part of the movie experience is when the movie starts. For me the after starts directly when the movie is over, the moment I stand up –this is when the after begins. I never watch the credits […]. There are occasions where I just stand and watch the credits but I am not actively watching, I am just standing there because the movie had a huge impact on me.

3. Quotes from participants on the cinema-going journey

a. Before

Christopher: The before… due to the anticipation before watching a film.

Sebastian: In some ways, the obvious answer is while watching the film but that maybe isn't. The actual process of deciding to go, to see anything, trying to work out what to see, where & when & what time, where are we going to sit, that's almost the richest part of the experience and it's the one where there is more info and there are much more tools now that they used to be, greater awareness now of what's available and when.

b. During

Alexa: I guess the during… the physicality of watching.

Diana: I think the during is the most important because that's why you went there and that's when you get the most out of the experience.

Tinj: I would say the during, like the actual activity of watching the film, and that tends to be a very passive activity in the sense that I just sit here and I consume the film, I am a passive watcher [means viewer]? I don't know. Because this is the film, this is it, everything revolves around the film.

Kathrine: The movie itself is always central to it and that's why I can go to the cinema alone and it doesn't bother me at all because the movie is the central thing.

Grigory: I've been recently to a trip to a cinema with friends in a big multiplex and the film was brilliant but every side of it was pretty horrendous. It was overpriced to see the film, we had an overpriced meal which was cold, and the whole place was set up to be a multiplex.

Maria: Cinema-going is very social for me so I don't go alone; only in extreme cases if I really, really want to see something! It always has to do with talking to people about the movie and in that sense it's very much part of how I experience it.

Anna: I've never used my phone during a movie. I suppose I have a sort of respect when going to the cinema as a cultural experience.

Kiara: I am a little bit self-conscious about the light. If somebody sits next to me, yeah, it can be distracting, other people can see it. It's in my backpack that I bring with me, so I never check my phone while I am watching the film.

Grigory: Basically, in the cinema space, you don't really talk about something, the film is on, you watch and you would get out. It's more basic manners than anything else.

Yunie: […] try to minimise disruption for people around you –so obviously if you have two seats that are in the middle and you have 15 people that you would have to make them raise from their seats, then you wouldn't prefer to do that, at least we would just rather go to another place where we wouldn't disrupt so many people.

Tinj: While I was going to cineplexes, people couldn't stop talking really, and I decided to watch the same movies that I was watching in smaller more independent cinemas. And people didn't talk at all. And that was like a cultural shock to me.

Chloe: Sometimes I like that [automated ticket collection in multiplexes] because it's really quick and simple, but if I go somewhere like Broadway, the people do make it a lot better. Whereas I find the only person I interact with in Showcase they are just disinterested and then they go back talking with their friend and nothing but that. That annoys me.

Kathrine attended a Japanese Film Festival with the director's Q&A and seems excited about it: 'We enjoyed the second visit, the movie at the Japanese film festival because we went with friends, when the movie finished they had directors' Q&A and I think it was really, really interactive! The director flew from Japan!'.

Christopher: I prefer cinemas like Broadway, that are small cinemas, not mainstream. I like the idea that they combine bar and restaurant with a movie that you can watch […] it feels like home. Because at home you can have something to drink, it gives you this sense. I like independent companies or cinemas, I don't like the big, commercial things. And they have this home-like feeling, very comfortable feeling when you go to a cinema like this, Broadway. Small rooms, it's not like that vast, gigantic place that you go in other cities. Normally a person is going few minutes before the screening just to find some seats close to the centre of the screen I like that in Broadway is not pre-allocated, I think it's more…free!

Tinj: Another reason why I like to go to independent cinemas is because more and more cineplexes come up and less and less independent cinemas are around, and I believe by coming to the cinema actually, you also help the individuals or the people who run these cinemas to maintain their business mainly. And I think that this is really difficult in the times that we are going through with the whole on demand services.

Diana: It's because the type of people that go to Broadway are kind of people that I kind of see myself similar to.

Bruce: For me it's being amongst hopefully same-minded people.

c. After

Yunie: The discussion with husband and friends about the movie itself is what really adds up, the 'after' experience. So the feeling it gave you, how you interpret some feelings, what was the hidden meaning of something, which depends on how good or bad the movie was. So this

reflects back to the art itself. So this discussion will only be a personal conversation with my husband or friends [not online].

Diana: Normally the conversation because while we walk back to the car, we talked about what we watched, so that's the special part of it. Kelly

Maria: I guess the most memorable aspect for me is watching the movie and coming out of the theatre and talking to people about it afterwards –especially if they have seen it. Usually I remember those moments.

Shandy: I am just rating with Film Affinity. It's not so much about rating the film, it's more to remember that I 've seen it and when I saw it. I can scroll back through my Film Affinity account, which I have for about 4 years now, and say "Oh December 2014, it's when I went to see that!". It's more to keep a record of when I saw things and to rate them.

4. Quotes from participants on cinema-going as part of one's identity

Performative identity

Shandy knows the exact period of the year that she will go more frequently and when not:

I 'd say between now and August I won't go that much, because the better films come later in the year for the awards and everything, so I might only go like twice a month, which is not much for me. However since December till now, oh my God, I've been to the cinema more than twenty times maybe since Christmas, but maybe because they were Oscar films.

So from December till March, she will go much more than April-August because this is when the 'good films' and the ones nominated for awards usually come out. Finally, there is Alexa who admits that cinema-going frequency depends on where and who is with: 'If I happen to be with my husband in Sweden with his kids then I 'll go to the movies more'.

In the first case, Stefan's and Shandy's words are quite representative of what participants talked about with regards to (a).

Stefan: I would classify Hacksaw Ridge and certainly Hidden Figures as movies that became obligation to watch, because of the nominations. I think the nominations boost their profiles in a general way and partially

as a result of that a lot of friends and family back home saw Hidden Figures and I wanted to see it and be able to be part of that conversation or have a sense of awareness so I could you know don't be aloof from that, but be like Oh yes but have you seen that, be that kind of grumbling film fan!

Shandy: So I was trying to find a way of fitting in some films that were nominated for the Oscars in that week. […] I wanted to see it because I already could tell that there was like a thing around it and it would be worth knowing about this film. So I guess I am coming more from the angle that I feel if I don't see this film now, I will look back in two years and I will be like 'I can't believe I didn't see that, it was such a famous film'! So, I think like this now while in the past I didn't think so actively about the film industry or cinema.

As to (b), there were many participants that were referring to cinema-going activities such as going to the cinema, to festivals, to anything that has to do with watching a movie at the cinema by using expressions like 'that's what I do', 'that's who I am'. The way they talked about cinema-going clearly showed that it is a part of themselves that defines them as people in general not only as cinemagoers. Related to that is also the fact that some cinemagoers demonstrate a high level of commitment and responsibility with regards to cinema-going (c). As Ari put it: 'you know it's 2-3 hours of your life that you put aside to say I'm committing to this right now'. Stefan, Chloe and Shandy show hands on responsibility when it comes to going to the cinema either by pay attention to the films that come out and have general awareness about them before even picking up a cinema brochure to see what's on either by being completely immersed in the film and be careful and concentrated in every second of it because it is as if you are 'studying the film' (Chloe), they want to carry on the discussion afterwards and therefore be totally prepared for it. Especially in the case of Stefan who also happens to review films on his social media or even semi-professionally on film forums, it is a matter of 100% commitment and responsibility: If I know I am reviewing this film, I will take notes while I watch it. Yes, I got to take that seriously. Also, I will go to the cinema alone'. Finally, evading to participate in any talks that have to do with a movie one has watched immediately after watching it, was an element directly interconnected with how each cinemagoer prefers to digest a film. As mentioned already in the section about social cinema-going, there are those who like to talk about it after watching it because this is their way to reflect on it, but there are also those who distance

themselves from any other ideas, digest and have their own ideas about what they saw. Kunal doesn't want to go to the pub after the movie with the rest of his friends because he wants to take more time to understand it and when he feels ready he will talk about it. Same about Anna: 'There seems to be a delay I don't talk immediately after. I wait for more people to see it, I get a really long tail in the cinema-going experience I suppose; I go to the cinema and then a month later I will talk about it'.

Solitary identity

Kiara is a participant who introduced the idea of cinema-going as a solitary activity by claiming that it would be an inappropriate activity for a date: 'I don't think taking someone to see a film is a good idea for a date because I think it's quite a solitary experience'.

Despite wanting to keep the social experience, Philip finds it frustrating to convince people 'do something which isn't just going to the pub so afterwards; it's really tiring'. In his case, he finds it difficult to motivate people join him at the cinema so he ends up going alone most of the times. Finally, Kiara goes to the cinema by herself, usually when she really wants to watch a movie 'like certain women, which it's sort of quite slow' but she feels bad to ask somebody to come see it with her because she would be afraid that they wouldn't like it. Shandy shares the same concern; her differentiated taste makes her avoid inviting friends to go see movies with her: 'I don't really have many friends that would definitely be interested in the films I like. So I already know they wouldn't be bothered, so I am happy to go alone'.

5. Quotes for usefulness and usability

Kunal: I would want an app that combines all the cinemas. I don't want to have 4 apps to see where... "it's not on there, I open the next app It's not on there..." If there was an app that was more like geo-location, alright so, here what's on in the city… As a customer that would be the most useful. Unfortunately a lot of digital applications, are so gimmicky and badly thought out and lack invention.

Ananda: In terms of booking or looking for films, I would use an app as long as it was good and it worked… I couldn't just figure out when the film was on from the website and I just was like "I'm just not going to go", so annoying. I just don't believe they are user-friendly at the moment!

I think it’s a problem when someone just makes an app just because they want to have one, and they are like “what’s this for? So we can have an app”, you need a clear idea of what your app is for otherwise it sucks.

Stefan: In terms of digital stuff, to add another thing on top of that it would have to be a very specialised one.

Belle: I think the problem is that of designing the apps just for the sake of it. The issue we are facing is whether I would mind sharing this data, but whether yes or not, your data is out there, but how the company can actually utilise this data and make it in an interface that is actually useful.

Ananda: I had a free voucher to go see a film in Cineworld and I couldn't just figure out when the film was on from the website and I just was like "I am just not going", so annoying.

Kunal: Yeh, that part is awful!

Ananda: That website... I just was trying to search the film, when is this film going to be in Nottingham and I couldn't even do that. So, id the app would work, like you could search it by data and I want to go on, what's on on Wednesday, or you can search by film [...] that would be so helpful! I just don't believe they are user-friendly at the moment!

-Belle: I also hate the Cineworld website because I can't search, I can't find anything I want.

6. Quotes for accessibility

Researcher: So, if you had this kind of profile, would you like it to be on your mobile device or at a desktop/ online? Tinj: I believe both. Chris: Both, I think so in today's digital age. Ella: I would equally access both. Rose: Yes, both. Bruce: Me too.

Chris: You need something really fairly accessible, I am just trying to think, because that’s probably the first device that you ‘ll pick up and try to put your review down.

Stefan: It depends, if I am writing my opinion about a movie, I hate mobiles, I hate typing on a mobile, I find that annoying. So, I 'd probably sit on my computer if I actually want to give an opinion.

Ananda: I like it when places have captioned or audio-described screenings. There is a variety of different disabilities who would benefit from a screening where the volume stands out a bit, the lights are dimmed and you can leave if you need to! Just to have these specific screenings, I like equal opportunities to everyone.

7. Quotes on Community/ Shared experience

Melodie: I like the community aspect actually because sometimes you find a movie, and you think the only person that would watch this with me you think Oh they are somewhere else, like the Back to the Future, I didn't go because I couldn't be bothered to see three movies in the cinema, alone, with no one to share this exciting experience with. But it would be nice to have a community like to ask are you going for that triple Back to future thing, whatever?

Stefan: I mean you could try create something very local, you know about the filmgoing communities and then something like that is what people put into it, again it's a matter of is this going to get me something different that I am not already doing?

Tinj: I believe enabling interactions between people like talking, discussing about the film, that would create a lot of interesting results in the end, because we would get to know other people around Nottingham, around Broadway.

Mann: As a member here, you could link the ticket buying with online feedback with all of that so if someone bought a ticket, they watched the film and then they could subsequently improve the cinema-going experience and ask some questions about the film afterwards. Because if you ask someone there and then after the movie, they would probably want to go to the bar, or get back home.

Tinj: This is something weird, this is when the social aspect will happen, this is when you can basically start talking to strangers about the film and it's something I've never done because I am very introvert, but I remember going to a film festival in my hometown and strangers were talking after the film and this is something cinemas do not facilitate. And I think managing to make the social afterwards would be interesting. What if the venue could promote that?

Chris: There are groups that do meet now, I am on a website that is called meetups and I can't remember it now but there was a group that does come here to watch a film and do drinks before or after. But you've got to sign up in this specific group.

Ari: A lot of people say they would certainly be interested in that kind of thing, there is definitely the interest, the need for that. I don't know if there is a forum page on the website, where it could be a place for you know, what films are on the moment or various films other people have seen, classic films that people haven't seen and so on. A place like a depository of ideas. It's very much about I've seen a film, it's kind of tight to a time and place whereas a lot of our interaction with it isn't, you know and digitally, we decide when we consume things and so on don't we? So, if you go to see a film you would be tight to a time and place to discuss that but then we are moving more and more into doing that kind of thing, so if we can't do it in here and now that I've just seen a film either with the other people that you might want to go to the bar and talk about it, there should be a place for home for this kind of stuff, some sort of forum, an online forum maybe.

Bruce: You could have an app where at the start before you go into the film, you say, would you like to discuss this film with other people, with like-minded people and look at the gps settings. you can get an alert afterwards, meet at the bar in the corner or whatever!

Rose: it would be a great way, a quite non-intimidating way just to be "Oh we're in this corner" and then you go three and you are like "Oh I skipped all the awkwardness!"

Bruce: You could easily have as part of the cinema here, at the end of lobster, suffragette, carol, whatever film it is, you know, let's meet at the bar. It could be almost curated or led by one of the people say meet at the corner, just the starting point of a discussion.

Kiara: It hasn't occurred to me [to talk to others in the cinema]. I think that's because when I go during the daytime the demographics are very particular, especially in Nottingham. So for example when I went to see Certain Women I was pretty much the youngest person in the room and everybody else was in their 50s and 60s. And like, I can talk to people about that, but you think there are not your peers or you don't feel motivated to. But it would make sense because they were quite a few people there and there were quite a few people by themselves as well.

Tinj: Sharing this kind of information would be more interesting if the info was related to the film itself. If for example, people could create content for a particular film like write a poem, a review, anything, and that particular film comes back due to popular request for example, it would be interesting to see quotes from reviews probably, or pictures or art that people made for that particular film. In this way you could relate to the film and with something that is related to the film itself.

Rose: I know not everyone watches the credits at the end of the film but if you make sure to put it in the end of the film, so for people that would be interested.

Tinj: I think what you said is very interesting, projecting images or any other content after the screen, because personally when the film finishes, I stand up and go away, I'm off. This is something weird, this is when the social aspect will happen, this is when you can basically start talking to strangers about the film and it's something I've never done because I am very introvert, but I remember going to a film festival in my hometown and strangers were talking after the film and this is something cinemas do not facilitate. And I think managing to make the social afterwards would be interesting.

8. Quotes for personalisation

Ananda: helping them build up a profile about my habits and then people who like to go on twitter times of the day, they would get that. You know that's all data about your profile. It's again about building a personalized curated cinema-going experience. They would link it to you personally. I wouldn't mind, I wouldn't share this publicly necessarily but I wouldn't mind that. So being attached to a membership card ,which is scanned when you buy your movie ticket and then your app goes "you've seen this or you are going to see this".

Chris: Creating a personal profile, if it gives you access to the community, because the people that would create the profile, they actually want to be there and see that film or take part in that community, it would be ideal, it's such as simple thing as a forum but you have to be signed in as member or having a profile before you access. Mann: Yeah, it's got to be something distinctively extra, which you don't get at the moment without signing in and I think that's definitely what would drive me to it.

Ari: I hate it [recommendations]. Actually, no, it's up to me to decide what I want to buy and I don't need you to, you know, I have a wishlist!

Ella: You don't know me!

Simon: You don't know what I want that I can't have already without you telling me!

Kunal: What worries me is that they think they know me. That happens a lot with those systems, you get a profile that's actually wrong.

Kunal: I would like a reminder system because I often see trailers and I say I really wanna watch it and then I go look at that movie and I find out it was on a month ago and I missed it. something to remind you right now.

Chloe: Yeah, I have a problem with that, I am just thinking of IMDb and they have this "coming soon" feature and it's on my watchlist and it sits behind with your watchlist with everything else you kind of have and you forget to check back! And if you have it somewhere else to remind you, like it will tell you "it's coming on right now, if you put it on some sort of watchlist then it should remind you when it's actually being released".

Kunal: [...] there are some films that are really lost under the noise.

Melodie: I have got a list of movies I want to see. So if there was an app that you could put that immediately, so that you don't forget later.

Ananda: if there was an app, like I saw this film, I liked it, then I get an email going 'Ouh! there is another film by that director, like this film that you saw', like Netflix.

Melodie: Or ever like a retrospective like Oh you enjoyed this, you know what you should check out, this movie that he made a few years ago, so you would think ah the app thought about me that's cute!

Bruce: Well, I did like the idea about keeping, almost having a record of the films that you 've seen and perhaps some sign-ups and the links to some critiques, reviews because despite what you said about your age, I am by far the oldest person here and I just started keeping, I used when I was young, keep the tickets of the cinema, when I lived in London, and I still got those, so that was really, I don't know why I kept it but I guess it was just to see which cinemas in London I 've been to, but now I think

it’s slightly different, as much as I want to be able to flick back and …because sometimes I don’t remember all that stuff, not how much I used to, so having sign ups for the films, if you are logged in then you can look back in that digital space and that could act as a reminder perhaps. Just thinking loud, in the future, if for some reason the memory fails, then that could, the photographs and the text act as a way of activating the memory a bit more.

Tinj: Every time I was watching a movie, I was checking in on IMDb, that I watched it because I wanted to have a recollection of the things that I've watched, but then I got bored of IMDb, because I like it, it's a useful tool but the aesthetics of it, I would say the whole promotion of blockbusters -instead of movies I enjoy!

Simon: Films, if you don’t see them in the first 2-3 weeks, then you miss the opportunity to see them. So, if there was a kind of opt in option to say I missed this film, please send me an alert if you gonna bring it back again.

Rose: I like the idea of bringing something back. There are many times that I just missed a film like even has a 4 week session, or I might just missed it because it gets busy or whatever so it would be nice if they had a few screenings or certain films, whatever, that would be really cool.

Kunal: I hate mobile phones during the cinema, I wish they could get rid of this, I think it’s horrid, I think it’s really annoying in the cinema, turning it like into an X factor game. It’s ruining for me what’s special about the cinema. It’s turning it into a social media game which is driving me mad! If someone could ban apps during the movie or even during the trailers, maybe doing them separate.

Researcher: Actually it could be an app that gives you a prize only if you don't use your phone! -Melodie: That would be so useful! Kunal: That is clever! Melodie: But nobody would get the app.. Oh actually... Kunal: You would if you got a prize! That is clever! It records if you haven't got your phone out! Charlotte: Points! For a free ticket! Kunal: Points? That's clever! That would be wonderful. An app to use the right way!

Kunal: A point system would make me choose the cinema, I don't mind to go to any cinema that shows what I want, cause you could have a bad experience in any of them.

Melodie: I think when coffeeshops do the loyalty card, like the Homemade coffeeshop does, buy 5 coffees and you get a brownie, so like ten movies and next time popcorn is on us or something like that, constantly well not constantly but you know.

Chloe: I think a point system to get money off the ticket or things like that, it would be better because it would help to future movies I was going to watch.

Melodie: I think I would be more inclined to buy snacks if that led to points in the future. I mean I love popcorn but I never buy it in the cinema because it's outrageously priced, but if I knew, like, in my head that Oh but I get points for this, then I would definitely buy it!

Kunal: For me, it depends on the cinema, points for food in a cinema like Broadway where you can get a nice meal and a pint, whereas in general I avoid snacks in the cinema because they are unbelievably priced!

Stefan: For me it's cost, if it's under 3£ I will get popcorn, if it's above, I will be like mmm do I really want it?

Ananda: I always like this kind of places to give you free things on your birthday when you sign up. Generally stuff on your birthday is nice, it always very personal.

9. Quotes for transparency

Ananda: I wouldn't mind if it was similarly an app and I would give them my personal email, address, phone number, that sort of stuff. But when I'd buy a ticket through the app and it shows up in my profile, I went to see this film, as long as I could hide if I went to see something really embarrassing, cause sometimes that happens, then I wouldn't mind having it publicly on a profile, like, of what films I've seen.I wouldn't mind be connected to facebook, twitter, whatever sort of social media and for example to say I m going to see this film today and it tweets to my twitter account, like you know I am at the cinema to see that.

Kunal: For the first few times I might care but then you know what it's like, how these stuff are. I already shared in facebook that I am going, I already checked in..

Chris: I like the use of social media and reporting feedback on it. I never used to do it but in the last 6 months or so, I started to use it a lot, the

reason being in Nottingham itself, I found lots of cafes and bars that opened in the last 6 months and have no wheel tracks, so first thing I do is questioning them if they have it or not and then, it's just a post on facebook "Have you got wheelchair access?" and I actually found out that a lot of these facebook pages are actually run by external companies that have no clue what the venue is actually doing. I didn't know about that until I confronted the manager about it. I was getting different information from the external company and different from the manager of the actual venue and some of these external companies, have actually deleted some comments I 've left!

Bruce: A lot of people's views are colored by that abuse of data, digital data, well we had this talk and we all have received lots of emails we didn't want to, lots of spam, and that's because other people have managed to get all of that data, which really never intended fully to be like that, so having that data fairly safe…as long as it's in a safe environment, I mean , yeah, I would [share it with the venue]! But if it was for a bigger, commercial organisation I would make sure that I would check the boxes.

Researcher: If you knew there was transparency, would you be more willing to share more data? Emma: I think if it was user-friendly and very clear to us what you can do, with no doubt, and it would be completely obvious, that would be really good. For user recommendations, if you like this, click that out and you can opt in for example.

Ari: Digital media and the internet and computers, they are either this or they are that, there's no grey, there's no colour, no definition, no nuance, whereas your real life identity can do all of that. So digital identity says you saw that film, it doesn't say 'yes, but I hated it'. But if we had a list, if it was a binary thing, you know, a tick box, I saw these films, it doesn't say anything [...] and if you then write a review, that's gonna be the nuance, isn't it? Because that's your interaction and you wrote that. [...] and it is yourself as a human identity isn't it that adds that review later on.

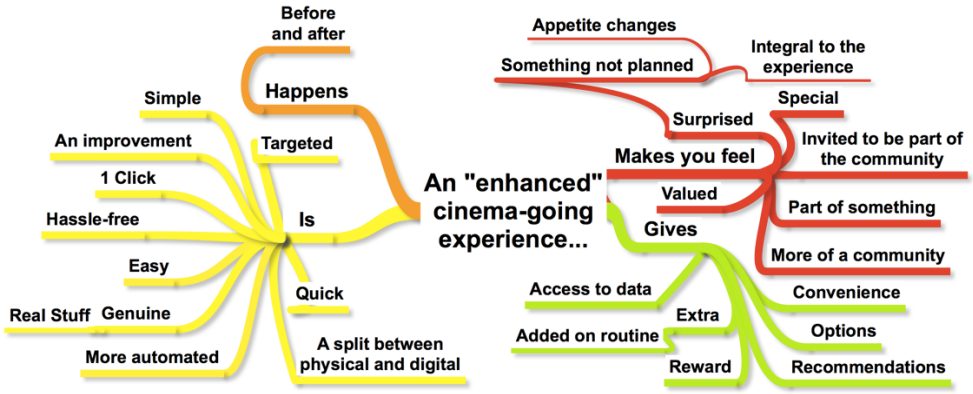
Tinj: I believe it's interaction between the users that would make this nuance happen, the grey happening basically. Although we can infer things about the other person: I mean if someone has watched all the James Bond films, and another person has watched all the JB films plus other films, then I can make a distinction between these two people.

Ari: Going back to Secret cinema, there was a map and it showed everybody that was going to see the film. So when you are driving away north for 2 hours to learn that somebody lived in the same postcode as you, was a really big thing. The frustrating thing was that you didn't know anything else about this person. I think there are times where you would like to know, you would be happy to share information for people to find you and you'll be able to find them with a sign in for example. Because we've got something in common here and we've agreed to be in the same time and place and so on.

Tinj: Sometimes it's interesting to learn about where the film is actually situated in the broader artistic spectrum. This kind of information is interesting because a film is not an individual thing, it's not an individual entity, it's a broader link and having a link to that would be interesting.

10. Enhancement definition according to evaluation workshop participants

Below is a visual representation of the definition of enhancement:



For some people, the enhanced experience would just refer to being simple. For instance, Airi likes physical mementos and thinks that when you go traveling you won't use any apps. Nevertheless, Arthur prefers digital enhancement like recommendations tailored to his existing activity and likes the combination of physical and digital, a 'split between the two'. He however, puts some boundaries in how much surprise should be there in the recommendations because if he would be bombarded with many suggestions, he would relate it to cost and think if he wants to spend money on something he is not sure about. For some, such as Kaito and Alexandre, cinemas such as Broadway provide an already enhanced experience: accompanying food with drinks in the

screening room, with music and other events or festivals, with the friendliness of the staff, with genuine add-ons to the movie like director's Q+A, interviews, additional material and making ofs. An addition to that is a cosy, warm place to stay before the movie and after and have a discussion. A couple of examples of what participants gave as examples of how they perceive 'enhancement':

Mateo: Something like a special experience once in a while.

Victor: Convenience would be to be able to pre-book food and drinks, make it hassle-free so collect your ticket, food, drinks and go in the movie. For me, the most likely bit of my experience that could be enhanced is before going to the cinema, arranging who to go with, buying the tickets, booking seats…

Julia: I am the opposite of convenience, I am more about surprise, I don't want everything planned because my appetite changes and I might not want to do exactly what I planned one week ago. Something that would be so integral to the experience…; the core experience is to watch the movie, the enhanced would be something added on what I would do every time. For example the feedback and looking at my history could become part of my core experience.

Louis: Normally if you go to cinema it's a very isolated experience, you go to the cinema, you watch the movie and then you leave. But this app would make the experience extended. like even if you are not physically in the cinema you could interact with people and it's more about build up your profile, so it grows the cinema-going experience, I think that's an interesting aspect of it. Enhancement is improvement.

Agnes: It should make you feel valued.

On the other side of the coin, some cinemagoers were a bit more sceptical and critical by supporting that enhancement should be physical and that apps would be one more thing to worry about because apps just pile up, 'it is the medium that changes not the experience' as Samuel said. Oliver thought that 'technology and cinema don't go together' and Alice explains that she doesn't think that the personalisation of the website and app would 'improve the actual cinema-going experience, they would improve the before and the after' confirming that it should be something beyond the movie itself. It would be interesting though to compare their general views on enhancement with the general

evaluation of the system and how the prototypes would enhance or not their cinema-going experience.

11. Selected quotes for the evaluation of the prototypes (from workshops)

Gifting experience

Participants thought that being able to curate a gift experience will enhance their cinema-going experience. More specifically, 89% of the participants agree or strongly agree that they would like to use it and 83% think it is easy to use. For instance, one of the participants recently bought a cinema gift card for someone and commented on how the experience is currently annoying, she had to travel all the way to the cinema just to buy the gift card. Therefore this feature was a perfect solution to her not-so-good experience. Cinemagoers particularly liked the possibility of linking one's cinema account to a music playlist (ie. Spotify or Youtube) and the big screen message, and thought it's a 'different gift that will make someone happy '(Lilly). In fact, Gabriel pointed out: 'I especially liked the gifting, I could see myself using that and of course I would like someone to use it for me, put together a personalised cinema-going experience, that would be awesome!' and he thought that such a feature would grow over time, rather than defining each and every possible variable of it. Some issues with this feature were that it would be available to everyone, even somebody that is not in the system and that it needs to be thought out in order not to expose or embarrass someone publicly. There was a particularly interesting conversation between Gabriel and Victor where Victor was sceptical to the feature and thought that gifting a cinema experience would not be a personal and valuable gift and Gabriel argued in favour of it presenting the example of Secret Cinema where people are in between a live, shared and cinematic experience with costumes and food relevant to the movie and how with this feature of the prototypes one would be able to tailor the surroundings to fit the movie and gift this to somebody. Participants extended on how they would imagine the gifting experience by saying that it would be a perfect gift for their children, their parents, their friends on a birthday or a special occasion and one participant even mentioned as a receiver her landlady who likes movies. They then went on to suggest adding options in the form of packages for different people. These packages could include special gift bags to welcome the receiver of the gift to the movie theatre. The gift bags would make the receiver feel special and would contribute to a general atmosphere.

Overall, what needs to be done is leave space for a person to tailor the experience they want to create themselves. Of all 18 participants, 10 stated the gifting experience as their favourite and 2 as their least favourite during the discussion.

Broadway Box

People didn't discuss much about the Broadway Box. Although it didn't receive any negative points, participants in the third workshop pointed out some challenges around privacy and intellectual property. There is a limitation of copyright issue if people copy and paste materials from the internet and of reliability: in case this happens who is going to be blamed, the cinema or the uploader? These are solved by making the contributor sign that they certify it is their own copyright and since it is not used for commercial purposes and with their consent, the cinema would have no problem. These issues mean though that there should be no reward for contribution to the box because there might be cheating. The value of rewarding contribution from cinemagoers was actually also debated in the fifth workshop where the following conversation took place:

Louis: In the first app, in Broadway Box, are there any incentives for contributing content? How would you encourage people to actually participate and upload stuff? Like a free ticket or something.

Agnes: I second that.

Oliver: I don't. Because many people… these kinds of incentives will lead to breaking the system, so you see a lot of spam, so you will see people commenting on everything just for the sake of commenting on everything and getting badges.

Nevertheless, the Broadway Box had also some fans, among others, it was Victor's favourite feature of all the prototypes, because it reminded him of 9GAG: 'I'd like to read it and scroll through after I watched a movie' and participants of workshop 5 who liked the whole idea and added that they liked the memes 'and would like to be able to share with friends' (Agnes, W5).

Memory Bubbles

As the numbers suggest, participants didn't particularly fancy the memory bubbles; as a matter of fact around 33% said that it was their

least favourite feature. Mariana (W1) thought the memory bubbles need to be refined, it looked ephemeral to her 'like someone will pass and rub it off'. The same thought shared Victor (W2) who said that they seem as somebody could vandalise the message by passing by. On the other hand, It was Airi's favourite feature because of the nostalgia it creates. Additionally, Samuel thought it's good because it is something old and instantly becomes important. It would be nice therefore to maybe take pictures of them or archive them digitally:

I think when something is old it kind of takes on a sense of interest or importance, having some sort of archive would be interesting. Framing kind of what you want for people you would get maybe a little better results from that. Because there is a lot of stuff that's personal and that's good but people don't necessarily automatically write interesting things on the wall. Samuel

Finally, Gabriel liked it because it is a nice way to decorate an empty space, like 'authorised graffiti'.

Movie Feedback

The whole movie feedback system was the centre of constructive debate. 67% would like to use the movie feedback system and 89% of the participants thought it is easy to use. To begin with, the movie feedback on the tablets in the cinema space received the most criticism: it was the majority's least favourite (received the least points in the rating), 3 out of 18 answered in the discussion that it was their least favourite and challenged the idea by presenting many limitations it would have. The interesting part is that participants from all 5 workshops almost concluded to the same limitations. The researcher is giving a list of them below:

If the movie finishes too late, people would be tired/ prefer to go home/ in a rush to catch a bus;

There would be a flow of people coming out of the screening rooms and it would take time to put a review on a tablet so people wouldn't queue to complete it.

It is 'too complex a system for people passing by' (Gabriel, W2): one would have to log in and then remember to log out, which brings issues of breach of privacy and security because 'someone else could go in your account and troll you' (Oliver, W5). Airi (W3) suggested to get a

notification on your phone ‘You just submitted a review, if this wasn’t you contact us’ to prevent incidents like that.

Important to have the choice to be anonymous;

Typing on a tablet is troublesome, especially if it has to be done in a public space and doesn’t give you the option to draw or be creative;

Many people want to digest what they saw first, collect their thoughts and write something as personal as a website based review in the comfort of their own space and time.

Workshop 2 participants had a whole discussion on how there could be a solution such as have a stylus to enable more creativity and freedom with comments and queue the comments so that they are approved from the system to avoid inappropriate comments. Still, this would prevent from ‘instantaneous satisfaction’ (Gabriel) one would take from seeing their comment on the screen. They concluded with admitting that there should always be a human in the loop to approve comments either physical or digital and Julia suggested to have this system not only for movie reviews but also for other purposes. Workshop 3 participants discussed that this system would be good if fans are the target audience because they usually want to share feedback at the moment and somehow show to their fan community that they attended something. Workshop 5 participants talked about quick alternatives as 3 smiley faces but quickly turned this down because it is not contextual and to rate a movie one needs to rate separately ‘music, story, costumes etc’ as Elsa (W5) added. To the author, it seemed like movie feedback tablets were somehow hindering accessibility instead of promoting it.

With regards to the TV screen with comments on movies from cinemagoers, the participants’ evaluation comments were divided. Some liked to see that before booking so that they get ideas in front of the box office. Others challenged it by saying it would make them suspect that they might see spoilers, it would be like they were forced to look at it if the screen was on their way to the screen and someone should control how many comments would be on every screen, how frequently the page would turn, what goes up because comments like ‘pure pleasure’ wouldn’t be valuable for anyone to understand anything about a movie. When asked if they would prefer a physical kind of representation of the feedback, participants from workshop 1 agreed. Samuel (W1) notably said ‘digital looks cheap’ and discussed how he would rather an analogue board rather than waiting for the screen to

change so that to see all comments/ reviews. As Mateo claimed 'pen and paper are more authentic' and others agreed that it confirms that a real person took the time and wrote something down whilst digital reviews could be coming from anyone even an employee of the cinema. He continued saying that 'device-wise, tablet or website makes it more personal than a TV screen because it's your choice to login'.

The website movie feedback was something that most participants liked (they prioritised it as 4th favourite in the list of 8 features) and suggested that they would definitely use that over the tablet to write and browse fellow cinemagoers' reviews. They also found it to be trustworthy and enable them to meet other cinemagoers and their taste. For instance, Sofia (W1) thought it is good to know and trust someone's film views and be able to follow them, she would really value that and would use it to book films and Alexandre (W4) liked the idea of following people because he is lazy to search movies on his own so he would trust those. Something that should be done to encourage participants rate and review the movie, would be after the day of the film projection one has booked, the system could ask 'Do you want to rate the movie you saw'? (Agnes, W5). Last but not least, participants in workshop 3 and 5 spotted a limitation of the whole system: the movie feedback prototypes introduce a whole new rating/reviewing system that in the beginning will have no users therefore won't be interesting and attractive for others to be part of it: 'The rating system, there is IMDb rating why introduce a whole new one instead of building on the existing one? I am sure it will allow you to build on the system to apply yours' (Louis, W5). Hence, attaching it to another existing platform would create a hub with quite a lot of data where everything could be linked together.

Personalised mobile app and website

These two prototypes were the most discussed in terms of how they can enhance current cinema-going experience and attracted participants' most interest. When asked, 56% of the respondents, replied that they would like to use both prototypes if they existed. In addition, 94% and 89% of the participants thought the personalised website and the mobile app respectively seem easy to use. All people liked the feature 'My movies/ My moviegoing history' because it helped them remember what they saw, when and if they liked it apart from Arthur (W3) who said it was his least favourite due to the many numbers: 'I liked it because I have a terrible memory I would love to go back, what I liked and what I didn't like. So if I enjoyed it I could also have a discussion with others.

So that would enhance the experience for me' (Elsa, W5). Participants noted that history management should be available so that users could edit and delete history (in case of a break-up or a cheat discovery as participants mentioned when giving examples). Another point that was discussed a lot in all workshops was which specific data should be illustrated. Some participants thought that seeing how much you ate or drunk or who you went with every time is 'too much stats' (Arthur, W3) and there is no need to be available for the user to see. On the contrary, Julia (W2) liked seeing her raw data because she is interested in quantified self stuff and Victor (W2), an advocate of seeing all of his cinema-going related data on the feature, admitted his desire to 'be able to play around with it and do data visualisations'. It was apparent that participants have diverse interests with regards to data and statistics to be shown but the majority thought that the heart of the experience is the film, therefore data shown on the feature should revolve around the film. For example, films and film types/ genres, language of the film, director, and year of release would be very interesting to see. On the other hand, data like who you went with to the cinema and which day is your 'preferred' weren't favoured from participants and could be omitted. Julia also pointed out that using the word 'preferred' would mean that the system 'makes inference and interpretation' of her preference and this shouldn't be done. An example to illustrate this limitation was Airi's (W3) question 'What if you buy a ticket to give to someone else and the system includes this in your algorithm for taste'? As a result of the different taste of people in what they want to see in their profile, a level of data self-management should be adopted: all data collected would be available for the user to see, but it would be up to them to play around with the dashboard, and choose what to have on top, at bottom or what to hide completely because it is of none interest. This should apply to the design of the interface so people will be able to tailor for example the colors they use (Alice, W5). In general, leaving some space to enable the users tailor their experience through an integrated system would help them take the experience back home (Oliver, W5) and 'make it feel more you' (Alice, W5).

According to participants, the strong point of the personalised prototypes would be recommendations. Participants liked both the idea of the system recommending something relevant to one's patterns but also something random, small, unknown and obscure. For the first category, recommendations shouldn't be only based on what one saw but also on

how they reviewed it (Victor, W2); there should be a more complex scoring in the system to understand what the user specifically valued in a movie (eg. specific scenes, music). These recommendations would result in either gaining or losing users' trust depending on how accurate or not they were. To complement this and gain audiences' trust, there could be 'staff's choice' as bookstores do, because cinemagoers usually know the cinema staff and they build a relationship with them, they know whose movie taste fits with theirs and trust them. Another idea came from Kaito (W4) who suggested to link 'my moviegoing history' with IMDb so that recommendations are more accurate and enable the cinemagoer to also add movies they saw at home: 'For it to augment the experience, it would need a decent user base, maybe something to look at would be how to build the user base first, tactics to do it'. For the second category, Julia (W2) suggested that for example, a 10% of recommendations could have an element of surprise and exploit the potential of the taste spectrum of each cinemagoer. Arthur (W3) added the issue of cost to 'surprise recommendations', claiming that surprise screenings should be offered at a better price to attract sceptical cinemagoers.

With regards to other features included in the personalised website and app, participants were mostly positive. Overall, the Film Discussion Hub was the most successful one along with the alerts feature. The first was reported as a favourite from 4 people. Participants felt it is a nice addition, 'good for people who go alone, or even with friends and like discussing the movie' (Kaito, W4). Alice, Agnes and Oliver in workshop 5 had a discussion on how to facilitate keeping in touch with the people one meets in the Film Discussion Hub and emphasised the need for being able to somehow befriend them. The latter was in the spotlight of the discussion of all 5 workshops. People talked about alerts as something that would really use because many times they forget about films and they want some kind of reminder and added many ideas that concentrate on this feature below in the ideas section. Finally, 'My account' feature could have a photo instead of an avatar 'if you want to be recognised among the other community members' as Victor (W2) said. Arthur (W3) supported that he would like to use this feature also on the mobile app so that he is able to change it whenever he wants. Agnes (W5) thought the avatar extras should be different depending on your membership status. To wrap up, people mentioned that they especially liked the community aspect of the prototypes, that they found it good that they could have everything in one place and that they would use the system.

Stakeholders' prototype evaluation workshop

The first overall comment was positive and came from Steve regarding how important it is to keep the idea for building an experience to extend the movie viewing, something to extend the 'after' of the cinema-going experience:

I actually think it's potentially very exciting. Lots of very interesting points. Through the research that we've done the understanding that people want to talk about films after they've seen films, and there is that, getting people watching the film and then they leave and so that creating that space afterwards and elements of these address that. I mean I like quite a lot of the elements and this is why I invited you back because I 'd be interested to hear what other people think.

The points to follow had to do with challenges and issues that the Broadway staff members figured out. Melissa introduced the fact that Broadway used to have a similar to 'Movie Feedback' feature called 'Be social' but wasn't widely used by audiences:

Melissa: Yeh there are some really good things in there. I think one thing that came to mind though, is I feel that Broadway has done a little bit similar before with the Be social thing that used to be on a website that used to be an opportunity for people to rate films and write reviews on the website […] what happened is that people weren't actually using it.

Caroline: That's correct. For these things to work, they tend to need huge numbers of people contributing all of the time to constantly keep it updated. And in a way we were overtaken by social media because that's what people did, on their own personal social media, if they were commenting they were doing it on their Facebook, Twitter or Instagram.

Melissa: If we move into something a little more in depth like what you've presented maybe it has to be completely embedded within the marketing strategy, that we have to encourage people to use it by using it ourselves. Because then you can have members of the audience that will recognise staff that they speak at the box office, the ushers, you know everyone, and if we have those profiles already in there and we could push people out we could get people to interact a bit more.

J: My question is if that's the kind of experiences that people have said that they like, how much of that could be delivered from existing platforms? And if that's something that we could do as part of the new website[97].

Both Melissa and Caroline touched upon points already made by audiences. Probably the feature wasn't used and likewise maybe 'Movie Feedback' wouldn't be used because cinemagoers use already other platforms such as Facebook, Twitter and Instagram to talk about their moviegoing experience and share it with their networks on social media. Additionally, Caroline highlighted exactly what some of the participants have said about the fact that to make it work, these platforms would need lots of users and data in order to engage and gain more users, therefore maybe it is better to build on already existing platforms as John suggested. In parallel, Melissa seeing things from her marketing perspective thought that a good way to engage with audiences and encourage them use this feature would be through using it themselves as staff. Especially the box office people and the ushers, who are those who deal with customers on a daily basis, cinemagoers know them and as pointed out in the audiences' evaluation workshops, they trust them and their opinion. However, the conversation ended with Dave noting down the challenges with still doing something like that: 1. The organisational burden would be high: staff should moderate in any case what people say and if they are being insulting or inappropriate; 2. The cost of collecting and storing big volumes of data is big and requires collaboration with third party software organisations that allow for having big databases and edit of data.

Next, participants discussed how a personalised app like the one in the prototypes should be working across all cinemas in order to be viable commercially:

Caroline: I really loved your idea of the app and that personal thing and that you create a personal journey. The truth is if I was developing an app like that commercially, I would need it to work across all cinemas, it wouldn't be just for Broadway.

Steve: Because I just go elsewhere.

[97] Broadway is in the process of designing a new website.

Caroline: Yeah, most people do. So you would need to develop a personal cinema app that would work across all cinemas, and that could also mean that it would be commercially viable.

Dave: But you would have to manually put your data in, saying I've seen this film. It couldn't collect information just from purchases. Unless if all cinema exhibitors were behind that and allowed you to have access to that information.

They identified the need to collaborate with cinema exhibitors in order to get access to data such as bookings to preventing from people having to fill in everything manually.

Furthermore, gifting was one of the most liked features of the prototypes as Steve admitted that they are already doing it but the prototypes are using data to fit the users' preferences as John noted:

Well, I liked that gift thing. You could send your partner a gift. It's nice. We haven't tried this, at the end of the day, we love having this community, we know that it exists now and something like this could enhance that community but we also want people to come back, see movies, come and drink, come to special events. So that gifting thing, I think it was very nice and we already do it in quite an old-fashioned way with vouchers and gift cards and things like that but I thought this was interesting where you could give someone an alert for their birthday and whatever it might be.

Dave continued throughout the whole conversation to explain to the rest of the team concerning the back end use of data, how they capture it already, using which software (eg. Movio https://movio.co), possible issues with data -useful in its majority but in some cases, a bit irrelevant to the purpose of the workshop and to the prototypes themselves, rather more related to what he had in mind for how they would use different features for their profit. What this means is that it was obvious throughout the conversation that some of the participants were translating everything to commercial use rather than seeing the big picture which was the point of the prototypes regarding digital identity and the current cinema-going experience including data. Nevertheless, Steve reminded the importance of my research by saying: 'This all uses personal data and that stuff uses the back end to drive you know personalisation, but some of what you are doing at the university is bringing that personal data to you, to the user. So it is not privately useful, it is actually useful'.

John summed up that the next step forward would be to match these experiences with how they can be adapted by Broadway:

John: The next step to look at what would be to look at what of these experiences 'we can deliver through existing platforms and how they could tie with movio, with the new website, with the loyalty scheme. […] I think it would be interesting to see what could be done in the membership scheme you know ok for physical rewards, but also for digital what you said about avatars for example. Put loyalty into terms of digital reward as well and explore that'. By introducing the conversation around the loyalty scheme, Caroline noted that they have done something similar to what I suggested with the different levels of membership before in 'Be social' where people could choose being platinum, gold etc. and they thought in the new version of it, they 'would give paid members would also get more points' as Steve claimed.

Another point that was made from Steve was that the need to delete history, since the system is 'actually storing something becomes quite personal and important to people, it's their lifelong cinema history. And that takes a certain level of responsibility' as Caroline added. Then, the discussion moved to notifications, which participants of the workshop found very useful and actually thought that should be embedded as web push not only app push as Lee suggested and Dave added that it would be fantastic to have it also just before selling out to encourage people buy their ticket: 'I quite liked if the movie comes back. That's the big one, because if it comes on their mobile saying you know we're close to selling out, that would be fantastic, that would be impressive. They can turn it off if they want to.' (Dave). With regards to 'my moviegoing history' Melissa liked how it was like a cinema movie diary as Letterboxd (https://letterboxd.com) which she is already using to log her moviegoing activity, but more sophisticated: 'this is a next level, what you've got here, they don't go into so much detail'.