Exploring Digital Business Models in Performing Arts through a Dynamic Capabilities Lens

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Abstract

This PhD research is situated at the intersection of arts, business, and the digital realm. With a particular focus on the crisis-time practices during the Covid-19 pandemic, the thesis investigates how performing arts enterprises (PAEs) can deploy business models in the digital economy. The Covid-19 pandemic acted as a catalyst of digital transformation in many traditionally live activities-based industries, such as the performing arts sector. As live performance-based business models were made temporarily obsolete, the global health crisis marked a drastic drop in income for the sector, but also accelerated organisational decision-making, the adoption of novel digital technologies, and the development of dynamic capabilities (DCs) (Teece, 2007; Teece et al., 1997) in PAEs, which enabled the experimentation with innovative digital business models. Set within this context, this thesis explores the activities of UK-based PAEs to share insights into their recent digital business model innovations, and to discuss the implications of arts and cultural sectors' pandemic-time 'digital pivot' for the post-pandemic performing arts landscape.

Although the 'platformization' (Nieborg and Poell, 2018) of work and leisure activities has created a prolific ecosystem for digital entrepreneurship, publicly funded, non-profit PAEs commonly lack the financial, time and human resources to engage in business model innovation (BMI) or embed digital technologies in their business models. This situation is further complicated by the mission of arts and cultural enterprises to create different types of value (e.g., cultural, social, and economic), which requires the complex task of balancing competing value creation logics. This research therefore sets out to explore how PAEs can better embrace the opportunities of the digital economy and build strong DCs required to engage in digital BMI.

Through addressing the following research questions: "How can performing arts enterprises deploy business models in the digital economy?" and "How do the dynamic capabilities of performing arts enterprises change in order to enable digital business model innovation?", the thesis investigates innovative business models deployed by PAEs in the digital economy and the dynamic capabilities that enable PAEs to engage in digital BMI.

To facilitate the identification of digital business models deployed by PAEs, a novel theoretical framework is developed that draws upon Rex *et al.*'s (2019) categorisation of common (live activities-based) business models in performing arts, extending it to the context of the digital economy. Drawing on extant literature on business model research, arts entrepreneurship and dynamic capabilities research, the thesis adopts a qualitative, multi-stage and multimethod research design. By combining semi-structured interviews, netnographic research and multi-method case study research, data is collected on existing and emerging digital business models in performing arts to determine their key characteristics and potential for sustainability and viability.

The research contributes to both theory and practice. First, with a focus on the Covid-19 crisis-time practices in PAEs, the thesis situates the concept of digital business model in the context of performing arts, advancing the work of Rex *et al.* (2019) and furthering understanding of the type of digital business models that PAEs are likely to deploy post-pandemic. Second, the thesis presents a novel conceptual model highlighting the dynamic capabilities that contribute to the digital BMI within PAEs and enable them to develop new business models for the digital economy.

The research also offers a range of implications for policy, as it provides policymakers with evidence of how the prevailing cultural policy supports the digital BMI process and development of critical dynamic capabilities in PAEs. Additionally, it pinpoints key issues and loopholes with the current arts funding infrastructure with regard to creative digital R&D and innovation in performing arts. These insights are particularly valuable to SMEs, as when

seeking to engage in digital BMI they face considerably more challenges than larger, better-resourced peers. From a practitioner perspective, the research is valuable as it highlights potential digital entrepreneurial opportunities available for performing arts and provides guidelines for PAEs when designing business models for the digital economy.

I would like to dedicate this thesis to my daughter Hilla. You are my absolute pride and joy. Your energy is contagious, and it inspires me to chase my dreams.

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LIST OF ABBREVIATIONS

Abbreviation	*Description*
ACE	Arts Council England
AE	Arts entrepreneurship
AHRC	Arts and Humanities Research Council
BFI	British Film Institute
BMI	Business model innovation
CE	Cultural entrepreneurship
CRF	Culture Recovery Fund
DA	Darbar Arts
DC	Dynamic capabilities
DCV	Dynamic capabilities view
DCMS	Department for Digital, Culture, Media, and Sport
EPSRC	Engineering and Physical Sciences Research Council
GPD	British Gross Domestic Product
NT	National Theatre
NPO	National Portfolio Organisation
PWYC	Pay What You Can pricing model
R&D	Research and development
ROH	Royal Opera House
RSC	Royal Shakespeare Company
UKRI	UK Research and Innovation

Chapter 1 Introduction

The relationship between performing arts and digital technologies is highly complex. The digital replication of a live performance has traditionally been considered somewhat inferior to its live counterpart, technologically challenging to produce, costly, and lacking the social and emotional experience of a live event (Burgheim, 2016). Therefore, prior to the Covid-19 pandemic in early 2020, most performing arts enterprises (PAEs) showed little interest in the digital capture of performance, and whilst digital technologies were commonly used to support marketing processes, PAEs were hesitant to embed them in their business models (ACE and NESTA, 2019). However, the rapid changes forced on the arts and cultural sector by the pandemic, such as the closure of cultural venues and strict regulations on social distancing in 2020-2021, presented a considerable challenge for the performing arts industry that was, and still remains, largely behind the curve in terms of digital transformation, compared to many other sectors of the creative industries. As live performance-based business models were made temporarily redundant, the pandemic marked a drastic drop in income for the sector, with reports indicating losses of as great as £303 million in theatre box office revenues between March and April 2020 alone (Digital, Culture, Media and Sport Committee, 2020). These circumstances acted as a catalyst of rapid digital transformation for the sector, accelerating organisational decision-making and the development of dynamic capabilities (DCs) (Teece, 2007, 2010) in PAEs, which enabled experimentation with novel and innovative digital business models.

Digital technologies can offer considerable benefits for widening the reach of artistic and cultural content and attracting new online audiences. However, the competition over the time and attention of digital audiences is fierce (Lotz, 2017), as since the introduction of social media and video streaming platforms, audiences' cultural consumption and content creation habits have

been revolutionised by emerging phenomena, such as short-form video content and "second screening" experiences, which have gained increased popularity particularly among younger consumers (Shagrir, 2017). The pervasiveness of digital platforms in everyday life also poses new challenges for cultural producers, as platforms typically have an irreplaceable role in the production, distribution and circulation of their content (Nieborg and Poell, 2018). Digital platforms such as YouTube, Facebook and Instagram are not neutral environments but they are governed by global dominant corporations (Øverby and Audestad, 2021). They form ecosystems that Van Dijck *et al.* (2018) refer to as platform societies, and act increasingly as gatekeepers to users' social and economic transactions.

Although the global dominance of digital platforms has created a prolific ecosystem for digital entrepreneurship that, for instance, many social media entrepreneurs have greatly benefitted from (Guiñez-Cabrera and Aqueveque, 2022; Secundo *et al.,* 2021), publicly funded PAEs often lack the resources and managerial capabilities to engage in digital BMI or deploy novel business models on digital platforms. This is further complicated by the mission of cultural enterprises to create different types of value (e.g., cultural, social and economic, see Bourdieu, 1990), which requires a precarious balance of competing value creation logics that makes the BMI process increasingly complex. Meanwhile, the optimism towards digital BMI is prevalent among policymakers and arts funders (Mihelj *et al.,* 2019), who are vouching for the hybrid future of arts and culture, urging arts producers to explore alternative income generation methods, including those offered by the digital economy (ACE, 2020; TEH - Trans Europe Halles, 2015). Thus, PAEs feel the pressure from their funders to engage in digital entrepreneurial ventures, but often struggle to embrace the digital entrepreneurship, to focus on the consumers' needs and design sustainable business models that justify the resources spent on their digital productions.

1.1 Aims and objectives

Set within the above context, this PhD research is situated at the nexus of arts, business, and digital technologies. The core aim of this research is to capture the insights from the crisis-time practices during the Covid-19 pandemic and identify the processes and strategies that enable PAEs to engage in digital business model innovation (BMI) and deploy digital business models in the post-pandemic era.

As a theoretical framework, the dynamic capabilities (DC) approach (Teece, 2007, 2010, 2018; Teece *et al.*, 1997) offers useful insights for analysis. Although researchers (e.g., Best *et al.*, 2021; De Silva *et al.*, 2021) have begun to explore the role of DCs in the non-profit, social purpose context, in the unique context of performing arts, the deployment of digital business models and the DCs enabling their development, have only sparked limited scholarly interest. In the UK, most research examining digital business models in performing arts is aimed at practitioners and has been commissioned by public bodies, such as Arts Council England (ACE), NESTA and the Department for Culture, Media, and Sport (DCMS), and conducted by sector-support organisations or consultancy agencies. The policy-driven goal of these publications is thus in line with policymakers' and arts funders' ambitions: they aim to encourage arts and cultural enterprises to engage in digital BMI and explore potential revenue streams offered by the digital economy, instead of continuing to rely upon the traditional public subsidy-based business models. Therefore, to begin the investigation of PAEs' digital business models, the unique and complex characteristics of the UK performing arts sector require clarification.

1.2 Research context

In the UK, performing arts are classified as part of the arts and cultural sector, which, in turn, are part of the creative industries. Although it is not in the

scope of this research to provide a full historical overview of the arts and cultural sector in the UK, as its origins have been comprehensively traced elsewhere (see Cunningham, 2002; Hesmondhalgh, 2007; Hesmondhalgh and Pratt, 2008; Towse, 2014), nevertheless, to fully comprehend how PAEs deploy business models in the digital economy, it is appropriate to begin with a brief historical overview on the origins of the creative industries and unpack the key concepts relating to this research context.

The following sub-chapters outline the research context: the UK performing arts sector, hereafter referred to as 'the sector'. First, the origins of the creative industries (also sometimes referred to as culture industries, cultural industries, or creative economy) will be highlighted with a specific focus on the motives behind the long-standing debate over the economic value of arts and culture. Then, the value creation process of arts and cultural enterprises will be illustrated, alongside with the arguments why the value created through arts organisations' business models differs from that created by commercial enterprises. Next, the current UK arts funding structures will be presented, and insights on the heterogeneous nature of the sector will be offered. Finally, the chapter situates performing arts in the digital economy and draws key points from relevant policy and practitioner literature relating to arts entrepreneurship, business model research, and DC research in the unique context of performing arts. This overview of the research context is an essential starting point to understand the factors that contribute to digital BMI in performing arts, and to the building of dynamic capabilities (DCs) within PAEs.

1.2.1 From the cultural industries to the creative economy

The history of cultural industries dates to the 20th century Frankfurt School of Philosophers. Critical theorists Theodor Adorno and Max Horkheimer were the first to coin the term "culture industry" in their book *Dialectic of Enlightment* (Adorno and Horkheimer, 1944), where the term was used to

refer to the factory-like production process of standardised cultural goods from the newly emerged mass cultures, such as radio, television and film. Perhaps reflecting their personal situation as Second World War refugees in the United States of America, Adorno and Horkheimer's view on the novel, industrial dimension of culture was rather pessimistic. By juxtaposing the popular mass culture that they had encountered in the US with 'high culture' —alluding to representations of more traditional forms of art that they considered autonomous of any commodification— Adorno and Horkheimer considered the linking of 'culture' and 'industry' paradoxical, making 'the culture industry' a dangerous tool of capitalism that would render consumers passive and docile rather than creative and productive. In the same book chapter, Adorno and Horkheimer were equally critical of technology, voicing their concerns over technological development's negative impact on democratic societies. Over half a century later, some social media critics (e.g., Taylor, 2014) have interpreted Adorno and Horkheimer's statement as a premonition about the global dominance of digital platforms.

Nevertheless, the term culture industry, or later cultural industry, remained, and was adopted by scholars and international organisations alike. For example, drawing on Adorno and Horkheimer's work, UNESCO's publication *Cultural Industries: a Challenge for the Future of Culture* (Girard, 1982) provides a detailed description of the cultural industries, and, for the first time, highlights the economic aspect of culture:

> ... a cultural industry is held to exist when cultural goods and services are produced, reproduced, stored or distributed on industrial and commercial lines, that is to say on a large scale and in accordance with a strategy based on economic considerations rather than any concern for cultural development. (Girard, 1982, p.21)

Cultural policy scholars (e.g., Hesmondhalgh and Pratt, 2008) have observed that in that same era, the cultural industries began having an impact on cultural policymaking in countries such as the UK, France and Australia. Indeed, already in the 1980s, Stuart Hall (1981), who had a key role in the

development of cultural studies as a discipline, noted that contemporary popular culture was commercial of nature as it is produced with the view of making a profit, and the very reason why popular culture matters is its employment in politics.

Although, for policymakers, the concept of cultural industries proved problematic, because many artists —perhaps adhering to Adorno and Horkheimer's definition— felt that arts were, in fact, not part of any commercial industry. Also, the term 'cultural industries' was ambiguous, as it originally referred to specific sectors such as performing arts, visual arts, and the heritage sector, but excluded many other parts of the economy, such as film and TV, that were also producing equivalent cultural goods and services. Therefore, a new terminology was needed that would encapsulate the value that culture creates for the economy and the cultural industries' role as a major source of employment opportunities.

The first attempts to measure the economic contribution of culture to a country's economy were done in Australia and the United Kingdom. In 1994, Paul Keating, the Prime Minister of Australia, released *Creative Nation: Commonwealth Cultural Policy,* a study, which was the first formal outline of the Australian cultural policy (Department of Communications and the Arts Australia, 1995). The publication redefined cultural industries to encompass new sectors such as radio and film, promised funding to cultural institutions, as well as emphasised the value of culture and the cultural industries' contribution to the country's economy. In 1998, drawing on the Australian work, the newly established Department of Culture, Media and Sport (DCMS) released the *Creative Industries Mapping Document 1998*, which, as the title suggests, was the first attempt to map the thirteen industries that: "… have their origin in individual creativity, skill and talent and … have a potential for wealth creation through the generation of intellectual property" (DCMS, 1998).

According to DCMS, these industries included advertising, antiques, architecture, crafts, design, fashion, film, leisure software, music, performing

arts, publishing, software, TV, and radio. Software as an industry was included in the sectors of the creative industries already in 1998, however, the word 'digital' was added to the DCMS's name only in 2017, when it was renamed to Department for Digital, Culture, Media, and Sport, to reflect the department's increased involvement in digital sectors. More recently, in 2023, the UK has seen further governmental restructuring under the leadership of Prime Minister Rishi Sunak, with the establishment of the new Department for Science, Innovation and Technology, which has been tasked with supporting scientific research and the technology sector, with the overarching goal of fostering innovation within the UK economy and positioning the nation as a global leader in these fields. As a result, 'Digital' has now been removed from DCMS's name.

Nevertheless, the *Creative Industries Mapping Document 1998* was particularly significant, as it offers the first systematic analysis of each sector's contribution to the economy and highlights the issues that they were facing. Furthermore, as stressed in the quote above, it depicts the two building blocks of the creative industries: "creativity" and "intellectual property" (IP). Among the most notable findings, the DCMS study revealed that the creative industries employed nearly a million people and contributed four percent to the British Gross Domestic Product (GPD). It also underlined the disparity within the industries between a large majority of microenterprises and a small number of national institutions and large global corporations. The DCMS's definition of the creative industries may also be problematic, because SMEs are typically the main generators of IP that stem from their creativity, whereas the large global corporations usually buy and exploit IP, with not much creativity involved in their business model.

Most importantly, however, the mapping document engraved the term creative industries in the international cultural policy discourse and highlighted the impact of creative activities to a country's economy. The exercise was then repeated in 2001, by which time the term had already become widely used, and the creative industries' central role as a contributor

to the modern economic life commonly recognised. Indeed, it was stated in the 2001 report that: "The creative industries have moved from the fringes to the mainstream" (DCMS, 2001, p.3). DCMS's definition of the creative industries is what Hesmondhalgh (2007) refers to as 'the British model', as it has been adopted as a global framework for mapping the creative industries and become the preferred model of classification in many countries, for example, in East Asia, Australia, New Zealand, and Scandinavia (Rossello and Wright, 2010).

Whilst the original definition of the creative industries has been widely accepted by academics and practitioners, it has also faced criticism. For instance, Garnham (2005) argued that the labelling exercise by the UK government was by no means politically neutral. He stressed that the linking of the traditionally subsidised, non-profit sectors of performing arts, visual arts, and crafts to the more commercially valuable sectors, such as music, broadcasting and particularly the IT sector, granted the creative industries a much more important status, thus making them part of the newly formed information society and a key growth area in both the national and global economy. In a similar vein, Bakhshi *et al.* (2013) note that the core problem with the DCSM's definition is that it does not explain what is meant by "creativity", and therefore the whole concept of creative industries has become dated, particularly in relation to new creative occupations, such as social media entrepreneurs (e.g., Guiñez-Cabrera and Aqueveque, 2022) that have emerged with the digital transformation.

The concept of the creative industries, whilst adopted by many international organisations such as the EU, UNESCO and UNCTAD and still very much in use today, is sometimes replaced by the wider concept of "creative economy". The term, originally coined by Howkins (2001), extends the definition of creative industries further to include all creative activities within an economy. This interpretation has also been supported in NESTA's report *Beyond the creative industries: Mapping the creative economy in the UK,* which states that creative activities occur increasingly outside the creative industries, and

in fact, there are more creatives working in the non-creative sectors than within the actual creative industries (Higgs *et al.*, 2008). Howkins's (2001) theory is based on the notion that creativity arises when an individual, group or organisation creates something new, and the products of creativity might be intangible, such as ideas or services, or tangible, such as physical products. Howkins (2001, p.8) thus goes on to define the creative economy as: "the transactions of creative products that have an economic good or service that results from creativity and has economic value."

To conclude on the various theoretical approaches utilised to map the industries driven by creativity, many scholars (Garnham, 2005; Schlesinger, 2017; Towse and Handke, 2013) have pointed out, how the evolution of terminology from the narrowly defined cultural industries to the wider concepts of creative industries and creative economy was, indeed, primarily a political exercise with the goal of embracing the economic value of culture. Towse (2014, p.16) elaborates the argument and points out that while such policymaking has been successful in its endeavour to emphasise the economic value of arts and culture, it has sometimes done so "at the expense of their artistic and cultural value."

1.2.2 The value of arts and culture

The debate around the value of arts and culture essentially roots from the renowned "Paradox of value" presented by economist Adam Smith (1776) in his book *The Wealth of Nations*. Smith's theory —also known as the Water-Diamond paradox— uses the examples of water and diamonds to imply that all goods have two values, value in use and value in exchange. Whereas water has a high value in use and hardly any value in exchange, diamonds have an extremely high value in exchange, but no real value in use. Smith's argument also considers price as a measure of value, meaning that consumers frequently pay a high price for goods that are no use for them in everyday

life but can be exchanged for other goods that have a better in-use value (Smith and Cannan, 2003).

Building on Smith's concept, neoclassical economists later introduced the idea that in addition to a product's utilitarian value, a goods or service's price might equally depend upon the consumers' perception of its value. Another noteworthy element in neoclassical economics is market demand, which together with price act as the main factors in determining the value of a good or a service. Towse (2014, p.17) observes that neoclassical theory considers some aspects of value unmeasurable by market prices, and this often leads to 'market failure', a phenomenon which is common in the arts and cultural sector. She notes that while some goods or services can simply offer personal satisfaction or utility to consumers, others can provide them with cultural benefits that cannot be measured by market prices but need to be evaluated in alternative metrics. This, indeed, justifies the need to subsidise the arts and cultural sector from public funds. Bourdieu (1990) contributes to discourse the value of arts and culture by arguing that the aesthetic qualities of an art product do not play a key role in determining its financial value, but artwork is valued according to its position in a symbolic field of cultural appreciation, where art is assessed based on both its creators' and cultural participants' perspectives. Bourdieu's theory emphasises the social nature of the value creation process in arts and culture and supports the argument that arts may generate different types of values (e.g., artistic, social, economic) for their creators and audiences.

However, in the UK political discourse, since the first definition of the creative industries by DCMS (1998), the core argument for securing public funding for arts and culture appears to centre upon the economic value they generate for the economy. To leverage it, ACE has since 2013 commissioned biennial independent reports on the contribution of the arts and culture industries on the UK economy. A relatively recent report, conducted by the Centre of Economic and Business Research (2019, p.17), revealed that arts and cultural organisations contributed directly over £10.8 billion in Gross Value Added

(GVA) to the UK economy. Furthermore, Bakshi and Thorsby (2010) stress that in addition to economic value, cultural institutions create social and cultural value for consumers, as well as public value for society at large, and to clarify the value creation process of art and cultural organisations, they propose a value chain model (see Figure 1.1).

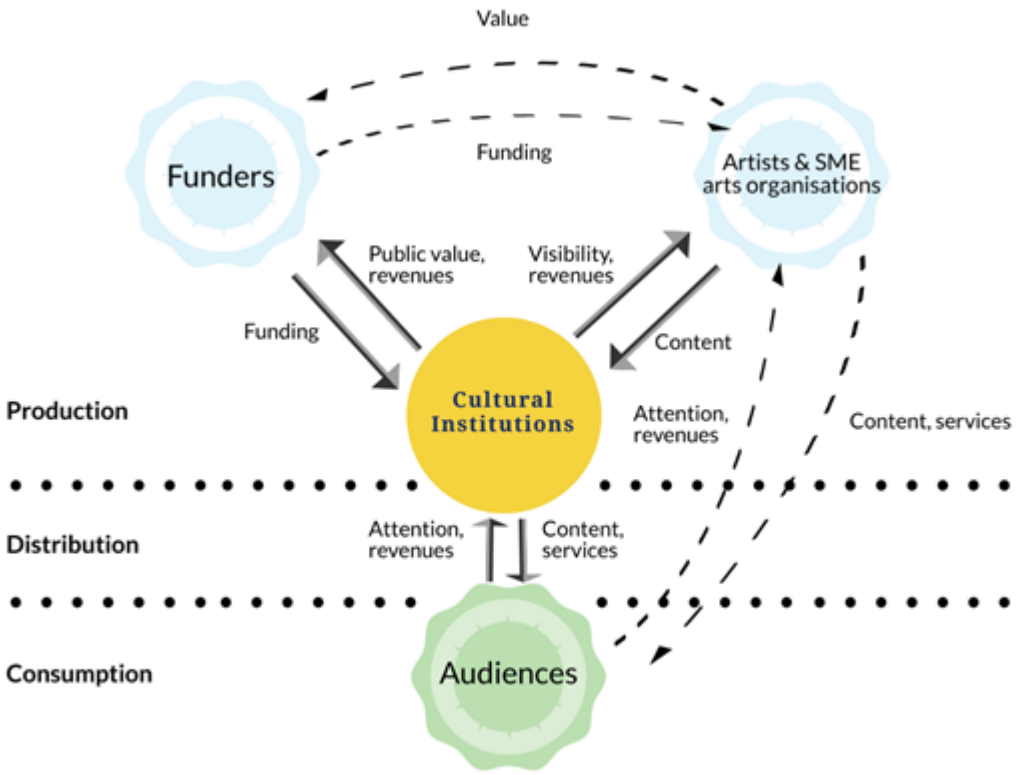


Figure 1.1 Value chain model for cultural organisations (Bakshi and Throsby,2010)

Bakshi and Thorsby's model highlights the interplay and arrangements between cultural organisations and their different stakeholders, and the precarious balance that cultural organisations are required to maintain while pursuing their mission and endeavouring to generate different types of value. Indeed, some of the key aims of different value creation logics can be conflicting, such as accessibility and revenue generation, artistic vision and audience focus, experimentation and scalability, and the creation of public

value, which is near impossible to measure. Since the value chain model proposed dates from 2010, it does not include the direct value exchange between artists/SME arts organisations and their audiences that is nowadays largely enabled by digital platforms, nor does it comprise the value exchange between artists/SME arts organisations and arts funders. Therefore, Figure 1.1 above has been adapted to reflect the current situation, where artists/SME arts organisations no longer necessarily need larger cultural organisations as intermediaries to engage in a value creation process. In the adapted figure, arrows are added to describe how arts organisations and arts can nowadays access audiences directly by providing them with content, services, and various types of value via digital channels. The adapted model will be used in case studies in Chapter 6 to illustrate the value creation process of the five performing arts SME.

Furthermore, a European Commission study (2017) on creative value chains aimed to provide an overview of the value chains and value creation processes across nine different sectors of the creative industries, with a special focus on the impact of digital transformation. The report emphasised the difference between creative and industrial value chains, drawing on UNESCO's (2009) cultural cycle concept, which describes value creation rather as a cycle than a linear process. Similarly, to Bakshi and Throsby's model, the study identified the different stages of the creative value chains and highlighted some of the external factors affecting them, such as market and policy conditions, which contribute to their increasing complexity.

In the context of performing arts, the EU report observes that digital transformation has been more gradual than, for example, in the music sector, as the long-standing perception has been that live performance will lose its essence when captured digitally (Burgheim, 2016). However, the report states that digitalisation has had both positive and negative impact on value chains, for example, it has increased remote participation in cultural activities and created digital product-based business models such as Event Cinema (see 1.2.6), but nevertheless, finding and implementing economically

sustainable digital business models remains difficult for PAEs (European Commission, 2017, p.61). The report refers repeatedly to business models and value chains, yet it does not describe in detail the value creation process in performing arts nor identifies the different types of value created or the digital business models adopted.

As established in this sub-chapter, arts and cultural organisations create different types of value, such as social, cultural, and economic. However, the economic value created through arts and cultural business models is often not enough to cover for their everyday operations (Rodriguez, 2016), and thus regular subsidy in the form of public funding is required. Therefore, the following section highlights the UK public funding structures and provides an overview of the heterogeneous nature of the performing arts sector.

1.2.3 Arts funding

Since 1994, arts funding and promotion in Great Britain has been the responsibility of three regional governments, the UK, Welsh and Scottish. Each government operates according to the arm's length principle to distribute the funding to the arts and cultural organisations. This means that non-departmental public bodies Arts Council England, Arts Council Wales and Creative Scotland receive Grant-In Aid and National Lottery funding from their respective governments, which they then distribute to the arts organisations operating within their region, according to their own policy guidelines (Dempsey, 2016). Exceptions to the arm's length funding model are leading museums and galleries, who receive Grant-In Aid directly from their governments.

In England, in 2018-2019, the total income of DCMS funded cultural organisations was £3.7 billion, of which ACE and its National Portfolio Organisations (NPOs) received over £2.1 billion (DCMS, 2019). The NPOs are cultural organisations including museums and galleries that are funded for a

set period of four years at a time. The current set of NPOs for years 2018-2022 is composed of 828 organisations, of which 187 are new to the portfolio. For the last decade, the funding focus has been increasingly outside London, and thus in the current portfolio, 60.3 percent of the NPOs are located elsewhere than in the capital area (ACE, 2019).

The amount of the annual ACE grant of an NPO varies greatly. While sector leaders, the prestigious national organisations such as the Royal Opera House, National Theatre, Southbank Centre and Royal Shakespeare Company each receive between £14-24 million annually (see Table 1.1), small NPOs' annual ACE grants are generally between £50,000-200,000 (ACE, 2018). In order to receive funding, the NPOs are required to report to ACE on their activities each year, as well as provide business plans including information on how to mitigate risk.

Top four ACE funded performing arts NPOs 2018-2022	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**Total**
Royal Opera House	24 028 840	24 028 840	24 028 840	24 028 840	96 115 360
Southbank Centre	18 360 000	18 360 000	18 360 000	18 360 000	73 440 000
National Theatre	16 700 000	16 700 000	16 700 000	16 700 000	66 800 000
Royal Shakespeare Company	14 984 000	14 984 000	14 984 000	14 984 000	59 936 000

Table 1.1 Sector leaders' ACE funding

Despite ACE's effort to maintain the level of state subsidy for arts by emphasising the economic contribution of arts and culture to the UK economy, the Centre for Economy and Business Research report (2019) revealed that 74 percent of UK arts and cultural organisations have been impacted by public funding cuts. Furthermore, reports from other countries highlight a universal decline in public funding across Europe, as a result of which arts organisations have been urged to become more entrepreneurial and encouraged to adopt new business models (ACE, 2015; TEH - Trans Europe Halles, 2015). Already in their strategy for 2010-2020, ACE recommended that arts and cultural organisations should actively seek new

sources of income, exploit opportunities offered by new digital technologies and focus on the needs of their audiences (ACE, 2013). In ACE's new strategy for 2020-2030, the same issues regarding the fragility of cultural organisations' business models and the reductions of public funding persist:

> … the business models of publicly funded cultural organisations are often fragile and generally lack the flexibility to address emerging challenges and opportunities, especially those relating to operating within the digital economy and in the context of declining public funding. (ACE, 2020, p.4)

Therefore, business planning and creative experimentations with digital technologies have become an essential part of an arts organisation's operations and innovation a key component in creating sustainable business models and securing new revenue streams in the digital economy.

In July 2020, during the Covid-19 pandemic, an unexpected funding infrastructure for art and cultural organisations' digital initiatives was introduced. To relieve the catastrophic impacts of the closure of all cultural venues, the DCMS announced an unprecedented funding scheme, the £1.57 billion Culture Recovery Fund (CRF), which marked the single largest investment in the UK culture and creative sectors ever seen. Three rounds of CRF funding were distributed through the arts councils of the four nations to over 5000 arts, cultural and heritage organisations, bringing the total pandemic-recovery support package for UK arts and culture close to two billion pounds (DCMS, 2021).

Whereas public subsidy remains vital for many arts organisations, it is only one element in their diverse funding mix. Other sources of funding include, for example, earned income, donations, sponsorship, crowdfunding and borrowed income, such as loans (Harris, 2018). Furthermore, the UK government has recently introduced additional, often referred to as 'industrial', funding schemes for creative industries organisations. With such schemes, funding typically originates from The Industrial Strategy Challenge Fund (UK Research and Innovation, 2020), run by UK Research and

Innovation (UKRI), Innovate UK and Research England. The fund aims to bring together the UK's leading researcher community with businesses to tackle major industrial and societal challenges.

For performing arts, such 'industrial' funding initiatives have included e.g., the £33 million *Audiences of the Future Challenge,* which was launched in 2018 as part of the government's Industrial Strategy, detailed in the Creative Industries Sector Deal (HM Government, 2018). The Audiences of the Future Challenge aimed to increase cross-sectoral partnerships by connecting academics, performing arts organisations and technology companies, with a focus on innovative and immersive storytelling. The goal was to harness the latest digital technologies to create revolutionary immersive experiences that will capture new audiences' attention and strengthen the UK's market position in the global creative industries (UKRI, 2019).

Another recent example of a one-off industrial funding scheme was the *UNBOXED "Festival of Brexit"* (UNBOXED, 2022), launched in 2018, but delivered mostly in 2020-2022. UNBOXED was a time-limited publicly funded investment of £120 million, distributed by the four governments of the UK, to stage a nationwide festival of creativity and innovation with the objective of bring communities together to celebrate the strengths, values, and identities of the UK, and attract new business and investment. Initial funding of £100,000 was allocated to 30 creative teams to work on their project ideas, and during the final phase, a total of ten large-scale projects were commissioned. The Covid-19 restrictions on social gatherings posed significant constraints for UNBOXED in terms of delivery, recruitment and impact, and the scheme was later criticised by a UK Parliament Committee for "irresponsible use of public funds" as it was unclear what value the project delivered in return on the considerable financial investment (Committees - UK Parliament, 2022).

Whilst ambitious with regard to their aims, the core challenge of these types of industrial schemes is, however, scalability. Indeed, the industrial funding may enable large organisations, such as the sector leaders, to achieve great

results, however, in 2014, 90 percent of arts organisations were microenterprises, employing less than five people (Dickinson, 2017). Therefore, large-scale Research and Development (R&D) projects involving leading technology companies as partners are simply not a realistic solution for most performing arts SME. Indeed, it appears that there is significant disparity between the political ambitions, goals and priorities for the cultural industries and the realities of the sector, which is mostly comprised of microenterprises.

To better understand the level of this disparity between large PAEs and performing arts SMEs, it is appropriate to define what is meant by a large, high-profile PAE, and what is meant by an SME. National Theatre (NT) is a good example of large, high-profile organisation. As illustrated in Figure 1.2, NT generates income from various sources. For example, the ACE Revenue Grant covers for 16 percent of the total turnover of £103 million in 2018/2019 (National Theatre, 2019), which is greater than the revenue from commercial income (13 percent), or the revenue from fundraising (12 percent). It is also noteworthy that the main part of NT's income is generated from the ticket sales of live performances (a total of 54 percent), and that the income generated from digital activities (4 percent) remains rather meagre.

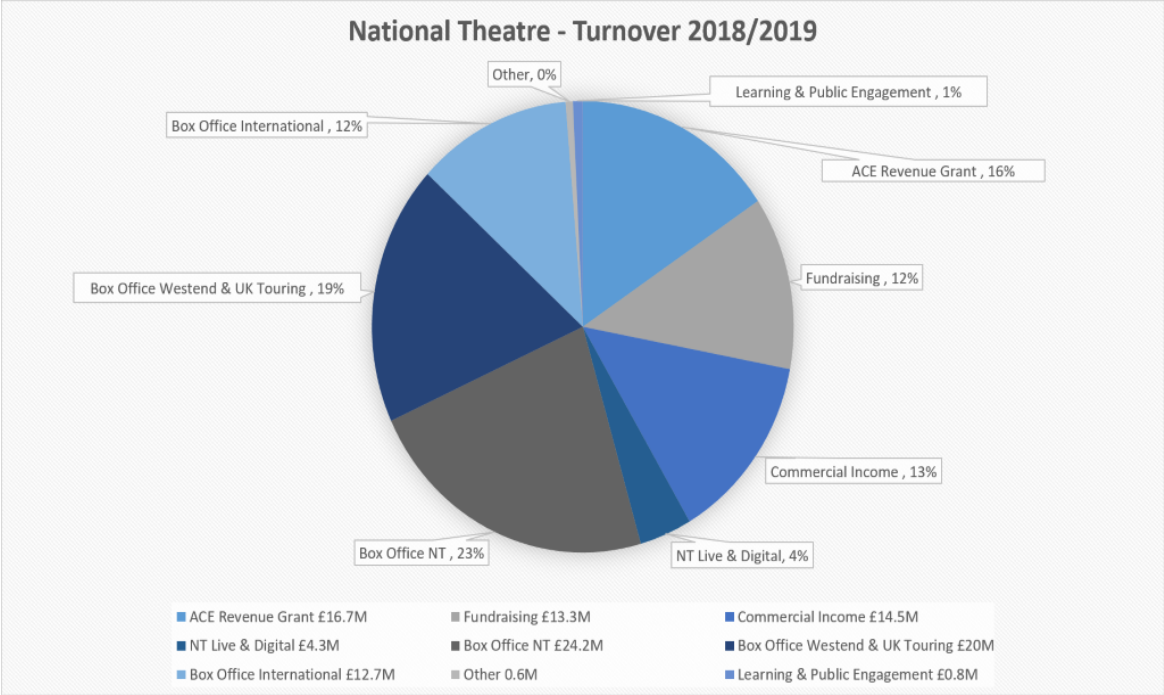


Figure 1.2 Annual turnover for National Theatre 2018/2019

Whilst NT is an adequate example of a high-profile PAE, on the other hand, the turnover and revenue sources of performing arts SMEs look very different. In 2019, 95 percent of creative industries organisations were micro-businesses, employing fewer than ten people (DCMS, 2020). Typically, UK-based performing arts small-medium enterprises (SMEs) generate an annual revenue of less than £100,000 (ACE and NESTA, 2019) and often employ personnel solely on freelance basis. Indeed, one-third of creative practitioners are freelancers, and in sub-sectors such as performing arts, visual arts and music, this figure can be closer to 70 percent (Creative Industries Federation, 2021), largely due to the highly specialised nature of the work that stems from creative endeavour in this field. The definition of a typical performing arts SME will be further discussed in 2.1.1.

1.2.4 Performing arts in the digital economy

The digital economy as a concept was first coined by Don Tapscott (1995). The early definition focused on the impacts of the newly emerged Internet, as at the time, it was considered as the driving force of digital transformation. Since then, the concept has evolved, and it is now used in diverse ways to describe all the economic processes, activities and interactions involving the use of digital technologies. Other similar terminology utilised alongside and in lieu of digital economy when referring to digital technology-based economic processes include the internet economy, the knowledge economy, and the digital creative economy. According to the UNCTAC Digital Economy Report (UNCTAD, 2019, p.4), the digital economy discourse has recently centred on the multitude of ways that "digital technologies, services, products, techniques and skills are diffusing across economies." In other words, focusing on the process commonly referred to as digitisation. Brennen and Kreiss (2016) broaden this perspective by emphasising how digitalisation has moulded the modern society, for example, by accelerating globalisation, facilitating the emergence of novel economies, redefining the notions of time and place and creating new production and distribution systems for culture, capital, goods and people (Knorr Cetina and Bruegger, 2002; Sassen, 1998). Indeed, some scholars, such as Castells (2010) argue that digitalisation is as significant to the contemporary world as the industrial revolution was to the 18th century, and others (e.g., Schwab, 2017) go even further and argue that, we are in fact in the beginning of the Fourth industrial revolution, where an emergence of novel digital technologies will merge, physical, digital and biological worlds and profoundly impact all aspects of life and even ideas on humanity.

In the UK, policymakers first used the term digital economy in the context of *Digital Britain Report* (Department for Culture and Department for Business Innovation & Skills, 2009), which was followed by the *Digital Economy Act* (UK Parliament, 2010). Digital media policy and copyright infringement were

in the centre of the early digital legislation. As concepts, the digital economy and the creative economy may appear confusing as they are used in a variety of ways by different scholars. For example, Wong (2012) states that in the UK, digital economy has arisen as an extension of the creative economy. Policymakers have also contributed to contextualising arts and culture in the digital economy. Policymakers have also contributed to the digital economy debate in the creative industries. For instance, DCMS (2018) stated in their *Culture is Digital* policy paper: "technology offers unprecedented opportunities for the UK cultural sector" (DCMS, 2018), but also observed that: "Our consultation and research have shown that the cultural sector currently lacks the infrastructure and the operating and funding models needed to thrive in a digital landscape" (DCMS, 2018). Since the publication of the policy paper, significant efforts have made to improve the digital skills and capacity of the sector, and funding have been allocated accordingly. Recent initiatives include, for example, ACE's Digital Culture Network that provides support and mentoring to arts and cultural organisations in all digital technologies related skills. The network began operating in 2019 and its operations have been extended until 2024.

However, the increased use of digital technologies in the arts and cultural industries has not always been considered positive, and more recently the digital optimism promoted by the UK government has been critiqued by some academics. For instance, Mihelj *et al.* (2019) pointed out how structural inequalities that typically manifest in arts and culture are also replicated in the digital sphere, and that digital activities are sometimes disruptive for the arts, particularly for organisations which rely heavily upon traditional live activities-based business models. This disruption caused by digitalisation is notable, for example, in the music industry, where new digital formats and streaming platforms have been introduced at a rapid pace. The introduction of these novel approaches —whilst tremendously beneficial to some, e.g., platform businesses, such as Spotify— have quickly overtaken traditional products, and destroyed established ways of working (Taplin, 2017).

In addition to posing a threat to traditional business models, Bakshi, and Thorsby (2010, p.7) argue that sometimes digital is seen as "dumbing down" arts and culture and well as exacerbating the already fierce competition over consumers' time and attention. Furthermore, there is great disparity among arts and cultural enterprises in the level of their digital maturity. Whilst digital pioneers and the sector leaders are successfully deploying myriad digital business models, most PAEs still rely on traditional ways of operating, and implement a live activities-based business model, where income is mainly generated from ticket sales to live performances (Searle, 2017). Recent research from Australia has also highlighted the phenomenon of digital disengagement, an act of resistance or refusal to engage with digital delivery, which prevented some arts and cultural organisations from exploring the pandemic-time opportunities of the digital economy (Holcombe-James, 2021).

Burgheim (2016) notes that in the arts and cultural sector, there are still sceptical attitudes prevalent in the sector towards the compatibility digital technologies and performing arts, with critics arguing that the essence of performing arts is impossible to mediate through digital technologies. Therefore, digital performing arts will always lack artistic relevance, imagination, and a feeling of social experience, and thus remain inferior to a live performance. This may, indeed, contribute to PAEs unwillingness to experiment with digital technologies, or engage in digital BMI. Burgheim (2016) adds, however, that during the last half a century, digital transformation is inevitably taking place in performing arts, as the use of digital technologies has gradually broken traditional barriers of live art, and transformed some aspects of it, such as music and visual arts. This transformation has offered novel perspectives and sensory experiences for audiences, and therefore, she reflects, the use of digital technologies in performance is not necessarily reaching its full potential nor getting the recognition it deserves.

1.2.5 Practitioner research on digital business models

There is a significant body of grey literature on digital policy aimed at arts and cultural organisations, published by the DCMS. For example, the *Culture is Digital* policy paper (2018) communicates the government's vision, themes and commitments to the arts and cultural sector as well as to society at large. The report calls for new collaborations between arts and technology companies with the focus on audience engagement: "Culture and technology can work together to drive audience engagement, boost the capability of cultural organisations and unleash the creative potential of technology" (DCMS, 2018).

In a similar vein, cross-sector collaborations and an audience-focused, data driven, entrepreneurial approach are emphasised in ACE's art investment principles and strategy for 2020-2030 to ensure sustainability and gain a better understanding of audiences' needs. This is communicated in detail in the investment principles, where ACE foresees changes in the cultural and technological landscape and urges cultural organisations to become more dynamic, adopt an entrepreneurial mind-set and engage in BMI in order to secure funding and become more resilient and self-sustainable: "Cultural organisations will need to become more entrepreneurial and develop business models that help them maximise income, reduce costs and become more financially resilient" (Arts Council England, 2020, p.49).

The *Boundless Creativity* research project (2021) by Arts and Humanities Research Council (AHRC) and DCMS explored innovation in cultural experience during the Covid-19 outbreak with a goal of providing evidence to inform the creative and cultural industries' recovery from the pandemic. The report acknowledged the impact of the pandemic as an accelerator of digital transformation in the arts and cultural sector. Echoing the *Culture is Digital* policy paper (2018), key recommendations for the future included stronger cross-sectoral collaboration in R&D with a view of creating cultural and economic value; focus on reaching and monetising new international

audiences online; re-structuring the policy framework to support creative R&D and broadening digital access for both producers and consumers of cultural content. Thus, as will be highlighted through the case studies (see 6.3) cross-sectoral collaborations, innovative and entrepreneurial BMI, focus on global digital audiences and their needs, as well as enabling access to all audience groups appear to be the key trends, and perhaps the direction which arts funders and policymakers wish to see the publicly funded arts and cultural sector take in the digital economy.

To facilitate their funded organisations' digital journey, ACE regularly publishes research reports on the use of digital technologies and toolkits on how to make digital work (e.g., ACE, 2015). Perhaps the most significant piece of research by ACE and NESTA is the longitudinal *Digital Culture* report, which in a unique way, explores the impact of digitalisation and digital technologies on the UK arts and cultural sector. The data for the report is gathered through surveys, primarily from NPOs. The study has been conducted in 2013, 2014, 2015, 2017 and 2019, and the most recent survey gathered data from 1182 arts and cultural organisations (ACE & NESTA, 2019). The four key research areas of the Digital Culture study are: business models and income generation; audience development and data use; research and development, and enablers and barriers to increasing digital activity, of which the first two are particularly relevant to this research project.

One of the key findings from the latest Digital Culture study (2019, p.10) highlights that initially in 2013 and 2014, there appeared to be notable growth in the proportion of arts organisations reporting digital technologies being important or essential to their business models. However, in 2015 - 2019 this initially upward trend seems to have lost momentum, with only 49 percent of organisations in 2019 considering digital technologies as important to their business model, compared to, for instance, the 88 percent that considered digital technologies important to their marketing. This implies that although digital technologies are widely used for marketing purposes in the

arts and cultural sector, most arts and cultural organisations still rely upon traditional business models, where digital is yet to find its place.

With regard to monetisation, the *Digital Culture* report (2019) highlighted some digital business models in use in the arts and cultural sector for income generation purposes, for example, digital tickets sales, crowdfunding, and revenue generation from third-party platforms, such as Eventbrite, YouTube, and Spotify (Arts Council England & NESTA, 2019). Considering that ticket sales are traditionally one of the core revenue generation methods of any PAE's business model (see, for example, NT's revenue split illustrated in Figure 1.2 in 1.2.3), it is surprising that less than half of the survey respondents were selling tickets online. It is also noteworthy that only a small minority of seven percent were able to generate revenue from third-party platforms, which implies that the monetisation of cultural content on digital platforms is still in its infancy in the arts and cultural sector.

These findings from the sector indicate that still today, arts and cultural organisations mostly use digital technologies to automate processes (Li, 2020) in their live activities-based business models (Rex *et al.*, 2019). These processes include, for example, selling tickets to live performances via digital ticketing systems or producing digital marketing content to promote live performances. However, there is one exception to this rule, the Event Cinema business model, which has been deployed successfully by PAEs in the digital economy for over a decade. The term Event Cinema refers to the concept, where audiences attend a livestreaming of a performing arts production at their local cinema.

ACE and British Film Institute (BFI) commissioned a comprehensive study (Abrahams, 2015) on the impact of Event Cinema and found that the UK is the global leader in event cinema and the industry was worth over £35 million already in 2014. The event cinema sector is mainly dominated by sector leaders, such as NT (See Figure 1-2) and the English National Opera, and due to high production costs can be challenging to access for smaller performing arts organisations. The event cinema model's key benefit to audiences is the

removal of geographic barriers, as it renders performance content accessible to new audiences, who could not otherwise experience productions from companies based further afield. However, the report (Abrahams, 2015) revealed that financial returns were not always to be expected from event cinema, and that key challenges included the lack of public awareness mainly due to insufficient marketing budgets.

Furthermore, in the *From-Live-to-Digital* report (AEA Consulting 2016), commissioned by ACE in 2016, it was posited that not many arts organisations are able to generate income from streaming activities. The report also suggested that digital activities have the potential to complement live activities, an argument, which goes against the traditional belief that a digital offering risks cannibalising a live offering. Moreover, the report underlined the manifold benefits for arts producers that stem from the use of digital technologies, for instance, increased geographical reach and engagement with new and traditionally excluded audiences.

1.3 Research questions

From a theory-driven perspective, knowledge of digital entrepreneurship and digital business models in the context of performing arts has lagged behind practice. Little attention has been paid to defining and contextualising the concept of digital business model in the arts and cultural sector and to investigating the team and individual-level processes that allow PAEs to engage in digital BMI with the view of developing business models for the digital economy.

As will be highlighted in more detail in section 2.3.3, BMI can only occur if a firm possesses strong DCs, as the ability to engage in BMI is, in fact, an output of a firm's DCs (Teece, 2018). Therefore, the dynamic capabilities view (DCV) (Teece, 2007; Teece *et al.*, 1997) was chosen as a theoretical lens for the inquiry (see 2.3 and 3.3), and the aforementioned gaps in scholarly

literature (further explored through the literature review in Chapter 2) allowed for the formulation of the following research questions:

RQ1: How can performing arts enterprises develop and deploy business models in the digital economy?

RQ2: How do the dynamic capabilities of performing arts enterprises change in order to enable digital business model innovation?

1.4 Overview of research methodology

Drawing on a theoretical framework of business model research and entrepreneurship, the thesis explores the digital business models of UK-based PAEs, using a qualitative multimethod research design. By combining semi-structured interviews, netnographic research and collaborative multi-case study research, empirical data is collected on existing and emerging digital business models in performing arts to explore their characteristics, sustainability, and viability, as well as to investigate the DCs that enable PAEs to engage in digital BMI with the view of designing and deploying business models in the digital economy.

1.5 Organisation of the thesis

The thesis is organised in eight chapters. Following this introductory chapter, which sets out the research context:

- Chapter 2 provides a review of business model, entrepreneurship, and DC theories relevant to PAEs operating in the digital economy. Drawing on extant literature, the chapter aims to highlight the gaps of knowledge in extant research focusing on the digital business models and digital business model innovation in performing arts.

- Chapter 3 presents the methodology used for the inquiry, the research philosophy, research designs, research ethics and research methods utilised and introduces the novel theoretical framework of common digital business models in performing arts. The chapter also provides reflexive narratives of events for each research stage to clarify how the research unfolded.
- Chapter 4 presents the first study, a case study, which involved 18 semi-structured expert interviews with senior performing arts professionals, specialised in digital development. The aim of the first study was to investigate the role of dynamic capabilities in PAEs' digital BMI, and to identify business models deployed by PAEs in the digital economy.
- Chapter 5 presents the second study, a netnography of on 35 UK-based PAEs, conducted on the social media platform Facebook during the peak period of the Covid-19 pandemic in 2020. With a specific focus on SMEs, the core aim of the study was to identify digital business models introduced by PAEs during the pandemic through the immersion of the researcher in the PAEs' digital communities on Facebook.
- Chapter 6 presents the third and final stage of the research, a multimethod multi-case study on five performing arts SMEs, with an objective to provide a more in-depth analysis of the different of digital business model types outlined in the new framework for common digital business models in performing arts, and to highlight the microfoundational DCs that enable performing arts SMEs to engage in digital BMI.
- Chapter 7 presents the final thesis discussion, linking the three research stages together to discuss conceptual and empirical contributions, implications for arts entrepreneurship, business model and DC literature, as well as implications for practitioners and

policymakers in post-pandemic performing arts. The chapter also highlights the limitations of the research.

- Chapter 8 presents final conclusions in relation to the research questions, summarises the contributions and offers guidelines for future research.

1.6 Publications from the thesis

Some parts of this thesis have been accepted through peer-review for publication as a journal article or conference proceedings:

- A preliminary analysis of the findings outlined in Chapter 4 appeared in conference proceedings as Manninen, K., Martindale, S., Carter, C.J., Leyshon, A. (2021) *Digital Business Models in Performing Arts*, British Academy of Management Conference, online.
- An alternative analysis of the findings outlined in Chapters 4 and 5 appeared in the conference proceedings as Manninen, K., and Carter, C.J. (2022) *Digital Business Model Innovation in Performing Arts – An Emergent Framework*, Institute for Small Business and Entrepreneurship Conference 2022, York, UK
- An alternative analysis of the findings outlined in Chapter 6 appeared in the conference proceedings as Manninen, K., and Carter, C.J. (2023) *Case Darkfield: Digital Transformation in a Small Performing Arts Enterprise*, Institute for Small Business and Entrepreneurship Conference 2023, Birmingham, UK
- An alternative analysis of the data collected for case study Beta is published in Benford, S., Manninen, K., Martindale, S., Hazzard, A. Martinez Avila, J.P., Tennent, P. Spence, J. Castle-Green, T. Brundell, P., Barnard, P. and Darzentas, D.P. (2023) *Infrastructures for Virtual Volunteering at Online Music Festivals.* Proc. ACM Hum.-Comput.

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1.7 Chapter summary

As will be highlighted in the subsequent chapters, the adoption of novel digital business models in performing arts was significantly accelerated by the Covid-19 pandemic, which also contributed to the development of DCs within PAEs. Yet scholarly investigations on the nature of these emerging digital practices and processes remain limited. Therefore, to summarise and facilitate the interpretation of the research data in the following chapters, the key takeaway points from this introductory chapter are the following.

In the UK, the non-profit performing arts sector is part of the creative industries, which produce considerable value for the economy. In 2021, the creative industries contributed £109bn to the UK economy (Scott, 2022). However, this value is not always economic but can also be, for example, cultural, social, or artistic. Therefore, PAEs' operations can be complicated by the sometimes-conflicting aims of different value creation logics.

Digitalisation has been slower in performing arts than, for instance, other sectors of the creative industries such as film or TV. This is partly due to traditional beliefs that live performance loses its essence when conveyed via digital technologies, and partly due lack of resources, digital skills, and capacity within the sector.

Much of the performing arts sector remain heavily dependent upon public funding, and this funding has been declining recently (Centre of Economy and Business Research, 2019). Therefore, arts funders such as ACE have urged PAEs to actively seek alternative revenue streams including those offered by the digital economy. Public funding is not PAEs' only source of income, but they use a diverse funding mix of earned income, donations, sponsorship, crowdfunding, borrowed income, such as loans (Harris, 2018) and funding from diverse industrial schemes.

The sector is very heterogeneous and there is a high level of disparity between the large sector leaders and SMEs. Furthermore, over 70 percent of practitioners are freelancers (Creative Industries Federation, 2021), largely due to the highly specialised nature of the work that stems from creative endeavour in this field.

Policymakers appear highly optimistic over the opportunities of the digital economy for arts and culture; however, researchers have pointed out issues related to increased structural inequalities, digital disruption and the fierce competition over consumers' time and attention in the digital realm. Furthermore, sector-support and intermediary organisations appear to have taken the lead in contextualising the concepts of business model and business model innovation in arts and culture.

Chapter 2 Literature review

This chapter will review academic literature from the fields of entrepreneurship, business model research and dynamic capabilities research to highlight the gaps of knowledge in extant research related to how performing arts enterprises (PAEs) develop and deploy business models in the digital economy, and how dynamic capabilities (DCs) contribute to PAEs' digital business model innovation (BMI). The chapter begins by unpacking the concept of arts entrepreneurship and exploring how entrepreneurship and digital entrepreneurship occur in the context of performing arts. The chapter then moves on to discuss the business model construct and the different streams of business model research; definitions, components, taxonomies, business model innovation (BMI), and digital business models. Finally, the chapter introduces the concept of dynamic capabilities and clarifies its impact on business models and BMI.

2.1 Entrepreneurship in the arts

As established in Chapter 1, arts and cultural organisations in the UK are being strongly encouraged to become more entrepreneurial by policymakers and arts funders. Indeed, the need to diversify existing business models and explore new revenue streams to public funding has been persistently expressed by arts funders and policymakers in the UK and Europe for far over a decade (ACE, 2015; TEH, 2015). To grasp the essence of the term "entrepreneurial" in the context of arts and culture, the different forms of entrepreneurship require clarification. Furthermore, despite entrepreneurship being is a relatively new area of research, various definitions for "entrepreneur" and "entrepreneurship" have been proposed by academics, usually stemming from their research focus and disciplinary perspective.

The English term entrepreneur originates from the French verb '*entreprendre'*, meaning '*to do something'* or to '*undertake'*. Its noun form

'*entrepreneur'* was first coined in academic literature by Richard Cantillon in 1773, when alluding to a business owner who assumes financial risk over his venture (Casson, 1982). The concept of entrepreneurship gained prominence in academic discourse in the early 19th century, as economists Jean-Baptiste Say and John Stuart Mill expanded on the idea in their writings. Building on Cantillon's initial definition, Say characterised the entrepreneur as an individual with the foresight to identify when resources should be reallocated from less productive to more productive ventures (Say, 1821). Mill further refined this definition, placing greater emphasis on the entrepreneur's role as a manager and administrator (Mill, 1848). These contributions helped to establish the modern understanding of entrepreneurship as a distinct field of study and a critical driver of economic growth.

Austrian economist Joseph Schumpeter was among the first to link entrepreneurship to the development of the economy. He viewed entrepreneurs as risk-taking agents of innovation and change (Schumpeter, 1942). The Schumpeterian entrepreneur implements a process, referred to as 'gales of creative destruction', the continuous mutation of a market economy that destroys the existing structures from within, enabling the emergence of new, revolutionary ventures. Thus, as posited by Schumpeter (1942), innovations are initiated by entrepreneurs, who transform ideas into new products and services that can be commodified (Acs *et al.*, 2009; Block *et al.*, 2013). As Acs *et al.,* (2009) point out, however, Schumpeter does not specify where the innovative ideas come from, and therefore entrepreneurs are not necessarily creators of innovations, but merely have the ability to create economic opportunities. Furthermore, Schumpeter (1942) noted that despite the short-term negative implications of the creative destruction process, such as mass unemployment, the process itself is vital, because otherwise economies will stagnate, and growth or higher standards of living cannot be achieved. Schumpeter's theory is particularly applicable to today's digital economy, where technological change has precipitated the emergence of disruptive and destructive business models, such as multisided markets and platforms (Clarke, 2019).

Some scholars describe entrepreneurship as a process of discovering opportunities and creating organisations to seize them. For example, (Bygrave and Hofer, 1992, p.2) argue that entrepreneurship encompasses "all functions, activities, and actions associated with perceiving opportunities and the creation of organizations to pursue them." They go on to define an "entrepreneurial event" as the act initiated by an entrepreneur to establish an organisation with a goal of pursuing an opportunity. Indeed, there are many different types and contexts of entrepreneurship. Relevant to this research, Amit and colleagues (Amit and Schoemaker, 1993, p.816) make the distinction between entrepreneurs, who are profit-seeking and those who are not: "Entrepreneurs can be categorized into those who are profit-seeking, either working individually or in a corporate setting, and those who are not profit seeking, working in charitable, government and other not-for-profit organizations (e.g., universities)." This categorisation implies that there are entrepreneurs in non-profit sectors, such as arts and culture, who bring about innovative ideas and introduce them to the market. However, typically in these non-profit sectors, generating sufficient income to attain financial sustainability and autonomy is the main goal for entrepreneurs, rather than seeking profits or achieving growth.

Welter and colleagues (2017) argue that entrepreneurship research is too often focused on high-growth, venture capitalist funded, technology-enabled businesses, those that follow the so-called Silicon Valley model of entrepreneurship. As a response, they call for more attention to be directed to the heterogeneous forms of entrepreneurship that may manifest in serendipitous ways, and introduce the term "everyday entrepreneurship", which describes the activities of the diverse outliers of entrepreneurial ecosystems, who will never be 'gazelles' or 'unicorns', yet actively participate in creating wealth and employment opportunities for their communities. This definition seems very pertinent to the creative industries, as according to Creative Industries Federation, one third of creative practitioners are freelancers, and in sub-sectors such as performing arts, visual arts and music, this figure closer to 70 percent (Creative Industries Federation, 2021).

2.1.1 Defining arts entrepreneurship

Arts entrepreneurship (AE), sometimes also referred to as cultural entrepreneurship (CE), is an emerging field of research at the nexus of arts and business. AE has received increasing attention in scholarly literature, however, as a nascent field, the boundaries, definitions, and scope remain yet to be agreed upon. One key argument, however, is that arts and cultural organisations create value that is different to the value created by commercial enterprises and traditional, growth-orientated entrepreneurs. For example, Chang and Wyszomirski's (2015) define AE as a managerial process that combines various skillsets with the view of gaining autonomy and financial independence and generating different types of values for society, such as economic, cultural and social. Whilst the Schumpeterian entrepreneur is traditionally pictured as an initiator of innovation and change, who causes creative destruction by introducing disruptive and radical innovations to seize opportunities, stimulate growth and achieve competitive advantage, the arts entrepreneur is not necessarily driven by commercial motivations (Acs *et al.,* 2009).

The juxtaposition of art and business is, indeed, a long-standing source of debate. Traditionally, arts and cultural activities stem from the desire to express artistic talent, free from economic goals. This statement echoes Adorno and Horkheimer's (1944) dichotomy of mass culture and high culture, where the business-orientated approach of mass culture is considered to undermine the value of culture. Caves (2000) introduced several economic properties that distinguish arts entrepreneurship from traditional entrepreneurship, with arguably one of the most seminal being the concept of "art for art's sake", which underlines the inferiority of financial motivations to artistic practice. Relatedly, Eikhof and Haunschild (2007) draw on Bourdieu's work (e.g., 1990) on social practice to highlight the dichotomy between "artist's logic" and "economic logic" in artistic practice and shed light

on the precarious position of artists who are forced to continuously combine these often-juxtaposing logics in their profession. The enduring attitude that art should not be harnessed for commercial purposes has made it challenging for many artists to openly embrace an entrepreneurial mind-set and adapt their artistic work and creative goals to suit the taste and preferences of paying audiences.

Another important element of arts entrepreneurship is its multidimensionality. Rentschler (2003, p.164) drawing on other cultural researchers' work, encapsulates it well:

> …a process of creating value for the community that brings together unique combinations of public and private resources to enhance social and cultural opportunities in an environment of change while remaining true to the creative mission of the organization.

Rentschler's definition is particularly interesting, as echoing Eikhof and Haunschild (2007), it reveals the interplay of somewhat contrasting aspects within AE, such as capitalism and socialism, and emphasises the non-profit ambitions of the concept. It is also noteworthy how she stresses value creation over income generation, as well as the importance of both private and public resources to improve not only cultural, but also social opportunities, while remaining loyal to the artistic mission of an organisation.

Another source of debate in field of AE is whether artists, in fact, consider themselves as entrepreneurs. Haynes and Marshall (2018) conducted research on the working practices of musicians and found that whilst musicians were routinely engaged in diverse entrepreneurial activities in their business practices and demonstrated a highly entrepreneurial mind-set, they did not wish to label themselves as entrepreneurs. In their analysis, Haynes, and Marshall (2018) concluded that this reluctance was partly because musicians viewed entrepreneurship primarily as profit-seeking, and thus not in line with their creative mission, but also because they considered that the definition of "a musician" already encompassed commercial dimensions.

Indeed, research from 2010s onwards situate arts increasingly in the commercial realm in entrepreneurship literature (Conroy *et al.*, 2016; Gafni *et al.*, 2019; Greenman, 2013; Pret *et al.*, 2016), with some scholars proposing novel, more commercially focused definitions for cultural producers. For instance, Lange (2011, p.260) introduces the definition of "culturepreneur… an urban protagonist who possesses the ability to mediate between and interpret the areas of culture and service provision."

Nevertheless, the perception of arts as non-commercial activities remains dominant. Callander and Cummings's (2021) in their review of 98 articles from various entrepreneurship journals note that in 56 percent of the articles, arts were referred to as "a domain", implying that they were considered as either a sphere of knowledge or a field of non-commercial activity, somewhat detached from entrepreneurial ambitions. In a parallel review of 106 articles from peer-reviewed art publications, in 64 percent of the articles, the authors made a connection between entrepreneurship and profit-making (Callander and Cummings, 2021). This implies that for entrepreneurship scholars, arts are seen as a nascent context of commercialisation, whereas for arts scholars, entrepreneurship is commonly considered as a process of commercialising arts.

As highlighted in 1.2.1, performing arts are a sub-sector of the creative industries, and creative organisations are somewhat distinctive with regard to their size, resources, and number of employees. For instance, in 2019, 95 percent of creative industries organizations were micro-businesses, employing fewer than ten people (DCMS, 2020), and typically, UK-based performing arts SMEs generate an annual revenue of less than £100,000 (ACE and NESTA, 2019) and often employ personnel solely on freelance basis.

When trying to grasp the elusive concept of a performing arts SME, the *Ideal type SME* framework developed by Wapshott and Mallet (2021) may prove useful. The authors argue that smaller firms typically operate in a more informal fashion and propose a host of reasons for this (see Table 2.1). Anecdotally, SMEs operating in the performing arts industry display many, if

not all, of the 'ideal type' characteristics. For instance, performing arts SMEs can rarely influence their operating environment or business models but often depend upon larger firms (Rainnie, 1989) to access their audiences; company founders typically have a strong influence over business operations; staff commonly undertake different job roles; and decision making tends to be is informal and *ad hoc*. Table 2.1 outlines the *Ideal type SME* framework, which will be used in the final thesis discussion to highlight the typical characteristics of a performing arts SME, and how these evolved during the Covid-2019 pandemic.

Characteristics	Consequence
Takers, not makers of the external environment	Individual SMEs are poorly positioned to influence their operating environment
Owner-manager prerogative	Internally, the owner-manager has significant scope to run the business as they wish
Close spatial and social proximity	Relatively small staff numbers and often single location businesses that offer opportunities for familiarity and collaboration (and observation)
Informal and ad hoc	Tend not to rely on prescriptive processes but utilise "what works". Practices commonly reactive, emphasis on flexibility
Low task specialisation	People in the business need to undertake several job roles in order to get things done
Resource poverty	Resource constraints, primarily with regard to financial resources, but also time and expertise

Table 2.1 Ideal Type SME Framework (Wapshott and Mallet, 2021)

To summarise, AE as a concept can appear ambiguous, since it is an emerging field of research, and the concept is being studied from the sometimes-opposing perspectives of arts and entrepreneurship. Also, the historical debate on the compatibility (or rather incompatibility) of arts and business continues to influence AE still today. This, however, is slowly changing as both entrepreneurship and arts-focused research is increasingly emphasising the commercial potential and value of arts for society at large, instead of adhering to the historical view of artistic practice being indifferent to the commercial realm. Furthermore, while digital transformation is sweeping across the globe at an accelerating pace, digital entrepreneurship in the context of arts and culture has emerged a nascent research area. As the focus of this research is to investigate the digital business models deployed by

performing arts entrepreneurs and enterprises, next, digital entrepreneurship literature relating to the context of performing arts is reviewed.

2.1.2 Digital entrepreneurship in the arts

Hull *et al.* (2007, p.293) describe digital entrepreneurship as "a subcategory of entrepreneurship in which some or all of what would be physical in a traditional organization has been digitized." In a similar vein, Le Dinh *et al*. (2018, p.1) consider digital entrepreneurship "as the reconciliation of traditional entrepreneurship with the new way of creating and doing business in the digital era." These broad definitions imply that any entrepreneurial activity that involves transferring a product, service, or a major part of the firm into the digital economy, can be considered as digital entrepreneurship.

Since the emergence of Web 2.0, the digital economy has widened rapidly and conquered nearly all corners of society. Firms that started as technology start-ups such as Google, Amazon, Meta, Apple and Netflix have developed into large digital platforms that dominate our everyday life and act increasingly as intermediaries of our social interactions and financials transactions (Van Dijck *et al.*, 2018). Kraus *et al.* (2018) underline how digitalisation has not only enabled the development of novel digital businesses, but also marked a transformation of existing offline businesses into online businesses, thus giving birth to digital entrepreneurship, a new breed of entrepreneurial activities.

Digital entrepreneurship theory often emphasises the manifold entrepreneurial opportunities offered by the adoption of novel digital technologies, and their positive impact on increasing accessibility, lowering barriers of entry and improving cost efficiency (Castells, 2010; Porter, 2003). Many scholars (e.g., Belleflamme *et al.*, 2012; Mollick, 2014; Nambisan *et al.*, 2017) have explored emerging digital infrastructures such as, for instance, crowdfunding platforms and social media, and highlighted how

these newly formed digital ecosystems can act as foundations of entrepreneurial activities and cultivate the entrepreneurial potential of diverse 'everyday', microentrepreneurs (Welte*r et al*., 2017). Other researchers (Gillespie, 2018; Morozov, 2011; Tufekci, 2017) have criticised the same digital platforms for the lack of data privacy, insufficient content moderation and wide-spread use of black-box algorithms.

Schiuma and colleagues (2022) discuss entrepreneurship in the digital era and observe that digital technologies have contributed to the creation a novel business environment, characterised by rapid change and fast-paced technological development, which has led to the emergence of a phenomenon of Digital Darwinism (Goodwin, 2018). This implies that only the organisations who can embrace digital transformation at every level and reconfigure their business processes accordingly will be able to survive and thrive. Thus, they note, surviving in the digital age requires a specific organisational culture and adequate managerial capabilities that can foster on-going digital transformation.

Such digital transformation culture is still rare in performing arts. Prior to the Covid-19 pandemic, the digital capture of staged performance was considered often unappealing and lacking the essence of a live event (Burgheim, 2016). These apprehensive attitudes towards digital technologies perhaps stem from the dualism originally introduced by Benjamin (1969), who considered that an artefact loses its aura and unique proprieties when reproduced mechanically. Furthermore, PAEs have previously shown limited interest in digital performance, partly due to producing 'experiential goods' that can be challenging to convey via digital technologies, and a reliance upon public funding that has sheltered them from commercial, market-driven pressures (Bakhshi *et al.*, 2010). There is also great disparity between practitioners of different art forms in terms of digital skills and capacity. The publicly funded performing arts industry has been particularly lethargic to explore the opportunities of the digital entrepreneurship, compared to, for example, the

music industry that has actively reformatted their content to fit the newest technological developments (Leyshon, 2014).

Recent Covid-19 focused recent projects have explored the use of digital technologies by arts entrepreneurs during the pandemic. For instance, Haferkorn *et al.* (2021) explored musicians' livestreaming practises, and found that during the first pandemic year, 63 percent of musicians livestreamed their content at least once. One of the key findings was that livestreaming had an indisputable impact on accessibility as it enabled musicians to reach audiences (e.g., the disabled, vulnerable, low-income and those further afield), who could not have attended the music events otherwise. In a similar vein, Misek *et al.* (2022) concluded that the benefits of digital arts and cultural programming during the pandemic were pronounced for audience groups typically excluded from taking part in cultural activities, such as D/deaf and disabled, geographically remote, neurodiverse, elderly and vulnerable. However, both Hafernkorn *et al.* (2021) and Misek *et al.* (2022) pointed out, the income arts enterprises typically earn from their digital initiatives did not have the potential replace the income from their live activities.

To gain a better understanding of the digital business models deployed by arts entrepreneurs and arts enterprises, the next section introduces the business model construct and contextualises it in performing arts.

2.2 Business models and business model innovation

Despite having received considerable interest in scholarly literature, the business model construct remains a somewhat elusive concept. There is no common agreement among scholars on its definition, perhaps because business model literature has developed largely in silos according to the varying interests of the members of the research community (Zott *et al.*, 2011). Research on business models has also faced criticism over the years.

For example, some scholars, such as Schneider and Spieth (2013), go as far as arguing that business model research is generally behind the curve and has little practical implications, formalisation or structure. Others have found, however, that technological development is connected to the increased popularity of the concept (e.g., Chesbrough and Rosenbloom, 2002). Indeed, the emergence of the digital economy and the widespread adoption of e-business have engraved the term 'business model' in managerial and academic discourse, as well as amplified the scholarly debate on the topic. This, in turn, has led to numerous attempts of classification and definition of the concept and its components, and seen the production of various business model categorisations and taxonomies.

The term business model is far from being new. Osterwalder and colleagues (2005) observe that it was first used in an academic article in the 1950s, and Wirtz (2011) highlights several examples of early usage of the term from the 1960s. However, the authors point out that in these early publications, the term was utilised somewhat randomly in different contexts to imply various meanings. In the 1970s, the term was used to describe business modelling mainly in information technology journals (Wirtz, 2011), and thus until the turn of the millennium, the business model as a concept was mostly associated with the field of computer and system modelling. Wirtz (2011. p.7) recognises information modelling and information production as the business model's conceptual roots, stressing that the strategic dimension of the concept began to gain prominence much later in the 1990s. Furthermore, Nielsen and Lund (2018) observe that in the 1990s the concept began to be increasingly associated with e-business and the rise of the New Economy, which is now commonly referred to as the digital economy.

It has been argued that the emergence of Internet and the World Wide Web in the 1990s redefined the structures of economy, which enabled firms to introduce new business strategies and new business models (Kotha, 1998). This coincides with the emergence of the term business model in business and managerial discourse, as it was commonly used in the context of the

rapidly growing electronic commerce, and in particular, the dot com bubble (Amit and Zott, 2001; Timmers, 1998). Ghaziani and Ventresca (2005) discuss different contexts in which the term business model has appeared over time and highlight a rapid increase in the usage of the term between 1995-2000. During those years, the term was mainly used in the context of value creation (24 percent), electronic commerce (17 percent), revenue model (17 percent) and tacit conception (16 percent). This confirms a clear shift from the previous context of use in computer/system modelling. Similarly, Zott and colleagues (2011) conducted a search with the term business model in general management articles and revealed a significant increase in the usage of the term between 1995-2010, which is in line with the fast-paced adoption and diffusion of the Internet.

Wirtz (2011) observes that value creation has, indeed, become one of the most important aspects of the business model concept, as the term business model seems to include an intrinsic promise of new possibilities for value creation stemming from the value chain restructuring caused by the rise of Internet and the digital economy. It is worth noting that the concept of business model was only adopted by so-called 'Old Economy companies' following the burst of the dot com bubble, which caused many technology start-ups to fail due to their inconsistent and ill-designed business models. Nevertheless, the business model as a concept continued to exist and attract interest among Old Economy firms, and as they began to broaden their business models by adding digital components, and terms such as business model innovation (BMI) were introduced into practitioner as well as academic discourse (Wirtz, 2011). In fact, many scholars seem to agree on the Internet's key role as a catalyst for business model innovation and the introduction of more innovative and experimental business models (Afuah and Tucci, 2001; Amit and Zott, 2012; Timmers, 1998).

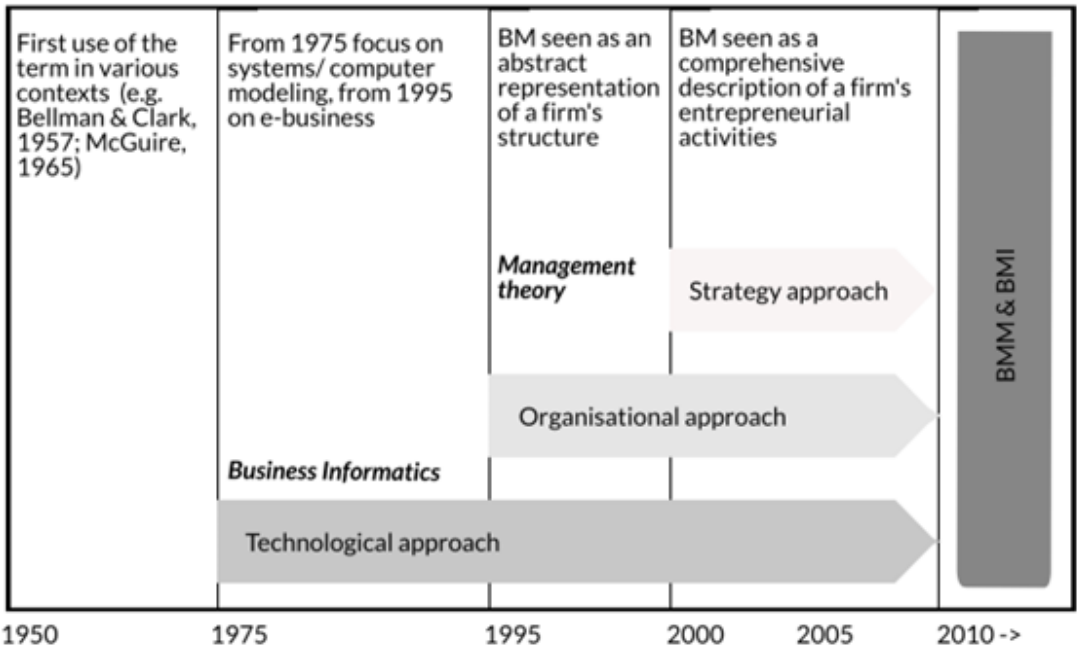
Zott *et al.* (2011) conducted a systematic review of 133 academic journal articles on business models in 1975-2009 and found that the business model literature has mostly developed in silos. Although there were significant

conceptual differences within and between the strands, four common themes were identified: 1) Business model is a novel, independent unit of analysis "distinct from the product, firm, industry, or network" (Zott *et al*., 2011, p. 3) 2) Business model explains holistically how firms do business, 3) Business model centres on the activities and partners of the firm, and 4) Value creation and value capture are both at the core of the concept.

2.2.1 Streams of business model research

The heated debate over a universally accepted definition for the business model construct is still ongoing among scholars today. As highlighted in the previous sub-chapters, the business model has diverse theoretical origins, which all contribute to its complexity. However, knowing the history and development of the construct can shed light into the various definitions proposed by academics and practitioners, and help to gain a better understanding of the different streams of research.

Wirtz (2011) proposes a chronological overview of the evolution of different approaches to business model research (see Figure 4).



The above figure highlights how business model research has developed over time and been influenced by different schools of thought. The three main approaches are the technological approach, organisation-theoretical approach, and strategy approach. Both latter approaches have origins in management theory, while the technological approach roots from systems/computer modelling. Furthermore, Pateli and Giaglis (2004) defined the three most popular areas within business model research as: 1) Definitions, 2) Components and 3) Taxonomies, and thus a brief overview of each is provided below.

2.2.1.1 Definitions

Extant research has attempted to define the nature, purpose and scope of the business model construct, as well as highlighted its relationship with other relevant concepts. Massa *et al.*, (2017) assessed extant business model definitions and proposed three main interpretations of what the term business model is used for. They argued that business models were seen as either

attributes of real businesses; cognitive or linguistic schemas or conceptual representations of how a firm operates. These distinct functions for the same concept highlight how scholars often approach the business model concept very differently, influenced by their research fields.

Indeed, there is an abundance of heterogeneous definitions, usually strongly influenced by each scholar's theoretical orientation. For instance, Timmers (1998, p.4) drawing on business informatics theory sees business model as "a system" or "an architecture". In the 1990s, the business model concept begun to lose its original link to information systems, and the organisational theory approach started to gain prominence. The business model was now seen as an independent unit, an abstract representation of an organisation's structure and an instrument for analysing how an organisation functions (Al-Debei *et al.*, 2008). Organisation as a unit of analysis has a long history that can be tracked back to the pre-industrial times. In managerial discourse, organisation as a concept became significant during the industrial revolution, thus building the cornerstones of modern management literature (Wirtz, 2011). Thus, organisational theory scholars Linder and Cantrell (2000, p.1-2) define the business model as: "The organization's core logic for creating value."

The organisational theory approach and the strategy approach in business models research are closely connected. In fact, Hedman and Kalling, (2003) posit that strategy as a construct stems from organisational theory. Since 2000, business model research has increasingly focused on strategic aspects and drawing on the organisational theory perspective of considering the business model as an independent unit of analysis and management tool, the strategy approach sees the business model as a comprehensive description of a firm's entrepreneurial activities assembled under one concept (Wirtz, 2011).

Many other definitions for the business model concept have been proposed. It has been represented, for instance, as "a heuristic logic" (Chesbrough and Rosenbloom, 2002, p.529), "a story" (Magretta, 2002, p.4), "a conceptual

tool" (Osterwalder *et al*., 2005, p.3), "an abstract representation" (Al Debei *et al*., 2008, p.4), or "the rationale" (Osterwalder and Pigneur, 2010, p.2) (see Appendix 1 for an overview of definitions). Whilst there is no consensus on the definition among academics, some agreement has been reached on the business model's nature as an independent unit of analysis, and the ability to provide a holistic overview on how a firm or an organisation creates and captures value within their network of partners and other stakeholders (Afuah and Tucci, 2001; Osterwalder *et al.*, 2005; Osterwalder and Pigneur, 2010; Zott *et al.*, 2011).

However, when examining business models in the turbulent, fast-evolving context of the digital economy, the conceptualisation of the business model as a static template or description seems somewhat simplistic and lacking in agility, particularly when seeking to encompass activities relating to research and development (R&D) and business model innovation. Indeed, recent research has begun to understand that business models cannot be static descriptions (Achtenhagen *et al.*, 2013). For instance, a stream of business model research considers the business model as a system of interdependent activities (Zott and Amit, 2010). This activity system perspective is useful when analysing business models from dynamic capabilities view (DCV) (Teece, 2018), as it places "a set of interdependent organizational activities... including those conducted by … firm, its partners, vendors or customers" at the centre of the business models concept (Zott and Amit, 2010, p.2017). The adoption of an activity-based view also enables researchers to gain a better understanding of the various microfoundational processes that allow business models to change and enable BMI.

Another dynamic business model conceptualisation is that of Doganova and Eyquem-Renault (2009, p.1560), whose definition of the business model focuses on what a business model does, rather than what it is. Doganova and Eyquem-Renault depict the business model as "a calculative and narrative device" that entrepreneurs use to "explore a market and to bring their innovation —a new product, a new venture and the network that supports

it— into existence." This definition provides a fresh departure from more traditional conceptualisations, and the interpretation of the business model as part-performative marketing device seems particularly apt for investigating emergent business models in performing arts, where they appear to be not only used to demonstrate the viability of a new product or service, but also for facilitating the interplay between PAEs and their key stakeholders.

2.2.1.2 Components

Another relevant body of research has approached the business model construct from a component-based perspective. This view considers the business model as a framework consisting of different components. A vast variety of diverse business model components has been proposed, e.g., Shafer *et al.*, (2005) identified 42 components when exploring twelve different business model definitions. However, no agreement has been reached on the factors that make a particular component or framework more appropriate than another.

Morris *et al.* (2005) reviewed the literature on business model components and revealed some key perspectives. They found that a total of 24 potential business model components were proposed, and the number of components in a business model framework usually varied between four and eight. The most popular components included: value offering (n=11), economic model (n=10), customer relationships (n=8), partner networks (n=7), internal infrastructure (n=6) and target markets (n=5). Furthermore, Morris *et al.* (2005) build upon existing literature by introducing a framework for grouping business model components composed of the following elements: offering factors, market factors, internal capability factors, competitive strategy factors, economic factors, and personal/investor factors.

Other influential business model frameworks include that of Hamel (2000), composed of four pillars (See 2.2.2), and the pivotal Business Model Canvas (BMC) by Osterwalder and Pigneur (2010), a one-page template that consists of nine components: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. The BMC is a visual tool aimed at managers for identifying the key components of their firm, and the connections and relationships between each element.

Osterwalder and Pigneur's (2010) BCM has also been a popular tool for mapping the components of arts and cultural enterprises' business models, and several arts and culture sector-specific versions have been proposed (e.g., Robinson and Lock, 2016; Rodriguez, 2016). Schiuma and Lerro (2017) stress, however, that the unique context and characteristics of the arts and cultural sector can make the transfer of frameworks created for commercial enterprises, such as the BMC, challenging. Therefore, this research opts to adhere Rex *et al*.'s (2019, p.55) definition of a business model that outlines typical components of an arts organisation's business model: "A business model describes how an organisation's assets and activities are combined to co-create and capture different types of value for individuals, groups and society through a particular value logic." Based on Rex *et al*.'s definition, Table 2.2 outlines the typical components of PAE's business model.

Activities	**Assets**	**Value logics**	**Revenue generation**	**Partners**
Producing live performances and relating activities	Expertise in creative production and distribution	Creating brand, public and artistic value (PAE and partners), social and cultural value (audiences)	Revenues generated through ticket sales and funding	Funders, performing arts venues and festivals

Table 2.2 Components of a PAE's business model (Rex et al., 2019)

Table 2.2 above will be used as a foundation for analysis when exploring the digital business models of five performing arts SMEs in Chapter 6.

2.2.1.3 Taxonomies

The third key area in business model research seeks to categorise business models into typologies or taxonomies according to various criteria. The aim of this type of research is usually to produce a list of common business model types in a specific context. Pateli and Giaglis (2004 p.312) argue that while a myriad of business model definitions and components have been proposed "the research community is yet to invent a common language, in terms not only of terminology but basically in terms of conceptualization, for discussing and analysing business models." Lambert (2015) draws attention to business model taxonomy studies as an apt tool for evaluating and analysing business models, and calls for creating a general, "master" taxonomy of business models. She also outlines a six-phase Business Model Research Schema for developing theories of business models. Osterwalder *et al.* (2005) argue that there are three overarching business model research areas: 1) Definitions and frameworks, 2) Types and taxonomies, and 3) Instances. They note that the types and taxonomies area encompasses "several types or meta-model types of business models that are generic, but contain common characteristics" (Osterwalder *et al.,* 2005. p.6), and that taxonomies often apply to specific contexts or industries.

Much of the prior research on business model taxonomies has focused on digital business models, previously also referred to as e-business models or internet business models. As the emergence of the internet enabled unprecedented ways of doing business, academics began to suggest various business model typologies and taxonomies for the digital economy. Timmers (1998) was the first to propose a taxonomy of eleven distinct internet business models, which was soon followed by many other e-business model taxonomies (see Appendix 2 for an overview). Furthermore, there has been an ongoing debate among scholars over the perceived novelty of digital business models, or whether they should just be considered as extensions or scaled up versions of traditional, live activities-based business models, as,

for example, an e-shop can be understood as an extension of a traditional brick and mortar shop (Timmers, 1998). An apparent issue with these early digital business model classifications is that due to the rapid pace of technological development, and particularly the emergence of Web 2.0, most of them are no longer relevant. Consequently, one recent strain of more business model taxonomy research (e.g., Groth and Nielsen, 2015; Lambert, 2015) has aimed to highlight the best research designs and methods for constructing a business model taxonomy, rather than proposing novel business model taxonomies.

It is noteworthy, however, that not all business model taxonomy research makes the distinction between online and offline business models. For instance, Baden-Fuller *et al.*'s (2017) typology is not on digital business models, but the four ideal types: Product, Solution, Matchmaker and Multi-sided, can be applied to both online and offline contexts (see Table 2.3). This lends support to the argument that digital business models are not necessarily novel, but digital technologies often only extend the traditional live-activities-based business models by facilitating their deployment.

Business model type	***Product model***	***Solutions model***	***Matchmaking model***	***Multi-sided model***
Description	Value is created when a consumer acquires a physical or intangible product from a producer, either directly, or through a supplier.	When a producer of goods or services directly engages with a consumer and co-creates value by providing a solution to a problem or a better experience for the consumer.	Involves three actors: the matchmaker and two consumer groups. The matchmaker creates value by saving the time of the consumers, who then can enjoy greater use value of the goods or service.	Requires three or more parties: the firm and two or more otherwise disconnected consumer groups: consumer beneficiary and paying-customer(s). The firm connects and extracts value from the interactions of the consumer groups, and this relationship is central to the multi-sided model.

Table 2.3 Ideal business model types (Baden-Fuller et al., 2017)

Business model taxonomy research in the arts is still scarce, however, the identification and classification of common, industry-specific business model

types has the potential to provide guidelines for arts practitioners when choosing business models and contribute to business model theory.

2.2.2 Distinction between business model and strategy

Another key debate in business model research, dividing opinions among scholars, is the difference between a business model and a strategy. Some argue that the two are, in fact, interchangeable (Massa *et al*. 2017). For example, Seddon *et al.* (2004) drawing on Porter's (2003) and Magretta's (2002) work, argue that the two concepts are roughly the same, and can only be differentiated by subtle nuances, meaning that strategy appears to be more focused on competitive positioning, whereas the business model rather implies a firm's core logic. Furthermore, Seddon *et al*. (2004) speculate that people coming form an information technology background favour the term business model, whereas people with a background in management tend to use the term strategy. However, noted by Wirtz (2011), the business model as a managerial concept stems from strategic management and not from computer/systems modelling.

Perhaps the ambiguity over the two concepts roots from their common origin, as Chesbrough and Rosenbloom (2002, p. 530) observe, the antecedents to the business model construct can be traced back to early strategic management literature in the 1960s. Chandler in his classic book *Strategy and Structure* (1962, p.13) defined strategy as: "the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources for carrying out these goals." Chandler argued that growth strategy determines the structure that the organisation tends to follow, thus laying the foundations for strategy-orientated business model research.

Strategy theory seeks to explain how a firm performs in a competitive environment (Porter, 1991). The competitive aspect is strongly present in

Hamel's (2000, p.65) understanding of the business model construct: "a business concept that has been put into practice", which has the potential to radically transform industries by creating value and competitive advantage for a firm. Hamel therefore asserts that strategy is, in fact, encompassed in the business model construct, which is composed of four pillars: customer interface, core strategy, strategic resource and value network. Furthermore, there are various streams of strategy research that have influenced business model research, including the resource-based-view (e.g., Penrose, 1952), market-based-view (e.g., Porter, 2001) and innovation (Schumpeter, 1943). As demonstrated in the historical overview of business model research in 2.2.1, the terms strategy and business model stem from the same origins, making them closely related and sometimes interchangeable. This research opts for the term business model instead of strategy, as it is more commonly used in practitioner discourse.

2.2.3 The impact of a crisis on business models

Another body of literature relevant to this research is the impact of a crisis on a firm's strategy and/or business models. Typically, a crisis is considered to have negative impacts on a firm's business models, in particular, in the lack of adequate crisis management (Coombs, 2007). However, a crisis may also have positive impacts on business models, for example, as seen with the new digital business models introduced during the Covid-19 pandemic. In a recent research article focusing on the impact of the Covid-19 pandemic on business models, Ritter and Pedersen (2020) argued that there are two types of business models, resilient and vulnerable, and they are impacted in six ways by a crisis. The latter types cannot manage the impacts of a crisis on their own, but require external help, whereas the former types can manage the crisis without assistance. Resilient business models are further divided into antifragile, robust, adaptive, and suspended impact types, and

vulnerable ones into aided and retired. Table 2.4 (adapted from Ritter and Pedersen, 2020) outlines the six crisis impact types.

BM types	Impact type	Description
Resilient	Antifragile	Performs better during a crisis, improves under stress, a crisis is a favourable environment
	Robust	Remains the same during a crisis, a crisis causes no change in operations
	Adaptive	Adapts during a crisis according to the opportunities available
	Suspended	Suspends operations temporarily during a crisis, but resumes operation after the crisis is over
Vulnerable	Aided	Unable to support itself during a crisis, may survive with external help, e.g., government subsidy
	Retired	Ceases completely during a crisis, may become outdated, or the outdatedness is revealed by the crisis

Table 2.4 Crisis impacts on business models (Ritter and Pedersen, 2020)

The above framework provides a helpful starting point when analysing the impact of the Covid-19 pandemic on the business models of PAEs.

Relatedly, Davidsson *et al.* (2021) investigated the Covid-19 pandemic's impact on entrepreneurial ventures, and drawing on the External Enabler Framework (von Briel *et al.*, 2018; Davidsson *et al.*, 2020), concluded that whilst the impact of the pandemic was mostly negative for the economy at large, there was also a plethora of positive impacts, and there were types of entrepreneurial initiatives and even whole industries that clearly benefitted from the global crisis. Such ventures and industries included, for example, the home delivery services, online collaboration software and services, dog training services and the vaccine industry.

Next, we come to explore the concept of value that many business model definitions situate at the core of the concept.

2.2.4 The business model and value

For some (e.g., Rappa, 2001), the value generated through a firm's business model is a synonym financial gains: "The business model spells out how a company make money", whereas others e.g., Linder and Cantrell, (2000) seem to provide a much broader conception of value by describing the business model as a logic that an organisation uses for creating value. Since this research investigates business models in the context of performing arts, it is key to emphasise the heterogeneous nature of value (e.g., social, cultural, artistic, economic) created through arts organisations' business models. Furthermore, a key question is, to whom a business model is creating value. For example, according to Rappa's (2001) rather narrow definition above, financial value is created for the firm, without any mention of the customers. Kaplan (2012), however, argues that the purpose of a business model is to create value for customers, and that the concept of value should be approached from a customer's perspective to create an attractive value proposition. This appears fitting to the context of performing arts, as a live performance creates cultural and social value for the audiences through interactions with the performers, while the organisation generates financial value from the ticket sales.

In business model research, the term value is often combined with other concepts to gain a better understanding of the different manifestations of value. Common value concepts include value creation, value proposition and value capture. To clarify these key concepts, this research adheres to the definitions provided by Rex *et al.* (2019), who researched arts and cultural organisations' business models (see Table 2.5).

Concept	*Definition*
Value creation	Identifies the activities through which value is (co)-created with the firm's personnel, partners, customers, and other beneficiaries
Value proposition	Identifies what the firm offers to their customers and how this proposition fulfils the customers' needs
Value capture	Highlights the pricing model and other mechanisms related to cost that the firm uses to generate revenue

Table 2.5 Key terms relating to value and business models

The above definitions encapsulate the core elements of PAEs' value creation process and will be utilised when outlining the value creation process of SME PAEs in Chapter 6.

2.2.5 Business model innovation

As highlighted in Figure 2.1, due to increased competition across markets since the beginning of the new millennium, there has been a shift from investigating the business model construct to exploring the emergent research areas such as business model innovation (BMI). The concept of BMI is centred upon transforming the value proposition and re-structuring the entire firm, as emphasised by the definition suggested by Casadesus-Masanell and Zhu, (2013, p.1):

> ...BMI refers to the search for new business logics of the firm and new ways to create and capture value for its stakeholders and focuses primarily on finding new ways to generate revenues and define value propositions for customers, suppliers, and partners.

In their systematic review of BMI literature published between 2000-2015, Foss and Saebi (2016) identify four core research streams that have developed mostly in silos. The first body of literature focuses on proposing definitions and conceptualisations for BMI, which typically vary from viewing BMI either as a process or an outcome. The second research stream considers BMI as a dynamic process and centres upon linking the concept to

organisational change through highlighting the role of capabilities, learning and leadership in BMI. The thirds research stream sheds light into the outcomes of organisational change processes, *i.e.,* novel, and innovative business models, usually investigated in a specific industry context, and the fourth research stream addresses the implications of BMI on the performance of a firm.

Furthermore, Foss and Saebi (2016, p.17) propose a definition for BMI as "designed, novel, non-trivial changes to the key elements of a firm's business model and/or the architecture linking these elements" and argue that BMI research expands business model research by adding a dimension of innovation, but note, however, that extant literature does not have clear theoretical underpinnings and lacks empirical inquiries. In particular, questions on the antecedents, drivers and enablers of BMI, manifestations of BMI on different organisational levels, as well as external factors impacting the achievement of sustained competitive advantage through BMI, remain yet to be answered.

Drawing on Foss and Saebi's (2016) definition above, it can be assumed that BMI requires a significant degree of novelty and creativity as it involves seeking novel value creation and value capture processes, deployment of which will lead to notable changes in a firm's business model. Therefore, in the recent years, BMI research has become one of the key research streams within innovation research, as it centres upon on "how innovations are executed" (Kraus *et al.*, 2020, p.2). For practice, this implies that BMI typically occurs as a response to fast-paced change in a firm's external environment and can enable the emergence of novel value creation practices. Krauss and colleagues (2020) also consider the development of products and services as the main driver of BMI and describe how extant research can be divided into three overarching dimensions that influence BMI: organisational factors, environmental factors, and societal factors.

BMI and digital transformation are firmly intertwined, as advancements in digital technologies require firms to consider alternative and sometimes new

business models. Indeed, Verhoef and Bijmolt (2019) define digital transformation as the way in which "a firm employs digital technologies, to develop a new digital business model that helps to create and appropriate more value for the firm." The ability to design and deploy sustainable, profitable business models is crucial to the longer-term survival and growth of any firm, but particularly in high-velocity environments, such as the digital economy, engagement in BMI is typically required to respond to competition and adapt to the changing external conditions of the firm (Teece, 2018, Teece, 2010, Teece and Linden, 2017). Yet, as noted by Bouncken *et al.* (2021), there remains a gap in knowledge in digitalisation of business models and the innovation that occurs in this context, and studies that focus on SMEs operating in traditional industries are particularly scarce (Matarazzo *et al.*, 2021).

Further, BMI manifests in different forms in different-sized organisations. Larger firms are typically in a better position to engage in BMI than SMEs, as they possess better financial, human, and technological resources as well as more adequate R&D facilities. Thus, the key differences between large enterprises and SMEs typically root from the level of resources they have at their disposal. However, since SMEs' contribution to economy has long been considered significant, it is important to examine the forms BMI may take outside the corporate environment. Extant research has highlighted how SMEs struggle to adopt new technologies due to the lack of essential resources, skills, and understanding of potential opportunities available in the digital economy (Giotopoulos *et al.*, 2017). Lack of resources can be a key barrier of BMI for SMEs, and thus the role of dynamic, managerial capabilities is pronounced, when investigating BMI in the SME context (Ibarra *et al.*, 2020). Extant research has demonstrated that BMI is crucial for SMEs, as it has significant influence on performance (Anwar *et al.*, 2018; Futterer *et al.*, 2018; Kim and Min, 2015). BMI also contributes positively to sustainability by helping SMEs to seize new business opportunities (Evans *et al.*, 2017; Yang *et al.*, 2017) and supports SMEs in achieving competitive advantage (Cucculelli and Bettinelli, 2015; Visnjic and Van Looy, 2013).

The heterogenous nature of the creative industries, where organisations vary from large multinationals to micro-businesses, offers an optimal setting for exploring BMI. Li (2020) conducted a study on 80 creative organisations and found that digital transformation was a driver of BMI as it offered the firms a wider choice of potentially viable business models. However, most of the business models under investigation were neither new nor innovative, in fact, Li notes that business model innovations are rarely based on novel business models or unprecedented ideas. He concludes that a digital business model can be considered novel in the following three cases: 1) Because the idea is new and unprecedented (this is, however, rare as there are very few completely novel ideas), 2) The idea for the business model is borrowed from one sector or domain and adopted to another one, 3) Digital technologies have allowed the scaling up of a traditional business model by removing barriers and increasing impact.

Drawing on Li (2020), the next section will explore the various way digital technologies may impact business models and highlight the key areas of digital economy research related to this research project.

2.2.6 Digital business models

There is a rich body of research exploring the impact of digital technologies on business models and the characteristics of digital business models. Veit *et al.* (2014) argue that a business model can be defined as digital if digital technologies fundamentally change its value creation and value capture mechanisms. Others (e.g., El Savy and Pereira, 2013; Weill and Woerner, 2013) concur on that a digital business model is a distinct type of a business model based on exploiting digital technologies. In today's increasingly online society, digital business models have become dominant in industries such as media, retail, and financial services.

The changes brought upon business models by digital technologies are considered mostly positive in extant literature. Many (e.g., Afuah and Tucci, 2001; Amit and Zott, 2001) agree that digitalisation has enabled the emergence of more experimental and innovative business models and created new entrepreneurial opportunities. Massa and Tucci (2013) elaborate and note that the fast-paced technological development has created unforeseen innovations and unique value creation methods. Kraus *et al.* (2018) reflect upon digital transformation and note that firms are now required to design and deploy a wide array of digital activities within their business models to seize entrepreneurial opportunities. Therefore, the digitalisation of business models involves both opportunities and challenges for firms, as the emergence of novel digital business models will also inevitably lead to the destruction of traditional business models and industries.

Li (2020) reveals an emerging trend relating to the adoption and deployment of digital business models. He argues that instead of implementing a single business model, digital technologies allow firms to increasingly adopt multiple digital business models as a portfolio to offer different products to different market segments or introduce their own multi-sided markets. Since this research project focuses on digital business models in the context of performing arts with a particular interest on those business models that emerge in the times of crisis (*i.e.* when traditional business practices are made temporarily redundant), two bodies of literature are briefly highlighted below based on their relevance to the research topic: 1) Digital platforms and social media, and 2) Business model and digital business model research in the arts.

Digital economy research has previously explored the nature of digital platforms and their role in society. Digital platforms can be considered as digital artefacts embedded in the digital economy and defined as "a technology architecture that allows the development of its computing functionalities and allows the integration of information, computing and

connectivity technology platforms available to an organization" (Sedera *et al.*, 2016, p.4). Most large digital platforms, e.g., social media platforms, have emerged from Web 2.0 technologies that allow users to create and share content in real-time. Social media platforms are thus under constant flux of users editing, interacting and distributing content on them, while the platform engineers iteratively reprogram the infrastructure to best meet the users' needs and match them with the financial value creation goals of the digital platform (Kallinikos *et al.*, 2013).

Digital platforms are not neutral environments, but typically managed by large corporations. Dominant, global platforms such as Google, Facebook and Amazon implement a multisided platform (MPS) business model (Øverby and Audestad, 2021). The MPS business model is a complex and dynamic construct, where value is generated from the interactions of two or more user groups that take place on the digital platform. Many consider digital platforms as more than merely software-based media, e.g., Andersson Schwarz, (2017) argues that digital platforms are governing systems, arenas for social action and intermediaries of economic transactions.

Van Dijck *et al.* (2018) introduce the concept of a platform society. They describe how digital platforms form ecosystems that penetrate every level of society and shape social life. There are parallel platform societies that exist on a global scale, for instance, the US-based platform society, governed by the five dominant technology corporations: Google, Amazon, Meta, Apple, and Microsoft. China, on the other hand, has its own ecosystem, controlled by the government, and dominated by companies such as Alibaba, Tencent and Baidu. Van Dijck *et al.* (2018) express concerns over the position of Europe in between these two powerful platform societies, and fear that it is on the verge of losing its public values as the dominant platforms keep growing despite repeated issues with data protection and content moderation. This strongly echoes Tapscott's (2000) view on digital business models as disruptors of demographic revolution and transformers of the culture of work.

Nooren *et al.* (2018) highlight the manifold dilemmas digital platforms create for policymakers. These are particularly apparent in the areas of innovation, freedom of consumer choice, data privacy and freedom of speech. Nieborg and Poell (2018) point out that "platformization" has disrupted the political economy of the culture and creative industries, as digital platforms now play a key role in the production, distribution, and circulation of cultural content. This has created a phenomenon of "platform contingency", meaning that art producers have become dependent on the technical assets provided to them by the dominant digital platforms. Platforms have also transformed traditional business models by transforming audiences into media producers, or "prosumers", who are increasingly involved in producing content for others while interacting on digital platforms (Andersson Schwarz, 2017; Ritzer and Jurgenson, 2010; Toffler, 1981).

For arts producers, social media and other third-party platforms have traditionally been a popular choice for distributing cultural content online. Following the coronavirus pandemic, however, there are signs that this is slowly changing as arts entrepreneurs now often choose to distribute their content on their own digital platforms, where they have more control over copyrights and the monetisation of their digital assets. Extant research has highlighted how SMEs have started to increasingly adopt digital platforms with the view of integrating digital technologies in their processes and products (Xie *et al.*, 2022). It has been revealed that the adoption of digital platforms has largely supported SMEs in digital transformation and helped them to develop novel value creation activities (Li *et al.*, 2018; Warner and Wäger, 2019). This may also be beneficial for digital BMI, as all business model innovation roots from value creation innovation, a concept which implies how value is created along the value chain depending upon resources and capabilities available in organisational processes (Achtenhagen *et al.,* 2013, Ibarra *et al.,* 2018). Moreover, it has been argued that in a challenging business environment, SMEs are required to innovate and pivot towards digital platforms in order to boost value creation (Truant *et al.*, 2021).

2.2.7 Business models in the arts – key debates

A body of literature has explored arts and cultural organisations' business models, BMI and more recently their digital business models. The key debates in the field centre upon arts organisations ability (or inability) to design economically sustainable business models that their business models to reduce their reliance on public funding and enable them to generate more significant and accountable societal impact (Schiuma and Lerro, 2017; ACE, 2011). In particular, there is a growing call for arts and cultural organisations to explore the development and adoption of new business models (Munoz-Seca, 2011; Munoz-Seca and Riverola, 2010; TEH – Trans Europe Halles, 2015). Indeed, cultural entrepreneurship researchers (Muñoz-Seca, 2012; Muñoz-Seca and Riverola, 2009; Muñoz-Seca and Riverola, 2010; Schiuma and Lerro, 2017) have argued that for the arts and cultural sector to become more impactful and sustainable, it is vital that arts producers expand their innovation capabilities, and transform their traditional, often unsustainable business models.

Many researchers (e.g., Hume *et al.*, 2006; Muñoz-Seca and Riverola, 2009; TEH - Trans Europe Halles, 2015) have pointed out the economic and policy-imposed need for innovative business models and called for increased strategic planning in the arts and cultural sector. However, as noted by Schiuma and Lerro (2017), typically the approaches adopted by arts and cultural enterprises, and the design and implementation of new business models tend to be incoherent and unsuccessful. More recently, Walmsley *et al.* (2022) explored the arts and cultural sector during the Covid-19 pandemic and concluded that in order for digital BMI to be successful, it needs to be firmly embedded in the arts enterprises' audience development strategy.

Whilst the business model concept has received increased attention among arts funders, art managers and practitioners (e.g., ACE, 2013; TEH -Trans

Europe Halles, 2015) during the last decade, academic research on arts and cultural organisations' business models remains scarce. On the other hand, it appears that sector-support and intermediary organisations such as International Network for Contemporary Performing Arts (IETM), Arts Council England (ACE) and Culture Hive have taken the lead in contextualising the business model construct and BMI methods to the arts and cultural sector. Rodriguez (2016, p.9) points out that for both profitable and non-profitable organisations, a business model is above all "a sustainable way of delivering products and services." He elaborates that in the context of arts and culture, sustainability is primarily understood as an ambition to survive whilst being successful in producing value for the organisation and society at large.

Furthermore, Dümcke (2015) argues that the reason the lack of research on business models in the cultural and creative sector is because most business models that have emerged as a result of digital transformation and societal change, are still in the experimental phase. She does, however, propose a broad typology of new business models for the creative and cultural sector, where she identifies the digital capture and streaming of live performance as the leading new business model for performing arts.

Scholarly research on the characteristics, components and types on arts and cultural organisations' business models and digital business models as well as BMI remains still limited today. A rare research article focusing on performing arts and BMI is that of McDonald *et al*. (2021), who investigated non-profit PAEs in the USA, and found that PAEs' business models were particularly vulnerable to changes in their external environment, and such changes could easily render their business models obsolete. Furthermore, McDonalds and colleagues discovered that although PAEs engaged in BMI with the goal of improving their value creation/value capture and achieving long-term viability, the process was primarily guided by their social purpose, and not financial motivations.

A key reference point for this research are the findings from the European *Creative Lenses* project (Rex *et al.,* 2019) that explored sustainability issues

in arts and cultural organisations and focused particularly on how arts enterprises can achieve financial sustainability without compromising their mission and values. Rex and colleagues investigated business models in arts and cultural industries and identified common features differentiating arts and cultural organisations' business models from those implemented by commercial enterprises: 1) Arts organisations' choice of business models are often determined by the economic, political, social, and cultural contexts of the organisation. 2) Arts organisations generate and capture different types of value through their business models, e.g., artistic, social, cultural, and economic, and that 3) Arts organisations commonly implement several – sometimes conflicting– business models in parallel.

Building on Baden-Fuller *et al.'s* typology (2017), Rex *et al.* (2019) introduced six business model types commonly implemented by arts and cultural organisations (see Table 2.6).

BM type	***Activities***	***Assets***	***Revenue generation***	***Underlying model (Baden-Fuller et al., 2017)***
Performer	Creating a show, or performing in one	Creative and production expertise	Ticket sales, artist fees	Solutions model: the creator and audience are present during the performance
Product	Writing music or creating physical artwork	Creative and production expertise	Ticket sales, artist fees, licensing of intellectual property	Product model: the creator produces the artwork, but is not directly involved in the audience experience
Commissioner	Commissioning a performance or another cultural event, connecting creators with audiences	Expertise in networking, relationships, and data	The commissioner pays a fee to the creator and generates income from funders and/or ticket sales	Matchmaking model: the arts organisations is a mediator between creators and audiences
Landlord	Renting out venues, e.g., studios, offices or working spaces	Access to venues and facilities management	Rental income, in-kind (non-financial) income	Solutions model involving the venue, tenants,

				and other users of the space
Hub	Running a venue or festival with multiple intertwining activities	Expertise in cultural programming, audience development, staff expertise and data	Income from funders, ticket sales	Multi-sided model: value is generated from two or more participant groups, although this value is not always financial
Service	Delivering an event, e.g., running workshops or courses, running a café or bar	Expertise in teaching, training, or providing catering services	Income from delivering services	A solutions model: service provider and customer are present during the service

Table 2.6 Common business models for arts organisations (Rex et al., 2019)

The above categorisation, drawing on business and management literature, marks one of the first attempts to categorise arts and cultural organisations business models. However, it is strongly focused on live activities-based business models, and thus could not be used for categorising digital business models deployed by PAEs during the Covid-9 pandemic. Therefore, a novel framework (see 3.4.2), was created during the data collection period, and used to categorise digital business models identified during the research.

According to Owen and O'Dair (2020), the existing body of research dedicated to exploring business models within the context of arts organisations and ventures has been subject to criticism due to a perceived lack of comprehensive effort. Specifically, there has been only few initiatives aimed at introducing frameworks that categorise the business models of arts and cultural enterprises, or systematically identify their key components.

In response to this identified research gap, this research endeavours to address and contribute to the ongoing discourse by conceptualising the business model construct to performing arts and gathering rich empirical data on PAEs' business models. In doing so, it seeks to establish a foundational framework for the analysis of digital business models and their integral components within the context of performing arts. By leveraging empirical data gathered from a diverse array of performing arts enterprises and

individual experts, the research aims to provide valuable insights into the structures and dynamics of digital business models within performing arts. Through this exploration, it aspires to offer a robust starting point for further discussions, theory building, and investigations in the nexus of arts and business.

2.3 Dynamic capabilities

The final section of the literature review provides an overview of the dynamic capabilities (DC) research relevant to this research. Dynamic capabilities view (DCV) is one of the most researched and debated topics in the domain of strategic management (Vogel and Güttel, 2013), and has also influenced other disciplines such as entrepreneurship, marketing, and human-resources management (Barreto, 2010).

2.3.1 The concept of dynamic capabilities

Capabilities are the 'invisible assets' (Itami and Roehl, 1991) of a firm that allow it to reconfigure and deploy its human, physical and technological resources (Amit and Schoemaker, 1993). In their seminal work, Teece, Pisano and Shuen (1997, p.516), define dynamic capabilities as: "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. This definition marked the starting point for a varied and rapidly expanding field of research that continues to attract the attention of management scholars still today.

Following Teece *et al.*'s (1997) work on DCs that centred upon a firm's resource reconfiguration capability in high-velocity environments, several conceptualisations have been offered for DCs with the aim to revise, extent and reinterpret the concept (see Appendix 3 for an overview). The DCV draws influence from several pivotal streams of literature, such as Schumpeter's

(1943) theory of creative destruction, Cyert and March's (1963) behavioural theory of the firm, and Williamson's (1975) theories on markets and hierarchies. These underlying theories may help to explain how resources and capabilities evolve and fluctuate during a firm's life span (di Stefano *et al.*, 2010).

Teece and colleagues (1997) argue that the DCV stems from evolutionary economics (Nelson and Winter, 1982) and extends the Resource-based View (RBV) (Barney, 1991, 1986). The RBV posits that a firm's sets of resources determine its performance and help to gain sustainable competitive advantage, because valuable sets of resources are unique or rare and thus difficult and costly to imitate (Barney, 1991). Therefore, according to RBV, firms are heterogenous due to their varying levels of resources, which guide them towards implementing diverse types of strategies (Barney, 1986, 1991). The RBV framework is widely used in strategic management literature, for example, for identifying key resources that help firms to achieve competitive advantage.

However, the RBV has been subjected to increasing criticism for its many weaknesses, particularly with regard to its vague definitions for the concepts of value and resources, and its limited understanding of the nature of competitive advantage (Kraaijenbrink *et al.*, 2009). Teece *et al.* (1997) argue that the DCV extend the RBV, because the RBV alone cannot explain how competitive advantage is achieved and sustained in fast-evolving environments of, for instance, technological change, and therefore unique and hard-to-replicate DCs are needed to achieve sustained competitive advantage.

Many researchers (e.g., Helfat and Winter, 2011; Winter, 2003; Zahra *et al.*, 2006) also make the distinction between lower, 'zero-level' capabilities and higher-order capabilities (Zahra *et al*., 2006) or first-order and second order capabilities (Danneels, 2008) of a firm. For Example, Winter (2003, p.992) describes the lower, zero-level capabilities of a firm as routine-like, "how we earn a living now" capabilities, and Helfat and Winter (2011) explore the

operational and dynamic capabilities of a firm and argue that the former enable firms to maintain *status quo,* whilst the latter actively contribute to a firm's transformation of *modus operandi*.

2.3.2 Categorising dynamic capabilities

In the attempts to expand the original conceptualisation by Teece *et al.* (1997), researchers have proposed different categorisations for DCs. For instance, Wang and Ahmed, (2007) offer a classification system, labelling the three main components of DCs as adaptive capability, absorptive capability and innovative capability. Teece (2007) argues that DCs can be further classified into three higher-order capabilities and various microfoundations, and Barreto (2010, p.271) introduces a typology of DCs consisting of the following four dimensions: "the propensities to sense opportunities and threats, to make timely decisions, to make market-oriented decisions, and to change the firm's resource base." All these classifications expand the original conceptualisation of DCs (Teece *at al.,* 1997) by placing more emphasis on the sensing and seizing of opportunities and threats, thus making these competences an integral part of a firm's DCs.

This research opts to build on Teece's (2018) overarching classification of DCs, highlighted in further detail below. According to Teece (2018), higher-order DCs include the sensing, seizing, and transforming competences of a firm. These usually emerge on executive level and are required for the design and sustained deployment of business models. The act of sensing describes a firm's ability to identify and understand new trends within its industry and recognise business opportunities that stem from such trends (Achtenhagen *et al.*, 2013). According to Teece (2007, p.1322) the typical opportunity and threat sensing activities of a firm include the "scanning, creation, learning and interpretive" practices across different markets and technologies, and usually the investment in Research and Development (R&D) activities.

Following the sensing of a new opportunity, firms must address it through the development of novel products, services, and processes (Teece, 2007). Thus, seizing competences indicate an organisation's preparedness to reconfigure and adjust its business model to seize novel business opportunities in a sustainable manner (Mezger, 2014). Seizing is rooted in knowledge integration and utilisation, which consists of both acquiring new knowledge and merging it with existing knowledge resources. Drawing on this knowledge, resources and competences are reconfigured in a way that supports the seizing of opportunities identified, with the view of capturing value through investment and business model management. Teece (2007) posits that firms can seize new opportunities by developing new products, services and processes that can be integrated in their business models. This usually requires financial capital as well as investment in development and commercialisation. In the context of non-profit performing arts, the investment required for new product/service development is usually sourced through fundraising.

Finally, the third higher-order DC, transforming (or sometimes reconfiguring), is a process that typically takes place in more established firms. Transforming involves realigning a firm's overall structure, business model and culture in a manner that enables it to respond to future challenges and opportunities (Teece, 2018). As noted by Teece (2007), such reconfiguring is key in achieving sustainability and growth when a firm grows and technologies evolve, which is usually the case when a firm operates in a high-velocity environment, such as the digital economy. Furthermore, as argued by Day and Schoemaker (2016, p.65) external networks and partnerships are an important component of transforming capabilities, as an organisation with "transforming capabilities is one where agile, entrepreneurial mind-set is actively cultivated within, with a broad expansive approach to external network-building."

In addition to the three higher-order DCs, which are deployed at an executive level, firms typically possess a host of "microfoundations" (Teece, 2007) that

manifest on a team or individual level. These are second-order DCs that include all the processes, organisational systems, skills, and activities within a firm that form the foundation for sensing, seizing, and transforming capacity building and impact decision making, particularly in uncertain conditions. Drawing on Teece (2007; 2018), Day and Schoemaker (2016) and Barreto (2010), Table 2.7 outlines the higher-order DCs and the common microfoundations related to the context of performing arts.

Higher-order DC	**Microfoundations**
Sensing • **Identifying opportunities and threats** • **Understanding business trends**	• R&D (Teece, 2007) • Opportunity recognition (Teece, 2007) • Researching competitors and industries (Teece, 2007) • Experimentation and use of new technologies and innovations (Teece, 2018) • Assessing customer needs (Teece, 2007)
Seizing • **Engaging in business model innovation to seize new opportunities** • **Reconfiguring business models based on the opportunities and threats identified**	• Business model design, development, and management (Teece, 2007) • Ability to make unbiased decisions about new products and services (Barreto, 2010) • Ability to secure funding for new products, services, and processes (Teece, 2007)
Transforming • **Realigning business models, culture, and structure to respond to future challenges and opportunities**	• Realigning existing resources and capabilities (Teece, 2007; Barreto, 2010) • Innovating new products, services, and business models (Teece, 2007) • Recruiting and retaining experts • Building new in-house skills and capacity (Teece, 2007) • Building cross-sectoral networks and partnerships (Day and Schoemaker, 2016)

Table 2.7 Overview of higher-order DCs and microfoundations within a PAE

However, Teece (2007) notes that not all enterprise-level practices can be considered as DCs, for instance the implementation of sector-wide, well-established practices is not a manifestation of DCs, as such practices are already widely adopted by competitors, and thus do not enable a firm to achieve competitive advantage. In a similar vein, Winter (2003) posits that ad-hoc problem solving is not a dynamic capability, as it is not an

organisational routine or practice, but something that occurs randomly with in firm.

2.3.3 Critique on the concept of dynamic capabilities

Over 25 years have passed since Teece *et al.*'s (1997) original definition of dynamic capabilities. During this time, DCs as a research field has expanded rapidly, but also faced recurrent criticism. For example, Kraatz and Zajac (2001, p. 653) argue that "while the concept of dynamic capabilities is appealing, it is a rather vague and elusive one, which has thus far proven largely resistant to observation and measurement."

Key debates in the field of DCs typically relate to the nature of DCs and the lack of a universally accepted definition, as well as to the impacts and outcomes of DCs (Easterby-Smith *et al.*, 2009). Indeed, there seems to be some disagreement among scholars on the core nature of DCs. Whereas in the original definition, Teece *et al.* (1997) refer to DCs as 'abilities', DCS have also been considered as 'routines' (Winter, 2003) or 'rules' (Eisenhardt and Sull, 2001). Additionally, many researchers (e.g., Ambrosini and Bowman, 2009; Eisenhardt and Martin, 2000; Helfat, 2007) consider DCs as processes, and Helfat *et al.* (2007) argue that this conceptualisation of DCs is particularly useful because it encompasses both managerial and organisational processes.

Eisenhardt and Martin (2000) elaborating on the argument that the DCV extends the RBV, posit that DCs are composed of a variety of specific processes within a firm. Such processes, they describe, include, for example, new product development, strategic decision making, resource allocation and knowledge creation. This view of DCs as processes appears particularly fitting when exploring digital BMI in performing arts.

There has also been a longstanding debate over the effects and outcomes of DCs, in particular, relating to the original argument that DCs are unique and

strongly linked to a firm's competitive advantage (Teece *et al*., 1997). Teece (2007, p. 1341) later extended this statement to include the disruptive implications of the fast-evolving digital technologies: "[DCs] are the foundation of enterprise-level competitive advantage in regimes of rapid (technological) change." However, other researchers have viewed DCs from a very different perspective. Most importantly, Eisenhardt and Martin (2000) propose that DCs simply represent 'best practices' that are identifiable, have commonalities across different firms, and are therefore not unique.

Thus, Peteraf *et al.,* (2013) suggest that two distinct schools of thoughts have emerged around these conceptual differences. The Teece's school (e.g., Teece and Pisano, 1994; Teece et al., 1997; Winter, 2003), portrays the DCV within an evolutionary framework, including a distinctive Schumpeterian dimension. In contrast, Eisenhardt and Martin (2000) conceptualise dynamic capabilities as mere responses to volatile external conditions, where DCs manifest as best practices. While Teece's perspective implies that dynamic capabilities can serve as a source of competitive advantage, Eisenhardt and Martin (2000) assert that dynamic capabilities can only offer temporary competitive advantages.

The debate over the relationship between competitive advantage and DCs is further complicated when exploring DCs in the context of arts and culture, where firms may not aim to achieve competitive advantage, but rather seek financial autonomy and self-sufficiency. Therefore, instead of focusing on how DCs can help firms to gain competitive advantage, this research opts to direct more focus on the nature of microfoundations of DCs in PAEs, and how they enable business model innovation.

2.3.4 Dynamic capabilities and business models

Many external and internal factors influence the development and emergence of dynamic capabilities within a firm (Eriksson, 2014). Zahra *et al.* (2006)

note that most literature examining DCs has focussed on established firms, and less attention has been directed to SMEs and novel entrepreneurial ventures, and thus our understanding on the antecedents of DCs in new firms is limited. Since PAEs are typically SMEs (Creative Industries Federation, 2018), this research is particularly interested in how DCs emerge in the context of new enterprises and SMEs, where resources and knowledge bases are more limited than in established firms (Waphott and Mallet, 2021). Naldi *et al.* (2014), researching DCs in SMEs operating in the creative industries, propose that sensing and seizing capabilities are particularly important for SMEs and younger firms for them to be able to innovate whilst continuing to create value through their core business, whilst resource configuration capability is more critical to established, mature firms, who are required to transform their existing ways of operating.

Extant research has suggested that DCs are also linked to market dynamism (Eisenhardt and Martin, 2000), and thus the industry/market context is an important factor in the analysis of the DCs of a firm. When investigating digital business models in the creative industries and more specifically the performing arts sector, the market can be characterised as a high-velocity, turbulent of nature, with blurred boundaries and fast-evolving industry structures (Wang and Ahmed, 2007). This was particularly the case during the peak period of the Covid-19 pandemic in 2020-2021, when the closure of cultural venues rendered traditional business models temporarily redundant and the uncertainty over the foreseeable future transformed the dynamics of the performing arts industry drastically for a period of two years and beyond. In such uncertain conditions, firms are required to constantly transform and reconfigure their existing capabilities as well as sense and seizing new opportunities at a rapid pace (Sirmon *et al.*, 2007). Therefore, the pandemic years offered an exceptional, unprecedented context for investigating how DCs emerge in performing arts, because PAEs were required to intentionally change their capabilities to ensure survival and sustained value creation.

Teece (2018) also draws attention to how a firm's business models, strategy and DCs are firmly interlinked, and argues that in order to develop DCs, firms need to remain alert to the changes in their business environment (market) and iteratively reconfigure their existing resources and capabilities. This implies that BMI can only occur if a firm possesses strong DCs, as the ability to engage in BMI is, in fact, an output of a firm's DCs (Teece, 2018). Business models can be considered as dynamic themselves, for instance, Demil and Lecocq, (2010) examine the dynamics of the interplay between different business model components, and Achtenhagen *et al.*, 2013 argue that to achieve sustained value creation, even highly successful firms are required to actively adapt and change their business models in response to their competitors' actions. Moreover, Čirjevskis (2019) posits that the various components of business models are strongly influenced by DCs, for instance, sensing capabilities can impact the identification of new customer segments and key activities, seizing capabilities may help to identify and seize new key resources and key partners, and lastly, transforming capabilities can impact the choosing of distribution channels and the management of customer relationships. This, in turn, may lead to the creation of new cost structures, revenue streams and value propositions. Therefore, this research considers strong DCs as an essential building block for a firm to adjust and renew its business model, to engage in BMI, and to achieve sustained value creation.

To conclude, it can be posited that arts entrepreneurship, dynamic capabilities and business models as research areas are closely intertwined, and it is necessary to combine them in order to explore how digital BMI occurs in performing arts. In this chapter, literature relevant to identifying and categorising digital business models implemented by performing arts organisations has been reviewed, and the implications of situating the key concepts of arts entrepreneurship and business model research in the unique context of performing arts have been discussed. Furthermore, in 1.2 an overview of pertinent grey literature by policymakers and other practitioner-aimed research by sector-support organisations was presented to highlight

the arts funders' impact on performing arts organisations' choice of digital business models.

The literature review revealed an apparent gap in scholarly literature investigating PAEs' digital business models and the dynamic capabilities that enable digital business model innovation. The framework by Rex *et al.* (2019) of common business models for arts and cultural organisations was explored and identified —once adapted to the digital economy— as a potential tool for categorising digital business models. Furthermore, a template for a conceptual model was developed based on the Teece's (2007) framework of DC processes and the components of arts and cultural organisations' business models as defined by Rex *et al.* (2019). In this model, Teece's (2007) three higher-order DCs: sensing, seizing, and transforming, are combined with the key components of arts and cultural organisations' business models as defined by Rex *et al.* (2019). Figure 2.2 outlines the three by four matrix model.

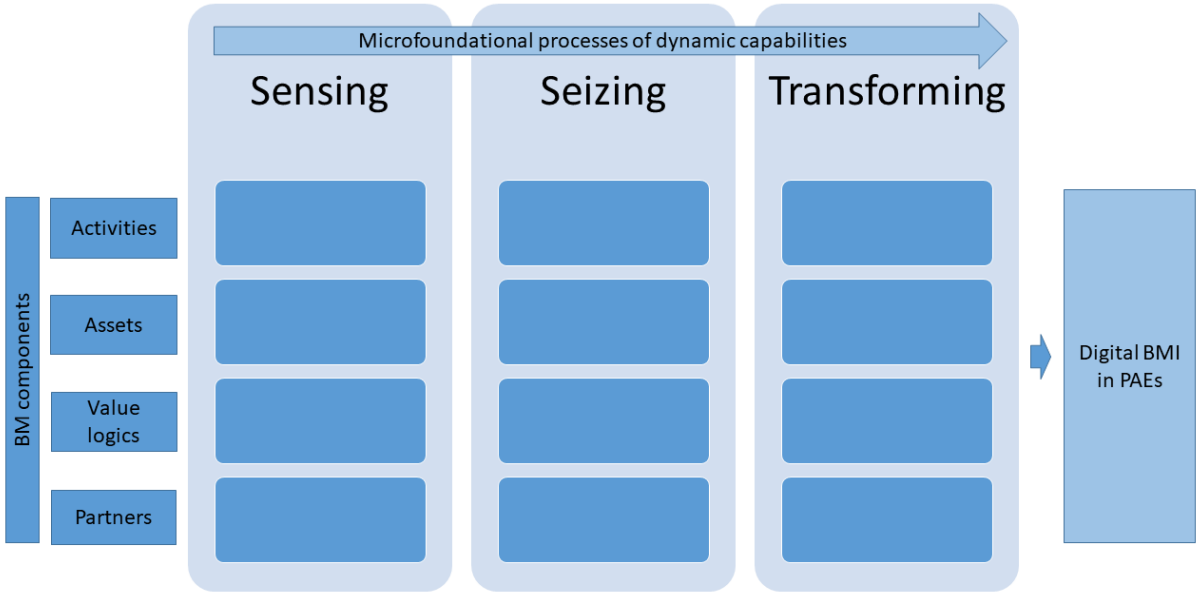


Figure 2.2 Model for identifying the impact of DC on PAES' digital business models

The model in Figure 2.2 will be used in Chapter 6 as a template for identifying the impact of DCs on the different business model components and the change in DCs that allows PAEs to engage in digital BMI.

2.4 Chapter summary

In this chapter, arts entrepreneurship, business model and dynamic capabilities literature was reviewed to gain a better understanding of how PAEs can develop and deploy business models in the digital economy, and how DCs contribute to PAEs' digital BMI. In particular, the literature review situated the concepts of business model and digital business model in the context of performing arts and established Rex *et al.'s* (2019) framework of common business model for arts and cultural organisations as a starting point for extending the research into the digital realm. The literature review also revealed notable gaps in knowledge relating to the entrepreneurial practices of performing arts SMEs, digital business models and digital business model innovation in performing arts, and the DCs that enable PAEs to engage in digital BMI. This gap will be addressed through the research questions presented in 1.3. In the following chapter, the methodology and the methods used in this research will be discussed, information will be provided on the research ethics, and reflexive narratives will be included to highlight how the inquiry was conducted.

Chapter 3 Methodology

The chapter begins by referring to the aims of this research project (see 1.1), which were established in Chapter 2 through the identification of gaps of knowledge in extant research on the digital business models of performing arts enterprises (PAEs). It then progresses to highlight the philosophical underpinnings of the research project and the chosen research philosophy. Next, the chapter moves onto describing why a multistage, multimethod approach was considered as an appropriate methodology for the inquiry. Finally, the research design, research ethics and research methods utilised in the different phases of the project are discussed, and reflexive narratives of events are provided for each research stage to clarify how the inquiry evolved.

3.1 Unit of analysis

In social research, 'a unit of analysis' refers to the entity or phenomenon that is being analysed. The main foci of the research were the emergence of dynamic capabilities (DCs) in performing arts enterprises (PAEs) during the Covid-19 pandemic and the resulting digital BMI that enabled the design and deployment of novel digital business models in performing arts. Therefore, it appeared appropriate to decide on two distinct units of analysis; the digital business model construct and dynamic capabilities processes.

As highlighted in section 1.2.5, the impact of digital technologies on performing arts has been studied through the longitudinal Digital Culture survey (ACE and NESTA) since 2013. Findings from 2019 revealed that less than half of the surveyed arts organisations considered digital technologies important to their business models and only a small minority (7 percent) were successfully generating revenue from third-party platforms (ACE and NESTA, 2019). These findings imply that digital technologies were perhaps not yet

embedded in every level of UK arts enterprises' operations, but often siloed in specific departments, such as marketing and communications.

Prior to the pandemic, the performing arts sector relied heavily upon the traditional 'Performer' business model (Rex *et al.,* 2019), where income is generated from the ticket sales of live performances. However, this model was made temporarily obsolete by the Covid-19 pandemic, which caused governments all over the world to ban social gatherings and consequently forced arts and cultural enterprises to explore the opportunities of the digital economy. Choosing both DCs and the digital business model as units of analysis meant that the primary aims of data collection were to collect evidence on how the pandemic enabled PAEs to engage in microfoundational DC practices which enabled digital BMI; the types of digital business models that emerged in the performing arts sector as a response to the pandemic; the nature and characteristics of such digital business models, and on how they were deployed during and beyond the pandemic.

3.2 Philosophy and paradigms

In social research, the concept of paradigm was first introduced by Kuhn (Kuhn, 1962, p.175), who utilised it to serve two purposes. First, to describe the "the entire constellation of beliefs, values, techniques, and so on" that are shared among the members of a specific scientific community, and second, to refer to a single element in the above-mentioned constellation, which, when used as a model or example, can define "the explicit rules of the inquiry" (Kuhn, 2009, p.190). Therefore, the term paradigm is strongly linked with the way of "seeing the world" (Morgan, 1980, p. 666).

For example, Patton (2001, p.69) defines paradigm as "a way of thinking about and making sense of the complexities of the real world." There are different types of paradigms, but they all encompass the following key philosophical elements that guide enquiries: axiology (beliefs, values, and morals of the research), epistemology (assumptions about the sources of

knowledge), ontology (assumptions about the nature of reality) and methodology (means for gaining knowledge about the world) (Guba and Lincoln, 2005; Lincoln *et al*., 2011).

3.2.1 Pragmatic paradigm

Creswell and Clark (2011) propose four paradigms that may inform practices of researchers: post-positivist, constructivist, participatory and pragmatic, of which the pragmatic paradigm is most commonly linked with mixed-method and multimethod inquiries (e.g., Tashakkori and Teddlie, 2003; Morgan, 2007, 2014; Pearce, 2012; Hall, 2013). The term pragmatism has its roots in the Greek word 'pragma' (πρᾶγμα), which refers to an action or the consequence of an action. Contrary to the predominant academic philosophy that is based on Cartesian dualism, pragmatic paradigm in research does not focus on antagonistic metaphysical concepts such as truth and reality, but embraces the idea of multiple realities that can be explored through empirical inquiries (Kaushik and Walsh, 2019).

The pragmatic worldview is clearly action orientated (Mertens, 2015) and practical in nature (Morgan, 2014). Although pragmatic mixed methods research has a long history of providing credible and high-quality evidence for social research inquiries, some scholars (e.g., Denzin, 2012) have critiqued researchers for the use of the pragmatic stance as a "what-works" approach. For instance, Bryman (2007, p.17), interviewing UK-based researchers, found that sometimes the pragmatic approach was used by researchers mainly to advance their own research agendas:

> When asked about how far epistemological and ontological issues concerned them, most interviewees depicted themselves as pragmatists, who felt it was necessary to put aside such issues to secure funding for their research interests and to publish their findings.

However, Morgan (2014), drawing on Dewey (1925) argues that pragmatism has solid philosophical foundations. He presents pragmatism not only as a research paradigm, but as a novel, action-led philosophy for conducting social research, equally suited for qualitative, quantitative, and mixed methods research.

Using pragmatism as an overarching research philosophy enables researchers to adhere to the theories of classical pragmatism, a philosophical movement that originated from the USA in the 19th century. Classical pragmatism was widely informed by Charles Sanders Peirce's (1839–1914) work, and his maxim of pragmatism is often considered as a key principle of pragmatic philosophy. In the maxim, Pierce emphasises the role of consequences of an action in discovering the truth:

> Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object. (Peirce, 1878, p. 265-266)

William James (1842–1910) and John Dewey (1859–1952) have also shaped the field of pragmatism significantly. As will be discusses in further detail below, it was Dewey's conception of pragmatism that strongly influenced this inquiry and was therefore chosen for an overarching research philosophy.

3.2.2 Deweyan pragmatism

When adopting a pragmatic approach, researchers are not bounded by the dichotomy of post-positivism and constructionism, as both understandings of the world are equally important in the pragmatic philosophy (Dewey, 1925). Dewey's (1925) pragmatic philosophy allows the researcher to focus their full attention on the nature of human experience (Morgan, 2014). Morgan (2007, p.53) considers paradigms as "shared beliefs within a community of researchers, who share a consensus about which questions are most

meaningful and which methods are most appropriate for answering those questions." This strongly echoes Kuhn's (1962) first definition of paradigms, and emphasises that paradigms are, in fact, "social worlds" where research communities can strongly influence the meaningfulness of beliefs and the appropriateness of actions. The consideration of paradigms as shared beliefs within a community of specialists allows researchers to combine the characteristics of post-positivist and constructionist inquiries, rather than emphasise their ontological and epistemological division. This reflects Deweyan pragmatism, where the focus is on human experience and ontological conceptions about whether the world is constructed through individual conceptions or exists independently outside of them are just "discussions about the two sides of the same coin" (Morgan, 2014, p.4). Therefore, knowledge is not determined by the metaphysical relationship between the world and the researcher, but it occurs through an active process of inquiry that creates a fluctuating interplay between beliefs and actions. This echoes Denzin's (2012, p.81) definition of pragmatism as:

> ... a doctrine of meaning, a theory of truth. It rests on the argument that the meaning of an event cannot be given in advance of experience. The focus is on the consequences and meanings of an action or event in a social situation. This concern goes beyond any given methodology or any problem-solving activity.

This research thus adopts Denzin's (2012) stance, in that it views 'truth' grounded in the idea that the significance of an event cannot be determined until it has occurred, implying that the implications and meanings of an action or event are shaped by the social context in which it happens. This perspective puts the emphasis on the outcomes and implications of events in a social setting, rather than trying to pre-define their meaning through methodological or problem-solving approaches. In a nutshell, this research views truth as something that emerges from lived experience, rather than as something that has been defined in advance.

This view of truth is well suited to producing conceptual contributions for the following reasons. First, it can lead to more nuanced and complex understandings of social phenomena, as it considers the intricate and dynamic interplay between events and their social contexts. Second, it encourages a holistic approach to analysis, one that encompasses both the objective and subjective aspects of an event, the two sides of the coin, as referred to by Morgan (2014). This, in turn, can lead to more insightful and comprehensive theories and frameworks. Third, it allows for a more flexible, iterative, and adaptable approach to theory building, as it recognises that meaning is contingent on the ever-shifting dynamics of social relations.

As Hall (2013, p. 19) posits, pragmatism offers "an alternative epistemological paradigm". The pragmatic research philosophy also emphasises the values, ethics, politics and worldviews of the researcher, and their impact on the choice of research methodologies and actions (Morgan, 2007). Deweyan pragmatism is radical of nature and therefore different from other ontological assumptions. Morgan (2014, p.1050) drawing on Dewey argues: "pragmatism presents a radical departure from age-old philosophical arguments about the nature of reality and the possibility of truth". Feilzer (2010, p.3) states that this acceptance of multiple realities allows the researcher "to be free of mental and practical constraints" imposed on them by the forced choice between post-positivism and constructionism, and Robson (1993, p.291) asserts that pragmatism grants the researcher the freedom from being "the prisoner of a particular method or technique''.

Shannon-Baker (2015), on the other hand, emphasises the element of complementarity in pragmatism by highlighting how it can complement the advantages and disadvantages of qualitative and quantitative approaches. Pragmatic research is, therefore, flexible, it stems from diverse human experiences, from taking action and from the knowledge that emerges from such actions, followed by the investigation of the consequences and outcomes of these actions (Morgan, 2014).

3.2.3 Pragmatic approach in business and management research

Researchers have successfully adopted pragmatic approaches within business and management, and social sciences research. For example, applying a Deweyan pragmatic perspective, McVea and Dew (2021) investigated the philosophical underpinnings of imagination and how they relate to the difficulties faced by entrepreneurs trying to generate value in a constantly evolving and multifaceted world. They found that imagination is a vital force in generating innovative ideas and adapting to change. Reflecting upon Deweyan pragmatism in a contemporary context, McVea and Dew (2021, p.310) argued that "…our lives are precarious. We are surrounded by ignorance, ambiguity, uncertainty within an ever-changing environment," and therefore pragmatists acknowledge that truth is not static or definite, nor is Dewey's theory of knowledge cynical or pessimistic. Rather, it argues that through careful and introspective investigation and a continuous development of ideas, we can cultivate temporary and meaningful patterns of continuity, even in the absence of enduring truths. This philosophy enables us to thrive and flourish in a world that is inherently dynamic and uncertain, a fact that was acutely evident during the recent global pandemic, during which this research project took place. By embracing the idea that truth emerges from lived experience and that knowledge is continually evolving, we can develop the resilience and adaptability necessary to thrive in uncertain times.

Moreover, in the digital realm, Ghezzi and Cavallo (2020) conducted a pragmatic, multiple-case study on three multisided platform start-ups to highlight the relationship between BMI, and lean and agile principles. They argued that pragmatic business model research has become paramount in the field of strategy, innovation, and entrepreneurship, because firms are increasingly endeavouring to innovate their entire business models, instead of centring upon individual products, services, or processes.

The arguments above form the main rationale why pragmatism was chosen as the companion and guiding philosophy for the inquiry. The focus of this research is on the human experience of performing arts producers and their audiences, who oversee and shape the innovation of emerging and experimental digital business models in the fast-changing digital economy, during an unpredictable time of a global pandemic. Thus, it was felt that these novel experiments and approaches could best be explored through a flexible, pragmatic, multimethod approach that accepts the existence of multiple realities and allows them to be explored through empirical inquiry with the goal of solving problems in the real world (Feilzer, 2010). Furthermore, given the practitioner-focused nature of the inquiry, the choice of pragmatism as an overarching research philosophy was further emphasised by Cameron's (2011, p.101) definition of pragmatism as "a practical approach to a problem."

3.3 Theoretical lens: Dynamic Capabilities View

A theoretical lens is the theoretical stance chosen by the researcher, which is positioned in the beginning of a research project and provides guidance through the various phases of the inquiry (Crotty, 1998). The DCV was chosen as a theoretical lens for the inquiry to support data analysis and ground the research more firmly on business and management theory. Relevant DCs literature was reviewed in 2.3.

3.4 Methodological approach

As a research paradigm, pragmatism embraces a flexible, pluralistic approach to research methods, recognising that different methods may be appropriate in different contexts and that multiple methods can complement and inform each other (Kaushik and Walsh, 2019). This openness to a diversity of

methods reflects pragmatism's focus on practical consequences and its commitment to adaptability and ongoing learning. Moreover, due to the central role of digital platforms as arenas of inquiry and the various digital business models implemented on these platforms, it was felt that one method alone would not provide a comprehensive enough account of the research topic, and therefore, multimethod research design (Brewer and Hunter, 2006) was chosen to identify and investigate the DCs that enable PAEs to engage in digital BMI and the heterogeneous business models PAEs typically deploy in the digital economy.

3.4.1 Research Design

Research designs encompass all the procedures for data collection, data analysis and interpretation of data. As stated by Kaushik and Walsh (2019) pragmatism occupies a middle ground between the two extremes of postpositivism and constructivism with regard to research approach. Whilst postpositivism favours quantitative methods and deductive reasoning, and constructivism leans towards qualitative methods and inductive reasoning, pragmatism embraces a flexible approach that values both. This allows the pragmatist researcher to choose the most suitable research design and methodology based on the research question being investigated, and actively engage in data creation and theory building, leading to a more dynamic and adaptable research process.

Therefore, the research project adopted a pragmatic, multimethod, multistage research design, which consisted of two sequential single-method studies, followed by a multimethod study that involved collecting various types of qualitative and quantitative data. This approach provided not only rich qualitative evidence, collected through methods such as semi-structured interviews and netnographic research, but also quantitative datasets from digital platforms, acquired through the platforms' analytics software and some small-scale survey data. The three stages of the multi-stage research

project are outlined in Figure 3.1, in relation to the Covid-19 pandemic events.

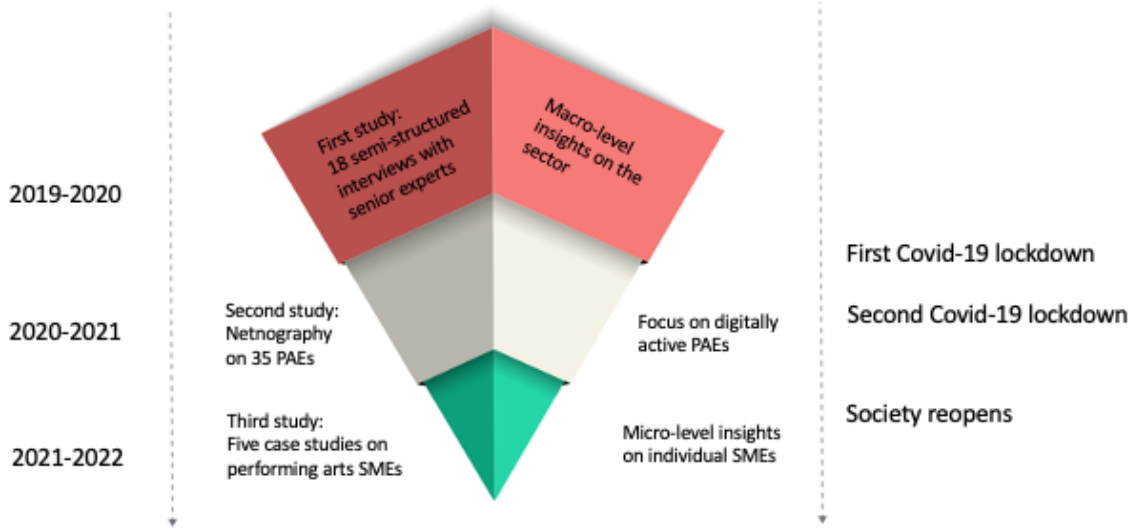


Figure 3.1 Overview of the multi-stage research project

The research project implemented an inverted pyramid-shaped research design, strategically structured to progressively narrow down the focus of the inquiry. The core objective of the initial study was to compile comprehensive macro-level insights into the UK performing arts sector. This involved engaging in in-depth interviews with leading senior experts from the field of performing arts. The second study was conducted amidst the peak of the Covid-19 pandemic when live performances could not go forward due to the strict UK Government-imposed restrictions on social gatherings. Consequently, the research focus was narrowed to digitally advanced PAEs, and their innovative digital business models launched as a result of the pandemic events.

The second stage of the inquiry adopted Netnography (Kozinets, 2020) as the research methodology, involving the selection of 35 PAEs, with a specific emphasis on SMEs. The insights derived from this phase informed the third study, which spanned both pandemic and post-pandemic periods. This final stage comprised five multi-method case studies, each examining a

performing arts SME. Throughout the research period, each organisation was interviewed 2-3 times over a period spanning 6-8 months, and data was extracted from their digital and social media platforms. This layered approach allowed for a thorough examination of the landscape of the performing arts sector as well as individual SMEs, encapsulating both pre-pandemic and pandemic-induced shifts.

3.4.2 Framework for categorising digital business models

The literature review revealed a gap in extant research in suitable theoretical frameworks for the identification, categorisation, and analysis of PAEs' digital business models. Rex *et al.'*s (2019) framework of common business models for arts and cultural enterprises (see Table 2.6 in 2.2.7) was identified as an apt foundation for extending the research into the digital realm. However, it was essential to adapt this framework for the digital economy, as it was not originally created for categorising digital business models, but offline, live activities-based business models. Therefore, during the first and second PhD studies, drawing on the examples provided by the expert interviewees and the findings from the netnographic research, Rex *et al.'s* (2019) framework was iteratively modified, and new, adapted archetypes for digital business models determined for the performing arts context.

The creation of the new theoretical framework for categorising digital business models was guided by Lambert's (2015) classification design steps. However, the goal was not to construct a typology or taxonomy, but a framework to support the identification of the most common digital business model types in performing arts. Specifically, a novel business model type, entitled 'The Streamer', was added to the framework. The other five digital business model types in the novel framework are not novel in the sense of being unprecedented (Li, 2020), but digitally adapted versions of traditional, live activities-based business models. The modified framework (outlined in Table 3.1) provided a basis for categorising digital business models identified

in the expert interview, netnographic data and case study data, and for defining the key characteristics of each digital business model type.

Digital business model type	***Activities***	***Assets***	***Revenue generation***	***Underlying model (Baden-Fuller et al., 2017)***
Digital Performance	The creation of a digital performance or other digital content to be offered in real time to an extended audience via digital distribution	Creative, production and digital distribution expertise	Online ticket sales, funding	Solutions model: the creator and audience are connected through digital technologies in real-time, e.g., during a live streamed performance
Digital Product	The creation of a digital product e.g., a pre-recorded performance or educational video that can be consumed on-demand	Creative, production and digital distribution expertise	Selling or renting digital products to audiences through a ticketing system, funding, licence fees, royalties	A product model, arts producer creates a digital product, but may appoint a number of third-party distributors across multiple media formats
Digital Commissioner	Commissioning digital performance(s) and/or related activities to distribute to audiences	Reputation, expertise in relationships and digital data	The commissioner might pay a fee or offer visibility to content producers. Revenues are generated from ticket sales or box office splits.	A match-making model: the commissioner is a mediator putting on a digital programme or performance created by an arts producer and engages/finds audiences for it
Streamer	Producing live or pre-recorded content to be distributed on third-party platforms such as YouTube	Creative, production and digital distribution expertise, expertise in building and managing a digital community	Income from advertising revenue from the third-party platform, sponsorship, merchandise sales	Solutions or product model, depending on whether the content is live or pre-recorded

		on the third-party platform		
Digital Hub	Running a digital platform	Expertise in programming, audience development, digital technology skills and data	Income from funders, and/or ticket sales income (e.g., subscription or freemium pricing model)	A multi-sided model, which generates value from two or more audience segments
Digital Service	Delivering online events e.g., workshops, courses, or other educational activities in real time	Expertise in teaching, training, and filming/ broadcasting	Ticket sales, donations, funding	A solutions model – the arts organisation and audiences are both present during the events

Table 3.1 Novel framework for digital business models in performing arts

3.5 First study: Digital business models in performing arts

The objective of the initial study was to investigate the role of dynamic capabilities that influence PAEs' digital BMI and deployment of digital business models. Additionally, the study aimed to identify business models implemented by PAEs in the digital economy, categorise such models using the novel theoretical framework detailed above, and provide a preliminary analysis on the nature and characteristics of the different digital business model types identified. The focus was particularly on documenting the knowledge and human experience of policymakers and leading experts of digital audience development, who possess vital top-level knowledge of the performing arts industry through their diverse collaborations with a variety of PAEs, and whose actions contribute to the conditions and the landscape of the UK arts and cultural sector. The first study was considered an essential starting point for gaining a better understanding of the emergence of digital business models in performing arts.

3.5.1 Research design

The initial study adopted an illustrative case study approach. Case study as a research strategy can be useful when exploring a topical, real-life phenomenon. Yin (2014, p.16) defines a case study as: "an empirical inquiry that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context". Shavelson and Townes (2002) state that case study research is a particularly pertinent research strategy when an inquiry addresses a descriptive how question or an explanatory what question, and, as Yin (2014) stresses, when a researcher wishes to highlight a specific situation or a phenomenon to gain a better understanding of it. An illustrative case study is a sub-type of a case study and seeks to describe "a situation or a phenomenon, what is happening with it, and why it is happening" (Hayes *et al.*, 2015, p.8) and shed light onto new and potentially innovative practices (Scapens, 1992).

Pragmatism provides a strong philosophical foundation for case study research, as it emphasises practical consequences, pluralism in research methods, reflective practice, and ongoing learning (Kaushik and Walsh, 2019). These principles align with the focus of case study research on understanding a specific phenomenon within its real-world context (Yin, 2014), the use of multiple data sources and methods, the iterative nature of the research process, and the aim of generating insights that can inform decision-making and problem-solving (Feilzer, 2010). Therefore, pragmatism supports the use of case study research as a means of generating deep and contextually rich understanding of complex phenomena and can help researchers to navigate the complexities and nuances of the research process in a flexible and adaptable manner (Eisenhardt, 1989). Overall, the alignment between pragmatism and case study research makes pragmatism a suitable paradigm for researchers seeking to generate insights that are both rigorous and relevant to real-world contexts.

The case study research design was constructed following the three steps outlined in Yin (2014, p. 5-6). The first step involved deciding on the phenomenon (the case) that was to be studied, which in this context was the emergence of digital business models deployed by PAEs. The second step called for determining the nature of the case study, and a holistic single case study with embedded sub-cases was chosen. This decision was made on the grounds that the case (the emergence of digital business models in performing arts) could only be studied holistically by identifying and analysing the nature and characteristics of the diverse sub-cases, which were the digital business models deployed by PAEs. The third step required assessing whether theory could be used to guide the selection of cases or decisions on data collection protocols and data analysis strategies. For this purpose, the new theoretical framework, outlined in Table 3.1 in 3.4.2, was utilised for categorising digital business models according to their type and characteristics.

3.5.2 Data collection and sampling

To gain in-depth knowledge on the case and the sub-cases (Patton, 2001), expert interviews were chosen as a research method on the basis that experts were identified as data sources of this information. Expert interviews are a research method commonly used across the social sciences. Choosing experts as interviewees is considered more effective and concentrated as a data collection method, particularly in the exploratory phase of a research project than, for example, participant observations or quantitative surveys (Bogner *et al.*, 2009). Conversations can offer in-depth and plentiful data about individuals' opinions and feelings, personal lives, experiences, and reflections on complex social phenomena (Brinkmann, 2015; Denscombe, 2010).

As collecting evidence and insights rooting from experts' lived experience with PAEs and their digital business models was the core objective of the study,

semi-structured in-depth interviews were chosen as the research method. In-depth interviews allow researchers to gain deeper knowledge from experts on the interview topic, beyond traditional what, why and how questions (Guest *et al.*, 2013). In addition to facts, this knowledge included interviewees' opinions and personal thoughts about the case and the sub-cases. The interviews did not unfold as conversations, but followed a loose structure of key questions, and can thus be described as semi-structured interviews (see interview protocol in Appendix 4).

The interviewee sample was selected through purposive sampling (Denscombe, 2010, p.35). This involved identifying experts, who were particularly knowledgeable about the phenomenon under investigation and possessed a considerable experience with it. Purposive sampling is a qualitative sampling method, which is not based on statistical considerations, but the aim is to increase the depth of understanding on the research topic (Palinkas *et al.,* 2015). Purposive sampling was considered the most apt sampling method, as its objective "is not to focus on the similarities that can be developed into generalisations, but to detail the many specifics that give the context its unique flavour" (Lincoln and Guba, 1985, p.201).

The purposive sampling process started with defining the inclusion criteria. These were based on the participants' experience and knowledge on performing arts and digital technologies, and it was decided that to be included in the study, all the interviewees must have over ten years of industry experience and occupy senior positions as digital specialists in public sector organisations or large and medium-sized cultural enterprises or be independent consultants working in performing arts and related industries.

The sample included a variety of senior digital experts with diverse areas of specialisation ranging from digital distribution and broadcast to digital policymaking and research (see definitions for each specialisation in Appendix 9). Some held senior positions at sector support organisations (*i.e*. organisations that provide support for the arts and cultural sector as part of their function, including government arm-length organisations), some

worked as independents entrepreneurs, and others were employed by medium-sized or large PAEs (size of the organisation was discerned using the Digital Culture 2019 standard, see Appendix 10) or streaming platforms specialised in arts and culture content (full list of research participants in Table 4.1).

N	***Specialisation***	***Organisation type***	***Interviews***	***Duration***
P1	Digital Distribution	Sector support organisation	1	47min
P2	Digital Audiences	Sector support organisation	1	46min
P3	Digital Content Production	Sector support organisation	1	40min
P4	Digital Policymaking	Sector support organisation	1	50min
P5	Digital Policymaking	Sector support organisation	1	60min
P6	Digital Policymaking	Sector support organisation	1	37min
P7	Digital Policymaking	Sector support organisation	2	60min and 37min
P8	Digital Research	Sector support organisation	1	66min
P9	Digital Content Production	Large arts organisation	1	25min
P10	Digital Broadcast	Platform	1	36min
P11	Digital Distribution	Independent consultant	1	40min
P12	Digital Audiences	Large arts organisation	2	42min and 23min
P13	Digital Business Development	Medium-sized arts organisation	1	48min
P14	Digital Broadcast	Independent entrepreneur	1	37min
P15	Digital Research	Independent consultant	2	77min and 58min
Total			**18**	**829min**

Table 3.2 List of research participants

When the Covid-19 pandemic started in March 2020 towards the end of the interview round, research aims were reviewed to include the impact of the global health crisis, and thus all research participants were re-contacted and provided with an opportunity to comment on the pandemic and its impact on PAEs' digital BMI. However, perhaps due to the nationwide closure of cultural venues and because many cultural workers were furloughed at the time, only three research participants took the opportunity. These three participants were interviewed for a second time with the interviews having a strong focus on the implications of Covid-19.

3.5.3 Coding and data analysis

The audio-recorded interview data from the eighteen semi-structured interviews was transcribed verbatim by the researcher, and coded in *NVivo* qualitative data analysis software (*NVivo*, 2020). Saldana (2016, p.2) defines a code in qualitative inquiry as "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data." As instructed by Saldana (2016) the coding of the data was done in two cycles. The first cycle involved using a combination of techniques including mainly descriptive coding, but also in vivo coding and process coding (Miles *et al*., 2013). First, descriptive coding was used to summarise primary topics in the data and to provide first level categories for indexing (Saldana, 2016). Next, in vivo coding was utilised when required to capture specific terminology or phrases used by the expert interviewees that did not fit under descriptive codes, and finally, process coding was deployed, in particular, to document the shift in the expert opinions due to the Covid-19 pandemic and the resulting actions. The second cycle entailed creating sub-codes to the first level categories and seeking patterns, relationships, and idiosyncrasies in the data (see Appendix 5 for a full list of codes).

Codes were then organised in overarching themes in preparation for thematic analysis, which was conducted following the pragmatic method detailed in Aronson (1994), using the *NVivo* qualitative data analysis software (*NVivo*, 2020). Themes were identified by grouping together individual ideas and experiences that may not make sense in isolation, but when combined, reveal a deeper understanding of the collective experience being studied (Leininger, 1985). This process is akin to piecing together a puzzle, where the researcher carefully examines how different components fit together to create a cohesive picture. Drawing on Morgan (2007), the coherence of the themes that emerge is a result of the researcher's rigorous analysis and interpretation of the data, guided by their deep understanding of the context and subject matter. This

pragmatic approach serves as a foundation for developing a comprehensive and meaningful representation of the phenomenon being studied. As Constas (1992) emphasises, this perspective is an essential point of origin for this type of research, highlighting the crucial role of the researcher's perspective and expertise in the discovery of themes and the development of a deeper understanding of the subject matter.

In practice, this was done by categorising themes under first and second order, and finally combining them in overarching themes (see Appendix 6 for full list of themes).

3.5.4 Reflexivity

The data collection period for the first study took place from September 2019 to October 2020. In autumn 2019, I was completing a three-month internship with the PhD industry partner, The Space[1] in parallel with conducting eighteen semi-structured interviews with senior digital experts from the performing arts industry. To identify suitable interviewees, I asked direct recommendations, mainly from the industry partner and from other relevant academic contacts, such as the PhD supervisors or their colleagues. If the recommended individuals were considered pertinent to the research project, I shortlisted them for potential participation.

The three-month internship with the industry partner provided an ideal setting for identifying potential participants and for conducting the interviews. As I was partly based at the industry partner's office in Birmingham, the internship enabled me to swiftly gain a cultural insider's view of the UK arts and cultural sector. I was able to take part in internal, weekly meetings and learn about projects they were involved in. I was also able to attend various,

[1] The Space is a digital agency funded by Arts Council England with a mission to provide support to arts and cultural organisations with their digital projects and help them to reach new audiences online. For more information, see www.thespace.org

sector-facing, live events organised by the industry partner during the internship period.

The experience of being a part of the arts and cultural industry as a cultural insider, evidencing human actions with the view of solving real world problems further justified the choice of pragmatism as the inquiry's research philosophy. The transition into an industry insider was fluid and uncomplicated, as I already possessed considerable experience of working in the UK arts and cultural industry, thanks to having a background as a circus artist and arts manager.

However, insider research —referring to qualitative research that is conducted within a group, organisation or culture, where the researcher is a member— can have methodological and ethical implications, particularly around positionality (Greene, 2014). Chavez (2008, p.475) defines insider positionality as "the aspects of an insider researcher's self or identity which is aligned or shared with participants". Greene (2014, p.4-5) lists the most common benefits and shortcomings of insider research. The benefits include knowledge of the culture or context of the research, more natural interaction with research participants, and access to hard-to-reach participants. The shortcomings, on the other hand, encompass a too subjective approach and researcher bias.

The previous knowledge and understanding of the performing arts industry proved useful, and perhaps led to more natural interaction with the research participants, however, the access to hard-to-reach participants gained through the PhD industry partner was the most valuable benefit of conducting insider research. My key aim was to obtain a diverse sample, representative of the UK arts and cultural sector, which is heterogeneous in the terms of gender, ethnicity, and social status. The scope was limited to UK based digital experts only. During the internship period, I was successfully introduced to several experts by the industry partner. Introductions were done either in person or via email, after which the contact had been established, and I could invite the experts to take part in the research.

Most experts were happy to take part in my research, but some declined due to time constraints or company policies that prevented them from taking part in any type of research. After initial introductions, I approached the experts to seek their informed consent. I felt that being an insider in the performing arts industry was significant for the research, as it granted me access to high-profile industry experts, who, without the industry partner's introductions, would have likely been unreachable.

Data was collected from 18 semi-structured, in-depth interviews with 15 digital experts. Interviews were conducted on the online video call platform, Microsoft Teams. 15 interviews took place between October 2019 - February 2020, with a further three conducted in September 2020. In March 2020, when I was about to finish data collection, the Covid-19 pandemic swept across the globe, and the UK, like many other countries, moved into an indefinite national lockdown. As all non-essential in-person social gatherings were banned, PAEs had no choice but to halt their operations, or transfer all their activities online. I therefore contacted all the research participants to offer them an opportunity to reflect on the unprecedented situation, however, only three participants agreed to take part in a second interview.

During the interviews, the research participants were asked questions about the UK arts and cultural sector regarding digital transformation and digital business models and encouraged to convey their knowledge and lived experiences as digital experts. To alleviate researcher bias, I paid particular attention to wording the question in an objective manner, so that I would not influence the interviewees with my own opinions on the research topic. This was achieved, for example, by avoiding leading questions or examples from other interviews, as well as by encouraging the interviewees to express their opinions through active listening. The semi-structured nature of the interviews allowed for spontaneous questions to emerge naturally, and the participants could freely elaborate on relevant topics and share anecdotes of their empirical professional experiences. Each interview was audio recorded, and to remain to close to the data, I chose to transcribe all the interviews

myself, which was a laborious process, and in hindsight time could have been saved by employing an external transcription service.

3.6 Second study: Covid-19 as a catalyst of digital BMI

The interview data obtained through the first study informed the selection of suitable PAEs for the second study. In particular, the first study research participants provided a host of examples of PAEs that they perceived particularly interesting and advanced in their use of digital technologies and highlighted a plethora of digital business model introduced by such organisations. The digital business models highlighted by the experts were then categorised according to the novel framework for common digital business models in performing arts (see 3.4.2).

Thirty-five PAEs were selected for netnographic research through purposive sampling (Denscombe, 2010). The main inclusion criteria were the digital business model type (see 3.4.2) and size of the organisation, which was determined according to the Digital Culture survey (ACE and NESTA, 2019) standard (see Appendix 10). Other criteria guiding the selection included the organisation's geographic location, art form and size of their digital community on Facebook. The aim was to obtain a heterogeneous and diverse sample that would accurately represent the UK performing arts sector (see the full list of selected organisations in Appendix 7). The second study adopted a qualitative, pragmatic approach, which involved conducting longitudinal netnographic research on the selected 35 UK-based performing arts organisations on Facebook for a period spanning over nine months between March-December 2020.

3.6.1 Research design

The use of digital methods is relatively new in qualitative research. However, as argued by Whiting and Pritchard (2020), collecting qualitative data from the Internet does not equal merely browsing the web for information, but digital methods are systematic techniques that aim to produce high quality data for analysis and interpretation. Furthermore, Caliandro (2018, p.3) notes that when researching social media platforms, the internet is not considered as an object of investigation, but "as a source for new methods and languages for understanding contemporary society". One of such methods is netnography, designed for conducting qualitative social media research "focused on human experience and cultural understanding" (Kozinets, 2020 p.15). Netnography is a relatively recent research method that draws from classical ethnographic concepts and techniques, adapting them to the digital realm. It has also been referred to, for example, as online ethnography or virtual ethnography (Hine, 2000), Internet ethnography (Miller and Slater, 2001), cyber-ethnography (Escobar *et al.*, 1994), digital ethnography or ethnography of the virtual worlds (Boellstorff *et al.*, 2012).

Netnography enables researchers to explore and collect data from diverse online communities through multiple research practices such as investigation (e.g., simplification, scouting or searching), interviews (online or in-person) and/or immersion of the researcher in a digital community as either a participant or an observer (Bowler, 2010; Kozinets, 2020). Netnography is a pragmatic choice for researching online cultures and communities because it provides a practical and effective way to access and study these groups in the digital age. Additionally, it acknowledges the ever-evolving nature of online communities and adapts its methods to keep pace with technological advancements, ensuring that the research remains relevant and useful. Kozinets (2020, p. 19) underlines the pragmatic nature of netnography as "a pragmatic, how-to, work-bench-level approach to studying social media using a cultural lens". In today's digital society, where a large part of our daily

activities is conducted online, netnography as a research method is increasingly relevant (Rokka, 2010; Tikkanen *et al.*, 2009). As noted by Hallett and Barber (2014, p.307): "it is no longer imaginable to conduct ethnography without considering online spaces".

Data-driven online research is inherently pragmatic, as Denzin (2012, p. 81) states in his definition of pragmatism: "the meaning of an event cannot be given in advance of experience." Therefore, the collection of data can sometimes precede the definition of the reasons why it was collected. This was indeed the case here, as the second study was conducted during the Covid-19 pandemic, under unprecedented conditions, where the foreseeable future was impossible to predict, and research could not take place face-to-face.

Thus, the research project's pragmatic research philosophy, focus on digital platforms as arenas of inquiry and the national lockdown conditions imposed by the UK government, strongly pointed towards choosing netnography as the research method for the second phase of the project. Whereas in ethnography, data is located in a field site, in netnography, data is located on a data site, which is often a social media platform. Furthermore, Kozinets (2020) notes that netnography is far faster and more practical to implement with regard to cost and time resources than a traditional ethnography.

3.6.2 Data collection and sampling

Facebook was chosen as an arena of inquiry for the research. This was mostly because despite facing increased competition in the recent years, it remains the most popular social media platform in the Western World. In February 2022, Facebook reached 2.9 billion monthly active users, and over 160 million small business owners used the platform every month (Meta, 2022; Statista, 2021). During the initial scoping of suitable PAEs for the second study, it was observed that all the PAEs mentioned by the expert interviewees during the

data collection for the first study had an active online presence on Facebook. Extant research (e.g., Zaglia, 2013) has demonstrated that brand page communities exist embedded on Facebook business pages, and these are real communities, comparable to any offline or online community. Following Hine's (2011) approach to online, multi-sited, virtual ethnography, which she referrers to as a mobile ethnography, the business activities of the selected PAEs were also followed across other digital platforms, such as the company websites, and occasionally other social media and streaming platforms. As noted by Hine (2015, p.15) this allows for triangulation and the understanding of "the object of inquiry from multiple perspectives", which is a key goal of pragmatic research.

Immersion was selected as the netnographic method, as it allowed the researcher to identify digital business models introduced by PAEs, act as a member of the arts organisation's online community and be involved in the engagement within it. Following the method detailed in Kozinets (2020), the four immersive operations utilised were:

- Reconnoitring: "the act of mapping out territory", which involves researchers to constantly iterate and re-assess what they are looking for, as they assess the value and relevance of the data on social media platforms for the research
- Recording: evidencing details of interactions on the data site, e.g., screenshots, events, and deep data (rich data that reflects different cultural realities)
- Researching: looking at the data through a research lens, as Kozinets states: "immersion is a plunge into the social media data lagoon wearing research-colored swim goggles"
- Reflecting: reflective data writing is a process of defining what is meaningful and capturing the experiences of the researcher in the social media ecosystem

(Kozinets, 2020, p.284)

Kozinets (2020, p.283) argues that immersion is not about simply collecting data, but "about the writing and curation of data". Therefore, a hand-written immersion journal was created, which included details of the novel digital business models introduced by the selected PAEs, the reactions of the PAEs' Facebook community members to the new initiatives launched, and the reflections of the researcher on the nature and functionalities of the digital business models (Kozinets, 2020).

The netnography was conducted in two parts. The first research period took place in March-July 2020 and the second research period between August-December 2020. The aim of the research was to identify digital business models introduced by PAEs during the Covid-19 pandemic through the immersion of the researcher in the PAEs' digital communities on Facebook. The digital business models identified were then analysed using the new framework of common digital business models for performing arts (outlined in Table 3.1 in 3.4.2) and discussed from a dynamic capabilities' perspective (Teece *et al*., 1997, Teece, 2007; 2018).

The sample of PAEs for the netnography was selected drawing upon the expert recommendations from the first study, however, as the best practice examples by the experts mostly included large, high-profile PAEs, a key part of netnographic research was to add digitally active, medium-sized, small, and micro-organisations to the sample. This was done because the practices of larger firms are not necessarily replicable by SMEs (Wapshott and Mallet, 2021). In addition to organisation size, other criteria included the perceived novelty of their digital business models introduced, organisation's geographic location, organisation type and size of the organisation's digital community on Facebook. The sampling was conducted with the view of obtaining a sample in which at least half of the PAEs were SMEs.

The four steps of netnographic data collection, "Reconnoitring, Recording, Researching and Reflecting" (Kozinets, 2020, p.284) were followed. As stressed by Kozinets, netnography is an emergent and inductive method, and

thus the researcher might not have a clear idea on what they should notice in the data prior to collecting it.

First, the immersive act of 'Reconnoitring' was applied. This involved the researcher familiarising herself with the business pages of the selected PAEs on Facebook and identifying posts that featured digital business models deployed by the organisations. To support the data collection through immersion in the digital communities, an immersion journal was created (see 3.6.2) to guide reflection and research decision-making. Following the guidance by Kozinets (2000), the hand-written immersion journal was used as a tool to reflect upon the research process and findings, and interpret the data collected on social media. During the Reconnoitring process, also referred to as "the act of mapping out territory" (Kozinets, 2000, p.284), new PAEs were iteratively added to the sample and others removed if they were deemed no longer relevant to the study aims. For instance, high-profile sector leaders, such as RSC, ROH and NT, who each have a multimillion-pound annual turnover and whose activities cannot therefore be replicated by SME organisations, were excluded. It proved surprisingly challenging to identify SMEs with an active online presence, and therefore, it was decided that the sample would reach saturation, when over half of the organisations were SMEs, all had introduced new digital business models during the pandemic and had an active presence on Facebook.

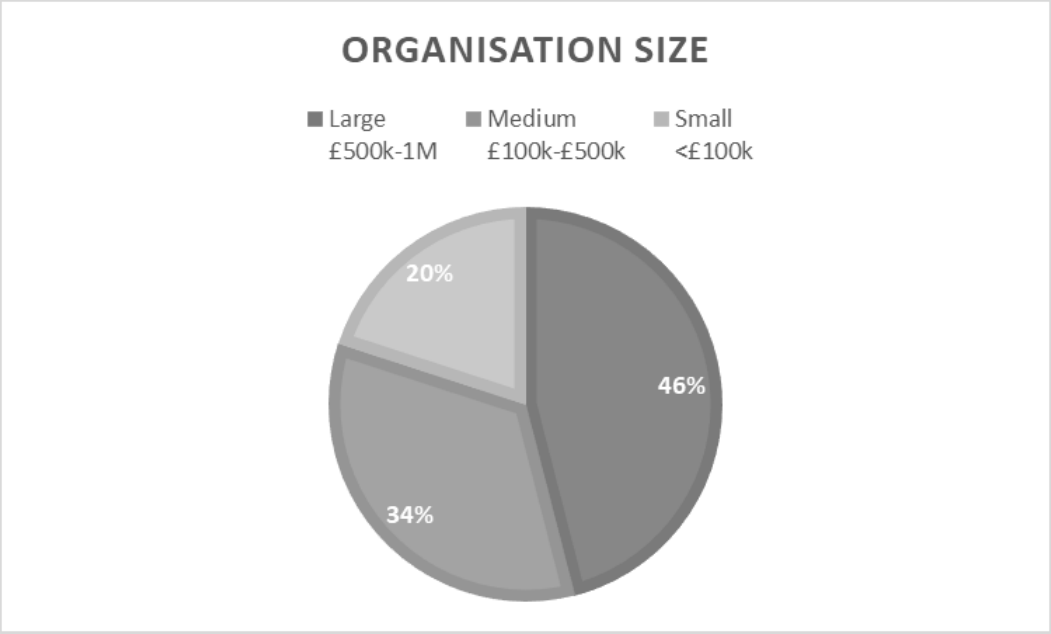


Figure 3.2 Organisation size and annual turnover (£)

Figure 3.2 illustrates the size of the organisations in the final sample in terms of their annual turnover. Following the method utilised in the first study, size of organisation was discerned using the Digital Culture Survey standard (see Appendix 10). Of the 35 organisations selected for the netnography, 20.0 percent were small, 34.0 percent medium-sized, and 46.0 percent large, which meant that 54.0 percent of the PAEs were SMEs.

The second stage of netnographic data collection involved applying the immersive act of 'Recording', *i.e.,* collecting evidence on the interactions between the PAEs and their digital audiences. The evidence included screenshots of posts on the PAEs' Facebook business pages, in which new digital initiatives were announced; online audience members' comments on the posts; immersion journal entries on the nature of the interactions, and notes on the characteristics of digital business model types identified. The dataset collected through Recording included a total of 689 screenshots. The data originated mostly from Facebook but following Hine's (2011) technique of conducting a mobile virtual ethnography, sometimes additional, supporting data from the company websites and other relevant digital platforms was

included. Observations on the data were noted in the immersion journal to facilitate comparisons between different organisations.

The immersive act of 'Researching' refers to exploring the data collected through a research lens and seeking for "deep data" in a netnography. Kozinets (2020, p. 229) defines deep data as the rich data that "reveals human cultural realities." This implies that short textual data —such as one-word comments on a Facebook business page— is not necessarily considered as deep data, but photographs and videos when accompanied with detailed descriptions; lead user data (e.g., posts from opinion leaders); resonant, emotionally appealing data; posting behaviours that appear as exceptions to rule; and micrological data (referring to the micrological analysis by Walter Benjamin, where the researcher tries to recognise recurrent patterns within a larger image), can all be considered as deep data.

Kozinets (2020) notes that the immersive operation of Researching should also be used to express the theoretical viewpoint or viewpoints of the researcher with the goal of revealing hidden meanings in the data collected. Therefore, drawing on Deweyan pragmatism, the goal of Researching was also to highlight the multiple realities of the human experience of performing arts practitioners and their audiences in the unprecedented context of the global pandemic. This involved exploring the data collected from both sides of the coin (Morgan, 2014): from the performing arts' organisations' perspective, who had to halt their usual activities for the foreseeable future and close their venues, but also from their audiences' point of view, who were confined in their homes unable to attend live cultural activities, and to engage with arts and culture, but had to only rely upon digital technologies to ensure their access to arts and culture. Again, the immersion journal was used as a tool to document and capture the essence of these perspectives and the interactions between the two parties: PAEs and their digital audiences.

The final immersive act of Reflecting involved engaging in a reflective data writing process to determine what was relevant in the dataset. As instructed by Kozinets (2020), the immersion journal served as a mirror in the writing

process for capturing the researcher's experience when identifying diverse digital business model types and categorising them according to the novel framework of common digital business models in performing arts (see Table 3.1 in 3.4.2). Reflecting on the data also allowed the researcher to link the Covid-19 pandemic events with performing arts organisations actions and draw conclusions on the impact of the pandemic on digital business model development and digital BMI in performing arts.

3.6.3 Coding and data analysis

The netnographic data collected from Facebook on the PAEs' digital business models was analysed following the operations of collating, coding, combining, counting, and charting as outlined in Kozinets (2020). The collating of different types of data (e.g., screenshots, comments from social media and immersion journal notes) involved gathering and systematically organising all the data in one format, in the case of this research, into one large Excel file. The operation included a fair amount of 'data cleaning' (Rahm and Do, 2000), where duplicates and redundant data was eliminated. Categories such as organisation size, art form, size of the Facebook follower community, business model type, partner organisations, hosting platforms, funding, and income generation methods were created to summarise the details of the digital initiatives introduced by the PAEs observed on Facebook during the longitudinal netnography. Since the dataset also included a large number of screenshots of posts with photographs or videos, these —if relevant to the research questions— were described in writing.

The process of collating was followed by the coding of the data in an Excel spreadsheet. This involved breaking the data on PAEs' digital business models down into smaller portions and labelling them with a priori codes derived from the literature review to assign meaning (see full list of codes in Appendix 12). During the coding and data analysis process, Rex *et al.'s* (2019) framework on common business models for arts and cultural organisations (see Table

2.6 in 2.2.7) was iteratively adapted into the novel framework of digital business models in performing arts (see Table 3.1 in 3.4.2) to reflect the findings emerging from the research data.

As Miles *et al.* (2013, p.11) posit: [Coding is] "the process of selecting, focusing, simplifying, abstracting and/or transforming the data that appear in the full corpus". To gain a deeper understanding of the prevalence and to allow comparison of certain conceptual elements emerging from the coded netnographic data, the processes of counting and charting were employed (Kozinets, 2020). This quantification of qualitative data justified the use of quantitatively descriptive words, such as 'more', 'often' and always', when writing up the analysis. Pie and bar charts were used to visualise the frequency of selected phenomena, such as the most used platforms for distributing digital content or the most popular income generation methods utilised by PAEs.

The analytic operation of Combining (Kozinets, 2020) allowed the active linking between the pandemic events and the collated research data. Conceptually related codes were created and linked with pandemic-time research from the sector as well as with extant business model and DC literature. "Pattern codes" (Miles *et al.,* 2013), *i.e.,* higher-order codes (see Appendix 12) were created to describe the online ecosystem formed by PAEs' Facebook business pages, responses to the pandemic events and the reactions of online audiences. Emphasis was placed on analysing the deep data captured during the immersive operation of Researching. The pattern codes acquired through Combining (Kozinets, 2020) were then categorised under overarching themes that are discussed in more detail below.

Furthermore, the data recorded in the immersion journal was revisited, and particular attention was paid on detecting developments in monetisation methods, perceived novel business model types, new platforms introduced, and funding received. Some of this data was then quantified using the methods of Counting and Charting (Kozinets, 2020) to detect macro-level patterns and reveal overarching trends.

3.6.4 Reflexivity

The second stage of the research project took place in March-December 2020, during the peak period of the Covid-19 pandemic. As the strict social distancing restrictions put in place by the UK government closed cultural venues and banned social gatherings for the foreseeable future, I began to iteratively revise the objectives and the focus of the inquiry. Most importantly, a new key focus was set on documenting and the impact of the global pandemic on the digital BMI that emerged within PAEs as a result of the turbulent conditions caused by the global crisis, and the subsequent deployment of digital business models. I soon observed that the pandemic appeared to act as a driver of digital transformation in the arts and cultural sector, accelerating organisational decision-making, and encouraging 'the pivot' to digital distribution among cultural enterprises. Indeed, during the national lockdowns, PAEs seemed to be engaging in often bold experimentation with innovative digital business models and digital audience development initiatives, which were largely enabled by the financial support from the UK government established Culture Recovery Fund (see 1.2.3).

Most PAEs have an active online presence on Facebook and use the platform to engage and interact with their audiences. Thus, Facebook appeared as the most suitable arena for the inquiry. I conducted an initial scoping in March 2020 and noted that all the organisations I had shortlisted for the study had an established business page on the platform and engaged actively with their digital community. The data collection process involved collecting different types of data from the PAEs' Facebook business pages including screenshots of posts about digital business models introduced, audience members' reactions and comments to the posts, screenshots of posts by other parties highlighting digital business models introduced by PAEs, screen recordings and other public digital records; such as live streams including audience

comments, as well as handwritten immersion journal entries based on my online observations.

Netnographic research is inherently insider research, and the methodology required me to position myself as a member and "cultural insider" (Kozinets, 2020) of the varied digital communities I observed daily. This enabled me to not only observe the PAEs' actions, but also collect evidence of their audience members' actions and interactions, and to engage in the process of self-reflexivity, which involved active engagement with the content and the critical questioning of insider perceptions (Bourdieu and Wacquant, 1994) that I had already familiarised myself during the first study data collection.

3.7 Third study: Digital BMI in performing arts SMEs

The final stage of the inquiry adopted a multimethod case study approach. Case study is "a history of a past or current phenomenon, drawn from multiple sources of evidence." (Leonard-Barton, 1990, p.249). The objective of the study was to provide an in-depth analysis of the different types of digital business models introduced by performing arts SMEs during the Covid-19 pandemic and shed light onto the case study organisations' microfoundational DC practices that enabled them to engage in digital BMI.

3.7.1 Research design

A case study approach was considered as the most appropriate research design due to its pragmatic and methodologically flexible nature. Case study research is inherently flexible, which implies that the research design can be modified during the course of the research, for example, by adding cases or research methods (Yin, 2014). As with the first study, the research design for the third study was constructed according to the guidance from Yin (2014) and Leonard-Barton (1990). The process began by choosing the cases to be

investigated, which were the five performing arts SMEs. The units of analysis were determined as the digital business models introduced during the Covid-19 pandemic, and the microfoundational DC practices that enabled the case study organisations to engage in digital BMI. A multiple embedded case study was chosen as the design as each case (the case study organisation) included embedded units of analysis. In addition, DCV (Teece 2007; 2010) was used as a theoretical lens to guide data analysis.

Case study research can utilise various qualitative and/or quantitative data sources to test extant theories or to create novel ones (Bromley, 1990). A key benefit of case study research is the richness of the dataset, as the data typically originates from several distinct sources, such as interviews, archival records, documentation (including online documentation), direct observation and participant observation (Yin, 2014, Leonard-Barton, 1990). Since a single case study approach cannot yield generalised conclusions and poses a risk of several biases (Leonard-Barton, 1991), a multiple case study method was applied. Yin (2014) notes the use of multiple case studies increases the external validity of the investigation and helps to mitigate observer bias. Thus, multiple cases were selected for the study, to provide in-depth insights on the digital business models deployed by each individual case study organisation, but also to engage in comparative cross-case analysis to obtain generalisable insights on the digital BMI practices of the performing arts SMEs.

3.7.2 Case selection and data collection

Selecting cases for the case study is a crucial part of case study research. Yin (2014, p. 48-49) posits that each case should be selected so that "it (a) predicts a similar result (a literal replication), or (b) produces contrary results but for predictable reasons (a theoretical replication)". From the sample of 35 PAEs selected for the second study, five were chosen for case studies. As

the research aimed to focus on SMEs, the sample of PAEs was selected using Yin's (2014) literal replication guidelines, meaning that the key criterion was the size of the organisation (focus being on SMEs for replicability). However, to achieve the thesis objectives, other key criteria included:

- Each case study organisation had introduced at least one digital business model during the pandemic
- The digital business model had emerged as a result of digital BMI (it was perceived to have a high level of novelty and innovation)
- The Covid-19 pandemic had had an impact on the design and development of the digital business model

The full sample of 35 PAEs from the second study was screened, and PAEs that were considered relevant to the main criteria of the third study were shortlisted. Eight shortlisted organisations were contacted to seek their consent to take part in the research, and five organisations agreed. The final sample can be found in Appendix 8.

Yin (2014) provides three core principles for the data collection process, which include using multiple sources of evidence, creating a case study database, and maintaining a chain of the evidence. In addressing these principles, but also strongly guided by Deweyan pragmatism, and restricted by the limitations of the crisis-time, pandemic conditions under which the research was conducted, a mix of Digital Methods (Rogers, 2013) and Virtual Methods (Hine, 2005) was chosen for data collection. An overview of the methods selected is detailed in the sub-sections below. Virtual Methods encompass traditional methodological strategies, such as interviews and surveys applied to the online context (Hine, 2005), whereas Digital Methods draw influence from Action-Network Theory (Callon, 1986; Latour, 1996) that investigates the relationship and interactions between machines and humans, and consist of natively digital methods, such as the collection of large quantitative datasets from social media and other digital platforms, through the platforms' analytical software. To maintain a chain of evidence, an online

database for created for each case study organisation including all the raw data collected from difference the evidence sources, and an analytical report was created for each case study organisation to summarise the key insights.

The data collected originated from a variety of sources, and included semi-structured interview data, data collected from social media and other digital platforms through the platforms' analytical software, survey data and online participant observation data. The data collection process was collaborative, implying that the researcher communicated regularly with the participating organisations through email and video calls over the research period, which spanned from June 2020 to November 2021. During the research period, all participating organisations were interviewed at least twice.

Table 3.3 outlines the interviews conducted and lists the research participants. As stated in 3.8, for the purpose of this research, pseudonyms were created for all the case study organisations and fictional names were created for their products or services discussed to protect the identity of the research participants.

No	Case study	Interviews	Participants	Length
1	Alpha	Interview 1	Founder, Producer	60min
		Interview 2	Founder, Producer	51min
2	Beta	Interview 3	Manager	57min
		Interview 4	Manager	25min
		Interview 5	Head of Events, Community Manager, Partner University Researcher	100min
3	Gamma	Interview 6	Founder, Producer	61min
		Interview 7	Founder, Producer	41min
4	Delta	Interview 8	Co-founder, Co-founder, Producer	59min
		Interview 9	Co-founder, Producer	45min
5	Epsilon	Interview 10	Co-founder, Co-founder	56min
		Interview 11	Co-founder, Co-founder	30min
			Total:	585min

Table 3.3 List of interviews and research participants

The participating PAEs had the freedom to decide what data relating to the deployment of digital business models they wished to share with the researcher. A short analytical report was produced for each case study organisation on the deployment of their digital business models based on key observations from the data provided, and all research participants were presented with a copy of this short analytical summary during the interviews. Some brief observations, such as types of engagement that appeared to attract the attention of online audiences, were also offered. This gave the participants a chance to reflect on the research findings and confirm or disconfirm the insights. The collaborative, participatory nature of the research increased the richness of the dataset and facilitated the collection of in-depth information.

3.7.2.1 Data from digital platforms and surveys

Data was collected through analytical software of selected digital platforms to gain a better understanding on the case study organisations' audience demographics, their audiences' content viewing patterns and audience response to the case study organisations' digital business models, as well as to explore the economic, geographic, and cultural factors that influenced the uptake of their digital products and services. Metrics included, e.g., views; subscriptions; ticket sales; likes/dislikes; comments; audience age, gender, and geographic range. The data was gathered from a variety of platforms, depending upon the case study organisations' choice of digital platforms. Data source platforms included Facebook, Eventbrite, Twitch, Google Analytics, YouTube, We Got Tickets, MailChimp and bespoke digital platforms.

Yin (2014) notes that in embedded case study designs, the sources may include quantitative data from, for instance, surveys if the use of such data is considered to increase the robustness of the dataset. Thus, complementary quantitative and qualitative data was collected from one in-built audience survey on a bespoke platform and three online audience surveys that were

conducted in the context of online events organised by two case study organisations.

3.7.2.2 Observation data

The predominantly quantitative data collected through digital platforms and surveys was complemented with qualitative data from direct and participant observations conducted online. The observations focused on the digital business models introduced by the case study organisations during the Covid-19 pandemic, and their online audiences' reactions to the initiatives introduced. All the case study organisations selected for the sample had designed and deployed at least one, or several digital business models as a response to the pandemic. The sample of digital business models represented diverse business model types (see Table 3.2), and the novel digital business models introduced typically combined elements of several digital business model types, and sometimes also live activities.

The direct and participant observation data was obtained through accessing the online communities of each case study organisation. In practice, this included the researcher observing the case study organisations' digital performances or other digital products, sometimes only once, other times as many as five times, depending on the nature of the digital business model, and the wishes of the collaborating PAE. Table 3.2 highlights the number, length and times of the events observed.

PAE	BM type	Length of content	Content type	Times observed	Distribution platform
Alpha	Digital Performance/ Digital Product	1h	Pre-recorded video content	2	Facebook and YouTube
Beta	Digital Commissioner /Digital Hub	10h	Mixture of pre-recorded and live video content	2	Facebook and YouTube
Gamma	Digital Performance/ Streamer	1h	Mixture of pre-recorded video, live video, and live audio content	5	Twitch
Delta	Digital Performance/ Digital Hub	3h	Interactive audio, video, and live content	3	Bespoke platform
Epsilon	Digital Product	20min	Pre-recorded audio content	3	Bespoke app

Table 3.4 Observation of case study organisations' digital business models

3.7.2.3 Interview data

To complement the dataset with in-depth qualitative data, findings from the social media and digital platform data, direct observation data and audience survey data were discussed with the members of the participating case study organisations in semi-structured online interviews, conducted on Microsoft Teams. To collect longitudinal data, two semi-structured interviews (method outlined in 3.5.2) took place with one or several founders or senior executives of each PAE, approximately six-to-eight months apart in 2020-2021. Table 6.1 in 6.2 outlines the research participants and interviews conducted. During the interviews, the participants were first asked questions about the goals and objectives of the digital business models introduced during the pandemic (see interview protocol in Appendix 13), and then presented with a short analytical report including key insights on online audiences' reactions to their digital business models, as well as other relevant findings. All the interviews were audio recorded and transcribed verbatim by the researcher. The semi-structured interviews offered the participating PAEs an opportunity to reflect upon the global pandemic and its implications of having to design and deploy new digital business models at a rapid pace, as well as iteratively confirm or disconfirm the key findings presented in the short analytical report.

3.7.3 Coding and data analysis

To provide novel theoretical insights, build new theoretical models and draw generalised conclusions from the case study data, Eisenhardt (1989) proposes a two-step method of within-case and cross-case analysis. The core objective of within-case analysis is to familiarise the researcher intimately with the case study data. The process typically begins with writing a detailed, descriptive narrative, in which unique patterns can be detected. As noted by Eisenhardt (1989, p.540), the descriptive narrative also allows the assessment and comparison of the unique patterns, prior to seeking generalisations:

> [Within-case analysis] allows the unique patterns of each case to emerge before investigators push to generalise patterns across cases. In addition, it gives investigators a rich familiarity with each case, which, in turn, accelerates cross-case comparison.

In addition to the detailed written narrative, visualisations, and graphs (Leonard-Barton, 1990) such as word clouds, time series visualisations and pie and bar charts were utilised to facilitate the identification of key insights from the rich data. Pettigrew (1998) argues that the descriptive narrative is crucial for generation in-depth insights, and it also acts as a foundation for cross-case analysis. In the context of this research, the with-in case analyses were conducted with a specific focus on the value creation process of the digital business models introduced.

The aim of the third study was to gain an in-depth understanding of the digital business models deployed by the case study organisations and highlight the team and individual-level microfoundations, *i.e.* the processes that contribute to the building of DCs within a PAE. Miles and Huberman (1994) posit that coding of the data is, in effect, a core part of the data analysis process. Therefore, during the within-case analysis, the research data was coded using

Nvivo analytical software (*NVivo*, 2020) in three cycles, following the method outlined in (Gioia *et al.*, 2013).

First, descriptive coding (Saldana, 2016) was performed to attach preliminary labels to the data and create an inventory of first-order concepts. Second, similar first-order concepts were combined under categories drawn from the conceptualisations of microfoundations by Teece (2007) and Barreto (2010). Finally, second-order themes were categorised into overarching aggregate dimensions, which in the context of this research, were the sensing, seizing, and transforming capabilities (Teece, 2007; 2010). Figure 3.2 provides an example of the data analysis process.

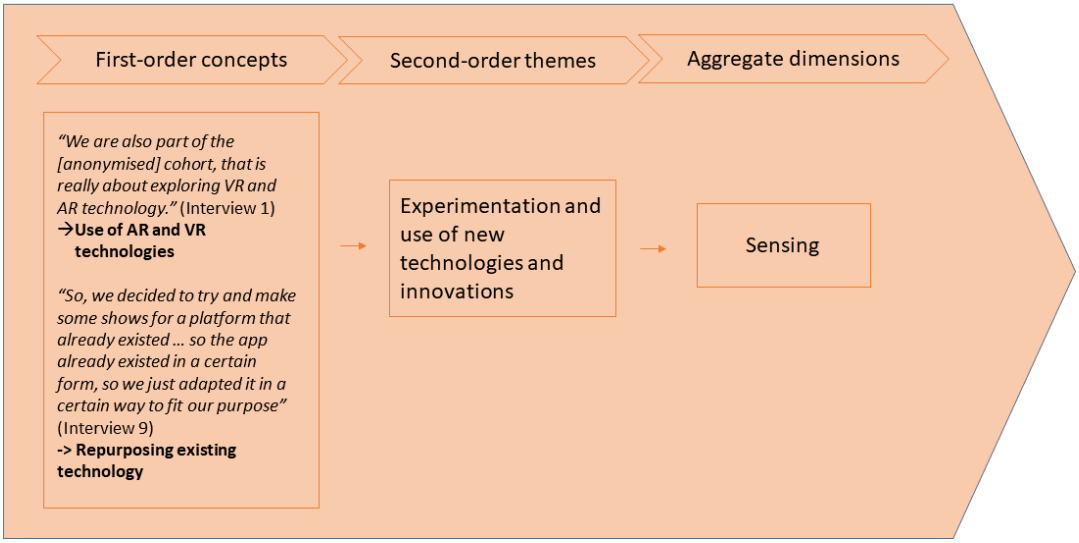


Figure 3.3 Data analysis process (Gioia et al., 2013)

The use of a multiple case research design also enabled the comparison between the five cases with the view of yielding theoretical generalisations. The cross-case analysis was conducted after all the within-case analysis of all five cases was completed. During the cross-case analysis, the descriptive narratives of each case study were coded in *NVivo* analytical software (*NVivo*, 2020), using patterns coding to generate common themes. This was done to reduce the rich empirical data into a more workable form, with the view of creating theory. Following the pattern coding, a word table (Yin, 2014) was created from the coded data to compare the key findings (see Table 6.12 in

6.4.1), and to identify similarities across the cases. Common characteristics of the digital business models deployed by PAEs during the Covid-10 pandemic were categorised under different business model components as defined by Rex *et al.* (2019), and common microfoundational DC practices in performing arts SMEs that enable digital BMI were categorised under the three categories of higher-order DCs (Teece 2007). Finally, a conceptual model was created, using the template in Figure 2.2 in 2.3.3 that synthesised the key findings related to each business model component (Rex *et al.*, 2019) and each higher-order DC capability (Teece, 2007).

3.7.4 Reflexivity

After shortlisting suitable PAEs for case studies, I needed to approach the organisations to invite them to take part in the case study research. With most case study organisations, I again, used my existing connections, and those of my industry partner, supervisors and other industry and academic contacts to make initial introductions. The approach of using direct email introductions through a common contact worked very well, and four out of the eight shortlisted, potential case study organisations provisionally agreed to take part in the research after the introductory emails. I then emailed them to advise that this collaboration would include taking part in a semi-structured interview and granting access to some of the analytical data from digital platforms they used in their professional practice (*i.e.*, non-public data analysis that requires their approval to access).

As the request to access the non-public data situated on a firm's digital platform can feel somewhat intrusive, I found that the initial introduction from a common acquaintance was crucial for establishing a good, trusted relationship with the participating PAEs. This was apparent with the communications with the only organisation that I had contacted without any previous connection, as with them, it took far longer to establish mutual trust, and they were far more cautious about sharing data with me. Furthermore,

the initial conversations with the case study organisations proved extremely important. In the context of this study, it was essential to become an insider, to establish a relationship based on mutual trust, collaboration, and a shared understanding of the industry culture, for the members of the PAEs to feel comfortable sharing their business data with a stranger. Here again, the connection with the industry partner, The Space, proved valuable, as whilst some of the arts organisations were not familiar with me, all were familiar with the PhD industry partner, which reassured them that I was also "a cultural insider" (Kozinets, 1998), who could be trusted.

The data collection process was conducted collaboratively, meaning that each organisation had the freedom to decide the kind of data to which they granted me access. Therefore, the structure of the data analysis reports was not always identical, as the view of receiving a full data analysis report on their digital project was also an incentive of participation for the arts organisation. However, some common elements, for example, the value creation process and the microfoundations of DCs were analysed in every case study to allow for cross-case analysis.

As part of the collaborative approach, each PAE received a full report on the analysis carried out on their data, which provided the participants with an opportunity to reflect upon the findings, confirm or disconfirm them, and allowed the research to feed back into the organisations' individual business plans. Some of the research participants also expressed that they planned to use the data analysis reports to support funding applications.

In the context of the second and third case studies, the insider research dimension was intensified, as I was able to take part in the production of some of the case study organisations' online performances or events. This meant participating in the design process of a digital product or service, for example, being present in production meetings, evaluating the suitability of potential digital distribution platforms and offering recommendations on how to improve the organisations' digital products in the future. Again, the risks of insider bias needed to be carefully mitigated, I therefore adopted an

objective approach drawing on data triangulation, where my recommendations were provided based solely on the data collected. Thus, the recommendations provided did not emphasise my own perspectives but reflected the PAES' audiences' responses to their digital initiatives introduced.

The analysis of the case study data was not without challenges. The process of going through the plentiful data originating from several sources was extremely time-consuming, and it did not help that additional time constraints were imposed on me by the national pandemic restrictions measures, in particular, the home-schooling of a primary school-aged child during the Covid-19 lockdown periods. However, writing the within-case analyses was an inspiring process, as it allowed me to dive deep into the empirical accounts of the research participants, and motivated me to keep going with the research, despite sometimes feeling overwhelmed by the sheer quantity of data that required processing and analysing.

3.8 Research ethics

Ethics approval for the inquiry was obtained from the University of Nottingham Research Ethics committee to protect human participants and their data. Since the research project was mainly conducted online, in the following paragraphs, the key ethics concerns with the data collection are discussed, in particular, in relation to data collected from the Internet.

Whiting and Pritchard (2017, p.2) introduce the concept of "digital ethics" and highlight key ethical issues of business and management research conducted online as "assessing what is human participation; when informed consent is required and from whom; the dilemma of what is public or private on the internet; and decisions about anonymization or attribution."

All the above are very relevant to this research, in particular, the main potential issue was the protection of all personal data collected from research participants and from online sources. Clearly, it was ethically important to

seek informed consent from data owners were realistic and possible. Given that the research involved gathering netnographic data and data from public social media platforms and other digital platforms, which may include personal data such as audience members' names, locations, visual appearances, and traceable online comments (Kozinets, 2020), a highly ethical approach to social media research was adopted.

Consequently, the research project only used data from public social media business pages and websites, and every reasonable step was taken to ensure that PAEs' employees or audience members were not identifiable through reporting of the research data. Thus, PAEs' employees or audience members were not referred to, for example, by their name, username, place of residence, or visual appearance.

Data collected through quantitative methods, such as audience survey data from the participating PAEs' and data from social media platforms' analytics software was anonymous at the point of collection, and therefore individual data sources were not identifiable. The netnographic data and online observation data including audience comments on posts and live streams from social media platforms was anonymised immediately after collection and coded thematically for analysis. The anonymised dataset did not include any identifiable information, and direct quotes from social media platforms were not used. Particular attention was paid on not reporting on textual and/or visual data that could reveal any social media user's identity as a result of online searching, instead the focus was on thematic findings from the netnography and quotes only from the interviews.

With regard to interview data, informed consent was sought from each interviewee prior to taking part in the semi-structured interviews. The participants were clearly informed about their right to withdraw from the research project at any time and without providing an explanation, that they did not need to provide any personal information, and that no personal data would be included in the research outputs. The participants were sent a University of Nottingham information sheet and ethics form prior to the

interview by email, and in the beginning of the interview asked to fill in an electronic consent form on Microsoft Forms.

All participant data that could have potentially been considered as personal data according to the Data Protection Act 2018 (UK Government, 2018), and lead to the identification of an individual, was anonymised. Thus, all the first study interview participants were referred by numbers, e.g., "Participant 1", "Participant 2" and their speciality, e.g., Digital Audiences. With regard to the third study, as the participating organisations were small, and typically had between two to ten staff members, all the names of the participating PAEs were pseudonymised using Greek letters, and fictional names were created for their products or services discussed in the PhD thesis to further protect the identity of the research participants.

3.9 Chapter summary

The aim of this chapter was to highlight the philosophical underpinnings of the inquiry and introduce the pragmatic research philosophy as a rationale for choosing a multistage, multimethod approach. As the research consist of three separate studies, the research designs, research methods and research ethics for each stage were outlined and reflexive narratives provided to highlight how the research was conducted. The following chapter will present the findings of the first study and discuss them in relation to the research questions.

Chapter 4 Digital Business Models in Performing Arts

4.1 Introduction

In this chapter, findings from the first research stage are presented. The initial stage of the inquiry was a case study that involved 18 semi-structured expert interviews with senior performing arts professionals, specialised in digital development. The goal of the study was twofold. First, it sought to investigate the role of dynamic capabilities (DCs) in performing arts enterprises' (PAEs) digital business model innovation (BMI) and deployment of digital business models. Second, it aimed to identify business models implemented by PAEs in the digital economy and categorise such models using the novel theoretical framework for common digital business models, adapted from Rex *et al.* (2019) as detailed in Table 3.1 in 3.4.2, and provide a preliminary analysis on the nature and characteristics of the digital business model types identified.

4.2 Dynamic capabilities in performing arts enterprises' digital BMI

The design, deployment and innovation of business models is strongly linked to the strength of a firm's dynamic capabilities (Teece, 2018). As outlined in 2.3.2, the higher-order DCs include sensing, seizing, and transforming. Teece (2018) proposes that firms need to be agile in their approach to adjust and combine their existing resources and capabilities to develop high-order DCs, which, in turn, enable them to engage in BMI and develop novel business models. In addition, firms deploy a variety of microfoundations, a term referring to the distinct skills, processes and activities on team and individual levels (Teece, 2007).

To gain a better understanding of the DCs leveraged by PAEs, at the start of each interview, the experts were asked about the current state of the UK arts

and cultural sector with regard their ability to engage in digital entrepreneurial ventures and implement digital business models. Echoing the findings from the Digital Culture survey (ACE and NESTA, 2019), the majority of the experts (13 of 18) found that the publicly funded arts and cultural sector had been slow to explore the entrepreneurial opportunities of the digital economy. Core reasons for this lethargy tended to fall under four key themes: 1) Long-established ways of operating, 2) Disparity within the sector 3) Organisation and personnel, and 4) Licencing and rights. The findings from each theme are explored below.

4.2.1 Long-established ways of operating

Sensing refers to a firm's preparedness to recognise and interpret novel industry trends, and identify opportunities relating to such trends (Achtenhagen *et al.*, 2013). Seizing concerns an organisation's ability to rapidly recombine resources to adjust its business model in a manner that enables the organisation to exploit the newly emerged opportunities (Mezger, 2014), and transforming describes the process of transformation of within an organisation, where aspects of a firm or its culture are reconfigured to best address the future opportunities and threats (Teece, 2018). The interview data revealed a notable lack of sensing and seizing capabilities in PAEs on organisational level, particularly with regard to technological opportunities.

P12 [Digital Audiences], who was leading digital operations at a large PAE, commented on the characteristics of arts and cultural institutions and their long-established ways of operating, which often prevented arts enterprises from pursuing the opportunities offered by the digital economy:

> I think that, generally arts institutions, cultural institutions, are probably behind the curve in terms of digital transformation. They have long established ways of working, long-established arts forms to manage, and they have managed them in a certain way for decades if

> not centuries, and it takes sometimes a little a bit longer to effect the transformation … it's not necessarily the primary instinct of an arts institution to seize new opportunities, particularly in the technological field. (P12 - Digital Audiences)

In a similar vein, another participant observed how traditional beliefs, such as the juxtaposition of arts and technology (Benjamin, 1969) were still prominent in the sector, which also hindered the sensing of digital entrepreneurial opportunities: "[Arts enterprises] have struggled, because ... I think because there has been a perception that [digital] is not for them." (P11- Digital Distribution)

P4 [Digital Policymaking] argued that although for the last ten years there had been resources (funding) available for digital research and development (R&D) and other digital activities through various arts funding schemes, arts enterprises were simply not agile enough in their digital BMI to establish sustainable collaborations with technology companies. This, again, reflected the sector's traditional, somewhat dated, ways of operating, which stemmed from the lack of sensing and seizing capabilities: "… I don't think [arts enterprises] have taken on board the principles of being, I don't know, I suppose, agile… I think there's still a kind of a, sounds a bit pejorative, but a slightly old-fashioned collective mind-set." (P4 - Digital Policymaking)

Many compared the publicly funded arts and cultural sector to the more commercial parts of the creative industries such as music, television, and film, which are already far further in exploring the opportunities of the digital economy. It was argued that despite not being as digitally mature as some other sectors of the creative economy, the UK arts and cultural sector was digitally advanced in a global context. This argument provided evidence that there are PAEs in the UK, who possess strong DCs that have helped them to gain competitive advantage over their international peers.

P10 [Digital Broadcast] described how the more commercially focused industries have already been transformed by digital technologies, which has created opportunities for entrepreneurs and caused a phenomenon what

Schumpeter (1934) describes as creative destruction. However, in publicly funded arts and culture, they lamented, this process was still ongoing and far from being finished:

> [The arts] are definitely lagging behind other core media types ... radio, music and television being the three, kind of, main areas and print journalism being another area, they've all gone through very big pivots, where a lot of the existing market was destroyed and then recreated in the digital environment, those entire industries are coping in a new world order, entire structures are rebuilt in those environments, and then unfortunately I would say, the performing arts, or the arts in general, you know, the journey is going on ... there's still a long way to go. (P10 – Digital Broadcast)

P6 [Digital Policymaking] and P7 [Digital Policymaking], who both worked for a sector support organisation and dealt regularly with a vast array of diverse arts enterprises, revealed that the "siloing of digital" in specific departments, such as marketing and communications, was still a common issue within art and cultural enterprises, which prevented the seizing of entrepreneurial opportunities and digital transformation of business models from taking place, as well as digital technologies from being embedded in firms' operating strategies and personnel's skillset. P7 [Digital Policymaking] commented:

> I talk a lot about digital being business as usual and I still think we're not quite there. So digital is held as a separate shiny thing that only certain people know about. And we really need to be in a position where digital is business as usual. It's part of everyone's role. It's not, you know, siloed somewhere in an organisation. (P7 - Digital Policymaking)

P6 [Digital Policymaking] concurred and argued that this "siloed thinking" was a sector-wide issue:

> I think siloed thinking is a problem for the arts sector. And, I think with digital content, you know, it's like the marketing department is creating

> their content, the education department is creating their content, and the performance department is creating their content... that is not necessarily the best way of doing it. (P6 - Digital Policymaking)

These findings are in line with Walmsley *et al.'*s (2022) argument that digital BMI can only be done successfully if it is embedded in the arts enterprise's long-term audience development strategy, and lend support to extant literature by cultural management scholars (e.g., Muñoz-Seca and Riverola, 2009; Muñoz-Seca and Riverola, 2010; Schiuma and Lerro, 2017), who posited that the arts and cultural sector has been slow, incoherent and unsuccessful in its attempts to engage in BMI.

It is noteworthy, however, that all the interviews above were conducted before the start of the pandemic. Indeed, as the strict social distancing restrictions imposed on PAEs by the UK government closed cultural venues, the experts' opinions about the state of sector began to change. This was apparent in the later interviews. P1 [Digital Distribution] observed how as a result of the turbulent conditions created by the pandemic and the closure of cultural venues, arts enterprises had begun to revise their digital strategies, increasingly pivot to digital distribution, and digitally transform their business models:

> The coronavirus pandemic has had an unprecedented effect on the number of organisations factoring digital capture and distribution into their short and long-term planning. This has resulted in a huge increase in the number of performances being published online. (P1 - Digital Distribution)

The interview data thus provided evidence on how the Covid-19 pandemic created significant market imperfection and increased the development of DCs in PAEs. As live performance content was no longer available, arts audiences' cultural consumption preferences changed overnight, and to sustain meaningful relationships and stay connected with their core audiences, arts enterprises were forced to rapidly explore the opportunities available in the digital economy. This radical development was caused by the

pandemic, a global health crisis that pushed arts producers to become digital entrepreneurs, which, in turn, contributed to the development of critical DCs in PAEs. In the turbulent pandemic environment, the deployment of digital business models became the sole option for PAEs to maintain their autonomy and sustainability, while continuing to produce artistic content and value for society (Chang and Wyszomirski, 2015). However, as also pointed out by Walmsley *et al.* (2022), the engagement in digital BMI and the introduction of myriad digital entrepreneurial initiatives by arts enterprises during the pandemic was not enough to mitigate the financial impact of Covid-19 on publicly funded arts.

4.2.2 Disparity within the sector

Another key theme that emerged from the interview data was the heterogeneous nature of PAEs and the significant disparity within the sector with regard to financial resources, digital maturity, skills, and capacity. SMEs commonly have restricted resources at their disposition (Smallbone *et al.*, 2012; Wapshott and Mallett, 2021), and performing arts SMEs are no different. Six interviewees drew attention to the lack of resources, namely the lack of R&D funding aimed at SMEs and emphasised the key role of regular public funding in the sustainability and survival of an arts enterprise. This strongly echoes the resource-based view (RBV) that firms are heterogeneous due to the varying level of organisational resources and capabilities they possess and use to create competitive advantage (Barney, 1991). However, resources alone cannot explain how competitive advantage is gained in a changing environment, such as the fast-evolving digital economy.

P3 [Digital Content Production] argued that the gap between small and large arts enterprises was created by the unequal distribution of public funding. This, they stated, led to smaller enterprises having less resources and

capabilities to engage in digital projects: "The biggest organisations are doing digital incredibly well, and the smaller ones have seen that success, they want to emulate that, the problem there is that gap between the resources and abilities that they have." (P3 - Digital Content Production)

R&D funding distribution was, indeed, a theme that emerged strongly from the interview data. Many research participants emphasised that the public funding available was distributed unequally and the total amount was not sufficient to cater for the whole sector, due to the current funding model being structured in a way that supported large, leading enterprises. This was possibly because these high-profile enterprises that had the best financial resources and strong DCs that enabled them to deploy digital business models, were also the most vocal in articulating the sector's needs to policymakers:

> ... there should be more R&D spending in the arts. And [some enterprises] have done a really good job of making that case to the government, which is why funding has become available... but it is on a macro level, it isn't at the level of what this R&D should actually look like, and how it would actually need to be structured. (P8 – Digital Research)

The experts described how the sector leaders regularly secured large grants worth of several millions of pounds (e.g., through Innovate UK's Audiences of Future project, see 1.2.3), an amount which —if distributed more equally— could have covered for ten or more small-scale R&D projects. However, as stated above, financial resources alone do not enable PAEs to engage in BMI or deploy digital business models, but DCs are needed to support this process. This is in line with Danneels (2008), who makes a distinction between first order and second order DCs. In his analysis, R&D capabilities are described as a firm's ability to build new technological competences, and thus contribute to the development of DCs.

The sector's funding needs with regard to digital R&D became apparent, in particular, the need for creative explorations. In effect, these experiments

were considered as unique acts of sensing (Teece, 2007), specific to arts enterprises, and shaping the development of DCs. It was argued that without sufficient R&D funding, PAEs were unable to engage in creative, innovative explorations and digital business model innovation was not likely to occur in performing arts:

> I think there needs to be proper funding for a range of innovative projects, projects which look into innovative rights models, innovative creative strategies, innovative distribution opportunities. Because it is only by actually trying out real projects that we'll be able to judge their creative success and their viability. (P14 – Digital Broadcast)

However, the issue with digital R&D funding was at least temporarily resolved, when the Covid-19 pandemic created a new operating environment for performing arts, which accelerated digital transformation in the sector (AHRC and DCSM, 2021). The closure of cultural venues provided PAEs a creative break from their everyday activities, and to mitigate the impact of the closure, the UK government introduced unprecedented funding opportunities for digital R&D, such as the Culture Recovery scheme, which enabled arts and cultural sector to apply for emergency funding and had a good success rate for applicants (Bradbury *et al.,* 2021). This, in turn, acted as a catalyst for PAEs to develop the critical DCs that are required for them to engage in digital BMI.

4.2.3 Organisation and personnel

The interviewees revealed a myriad of issues relating to managerial capabilities within PAEs. Extant research (e.g., Zhang, 2007) has found that employee capabilities, particularly managerial capabilities, play an important role in the development of DCs. Teece (2007) refers to these individual or group-level capabilities as microfoundations of dynamic capabilities. Microfoundations are the underlying actions and capacities on micro-level

within an organisation that shape decision making, strategy and DCs, and boost organisation-level performance (Eisenhardt *et al.,* 2010).

Many interviewees highlighted the general lack of digital expertise on sector level, and arts enterprises' inability to retain digital talent. They argued that due to the low salaries offered by arts enterprises, young digital specialists often left the sector to pursue more lucrative career aspirations in the commercial realm. The lack of young digital experts linked to another important theme of arts enterprises' senior executives not being digital natives, nor possessing an adequate knowledge of the potential or implications of digital entrepreneurship and digital BMI: "I think there's a naivety about digital distribution and its ability to reach audiences in the arts sector ... partly because the leadership doesn't really understand technology and how things work" (P6 - Digital Policymaking). P5 [Digital Policymaking] argued that: "… the leadership is generally a lot older, and not digitally native," due to the long-standing hierarchical structures still present in cultural institutions, which did not encourage the appointment of younger specialists to leadership roles. This generational gap made it difficult for arts enterprises to fully comprehend and fulfil their digital audiences' needs, as digital audiences usually tend to be younger than in-person audiences (Walmsle*y et al*., 2022).

As posited by Teece (2018), the management's ability to develop new business models is a core microfoundation of DCs. The research revealed that often managers' of PAEs did not possess the ability to develop digital business models, as senior executives lacked digital skills and understanding of digital technologies. This prevented digital technologies from being embedded in arts enterprises' business models, amplified the traditional live/digital juxtaposition (Benjamin, 1969), and hindered the sensing of technological opportunities:

> … lack of digital skills, like the senior executives of organisations don't necessarily have digital skills, they are not digital natives, they don't understand how digital would fit into their organisation. They simply

> think that is not for them. Maybe because they specialise in live performance. (P5 - Digital Policymaking)

As a solution, to close this generational gap in digital skills and develop the microfoundations of DCs in PAEs, measures were proposed, such as investing in the existing digital experts in arts enterprises, hiring digital talent from other sectors and focusing on internal digital capacity building. Also, it was observed that the issue with senior executives was potentially a temporary one, as it will cease to exist once the generation, who "have lived and breathed digital" (P6 - Digital Policymaking) start being appointed to leadership positions.

4.2.4 Licensing and rights

In addition to the organisational issues that prevent PAEs from sensing and seizing the opportunities of the digital economy, some of the experts drew attention to the external antecedents that influence the development of DCs (Eriksson, 2014). Key issues were related to the monetisation of digital cultural content, particularly to licencing and rights management. P14 [Digital Broadcast], who had worked in digital broadcasting for several decades, pointed out that there were no industry standards or licencing models in place, but arts enterprises tended to use *ad-hoc* structures and agreements that were usually not fit for purpose. In management literature, this type of "ad-hoc problem solving" is described as a process used by firms to achieve change without relying upon DCs (Winter, 2003). Such behaviours provide further evidence on the lack of critical DCs in PAEs. As a solution, the experts called for external stakeholders to take more responsibility and urged ACE and sector-support organisations to assume a more active role in exploring potential licencing models with the view of developing sector-specific standards.

P10 [Digital Broadcast], who worked for a digital platform, stated that the lack of a standardised licencing model was the greatest barrier preventing the development of digital performing arts products and their distribution on digital platforms. They observed that when a PAE was engaged in filming of a staged performance, often the agreements on royalties took place too late in the capturing process. This meant that, for instance, if one actor appearing in the digital capture were to oppose the royalty model, the project could not go ahead. The delay in developing a standardised licensing model caused great frustration among both arts producers and broadcasters, particularly because there are licencing standards in place in other industries, such as music and television, where lessons could be learnt from. P10 [Digital Broadcast] lamented:

> … it took years to get standardised models designed for television or for music and the rights models are very templated and structured ... and that now needs to happen as well in the performing arts, and they are like five years behind it, it's really painful, it's really, really painful. (P10 – Digital Broadcast)

A further issue causing confusion was related to intellectual property (IP) and rights when distributing content on digital platforms. P2 [Digital Audiences], who held a senior role at a sector-support organisation, observed that the issue with digital rights was ubiquitous in the arts and cultural sector, and actively hindered arts enterprises from engaging in digital BMI:

> We know ballet companies that do not have the digital rights to the scores that they perform nightly, or the choreography that they perform, same again with orchestras, same again with theatre groups, and I think there's a vast number of challenges that have held them back, and uncertainty in that area is probably stopping the sector from being able to experiment so freely or to develop quite so freely. (P2 - Digital Audiences)

P2 - Digital Audiences also argued how the cost of obtaining a licence for the digital distribution of a performance, which included, for example, music from

commercial artists, was often extremely high, even if the performance was not intended for commercial distribution. Furthermore, the licence needed to be renewed in every two years, which meant that some digital business models, such as the Digital Product model (see Table 3.1 in 3.4.2), often became unviable, and arts enterprises were thus excluded from seizing the opportunities its deployment could offer. P2 - Digital Audiences found that this issue was particularly prevalent among medium-sized arts enterprises:

> I think that has been a massive stumbling block for a lot of medium-sized organisations, to be able to put that material out. They don't own their own art; they're performing something that someone else ultimately owns the rights to. (P2 - Digital Audiences)

These findings further underline the myriad of barriers PAEs face when trying to develop critical DCs that enable them to experiment with new business models in the digital economy. Misek *et al.* (2022) found that the Covid-19 pandemic temporarily enabled a wider distribution of digital cultural content, as during the time of crisis many performers waived their rights or worked for less than usual just to keep working and creating artistic content. However, it is evident that these unprecedented, unique, crisis-time practices do not offer a permanent solution to the manifold rights and licencing issues present in the sector, but policymakers and sector-support organisations need to take a more active role in developing industry standards and a structured licencing model for the digital distribution of performing arts.

4.3 Digital business models identified

The second goal of the study was to identify business models implemented by PAEs in the digital economy and categorise them using the framework for common digital business models in performing arts (see Table 3.1 in 3.4.2). As explained in Chapter 3, during the first PhD study, this framework was iteratively adapted to the context of the digital economy from Rex *et al.*'s (2019) framework of common business models for performing arts, which did

not have a focus on digital business models, but centred upon PAEs' traditional, live activities-based business models.

To identify PAEs with strong DCs, who were engaging in digital BMI and already deploying digital business models, the research participants were asked to provide examples of 'best practice' digital initiatives introduced by PAEs that were successful in terms of both, artistic quality and in generating income from digital audiences to contribute to the sustainability of their organisation. The experts highlighted a variety of projects and mentioned a host of PAEs. These projects were then further researched online, and publicly available internet data was gathered to determine their characteristics. Four main types of digital business models were identified with the sample: Digital Performance, Digital Product, Digital Hub, and Streamer. To gain a macro-level understanding of business models implemented by PAEs in the digital economy, Appendix 11 outlines the organisations quoted, their size, income generations methods and categorises the projects according to digital business model types. Some of the best practise examples quoted were excluded from the table on the grounds that they were deemed solely as marketing approaches and not business models.

Organisation size was determined using the Digital Culture survey (ACE and NESTA, 2019) standard (see Appendix 10). The information relating to the annual income of the arts enterprises was sourced from public registers, such as the Charity Commission website, ACE's list of National Portfolio Organisations 2018-2022 and Companies House website. All the PAEs quoted by the experts were large, apart from one medium-sized enterprise. Unsurprisingly, the sector leaders, The Royal Shakespeare Company (RSC) and National Theatre (NT) featured most often in the experts' accounts. Other common best practice examples included Blast Theory's "born digital" (*i.e.,* digitally native) performances and Royal Opera House's (ROH) digital initiatives. The most quoted enterprises usually deployed a portfolio of digital business models, which confirms the findings by Li (2020), who argued that instead of implementing one digital business model, firms are increasingly

introducing portfolios of digital business models to serve different market segments. The characteristics of the four digital business model types identified by the experts are explored in further detail below.

4.3.1 Digital Product model

The RSC's work was quoted by six experts, with their 2016 production of *The Tempest* (RSC, 2017) highlighted repeatedly. A collaboration between RSC and technology companies Intel and The Imaginarium Studios, *The Tempest* embedded digital technologies in staged performance in unprecedented ways, for example, had digital avatars on stage interacting with actors in real time. The production was also captured as a film and sold to several third-party distributors.

With the digital capture of *The Tempest*, RSC implemented a Digital Product business model (see Table 3.1 in 3.4.2) where income is generated from licence fees or royalties from distributors, such as Marquee TV, the performing arts streaming platform, who distributes performing arts content to digital audiences through a subscription model. RSC's sustainable deployment of the Digital Product model demonstrated strong DCs, as they were able to sense a novel technological opportunity, attract new key partners, and reconfigure their value proposition to match the needs of digital audiences. Based on the experts' insights, the Digital Product model appeared to be the most common digital business model in performing arts, which implies that the digital capture of staged performance is quite widespread in the sector among large enterprises. Drawing on Li (2020), the Digital Product model is not new in the sense of being unprecedented, but digital technologies allow for the scaling up of a live performance by increasing its reach and impact.

The Digital Product model involves creating a pre-recorded digital product, e.g., a performance or an educational video that can be consumed on demand

on a digital platform, with income generated through the sales or renting access to the digital product. However, as revealed in 4.2.4, due to the lack of a standardised licencing model in performing arts and the high cost of capturing a staged performance, it can be posited that the Digital Product model is not easily accessible to SMEs. Furthermore, digital products can have a long self-life and deployment of multiple distribution formats. In average, rights are usually acquired for five to ten years, which can further increase the cost of the model. Particularly small and micro-enterprises often struggle to raise sufficient funds or attract sponsorship from, e.g., technology companies, to create high-quality digital products. Besides, as highlighted by the experts, the lack of microfoundations, such as in-house technology skills and digital capacity among PAEs' senior executives further complicates the viable implementation of the model.

4.3.2 Digital Performance model

The Digital Performance model emerged from the interview data as best practice and the second most common digital business model implemented by large PAEs (see Appendix 11). For instance, NT Live, National Theatre's cinematic livestreams were mentioned by four experts as a successful example of attracting digital audiences and generating income. The Event Cinema model, a variant of the Digital Performance model, involves an arts enterprise livestreaming their performance to cinemas across the country, where it can be enjoyed in real time by much larger audiences that would fit into the physical venue where the performance takes place. The Digital Performance model, much like the Digital Product model, is not novel in the sense of its core idea being unprecedented (Li, 2020), but digital technologies increase the impact of the traditional business model, which involves producing a performance for live audiences. As highlighted in 1.3.5, the impact of the Event Cinema variant has been previously investigated and evaluated by ACE and BFI. NT's sustainable deployment of the Digital

Performance model requires strong DCs, as it leverages on NT's expertise on hybridising and reconfiguring an existing business model (Teece, 2018).

Echoing the findings by Abrahams (2015), the interview data revealed a host of challenges with the Event Cinema model, particularly with regard to cost and accessibility. Although the model was widely quoted as best practice by the experts and its financial benefits to enterprises such as NT were recognised, the research participants observed several challenges with the deployment of the model. For instance, P14 – Digital Broadcast argued that the sustainable exploitation of the event cinema model was limited to sector leaders and virtually impossible for smaller enterprises:

> I think event cinema, for certain companies and certain projects, is an extremely successful channel to reach digital audiences, certainly for some theatres, for opera and for ballet, and even for traditional visual arts … but its exploitation, and certainly, its sustainable exploitation, is restricted to large, well-resourced companies. (P14 – Digital Broadcast)

This implies that due to the high cost and challenging licencing process, both the Digital Product and Digital Performance models were not easily accessible to SMEs. Most experts agreed that resources are distributed unequally in the sector, and without radical changes in the funding model that generate more investment in digital R&D and the development of DCs through digital capacity training, SMEs will continue to struggle to engage in digital BMI and deploy the Digital Product and Digital Performance models.

4.3.3 Streamer model

The research participants identified the Streamer model as a less common business model deployed by PAEs in the digital economy. As an example of the Streamer model, Royal Opera House's (ROH) YouTube activities were quoted by two experts. With over a million subscribers and over 300 million

views on the platform *(Royal Opera House - YouTub*e, 2022), ROH was considered to be in a good position to implement the Streamer model and monetise their digital community. As outlined in Table 3.1 in 3.4.2, the Streamer model involves producing live or pre-recorded content to be streamed on third-party platforms such as YouTube. In the Streamer model, income is generated from several distinct sources, such as advertising revenue from third-party platforms, sponsorship, and merchandise sales relating to the activities on third-party platforms. The Streamer model is digitally native, meaning that an equivalent live activities-based business model does not exist. Thus, in contrast to the Digital Product and Digital Performance models, the Streamer model is not a scaled-up version of a traditional business model present in the arts and cultural sector, but the model is borrowed from digital entrepreneurs in other sectors, such as video gamers on YouTube. However, this implies that the Streamer model either, is not novel in the sense of being unprecedented (Li, 2020).

For a publicly funded organisation, the deployment of the Streamer model can raise issues with access and ethics. Some PAEs may consider themselves to be precluded from monetising their digital content, since the production of their digital outputs has been subsidised from public funding and, thus, the monetisation of these outputs is in dichotomy with their funders' requirements. For instance, P12 – Digital Audiences pointed out that to guarantee access for all audience groups, it was unlikely that ROH could introduce financial barriers, such as adverts or paywalls, which would delay or prevent certain socio-economic audience groups from engaging with their digital content.

Therefore, despite having gathered a significant online community around their digital activities on YouTube, ROH was most likely not able not generate financial value from the content they produced for the platform. ROH's YouTube presence had, nevertheless other undisputable benefits in terms of value creation, as they were actively generating brand value for the firm, as well as social and cultural value for digital audiences. Despite the importance

of the brand, cultural and social value creation, income is required to sustain a PAE. ROH's inability to generate actual income from the Streamer model insinuates that perhaps they were, after all, using their presence on YouTube as a marketing tool, rather than deploying a digital business model.

It was apparent from the interview data that the Streamer model – although widely implemented by 'YouTubers' (referring to YouTube entrepreneurs) – is still rare in the arts and cultural sector. This is in line with the findings by Misek *et al.* (2022), who argued that The Tank Museum in Dorset was one of the rare cultural enterprises in the UK, who has sustainably implemented the Streamer model and generated significant income from streaming content on third-party platforms, such as YouTube and Patreon.

4.3.4 Digital Hub model

The Digital Hub model refers to creating and running a digital platform, with diverse intersecting activities, and generating income directly from the digital content distributed on the platform, often through a subscription or ticketed pricing model. The Digital Hub model is not novel in terms of being unprecedented (Li, 2020), but digital technologies allow for the scaling up of the live business model. The Digital Hub model is a variant of Baden-Fuller *et al.'s* (2017) multi-sided model, in which a firm extracts value from the interactions of two or more consumer groups. Multi-sided models are popular in the digital economy, as dominant digital platforms commonly implement the multi-sided platform (MPS) business model (Øverby and Audestad, 2021).

The experts identified some examples of the Digital Hub model in performing arts, such as The RSC's Globe Player or Darbar Arts' (DA) music streaming platform Darbar Player. These are bespoke digital platforms that PAEs have produced to distribute their digital content directly to audiences, instead of using a third-party platform as a mediator. Taking DA's digital platform as an

example, Darbar Player encompassed an ample collection of Southeast Asian classical music videos, captures of live performances or concerts as well as livestreamed music events. At the time of the interviews, the content was accessible to audiences through a subscription model, priced at £3.95 per month.

Despite the undoubted benefits of having sole control over the distribution and monetisation of their digital content, based on the interview data, the Digital Hub model appeared relatively rare among PAEs. The experts found that this was mainly due to the high initial cost of creating a digital platform and because it was challenging to attract audiences onto a new platform, as the competition over performing arts audiences' time and attention was already fierce. P15 – Digital Research, an independent consultant, reflected on an experience of working with a large PAE, who had considered experimenting with the Digital Hub model:

> We were doing some usability testing, and I remember some guy who was like, so you're going to tell me that hundreds of arts organisations might have essentially their own TV channels online. And if I want to find that stuff, I have to go onto 200 websites to go and find it. (P15 – Digital Research)

This anecdote captures the cautious attitudes towards bespoke digital platforms among the personnel of PAEs. One of the experts reflected that such attitudes perhaps rooted from the £1.8M Canvas project, a digital platform on YouTube, commissioned by ACE and launched in 2016 with the goal of reaching new digital audiences by making arts content more discoverable as well as developing digital skills and capacity in the sector (MTM, 2018). Following the failure of the Canvas platform, which was mostly due to the new-build, costly platform's inability to attract digital arts audiences, the general stance in the sector was that bespoke digital platforms were unable attract traffic and generate sufficient income to become self-sustained, after the initial funding has run out (MTM, 2018).

Due to such attitudes that stemmed from one failed experience, prior to the Covid-19 pandemic, it was extremely rare for an arts SME to consider creating their own digital platform. Therefore, the creation of digital products such as performance captures for broadcast television –although this, as well, was usually only accessible to few high-profile firms– was deemed a much more viable route to significant income generation. P14 – Digital Broadcast confirmed that selling digital products to broadcast television was the best way of distributing digital performing arts content, and expressed their doubts over monetisation through arts specific subscription or PPV platforms:

> Broadcast television is a very successful –in a very few occasions when people can achieve it– a very successful monetisation model, but I don't know anybody who has made any real success in terms of either producing work for subscription video-on-demand services or pay-per-view services to date. (P14 – Digital Broadcast)

Returning to the Digital Hub model, the experts described a plethora of additional challenges related to running a digital platform. The key ones centred upon the technical experience of designing and maintaining a digital platform and the initial cost of production. These included the lack of expertise in scoping platform requirements and procuring the technical production, the inability to deliver a positive user experience, insufficient marketing resources to attract audiences on the platform and the lack of initial funding. From a DC perspective, these can be considered as microfoundations of DCs, necessary for PAEs to sustainably deploy the Digital Hub model.

4.4 Discussion

The first research study set out to understand how PAEs deploy digital business models and how DCs contribute to this process. Furthermore, the research was positioned to map the common digital business models deployed by PAEs and investigate their main characteristics.

When situating performing arts in the digital economy, the findings revealed that the UK performing arts sector –although some experts considered it digitally advanced in a global context– has been slow to explore the opportunities of the digital economy. This became particularly evident when the performing arts sector was compared to other, more commercially focused, or digitally native sectors in the creative industries. The findings unveiled how this lethargy in the adoption of digital technologies stemming from a notable lack of both microfoundations and higher order DCs, has delayed the sector-wide introduction of digital business models in performing arts. Drawing on the interview data, the key barriers preventing PAEs from engaging in digital BMI were the unequal distribution of R&D funding and the lack of DCs, particularly managerial microfoundations within PAEs, which was reflected in senior executives' insufficient knowledge of digital ventures, the long-established, hierarchical ways of managing PAEs and the organisations' inability to retain young, digitally literate talent. Furthermore, the significant disparity among PAEs in terms of digital skills, capacity and financial resources further depicted a picture of a heterogeneous and highly unstructured sector.

However, it was also revealed that large PAEs possessed strong DCs and were thus in a much better position to experiment with digital technologies and engage in digital BMI than SMEs. As unveiled through the examples of best practice provided by the research participants, high-profile enterprises and sector leaders were commonly implementing both Digital Product and Digital Performance business models and experimenting with Streamer and Digital Hub models. In particular, the Event Cinema model, variant of the Digital Performance model, and the Digital Product model, which involved digitally capturing staged performances with the view of selling them to third-party broadcasters, was widely deployed by large PAEs. Yet, it appeared that these digital business models could only be replicated by SMEs if they received considerable assistance from sector-support organisations or were fortunate enough to secure one-off grants from digital-focused funding schemes.

The first study did not provide definite answers regarding PAEs' ability to design and sustainably deploy digital business models, but it did point towards some notable findings. One of the most important insights gained from the study was that whilst there is digital BMI occurring in performing arts and digital business models deployed by PAEs, these business models are not necessarily accessible to SMEs. Both financial resources and strong DCs are required for their sustained deployment, and the research findings revealed that performing arts SMEs often lacked both. Therefore, the first study firmly guided the following research stages towards a stronger focus on SMEs and the DCs that enable performing arts SMEs to deploy digital business models. It also provided a good macro-level understanding on best practice within the sector with regard to digital business models, as well as early evidence of the impact of the Covid-19 pandemic as an accelerator of digital transformation. Particularly the later interviews conducted during the pandemic illustrated how the pandemic seemed to trigger the emergence of DCs practices in PAEs and encourage them to experiment with digital BMI.

Although one expert disagreed on the role of public funding as an enabler of digital BMI, the research findings strongly indicated that initial investment from public funding is usually necessary for PAEs to develop DCs and engage in creative experimentations with digital technologies. The majority of the experts concluded that the main issue with the current distribution of public funding was that only large enterprises, those recipients of regular public funding, had sufficient resources to conduct experimentations with digital technologies and engage in the development of DCs with the view of deploying digital business models. Paradoxically, it was often these well-resourced sector leaders, who also secured the largest digital R&D grants, and thus the gap between large and small PAEs kept widening. It can therefore be posited that public funding is an essential enabler of digital BMI in performing arts, as without such funding digital BMI struggles to take place. The disparity among PAEs with regard to resources and DCs seemed to exclude some organisations from digital activities completely, as the events observed from the interview data revealed that there were no

sustainable digital business models available for PAEs that could be deployed at a low cost and without significant in-house, technological skills.

These findings are in line with other researchers (e.g., Misek *et al.,* 2022), who emphasised the role of public funding in enhancing online audiences' access to arts and culture. The findings also support the arguments of Walmsley *et al.* (2022), who found that the vital role of freelancers in the cultural industries is not fully understood, and therefore public funding or emergency support during the pandemic was not always reaching these micro-entrepreneurs who constitute up to 70 percent of the workforce in performing arts (Creative Industries Federation, 2021).

4.5 Conclusions

The relationship between performing arts and digital technologies is notably complex. Prior to the Covid-19 pandemic, the high-quality digital capture of live performance was often inaccessible to PAEs due to the high cost and challenging licencing and technology requirements. The lack of critical DCs required for engaging in digital BMI and deploying digital business models were reflected in the expert accounts when they described PAEs' apprehensive attitudes towards digital technologies and their long-established managerial practices. Also, the complex ecosystem at the intersection of artistic, public service and commercial realms where PAEs operate, seemed to rely on structures that increase disparity and inequality in the sector.

The study offers the following contributions that further our understanding on how PAEs deploy business models in the digital economy. From a theoretical point of view, it increases our understanding of the critical DCs that enable digital BMI in PAEs. Furthermore, drawing on the novel framework of common digital business models for performing arts (see Table 3.1 in 3.4.2), the research identified four digital business model types: Digital

Product, Digital Performance, Digital Hub, and Streamer, and provided evidence of them being sustainably implemented by (large) PAEs. Many high-profile enterprises were also observed to deploy several types of digital business models simultaneously, which confirms that firms are increasingly introducing portfolios of digital business models to target different market segments (Li, 2020).

More detailed analysis of the characteristics and components of the digital business model types revealed, however, that most were not easily accessible to SMEs, mainly due to their high initial cost and challenging technology requirements that required PAEs to possess strong DCs in order to deploy them. This implies that, despite PAEs' operating environment being increasingly digital, performing arts SMEs are still commonly excluded from sensing, seizing, and exploiting the opportunities offered by the digital economy. Therefore, more investigations are needed on small and medium-sized PAEs' digital activities to determine how they can sustainably deploy digital business models and compete with the well-resourced sector leaders.

It is also worth noting that none of the experts quoted Digital Service or Digital Commissioner models (see Table 3.1 in 3.4.2) as best practice. This indicates that, prior to the pandemic, these digital business models were perhaps not so widespread in performing arts. However, as will be discussed in Chapter 5, the pandemic years saw a dramatic rise in arts enterprises deploying Digital Service and Digital Commissioner models, and in particular, the Digital Service model gained unprecedented popularity among those PAEs, who provide educational arts-related services. Although in the scope of the first study it was too early to draw conclusions on the impact of the Covid-19 pandemic, the findings indicated that the global coronavirus outbreak acted as an accelerator of digital transformation in performing arts, and triggered the development of DCs, particularly among SMEs. As the closure of cultural venues rendered traditional live activities-based business models temporarily redundant, arts producers, out of necessity, begun to actively explore the opportunities of the digital economy. This sudden 'pivot' to the

digital economy required them to swiftly develop and leverage DCs, become more agile in their digital strategy and adopt an experimental and entrepreneurial mind-set.

4.6 Chapter summary

This chapter presented the findings from the first PhD study, which involved 18 semi-structured expert interviews with senior performing arts professionals. Through the analysis of the interview data, four types of digital business models were identified: Digital Product, Digital Performance, Digital Hub and Streamer, and the characteristics of each were highlighted. Furthermore, the DCs that enable PAES' digital BMI were investigated and a notable lack of critical DCs required for engaging in digital BMI and deploying digital business models was revealed, in particular, in the SME context. The subsequent chapter, which will present the findings from the second PhD study, a netnography on 35 UK-based PAEs, will build on the findings of this chapter.

Chapter 5 Covid-19 pandemic as a catalyst of digital business model innovation

5.1 Introduction

In this chapter, the findings from the second study are presented. The first study (see Chapter 4) revealed that whilst large, high-profile Performing Arts Enterprises (PAEs) were actively deploying business models in the digital economy already pre-pandemic, performing arts SMEs were often unable to develop digital business models, due to their high initial cost and challenging technology requirements. These findings strongly guided the second research stage towards a stronger focus on the digital business models deployed by performing arts SMEs.

The second study builds directly on the findings of the first study. Chapter 4 presented findings from the 18 expert interviews, through which four digital business model types were identified. Moreover, it highlighted a lack of crucial dynamic capabilities (DCs), particularly in small and medium-sized enterprises (SMEs), essential for effective digital business model innovation (BMI). Building on this groundwork, the current chapter presents the findings of a longitudinal netnography on the digital activities of 35 PAEs during the peak of the Covid-19 pandemic in 2020.

The research identifies six types of digital business models that emerged as a result of pandemic-induced digital BMI within the performing arts sector. These models are systematically analysed using a novel framework for common digital business models in performing arts, and the discussion is enriched by a DC perspective, drawing on the work of Teece (Teece *et al.*, 1997; Teece, 2007; 2018). The macro-level analysis in this chapter builds the foundation for a comprehensive understanding of digital BMI in the performing arts. Chapter 6 will then shift focus to a micro-level examination of practices within five performing arts SMEs. This investigation will aim to highlight the components and characteristics of their digital business models,

providing insights into the microfoundational processes of dynamic capabilities that enable PAEs to actively engage in digital BMI.

The second study was conducted in 2020, during the peak period of the Covid-19 pandemic, under crisis-time conditions, when strict social distancing requirements imposed upon PAEs by the UK government had closed all cultural venues and forced arts producers to rapidly turn to online activities. These unprecedented, unique conditions acted as a catalyst of digital transformation in performing arts and offered a prolific ecosystem for PAEs to engage in creative digital R&D, lack of which was highlighted as a significant barrier of digital BMI by the experts interviewed for the first study. Therefore, the second study's core objective was to provide answers to RQ2*: "How can performing arts enterprises develop and sustainably deploy business models in the digital economy?"*

5.2 Top-level findings

Through preliminary analysis of the netnographic data, it was established that the organisation size (in terms of annual turnover, see criteria in Appendix 10) and art form (e.g., theatre, music, dance) were not sufficient as variables to detect patterns in the deployment of digital business model types, but another category was needed to group the organisations according to their way of operating. Therefore, a new variable: "organisation type" was created, which reflected the *modus operandi* of PAEs. The categorisation introduced by Misek *et al.* (2022) was used as guidance to determine the organisation type, and thus, four different types of organisations were identified within the sample:

- Touring companies that do not have their own performing venue but tour with their performances in the UK and internationally
- Receiving venues that do not produce their own performances, but host touring companies in their venues

- Producing companies that have their own venue where they perform, but also tour with their performances in the UK and internationally
- Festival organisations, whose operations focus usually around organising one annual festival

As one core focus of the study was to identify and analyse digital business models introduced by performing arts SMEs during the Covid-19 pandemic with the view of gaining a better understanding on their nature and characteristics, the digital business models identified were labelled according to the six types outlined in the novel framework of common digital business models for performing arts: Digital Product, Digital Performance, Digital Service, Digital Commissioner, Digital Hub and Streamer (see Table 3.1 in 3.4.2). A comprehensive analysis was then conducted on each digital business model type, and their characteristics were examined in relation to the size and type of the PAE deploying the digital business model. This was to identify key differences in the approaches taken by different types and sized organisations.

5.2.1 Engagement with digital follower communities

When examining the topography of the online ecosystem formed by PAEs' business pages, it was revealed that almost all the PAEs in the sample used their Facebook business pages actively to communicate and interact with their audiences, who, in turn, reacted by 'Liking' and commenting on the posts or sharing them on other Facebook pages and profiles. There appeared to be a somewhat linear relationship between the financial resources of the organisation and the size of their digital follower community, as large PAEs –those, whose annual turnover was over £500,000– also had the largest follower communities on their Facebook business pages, with an average of over 22,000 followers (see Figure 5.1). Large PAEs were also the most active

in posting on their Facebook business pages and engaging in conversations with the members of their digital follower community.

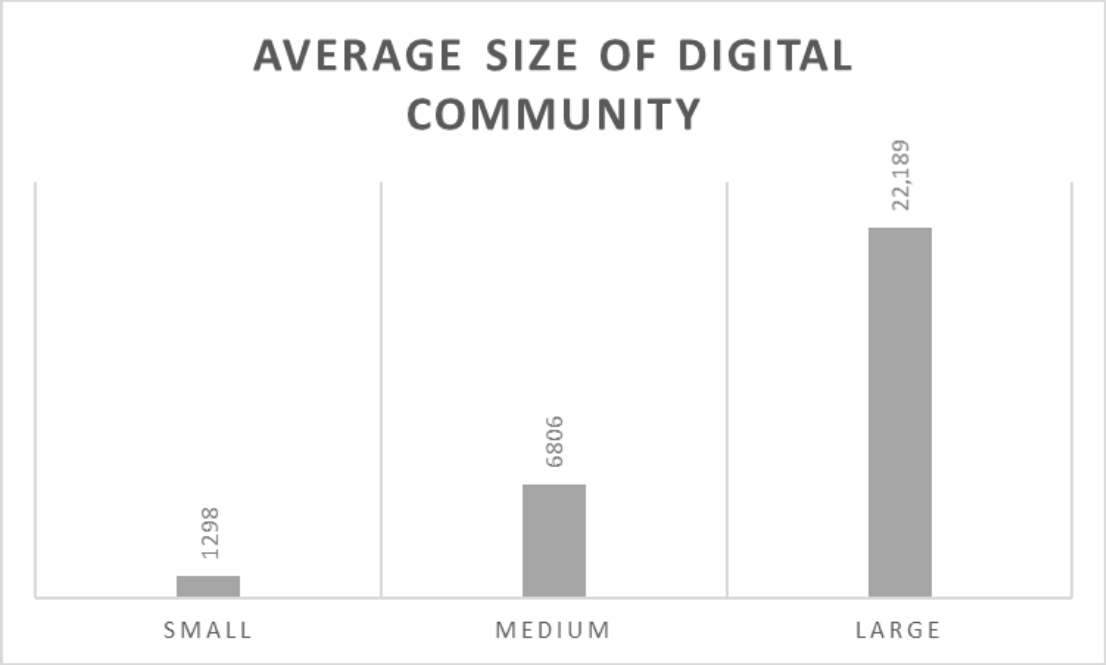


Figure 5.1 : Average size of PAEs' Facebook follower community

The difference between SMEs and large organisations on the level of interaction with online communities became particularly pronounced in March and April 2020, during the early months of the Covid-19 pandemic, when many large PAEs were posting on Facebook actively, from three to seven times a week, and to inform their audience about cancelled performances and as a lockdown-time alternative, offering rapidly repackaged digital content from their archives to be consumed free of charge on social media and streaming platforms. Furthermore, during the same period, some digitally mature PAEs already began to swiftly produce new content to be distributed on third-party platforms or on their own websites. One such example was the Bristol-based performing arts SME, Wise Children, who already during the early months of the pandemic introduced a comprehensive portfolio of digital business models, a digital programme hosted on their custom-made website www.wisechildrendigital.com, including an internet radio channel Wise radio,

a digitally captured show distributed on BBC iPlayer as a part of the BBC Culture of Quarantine initiative, a series of live podcasts, a series of Twitch live streams, pre-recorded performance content on Vimeo, and an educational online programme: a summer school for young adults, who wish to become theatre professionals (see Figure 5.2).

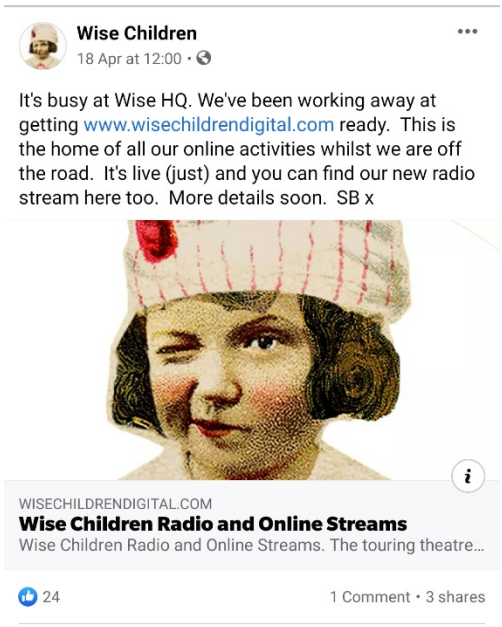


Figure 5.2 Wise Children's digital programme

On the other hand, echoing the findings from the first study, the structural inequalities (Mihelj *et al.,* 2019) and the disparity that typically manifests in the live activities-based performing arts context, also appeared to be replicated in the online realm. This was particularly noticeable with performing arts SMEs, whose activities were the foci of the second study. Indeed, many SMEs appeared to adopt 'a sit-and-wait approach' during the first four months of the pandemic (March-July 2020), which merely consisted of posting a few communications to inform audiences about cancelled performances, but no attempts were made to engage with digital communities, distribute new or repackaged digital content or interact in any other way. Consequently, the audiences of such SMEs showed little interested in their posts, which usually gathered only a handful of 'Likes,' as their

informative nature did not encourage followers to engage in conversations. The lack of engagement with digital audiences was possibly because many SMEs did not have existing digital content that they could repackage and distribute, or perhaps the lack of resources under the unprecedented circumstances forced them to completely halt their activities. This echoes the findings by Spiro *et al.* (2021), who surveyed 385 performing arts professionals and found that 76 percent had experienced financial hardship by the end of June 2020.

The analysis of the deep data collected during Researching (Kozinets, 2020) revealed that there was a plethora of emotions embedded in the interactions between PAEs and their digital audiences. It was unveiled that those (usually large) PAEs, who were typically receiving venues and had a strong community focus, worked particularly hard to ensure the continuation of the social interaction that they typically provide to their community audiences under normal circumstances. At the start of the first lockdown in March 2020, these community-focused PAEs quickly shifted their full attention on online activities and through the deployment of the Digital Commissioner business model, rapidly introduced their own, branded, at-home digital programmes, which often centred around Zoom-based learning and/or pre-recorded performance content that was usually offered for free with the goal of maintaining the link with their existing audiences and connecting with people at home. One example of this approach was the Salford-based The Lowry, a large receiving venue who introduced their #LoveLowry digital programme during the early months of the pandemic (see Figure 5.3).

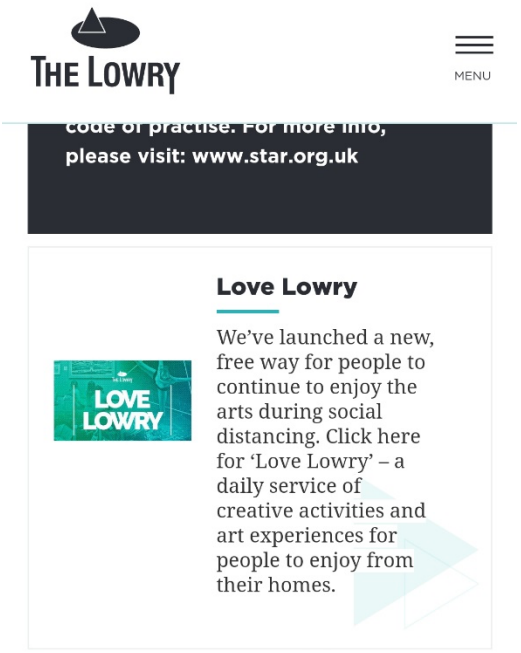


Figure 5.3 The Lowry's digital programme

One director of a large dance company encapsulated this new priority of creating social and cultural value for audiences at home on the firm's Facebook business page: "During these unprecedented times it's more important than ever that we stay connected with you, our dedicated community of followers, and thus we're launching a new online programme."

The rapidly produced, low-cost, digital content was often accompanied with existing, high-quality digital performance content, which had been quickly repurposed and repackaged to be distributed on social media platforms or on company websites. The novel digital offering created and produced as a creative and entrepreneurial response to the global crisis, also justified the introduction of emotional funding appeals to financially support PAEs through the pandemic. Whilst posting on Facebook about the repackaged, free content, organisations could introduce various Covid-19 emergency appeals and actively request donations from their digital communities. Such pleas for funding were generally well received. Online audiences expressed their approval by 'Liking' and 'Loving' the posts and sharing them widely within their digital communities to increase their visibility.

Of the 35 PAEs examined, nearly two thirds (65.7 percent) introduced a Covid-19 related fundraiser, either directly asking for donations, or encouraging audiences to donate in exchange of a free access to online performance or educational content. The appeals for donations were often written in a highly emotional language, e.g., "Please support our work, every penny helps us to deliver the joy of performing arts to your home" or "Please donate if you can, we are facing a devastating loss of income due to the Covid-19 pandemic". It was observed that the language of large PAEs, usually those with substantial venues to maintain or large festival programmes cancelled, had a pressing sense of urgency in their communications with online the audiences, particularly at the start of the pandemic, between March-May 2020. This reflected the financial uncertainty prevalent in the sector at the time, as it was not before July 2020 that the UK government introduced the £1.57 billion CRF to revive and resuscitate the arts and culture sector through the global crisis (see 1.2.3).

The two key emotions displayed by PAEs' online audiences during the first lockdown were empathy and excitement. Digital audiences appeared to react in an extremely positive manner to the digital programming introduced by PAEs, which was apparent in their reactions to Facebook posts announcing novel digital initiatives. Audience members were actively 'Liking' or 'Loving' the posts, tagging other users to inform them about new digital offerings, or commenting with heart 'Emojis' or expressing their excitement in short textual comments such as: "How fabulous!", "Looking forward to this!" or "Brilliant!" Online audiences also showed notable empathy towards the emergency funding appeals launched by PAEs by sharing them, and seemed to donate generously, when they felt that the digital content offered them social or cultural value. This was particularly evident with Opera North's *From Couch to Chorus* initiative in 2020-2021 (see Figure 5.4). The online singing workshops –initially introduced for over 55s in the Leeds area to combat social isolation– attracted over 2000 participants from all over the world, and raised over £100,000 in donations (Misek *et al.,* 2022).



Figure 5.4 Opera North's online singing workshops

The process of Counting (Kozinets, 2020) involved engaging in content analysis to quantify some aspects of the data collected. This permitted the researcher to conduct comparisons between the different elements identified in the collated dataset. Furthermore, following the approach detailed in Kozinets (2020), Charting was used to visualise the comparisons to support interpretation, and figures such as bar, pie, and clustered column charts as well as word clouds were utilised to visualise data and facilitate the representation of complex information. The quantification of the data on the digital business model types revealed significant differences in the deployment of each digital business model type according to the type of the organisation, *i.e.,* whether the PAE was a touring company, receiving venue, festival organisation or producing company. Of the 35 PAEs examined, over

half (54.2 percent) were touring companies, 22.8 percent producing companies with their own performance venue, 17.1 percent were receiving venues and 5.7 percent were festival organisations.

With regard to organisation size, it was noted that within the sample, touring companies were the most heterogeneous in terms of size but skewed towards being small rather than large, as 73.7 percent of touring companies were SMEs. Producing companies were typically large (75.0 percent) which reflects their high-cost *modus operandi* of running a venue, in parallel of producing and touring with performances. Similarly, 83.3 percent of receiving companies were large, managing venues with over half a million-pound turnover. Both festival organisations in the sample were SMEs.

5.2.2 Distribution platforms and monetisation techniques

The quantification of netnographic data revealed a wide array of digital platforms utilised by PAEs during the Covid-19 pandemic when deploying digital business models. Figure 5.5 outlines the ten most popular distribution platforms utilised.

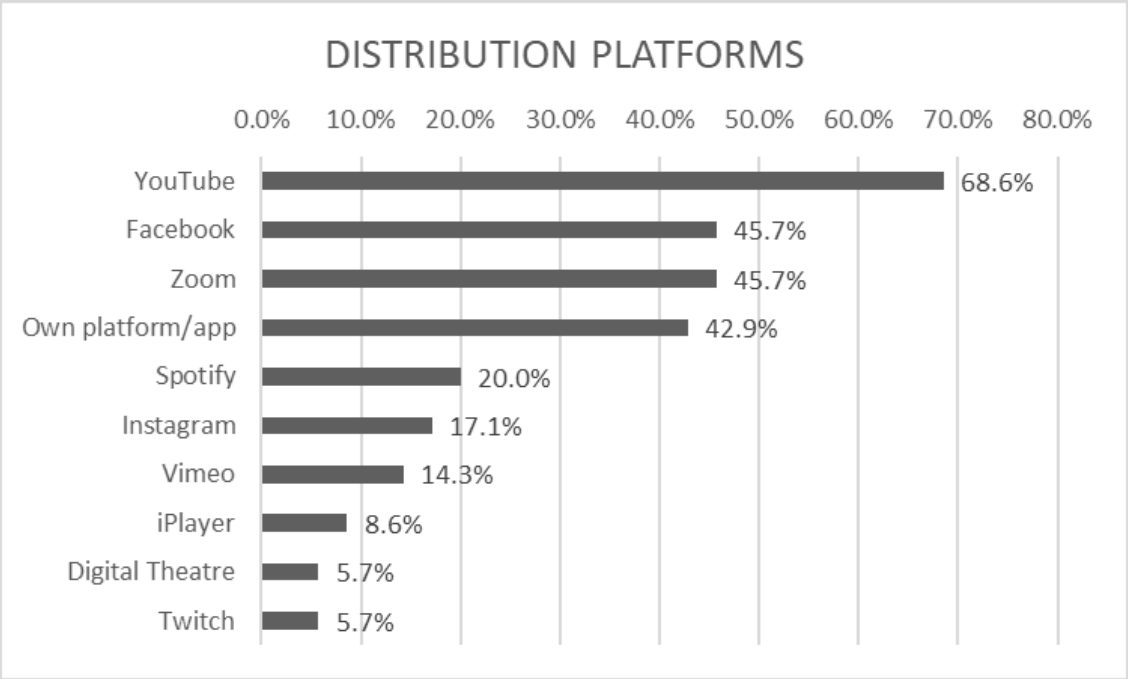


Figure 5.5 Distribution platforms used by PAEs

YouTube was the most used digital platform with 68.8 percent of the PAEs distributing content on it, followed by Facebook and Zoom, each used by 45.7 percent of the PAEs, respectively. YouTube was popular for hosting both livestreamed and pre-recorded performance and/or educational content. If the content was pre-recorded, many PAEs endeavoured to replicate the ambiance of a live experience by adding a live introduction in the beginning of the broadcast and/or post-performance live conversations with cast members. YouTube offers a comprehensive monetisation infrastructure for the members of the YouTube Partner Program, including, for instance, online fundraising features and channel membership options (Google, 2022). However, due to the challenging eligibility requirements of the program that, for example, require channels to have over 1000 subscribers and over 4000 public watch hours in the last twelve months (Google, 2022), most PAEs are unable to benefit from the YouTube monetisation infrastructure. This was evident in the netnographic data, as of the 35 PAEs investigated, only one organisation, Darbar Arts (see 5.5.6), was observed using the YouTube monetisation tools.

Facebook was primarily used for promoting and marketing of digital content, but also as a hosting platform for livestreamed online performances and educational events. In particular, *Facebook Live* and *Facebook Watch Party* functions were regularly utilised by PAEs as they allow online audiences to interact in real-time with the event host, as well as other audience members, by sending 'Emojis' and posting comments in the live chat during the event. Furthermore, Zoom, a platform that was barely known and rarely used by PAEs pre-pandemic, began to rapidly gain popularity from April 2020 onwards, and was commonly utilised for distributing educational activities such as arts lessons and other interactive events, including experimental digital performances.

The above findings depict how, particularly in the beginning of the pandemic, PAEs relied heavily upon third-party digital platforms (e.g., YouTube, Facebook and Zoom) to remain in contact and continue engaging with their online audiences. From August 2020 onwards, however, there was a noticeable shift in PAEs' distribution habits, as particularly larger PAEs and digitally mature SMEs began to increasingly transfer their digital assets on their own digital platforms or apps, which offered them better control over copyrights, and facilitated the monetisation of their digital content. In 2020, a myriad of resources and infrastructures were also introduced by different stakeholders as deliberate support mechanisms offered to the arts and cultural sector as cultural venues were forced to remain closed.

The Culture Recovery Fund (CRF) was without the doubt the most important infrastructure (see 1.2.3), however, there was also a plethora of other initiatives, such as the Culture in Quarantine scheme, a partnership between Arts Council England, BBC Arts, Arts Council of Northern Ireland, Arts Council of Wales and Creative Scotland that aimed to continue offering arts to people in their homes during the Covid-19 lockdowns and support the arts and culture sector during the challenging pandemic period. Some PAEs within the sample, such as Wise Children (see 5.2.1) were commissioned through the Culture in Quarantine initiative, which meant that they received financial

support for the production of their digital performances that were distributed to audiences via BBC iPlayer. Furthermore, some of the larger, more established PAEs, such as Opera North, also distributed their digital content through arts specific streaming platforms such as Digital Theatre and Opera Vision.

With regard to income generation, a range of approaches were deployed by PAEs to monetise digital content. As noted in 5.2.1, 65.7 percent of PAEs in the sample asked for Covid-19 related donations from their online audiences. In addition to income from donations, 60 percent generated income from tickets sales to online performances or other online events (see Figure 5.6). Many of those who sold tickets advertised a 'Pay-What-You-Can' (PWYC) pricing model with a variety of ticket types and price points, including free tickets and typically a recommended ticket price. 17.1 percent mentioned in their posts how their digital products had been commissioned by, for instance, streaming platforms or online festivals, and it can thus be assumed that they generated revenue from commissions or licence fees. A further 5.7 percent deployed a subscription model on their own digital platform or through a third-party platform. It is also worth noting that 45.7 percent of PAEs generated revenue from more than one source, for instance, from both ticketed online events and commissions/licence fees. Finally, 8.6 percent of the PAEs observed —all of which were SMEs— did not ask for donations nor try to generate revenue from digital content at all.

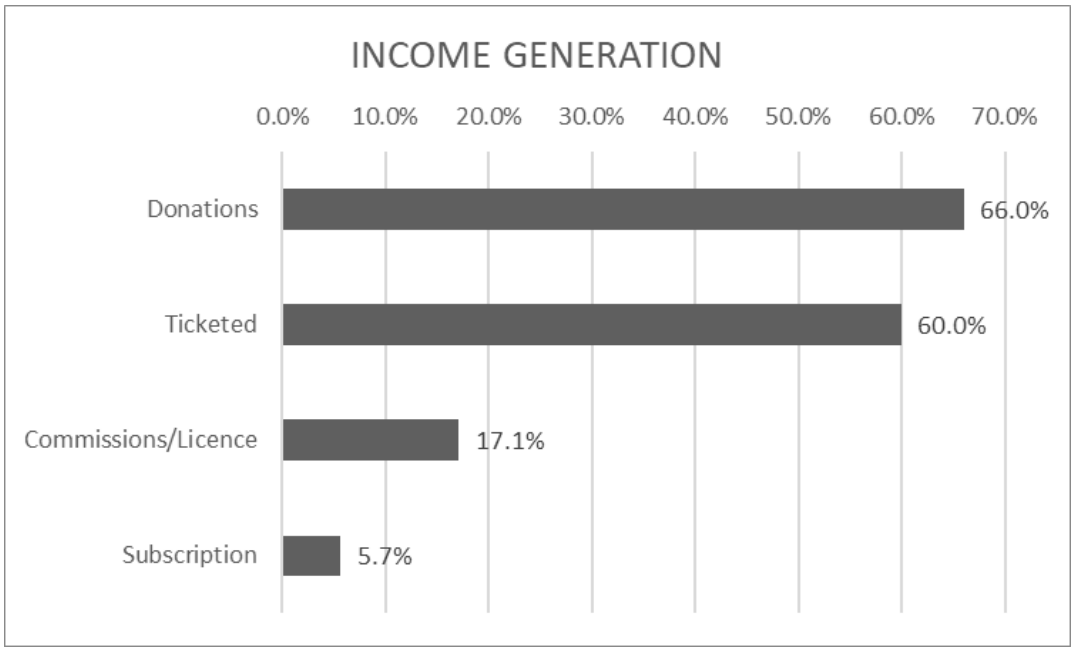


Figure 5.6 Overview of income generation sources

With regard to selling tickets to online events, of the 60.0 percent of PAEs who sold tickets to their online events, most (28.6 percent) opted to use their own online ticketing systems, located on their websites. However, SMEs did not always have their own ticketing system, and thus popular third-party ticketing platforms included EventBrite, used by 11.4 percent, and TicketCo, used by 8.6 percent of the PAEs, and a host of other, smaller ticketing platforms (see Figure 5.7 for an overview).

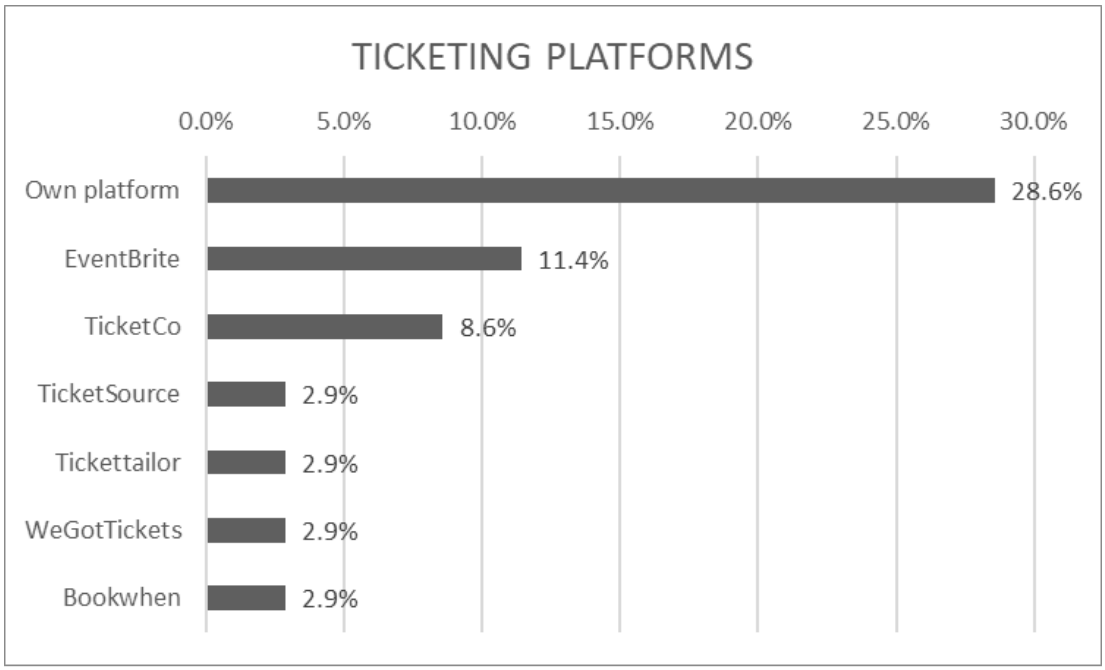


Figure 5.7 Most common ticketing platforms used by PAEs

Echoing the findings from the first PhD study, the role of public funding in PAEs digital BMI was crucial, as a significant part of PAEs income during the Covid-19 pandemic originated from public sources (see Figure 5.8). Of the 35 PAEs in the sample, 60.0 percent were ACE NPOs (see 1.2.3), meaning that they receive a set amount of annual core funding from public funds. Each organisation is selected in the National Portfolio for a period of four years, after which they have to reapply. During the Covid-19 pandemic, NPOs were able to redirect funds from cancelled, live activities-based projects to digital projects, which enabled them to engage in new digital productions (Misek *et al.,* 2022). An important source of income was of course the CRF (see 1.2.3), designed to support the arts and culture sector through the global crisis. Indeed, 34.3 percent of PAEs in the sample reported that they had received one or several CRF grants. Other income sources identified in the research data included ACE's project and Covid-19 emergency grants, as well as some emergency funding from trusts and foundations.

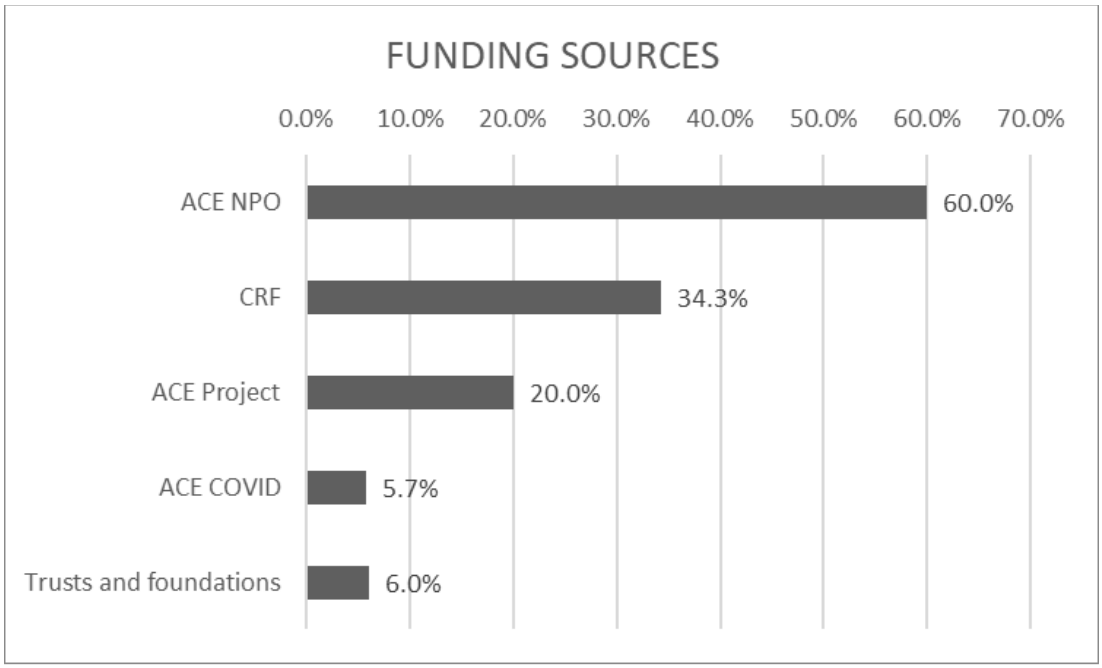


Figure 5.8 Most common funding sources during the Covid-19 pandemic

5.3 Deployment of digital business models

All six types of digital business models, outlined in the novel framework of common business models for performing arts (see Table 3.1 in 3.4.2), were identified in the netnographic data collected during the Covid-19 pandemic. Each digital business model type is explored in detail below. Consistent with the findings of the first study, the Digital Product model was again the most common digital business model type identified, with 68.6 percent of the PAEs deploying some variation of the model. The second most common digital business model observed was the Digital Performance model, adopted by 45.8 percent of the PAEs. Digital Hub model was less common with 20.6 percent of organisations deploying it, as was the Digital Commissioner model, with only 17.2 percent of organisations implementing it. The Streamer model appeared to be relatively rare in the performing arts, explored only by 8.8 percent of the PAEs (see Figure 5.9).

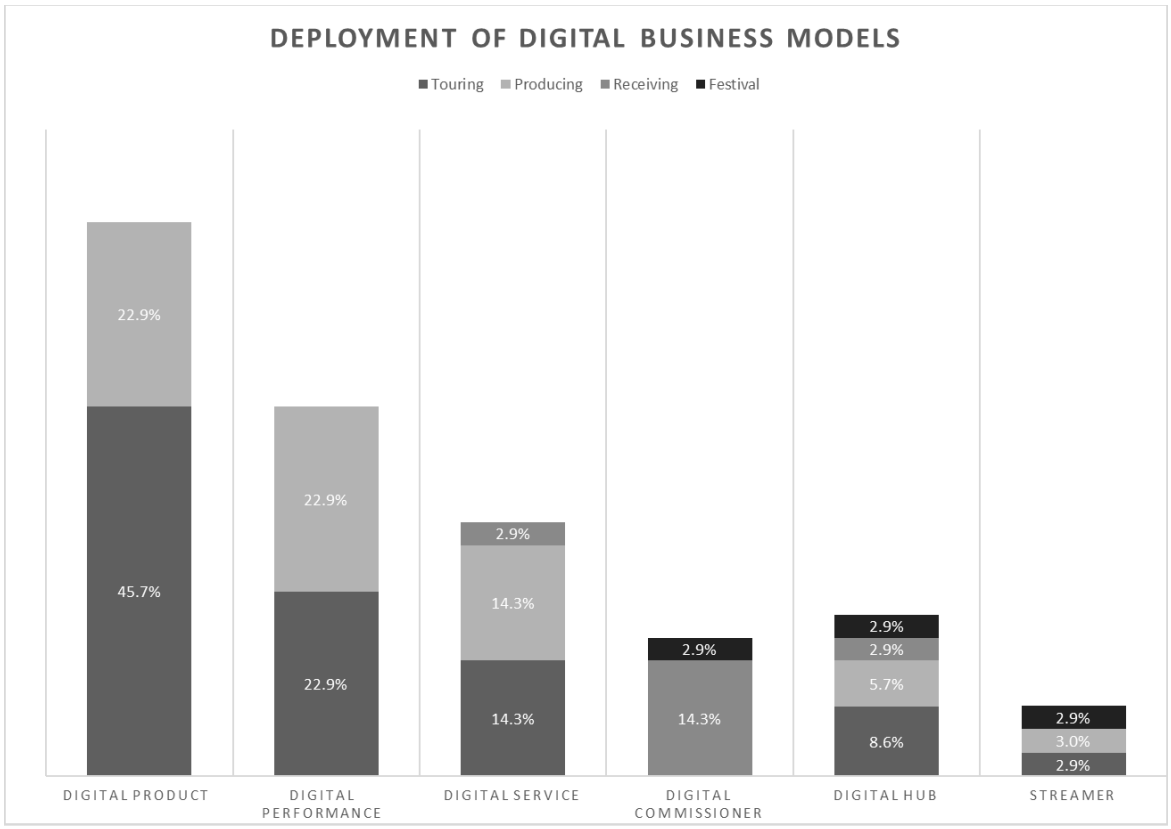


Figure 5.9 Deployment of digital business models

The quantification of the data on the digital business model types revealed significant differences in the deployment of each digital business model type according to the type of the organisation – that is, whether the PAE was a touring company, receiving venue, festival organisation or producing company. For instance, Digital Product and Digital Performance models were only deployed by touring and producing companies, which strongly reflects their live activities-based business models of touring and producing live performances.

5.3.1 Digital Product model

Digital Product models typically stem from a business model where live performance products tour receiving venues and festivals. However, in the digital sphere, Digital Product models do not include a shared audience/performer experience and are thus perhaps more similar to digital product-based business models of the film industry. Thus, drawing on Li (2020), it can be argued that Digital Product models in performing arts are not truly novel in terms of being unprecedented, but draw from traditional Product models (Rex *et al.,* 2019) that have been scaled up with digital technologies.

The Digital Product models identified in the netnographic data typically involved distributing existing digital captures of live performances, but as the pandemic lasted far longer than initially anticipated, PAEs started to increasingly engage in new digital-only productions, and consequently, a variety of innovative digital products was introduced, ranging from podcasts to online escape rooms, at-home audio performances and immersive dance films. It was noteworthy that many PAEs experimented with digital products that were novel to them, for example, podcasts, and distributed them on platforms such as Spotify, Soundcloud, Deezer or Anchor.

One such example was the London-based GRAEYE Theatre Company, composed of deaf and disabled artists, who in collaboration with Disability Arts Online launched a series of BSL interpreted podcasts hosted on Anchor. The podcasts were designed to provide support for deaf and disabled artists during the pandemic (see Figure 5.10). As providing support for the deaf and disabled artist community is a core activity of GRAEYE, and it can be posited that during the pandemic indeed, GRAEYE effectively scaled up their existing business model with digital technologies (Li, 2020).



Figure 5.10 Podcast series by GRAEYE

5.3.2 Digital Performance model

The Digital Performance model started to gain popularity during the second observation period (August-December 2020). This was partly because some PAEs were briefly able to reopen their venues in autumn 2020, which enabled them to organise socially distanced and hybrid performances that were often livestreamed to online audiences. The variations of the Digital Performance model observed during the study typically involved producing a livestreamed performance that would be distributed on the organisation's website behind a paywall, or on Zoom, especially if the organisation was smaller and had less resources or no existing digital infrastructure.

The Digital Performance model was mostly adopted by touring and producing companies with 44.4 percent of touring companies and 88.9 percent of producing companies deploying the model. These numbers imply that

producing companies were in a better position to deploy the Digital Performance model, as they had their own venues at their disposal for filming performances and perhaps already possessed the technology infrastructure required for livestreaming performances. Outsourcing livestreaming is costly, and thus many touring companies resorted to using the newly popularised video call platform Zoom as a hosting platform for deploying the Digital Performance model. One such example was the Nottingham-based Chronic Insanity, a small theatre company, who livestreamed a series of theatre performances on Zoom (see Figure 5.11).



Figure 5.11 Chronic Insanity's Zoom-based performances

Despite the lower video and audio quality of Zoom video call performances, the Zoom platform infrastructure provided PAEs with unprecedented, low-cost, digital stage management and monetisation options. Zoom has manifold digital stage management features that allow, for example, arts producers to introduce a lobby area for audiences and admit selected audience members

to the main video call one by one at their chosen moment, and mute and turn off audience members' microphones and cameras when required. Online audiences can also interact with arts producers and other audience members in real time through the live chat function, which adds another, live event-like dimension to the online event.

With regard to the monetisation of Zoom performances, the Zoom infrastructure allows PAEs to create private Zoom video call links through which participants can access the performance. This feature enables arts producers to generate income through selling tickets to the performances using their own or external ticketing platforms. When tickets are purchased, a private Zoom video call link is sent by email, through which online audience members can access the performance. Although the link is not unique, and could, in theory, be shared with others, Zoom also provides hosts with a variety of features to manage video call participants and even remove them from the call at any time, for example, in a situation where they have not purchased a ticket to the online event. Thus, the low-cost platform infrastructure provided by Zoom that was widely adopted by performing arts SMEs during the pandemic, rendered the previously costly Digital Performance model considerably more accessible to SMEs and enabled them to viably monetise their digital content.

The popularity of the Digital Product and Digital Performance models among touring and producing companies was perhaps because of the business models' familiarity from the live setting, as both digital business models are fundamentally adapted versions of live performance-based business models. The Digital Performance model stems from live performance and shared event experience, which form the core value proposition of PAEs' traditional business models.

5.3.3 Digital Service model

The netnographic data collected during the Covid-19 pandemic revealed a significant rise in PAEs deploying the Digital Service model. For example, participatory arts lessons were rarely conducted online prior to the pandemic, but as Covid-19 closed cultural venues, arts organisations who typically offered lessons or other educational events to their community members, swiftly transformed their offering so that it could distributed online. The Digital Service model is rooted in Baden-Fuller *et al.'s* (2017) solution model and involves delivering an online event, for example, a workshop, lesson, or a course in real time so that both the art producer and audience are present. 31.5 percent of the 35 performing arts organisations (see Figure 5.9) observed implemented a Digital Service model and offered online lessons in e.g., dance, circus, music, and theatre and/or educational events aimed at schools and practitioner communities. One example of a PAE deploying the Digital Service model during the pandemic was the Norwich-based The Lost in Translation Circus, who offered online circus classes on Zoom (see Figure 5.12).

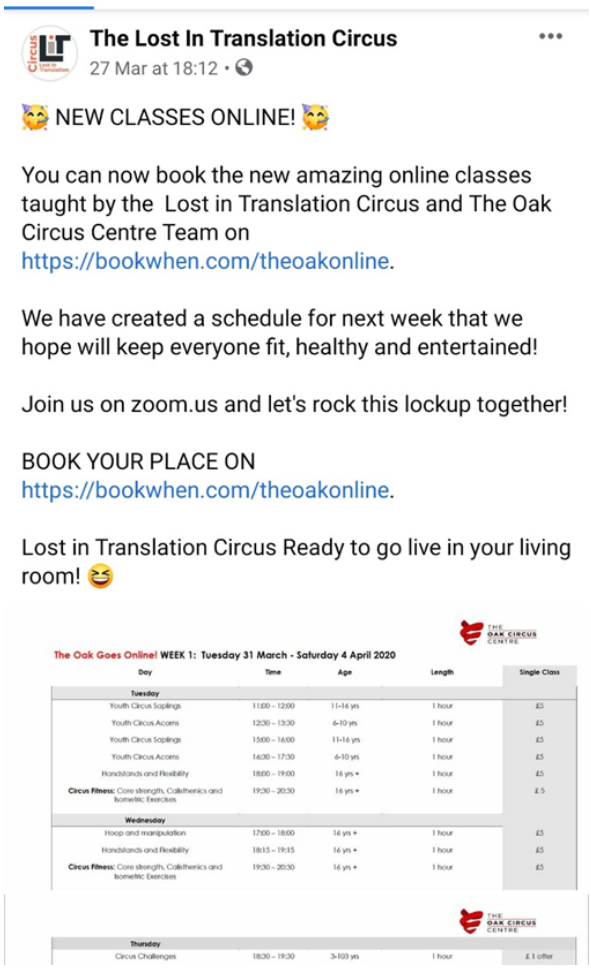


Figure 5.12 The Lost in Translation Circus' Digital Service model

The Digital Service model was the most common among producing companies, with over half (55.6 percent) deploying it, but also relatively popular among touring companies (27.8 percent) and receiving companies with 16.7 percent deploying the model. This reflects the vast array of performing arts-related services that production companies typically offer their audiences. During the first observation period (March-June 2020), a large part of the services was offered free of charge or on a donations only-basis, and many activities were aimed at home-schooled children to provide respite for parents working from home during the first national lockdown period. It was noted, however, that from August 2020 onwards, similarly to the performing arts organisations deploying the Digital Product and Digital

Performance models, also those implementing the Digital Service model began to increasingly monetise their digital content and experiment with diverse pricing models such as PWYC, ticketed and subscription models[2].

Again, Zoom was typically used as the distribution platform for deploying the Digital Service model, likely because of its low implementation cost, ease of access and interactive affordances. A small number of the Digital Service models introduced during the pandemic proved highly successful and exceeded expectations in terms of income generation. Opera North's *From Couch to Chorus* initiative (see Figure 5.4 in 5.2.1), launched in July 2020, is a good example of such, financially successful, low-cost, community-focused Digital Service model.

5.3.4 Digital Commissioner model

The Digital Commissioner model involves commissioning a digital performance(s) and/or related activities and distributing them to online audiences. The Digital Commissioner model appeared to be the digital business model of choice among receiving companies, with 83.3 percent of the receiving companies as well as 50 percent of festival organisations deploying the model. This is in line with the traditional, offline business models of receiving companies and festival organisations that involve commissioning PAEs and individual artists to perform at their venues and festivals. Most receiving companies observed launched their own digital programmes, or 'digital stages', initiatives under which they introduced a plethora of online activities, such as performances, lessons, interactive educational activities, and audio content, provided by the organisations

[2] Pay-What-You-Can pricing model allows audiences to choose the amount they pay for the cultural product or service, which can also be zero. Ticketed pricing model involves the art producer to set a defined ticket price for each audience group. Subscription models entail audiences to subscribe to a service provided by an arts producer for a set period of time, for an agreed price.

themselves or the touring companies who typically perform at their venues. Usually, when posting on social media about these activities, the organisations used a custom hashtag to convey that the digital offerings were a part of a wider online programme. Examples of such digital programmes included, e.g., Deda Derby's #LiveInYourLivingroom (see Figure 5.13), The Lowry's #LoveLowry (see Figure 5.3 in 5.2.1) and Lakeside Art's #InWithLakeside initiatives. With regard to distribution platforms, the organisations deploying the Digital Commissioner model experimented with manifold options. The choice of platform seemed to depend upon the content distributed, and a variety of platforms were used such as Facebook and YouTube for live performance content, Zoom for educational activities and the organisations' own websites for pre-recorded performance and interactive learning content.

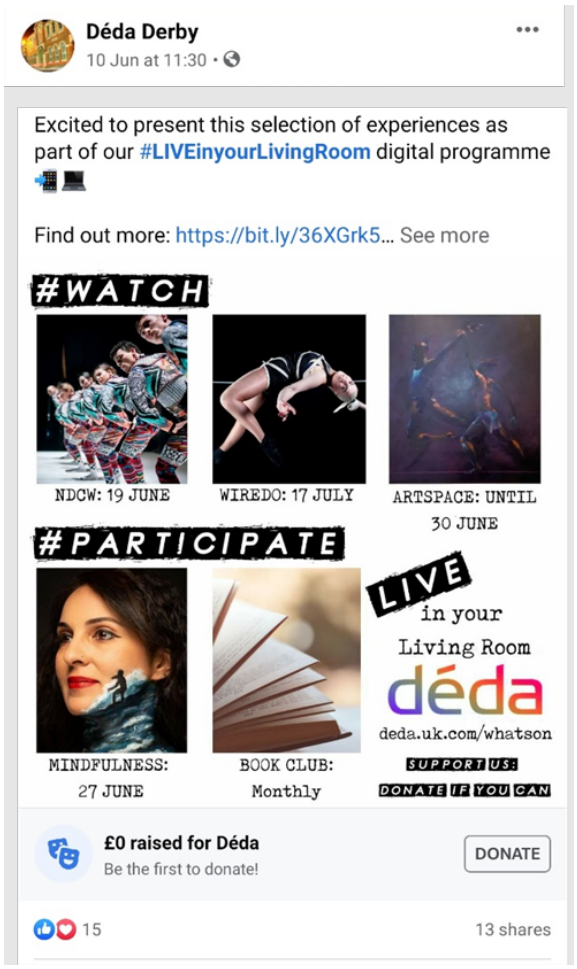


Figure 5.13 Deda Derby's Digital Commissioner model

Regarding the monetisation of commissioned events, some innovative, cross-sector approaches were identified. For example, in autumn 2020, The Lowry, collaborated with Fane, a London-based spoken-word event producer to produce a series of interactive, high-quality, livestreamed events with renowned authors, actors and podcasters. Tickets were priced at £10, and in addition, audiences could purchase a ticket and book package for £16.99, with a signed copy of the book by the author featuring in the livestreamed event delivered to their home address. These novel, "phygital" (Prior, 2021) arts initiatives, where physical and digital elements are combined in innovative ways to provide audiences an enhanced experience, started to gain popularity during the second observation period.

Furthermore, The Lowry also took part in an experimentation with digital touring with Wise Children (see Figure 5.2 in 5.2.1). In September 2020, they collaborated on a "digital tour" of Wise Children's performance *Romantics Anonymous*, where, Wise Children, as an act or solidarity, partnered with receiving venues across the world, and while the performance was livestreamed from Bristol, Wise Children allowed their partners, the receiving venues, to sell the tickets to the livestreams, enabling them to receive a commission of the tickets sales and ask for donations during the ticket purchasing process. These explorations of novel digital income generation methods illustrate the creative digital BMI that took place in PAEs during the pandemic. Therefore, although the Digital Commissioner model is a digital scale-up of a traditional business model, and thus not novel in terms of being unprecedented, its innovative implementation during the pandemic triggered new digital BMI practices in many PAEs.

5.3.5 Digital Hub model

The Digital Hub model concerns running a digital platform, sometimes with diverse, intersecting activities. It is an adaptation of a multisided model (Baden-Fuller *et al.,* 2017), where, when contextualised to performing arts, value is created from two or more audience segments. 20.1 percent of the 35 PAEs were observed to deploy a variant of the Digital Hub model, and contrary to those mainly deploying Digital Product, Digital Performance, Digital Service and Digital Commissioner models, organisation type did not seem to impact the deployment of the Digital Hub model, as the model appeared equally popular among all types PAEs (see Figure 5.9 in 5.3). Whilst some of the organisations deploying the Digital Hub model already had a digital platform at the start of the pandemic, a change in PAEs' attitudes towards running a customised digital platform was evident during the second observation period, when an increase in the number of organisations to introduce and experiment with their own digital platforms was observed.

One such organisation was Rambert Dance, a large producing company based in London, who in September 2020 launched their *Rambert Home Studio* platform (see Figure 5.14). The *Home Studio* aimed to gather all Rambert Dance's digital content at the same location. The initial content included livestreamed performances, interviews, podcasts, short films, and online dance classes. Joining the platform was free, but income was generated through a subscription model with a subscription to online class content priced at £7.99 per month, and from livestreamed performances, which were ticketed separately. It was observed that the Digital Hub model generated diverse types of value, such as economic and brand value for Rambert Dance and social and cultural value for their audiences.

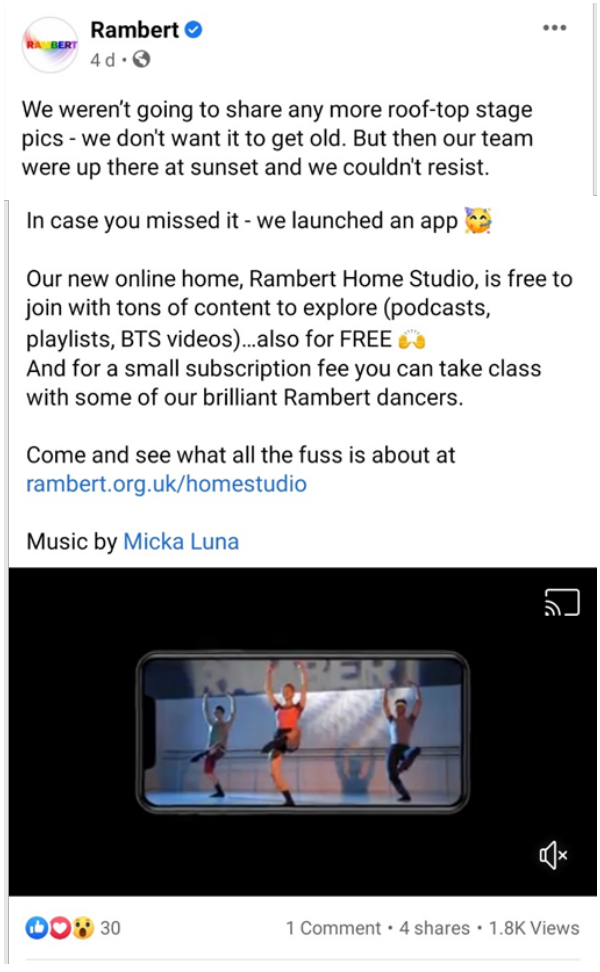


Figure 5.14 Rambert Dance' digital platform

Based on the netnographic data, the Digital Hub model appeared more accessible to digitally advanced performing arts SMEs, than, for instance, the Digital Performance model. This was evidenced by the actions of three performing arts SMEs observed within the sample, who swiftly introduced their own digital platforms as a response to the pandemic. However, these ventures were largely enabled by public funding, originating mostly from the CRF (see 1.2.3). The data on the organisations experimenting with the Digital Hub model also provided indications that control over all digital content distribution is something PAEs are increasingly seeking, and as discussed in 4.3.4, having a bespoke digital platform can be an asset for a PAE and contribute to their long-term sustainability.

Nevertheless, launching a digital platform also involves many risks, particularly for digitally inexperienced organisations. For example, experience is needed to determine the platform's technical requirements, outsource the production, create an attractive user experience, and target the right audience groups. During the Covid-19 pandemic, the distribution of emergency funding created an unprecedented opportunity to secure initial investment to build a digital platform, but the long-term maintenance and upgrade costs also need to be considered and factored in the arts enterprise's long-term business plan. Therefore, the risks and costs involved in deploying the Digital Hub model can be reduced only if the organisation possesses sufficient, long-term financial resources and in-house technical expertise to maintain and update the digital platform.

5.3.6 Streamer model

The Streamer model involves producing live or pre-recorded content to be distributed on third-party video streaming platforms such as YouTube. Income is typically generated from a variety of sources including advertising and subscription revenue from the third-party platform, sponsorship and

supporting merchandise sales. Only 8.8 percent of the PAEs, a touring company; a receiving venue; and a festival organisation - were observed to experiment with the Streamer model (see Figure 5.9). Two streamed on YouTube, and one opted for Twitch as a distribution platform. The Streamer model has traditionally been rare in performing arts as it does not have a live activities-based equivalent, but the model originates from video gaming influencers, who share audio-visual commentary of their real-time progress as they play through popular videogames in front of often vast online audiences.

Taking Darbar Arts as an example, the London-based festival organisation that specialises in Indian classical music launched a new membership scheme on YouTube during the pandemic. Followers from all over the world could join the scheme by paying £4.99 per month and gain access to a wide selection of members-only videos and community posts. In October 2020, Darbar Arts stated on their Facebook page that they had reached over 300,000 subscribers on YouTube (see Figure 5.15). Thus, it can be posited that the production of digital performances and their distribution on YouTube allowed Darbar Arts to generate revenue from YouTube through paid adverts and a subscription model, whilst creating cultural and social value for their audiences.

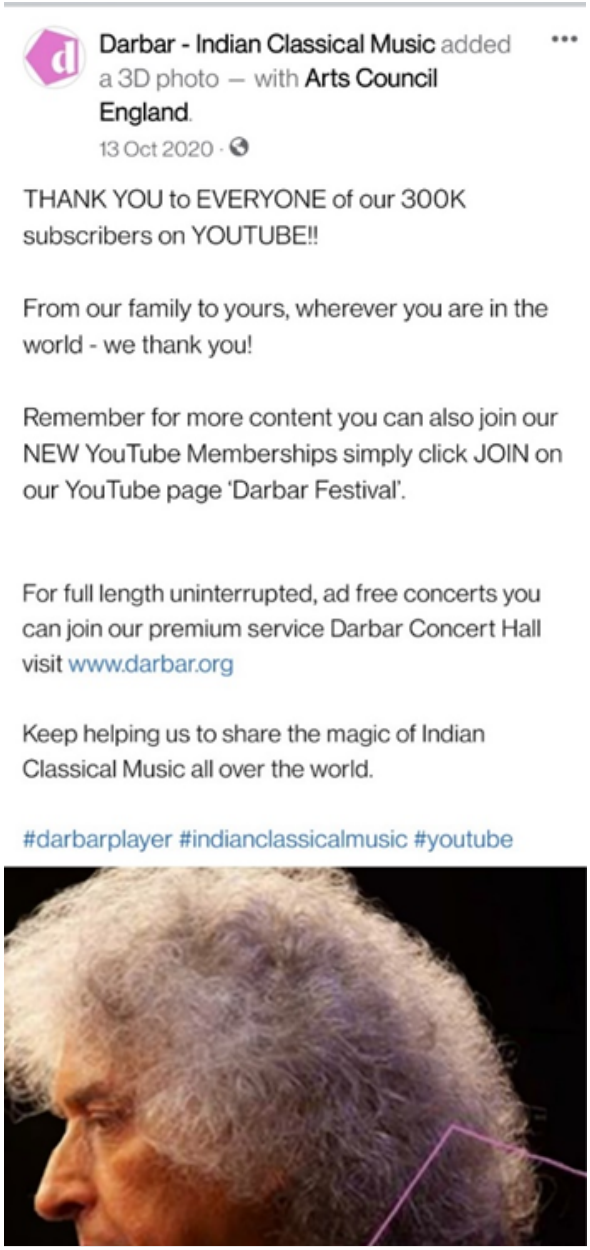


Figure 5.15 Darbar Arts' Streamer model

5.4 Discussion

In this chapter, the digital BMI that took place within PAEs during the Covid-19 pandemic and the resulting deployment of digital business models have been highlighted through a variety of empirical examples identified in the

longitudinal netnography. One of the key findings emerging from the research data is that PAEs engaged in an unprecedented level of digital BMI and conducted unforeseen digital experimentations during the Covid-19 lockdown periods. When investigating these innovative digital practices, based on the varied data on PAEs' digital business models it can be concluded that "selecting, adjusting, and/or improving the business model is a complex art." (Teece, 2007, p. 1329). Although artistic practices are the foundation of PAEs' operations, as noted by Achtenhagen *et al.* (2013), strong DCs are in the centre of the BMI process and critical for organisations to innovate and renew their products, services, and business models. This is further emphasised in the SME context (Ibarra *et al.*, 2020, Wapshott and Mallett, 2021), which was the core focus of this study. Whilst the first PhD study revealed a notable lack of DCs, in particular, among performing arts SMEs, the second study provided evidence how PAEs — regardless of the size or type of their organisation — were able to sense and seize digital opportunities, engage in digital BMI, and introduce a myriad of heterogeneous digital business models during the Covid-19 pandemic.

New business model development and BMI can only occur if a firm possesses strong DCs (Teece, 2018). Further, drawing on Teece's (2007) framework of higher-order DCs and microfoundations (outlined in 2.3.2.), PAEs' sensing and seizing competences were particularly pronounced during the pandemic, as these capabilities allow firms to design new products and services as a response to changes in their market environment. The emergence of sensing and seizing capabilities was perhaps because the pandemic environment encouraged the development of the managerial microfoundations within PAEs that —as revealed by the first study— were lacking in performing arts SMEs pre-pandemic. The netnographic research indicated the strong presence of previously absent managerial microfoundations, such as knowledge of the implementation of digital ventures, agile ways of managing PAEs, and reliance on young, digitally literate talent. In particular, the existence of these microfoundations was underscored by the high numbers of touring companies

—of which, 73.7 percent were SMEs— who deployed Digital Product, Digital Performance, and Digital Service business models (see Figure 5.9 in 5.3).

The research findings also provided evidence on how PAEs demonstrated increased levels of DCs spanning across the four dimensions proposed by Barreto (2010). For instance, PAEs were actively sensing novel business opportunities as they swiftly pivoted to digital activities when live activities were made temporarily redundant; demonstrated improved decision-making capabilities relating to their use of digital technologies and to the ever-changing pandemic-time restrictions; made market orientated decisions by swiftly customising their assets according to the needs of online audiences, and sometimes even transformed their core resource bases by launching digital platforms and other digital innovations.

Finally, it is important to highlight the external factors that enabled digital BMI to take place within PAEs during the pandemic. First, during the pandemic, public funding played a key role as an enabler of digital BMI, as without the re-directed NPO funding, CRF and ACE's Covid-emergency funding, digital BMI in performing arts could not have taken place. Second, the pandemic itself acted as an External Enabler of entrepreneurship (Davidsson *et al.,* 2021) and catalyst of digital BMI, as it provided PAEs with an ideal environment for engaging in digital experimentations. The closure of cultural venues over a period of 18 months granted PAEs a bounded respite from their ordinary routines and everyday activities, leading to having more time and human resources at their disposal to be re-directed towards developing digital projects. Third, the pandemic accelerated digital transformation and adoption of digital technologies in performing arts, as seen, for example, with the wide-spread use of Zoom.

Although this study mainly provides a sector-level analysis of the digital BMI practices of PAEs, preliminary evidence emerged from the netnographic data of performing arts SMEs, who demonstrated a highly entrepreneurial mind-set. This was illustrated through their use of digital business models as "calculative and narrative devices" (Doganova and Eyquem-Renault, 2009,

p.1560) to explore new markets of online audiences, which triggered fundamental changes in their traditional ways of conducting business (Veit *et al.,* 2014) and brought novel digital innovation into existence.

5.5 Conclusions

To date, little attention has been paid to digital BMI in the context of performing arts, despite the performing arts sector generating considerable social, cultural, and economic value in the UK. This chapter attempts to address a gap in the literature with regard to how PAEs develop the dynamic capabilities required to engage in digital BMI. By providing a response that draws upon business model and entrepreneurship research, it offers a perspective that explores common digital business models of UK PAEs through a dynamic capabilities lens (Teece, 2007; 2010).

The chapter offers both theoretical and empirical outcomes. First, drawing on the Covid-19 crisis-time practices, the chapter situates its exploration of digital business models in the context of performing arts, thus advancing the work of Rex *et al.* (2019) and by extension, furthering understanding of the type of digital business models that PAEs are likely to draw upon post-pandemic (see Table 5.9 in 5.3 for overview). Second, the chapter offers macro-level findings on the DCs that contribute to digital BMI in PAEs and that enable them to develop sustainable business models for the digital economy. The insights into the contributing role of strong DCs to the long-term sustainability of PAEs may be particularly critical in understanding and responding to the looming post-pandemic economic crisis, where rapidly increasing cost-of-living is likely to dramatically reduce public spending on leisure activities such as those offered throughout the arts and cultural industries. Under such uncertain conditions, to avoid the pitfalls like witnessed with the controversial UNBOXED project (Unboxed, 2022), it is therefore key that policymakers direct more attention to carefully evaluating the sector needs with regard to the long-term impact and sustainability of

artistic projects, instead of deciding on arts funding schemes solely based on the political ambitions they may hold for the arts and cultural industries.

5.6 Chapter summary

This chapter presented the findings from a longitudinal netnography, conducted on the digital activities of 35 PAEs during the peak period of the Covid-19 pandemic in 2020. The research identified a variety of digital business models that emerged as a result of pandemic-time digital BMI that took place within PAEs. These were then analysed using the new framework of common digital business models for performing arts and discussed from a dynamic capabilities' perspective (Teece et al., 1997, Teece, 2007; 2018). Following the macro-level analysis in this chapter, to provide a comprehensive analysis of digital BMI in performing arts, the next chapter investigates the micro-level practices of five performing arts SMEs, with focus on highlighting the components and characteristics of their digital business models and offering in-depth insights on the microfoundational processes of DCs that enable PAEs to engage in digital BMI.

Chapter 6 Digital business model innovation in performing arts SMEs

6.1 Introduction

This chapter presents the findings from the third PhD study, which involved conducting a series of case studies on five performing arts SMEs, who designed and deployed digital business models during the Covid-19 pandemic. Chapter 4 established a foundational understanding of the digital landscape within the performing arts sector. Drawing on insights from the 18 expert interviews, the chapter identified four distinct digital business model types, as well as emphasised a deficiency in critical dynamic capabilities (DCs), particularly prevalent in small and medium-sized enterprises (SMEs), crucial for effective digital business model innovation (BMI).

Therefore, Chapter 4 served as a bridge to Chapter 5, which employed a longitudinal netnography to investigate the digital activities of 35 PAEs during the peak of the Covid-19 pandemic, identifying and analysing emergent digital business models. Chapter 6 takes a step further by shifting from the macro-level to the micro-level, delving into the specific practices of five performing arts SMEs. This micro-level analysis aims to offer a more detailed examination of the components and characteristics of digital business models, as well as an in-depth exploration of the microfoundational processes of DCs that enable PAEs to actively participate in digital BMI. The sequential progression from Chapter 4 to Chapter 6 thus forms a cohesive and structured narrative, advancing from macro-level observations to a detailed micro-level examination.

The findings of the third PhD study, presented in this chapter, offer empirical, in-depth findings about the digital business models deployed by the case study organisations to investigate the team and individual level DCs that enable digital BMI in performing arts. Additionally, it aims to shed light onto how PAEs may choose to engage with DCs post-pandemic, when digital BMI

is perhaps less necessity-driven, and live and digital activities co-exist in parallel. Therefore, the core aim of this chapter is to increase the understanding of the innovative, pandemic-time digital practices of the case study organisations, as well as provide answers to RQ2*: "How do the dynamic capabilities of performing arts enterprises change in order to enable digital business model innovation?"*

The SME context was chosen for the study because over 70 percent of PAEs are SME (Creative Industries Federation, 2021), and as revealed by the the two previous studies (see Chapters 4 and 5), due to the variation in their critical DCs, performing arts SMEs often struggle to engage in digital BMI, whilst their large, well-resourced peers are typically quite advanced in embedding digital technologies in their business models. In particular, the research set out to explore the microfoundations that contribute to the development of sensing and seizing capabilities (Teece, 2007). This specific focus was chosen because transforming is more applicable to mature, large firms that are required to reconfigure their existing ways of operating (Zahra and George, 2002) and less critical to younger firms and SMEs. However, it as the inquiry evolved, it was soon noticed that most of the case study organisations also showed high levels of transforming capabilities, and therefore the microfoundational processes of transforming were also included in the research.

The chapter is structured as follows. First, the cases are presented individually through within-case analysis. Then, the cases are explored together through cross-case analysis to highlight similarities and draw meaningful comparison across the five cases (Eisenhardt, 1989; Miles and Huberman, 1994; Yin, 2014).

6.2 Within-case analysis

The data analysis began with within-case analysis, which involved writing a detailed, descriptive narrative of each case. The within-case analysis unveiled unique patterns of each case and allowed the researcher to intimately familiarise herself with the research data (Eisenhardt, 1989). Each case study organisation's design and deployment of digital business models, value creation process and DC practices were presented through within-case analysis, and these insights acted as a foundation for the subsequent cross-case analysis (Pettigrew, 1998).

6.2.1 Case Study Alpha

Alpha is a performing arts micro-enterprise based in London, composed of a team of two: the founder and a producer. Prior to the pandemic, Alpha was touring venues and festivals with their dance-film installation. The installation combines the narrative language of contemporary dance with digital technologies such as 3D animation, projection mapping and 360 photogrammetry.

In March 2020, when the pandemic started and the UK government announced the first national lockdown, Alpha had been preparing to present the installation at a prestigious performing arts venue in London. In the with-in case analysis below, this venue will be referred to as "the receiving venue". As live activities could not take place during the Covid-19 lockdowns, the Alpha team quickly decided to adapt their dance-film installation so that it could be distributed online.

The interview data highlighted two core reasons for engaging in digital R&D with the view of adapting the installation online. The first reason was circumstantial; since live work could not be performed, Alpha, alongside many other PAEs responded to the global crisis by adapting their work to

online distribution. The second reason, however, related more closely to sensing capabilities (Teece, 2007; 2010), as with the fully digital adaptation of the installation, Alpha saw an opportunity to explore a novel market and reach novel audiences outside their traditional audience demographics:

> We saw an opportunity to engage with more people than we would have been able to reach with the installation version. So, first there was sort of circumstantial reasons, I think, about there being no choice, it was really the only way to present the work, but it was also an opportunity to reach a different kind of audience. (Alpha, Interviewee 1)

Thus, through digital R&D, Alpha engaged in re-developing their installation for digital distribution and creating a dance film, a novel Digital Product business model. In May 2020, the dance film was livestreamed on Facebook and on YouTube simultaneously as part of the receiving venue's digital stage initiative. The video recording of the livestreamed performance was then available on the venue's Facebook page and YouTube channel for a period one week. Table 6.1 outlines the key components (Rex *et al.,* 2019) and characteristics of Alpha's new digital business model.

Value Proposition	**Digital business model type(s)**	**Activities**	**Assets**	**Value logics**	**Underlying model (Baden-Fuller et al. 2017)**
Dance film	Digital Product (Digital Performance)	Creation of a digital product to be consumed at a specific time or on-demand	Creative, digital production and digital distribution expertise	Creating brand and artistic value (PAE and partner), social and cultural value (audiences)	A product model, arts producer creates a digital product, and appoints a number of third-party distributors
		Revenue model	**Distribution platform**	**Funding**	**Partners**
		Offered free of charge	Facebook, YouTube	ACE project funding	The receiving venue

Table 6.1 Alpha's Digital Product business model

Although Alpha's approach was predominantly a Digital Product business model, the online distribution as part of the receiving venue's digital stage also encompassed elements of a Digital Performance model, since the event on Facebook and YouTube took place at a set time and included a video introduction by Alpha to enhance the liveness of the digital performance.

The digital adaptation was well received and the appearance on the receiving venue's digital stage attracted a large, international audience. Data gathered from Facebook's analytical software obtained through the receiving venue revealed that the Facebook livestream attracted 14,406 unique viewers, who engaged with the one-hour dance film for over 182 hours. The interactive audience experience during the Facebook livestream was highlighted by the 272 reactions ('Emojis' posted) and 165 comments in the livestream chat. Whilst 30 percent of the online audience members were based in London and commented in the livestream chat mostly in English, analysis of the livestream comments unveiled a large number of comments also in other languages, such as in French and Italian.

The global reach of the performance was further evidenced by Facebook user location data, as the five most common locations of participating Facebook users included countries such as Russia and Taiwan. Word frequency analysis conducted on the Facebook livestream comments in *Nvivo* analytical software (*Nvivo*, 2022) highlighted a generally positive audience experience as most frequent words used in the chat comments included: "you, love, process, work, brilliant, motion, watching, filmed, scene." Similarly, the data gathered from YouTube's analytical software provided evidence of international interest in Alpha's work. The livestream and recording that were available on YouTube for one week received 5289 unique views and gathered a total watch time of over 980 hours. Most common audience locations included countries such as the UK, the USA, Spain, Turkey, and Canada.

Although the deployment of the Digital Product business model did not directly generate income for Alpha, it had other important benefits relating

to the seizing (Teece, 2007; 2010) of the opportunity to reach new audiences within and outside of Alpha's usual audience demographic, and to explore markets other than the performing arts industry. The Alpha team reflected on the outcomes and benefits of the digital distribution:

> The main thing that it did... It really gave us a lot of exposure in places where we wouldn't have got it before. And I think some of those people were outside of the sector, but even for those within dance film world and the dance world, compared to doing like a physical thing, the access point was so much easier for people, it really did mean that even within our usual audience demographic, we reached a lot more people. (Alpha, Interviewee 1)

This type of value generated through exposure is notably difficult to measure, however, the digital distribution also led to other, more concrete outcomes, as following the livestreamed performance on Facebook and YouTube, the digital adaptation received a five-star review from *The Guardian,* and later in 2020, Alpha received prestigious awards for innovation from renowned dance and film organisations in the UK and the USA. The Alpha team considered such merits as direct consequences of the digital distribution, and found that they increased the value of the company:

> It's so nice to be able to describe [the founder] and his work, you know, as award winning. I think and think that goes a long way. Because it's sort of a stamp of approval. (Alpha, Interviewee 2)

These findings confirm Bakshi and Throsby's (2010) argument that in addition to economic value, cultural organisations create, for example, social and cultural value for the consumers of their products and services, and public value for the society at large. The value generation model (adapted from Bakshi and Throsby, 2010) for Alpha is detailed in Figure 6.1.

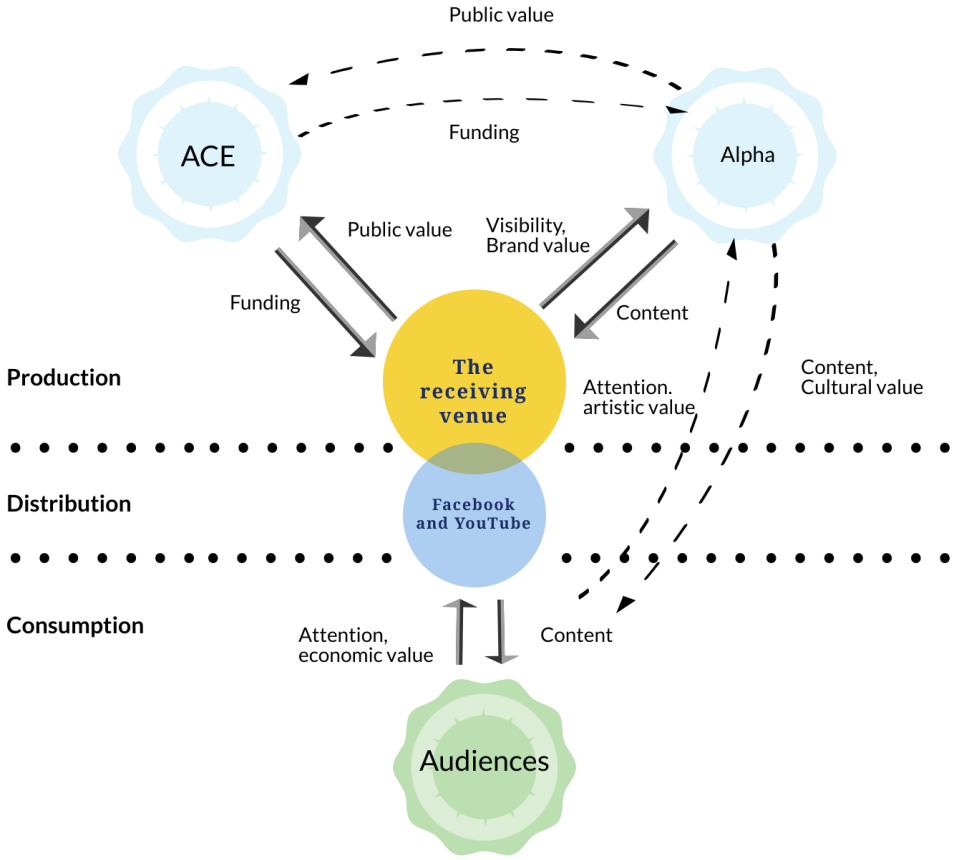


Figure 6.1 Value creation model for Alpha

As illustrated in Figure 6.1, the digital adaptation created different types of value, such as brand and artistic value for Alpha, brand and artistic value for the receiving venue, public value for the funder ACE, cultural and social value for the audience and economic value in the form of advertising income for the digital platforms Facebook and YouTube. Alpha did not generate revenue directly from audiences through the deployment of their Digital Product business model, as the content was distributed free of charge on third-party platforms and the project was funded by ACE. However, the third-party platforms, Facebook, and YouTube, generated economic value through their MPS business model, where value is created from the interactions of different user groups on a digital platform (Øverby and Audestad, 2021). These

insights underscore that dominant digital platforms are not neutral environments, but governing systems (Andersson Schwartz, 2017) that play a key role in the production, distribution, and circulation of cultural content (Nieborg and Poell, 2018).

Next, the individual and team-level microfoundations that enabled Alpha to engage in digital BMI are explored. Based on the cases study findings, it can be posited that when the pandemic started, the Alpha team rapidly developed the vital DCs required to engage in digital BMI and designed a novel Digital Product business model. Since strong DCs are required for a firm to engage in BMI (Achtenhagen *et al.,* 2013), the microfoundations of DCs (Teece, 2007), the processes (Wang and Ahmed, 2007) that act as a foundation for sensing, seizing, and transforming capabilities require highlighting. The key microfoundations embedded in Alpha's processes on team and/or individual level are outlined in Table 6.2, and examples of their manifestations given in the form of quotes and summaries from the coded interview data.

Higher-order DC	**Microfoundations**	**Example**
Sensing • Identifying opportunities and threats • Understanding business trends	• Creative digital R&D	*"If Coronavirus, sort of carries on... drifting in between being in full-on lockdown, and kind of like where we are now, we are thinking about how we might repurpose the work to reach different audiences."* (Alpha, Interviewee 1)
	• Experimentation and use of new technologies and innovations	*"We are also part of the [anonymised] cohort that is really about exploring VR and AR technology."* (Alpha, Interviewee 2)
	• Audience research to address audience needs	Collaboration with a university to conduct market and audience research
Seizing • Engaging in business model innovation to	• Business model design, development, and management	Digital adaptation of the dance-film installation (Interview 1)

seize new opportunities • Reconfiguring business models based on the opportunities and threats identified	• Ability to make unbiased decisions about new products and services	*"We're prepared to sell the digital work... it doesn't feel like the notion of digital touring has really taken off unless it's built within that kind of very first model... So... we're focusing on when the installation can go back out. And also, like refocusing on something new that in a way expands our practice, thanks to this kind of digital development."* (Alpha, Interviewee 1)
	• Ability to secure funding for new products, services, and processes	*"The first iteration and creation of it had a project grant, ACE project grant ... Because of the global pandemic, essentially Arts Council gave an almost carte blanche to people who had project grants to sort of communicate with them and how the money could otherwise we used to support the work, so we kept in close contact with the point of contact, in order to support the recreation of the work, to play and to distribute, and to ensure that this has been a good use of the project grant."* (Alpha, Interviewee 2)
Transforming • Realigning business models, culture, and structure to respond to future challenges and opportunities	• Realigning existing resources and capabilities	Redirecting funds between live and digital work budgets
	• Innovating new products, services, and business models	R&D with the view of developing a new AR platform

Table 6.2 Microfoundations of DCs identified in case Alpha

As highlighted in Table 6.2, the Alpha team engaged in various sensing and seizing practices, and as the pandemic continued, began to explore innovative transforming processes. The sensing phase was characterised by creative digital R&D, experimentation with novel digital technologies, as well as some market research activities. During the sensing, the Alpha team identified potential opportunities with regard to the monetisation of their digital content, such as selling their new digital product to streaming platforms, asking for donations in the context of free-to-access distribution or selling tickets to livestreams on third-party platforms. However, they soon

realised that these income generation techniques were challenging or impossible to execute, as digital audiences are notably difficult to reach without an established online presence, such as the one possessed by the receiving venue:

> I think that if, if we just ended up on like, you know, on Vimeo video-on-demand, like we would really struggle to just get the exposure to rise above everything else, which is why [appearance on the receiving venue's digital stage] has been such a great opportunity. (Alpha, Interviewee 2)

Seizing was characterised by the digital development of Alpha's dance-film installation, including the design and deployment of the Digital Product business model. Funding was obtained through redirecting ACE project funding from planned live activities to the digital project. The interview data highlighted how both processes were conducted in close collaboration with the receiving venue and ACE, which demonstrated how key partners were highly involved in the seizing practices. Another core microfoundational process of seizing was Alpha's ability to make unbiased decisions about new digital products. This was particularly evident in the second interview, when the Alpha team discussed how despite the pandemic's impact as an accelerator of digital transformation in performing arts, the digital economy for the industry remained rather underdeveloped:

> I think that we make the assumption that the digital economy for performing arts doesn't exist yet, basically... when we were looking at the monetisation of stuff on social media and YouTube, following the views on Facebook and YouTube... we had a donate button on the website as a kind of way of saying, if you want to support artists at this time, blah, blah, blah, and like basically, only a family member donated, so I don't think that we were convinced that that digital economy has matured yet. (Alpha, Interviewee 1)

The above arguments highlight the decision-making processes that are crucial microfoundational seizing capabilities, and the challenges performing

arts SMEs face when trying to find sustainable business models for distributing their digital innovations to online audiences.

Finally, the core microfoundations of Alpha's transforming capabilities related to innovating novel, hybrid business models that would encompass both live and digital activities. The producer of Alpha noted that the pandemic provided them with an opportunity to reflect upon the meaning of hybridity in the context of performing arts:

> I mean, my thinking is that now's our opportunity to not just wait to go back to normal, and consider what hybrid, blended creation is, in order to actually like, give workers the resilience to cope with situations like this, from a producing perspective, but I also, I'm interested in the question of what creative and artistic opportunities working in a blended or hybrid way actually brings to the work. (Alpha, Interviewee 2)

Alpha's founder concurred and elaborated that this was an opportunity not only for the company, but for the performing arts at large, as digital transformation continues to spread within the industry:

> I think trying to see this as an opportunity to push forward in a way which would be desirable for, for us and for the industry, to be reimagined in a different way. But quite what that is, is not, it's not entirely clear yet. (Alpha, Interviewee 1)

It was clear, however, that the Alpha team saw digital and live work to co-exist in the post-pandemic world, insinuating that in order to build and maintain strong DCs, acquiring knowledge and conducting experimentations with digital technologies played a key role in their future.

6.2.2 Case Study Beta

Beta is a festival organisation, based in Nottingham, founded in the context of a global charity's (referred to as "the charity" hereafter) national, grassroots music festival scheme. 20-30 similar local organisations exist in different cities across the UK with a goal of organising an annual, one-day live music festival that typically takes place in October. The Nottingham event, launched in 2011, has seen over 1000 artists perform in 15 venues around the city. Like many festival and charitable organisations, Beta is mostly operated by local volunteers, with the goal of raising funds for the charity. The volunteer team is recruited, trained, and supported by a small team of community engagement managers, who are employed by the charity and operate nationally.

When the pandemic started in March 2020, Beta was faced with a challenging decision: to cancel the annual festival or to innovate a new festival format that could be delivered entirely online. Beta's response to the global crisis was to transfer all activities into the digital realm and go ahead with the festival. As the first Covid-19 lockdown in 2020 continued far longer than initially expected an idea for an online festival soon emerged within the Beta team. This was mostly because the team had observed a rapid rise in the distribution and attendance of performing arts related online events. Echoing Rentschler's (2003) definition of AE that emphasises the importance of social and cultural value creation, Beta's manager commented how they sensed (Teece, 2007; 2010) that the unprecedented situation with Covid-19 was an opportunity for the organisation to continue providing their audiences with social and cultural value through digital means:

> We just saw that there was potential there. We could see that people were interested. We could see that people needed entertainment … particularly during lockdown. I think there was a real appetite for it. (Beta, Interviewee 1)

Beta collaborated with researchers from a university partner to transfer their traditional Commissioner business model (Rex *et al.,* 2019) into the digital realm, and designed and deployed a novel Digital Commissioner business model, in which value is created through commissioning digital performances and distributing them to online audiences. The *Beta Virtual Festival* was conducted in August 2020 in a private Facebook group, utilising the streaming service StreamYard for capturing and mixing livestreams, and the Facebook Watch Party feature to combine both live and pre-recorded content into a new festival format. Additionally, the festival content included immersive 360 videos that were broadcasted on YouTube.

Facebook was chosen for the main distribution because it was felt that it offered broad reach to the virtual festival's potential audiences, since both Beta and the charity already had an established presence on the digital platform. Other factors impacting the choice were Facebook's good usability, ease of access (audiences did not need to download any additional software to access the event) and free technological affordances, such as Facebook Watch Party video streaming tools and livestream chat function that enabled audiences to engage with organisers and participants in real-time during the livestream, and Facebook's Groups feature, which allowed Beta to control who could enter the private Facebook group where the festival was held. Table 6.3 outlines Beta's Digital Commissioner business model.

Value proposition	Digital business model type(s)	Activities	Assets	Value logics	Underlying model (Baden-Fuller et al. 2017)
Online music festival	Digital Commissioner (Digital Hub)	Commissioning digital performance(s) and/or related activities to distribute to audiences	Reputation, expertise in relationships and digital distribution	Creating social, economic, artistic and brand value (PAE and partners), social and cultural value (audiences)	A match-making model: the commissioner is a mediator putting on a digital programme or performance created by an arts producer and engages/ finds audiences for it
		Revenue model	**Distribution platforms**	**Funding**	**Partners**
		Ticketed, tickets priced at £10 (local event) and £5 (national event)	Facebook and YouTube for content, We Got Tickets for ticketing, GoFund for donations	In-kind support from volunteers, the charity, university partner	Large global charity, university partner

Table 6.3 Beta's Digital Commissioner business model

Beta Virtual Festival was well received by the audiences, with 60-70 people watching the livestream at all times during the ten-hour event. The local festival sold 166 tickets and 44 people donated on JustGiving, as a result of which over £2,500 was raised for the charity. 122 Facebook users accessed the private Facebook group during the one-day event. The number of tickets sold was greater than the number of participants, possibly because some of the ticket holders attended the festival on a shared device, and some only bought tickets to support the charity but did not attend the online festival.

Data obtained through Facebook's analytical software revealed that the audience was predominantly female (67 percent), aged mostly between 35-64 and located in Nottingham and in the surrounding areas (58 percent). The Watch Party livestream received 415 comments, and word frequency analysis conducted in *Nvivo* analytical software (*Nvivo*, 2022) on the livestream chat

comments further highlighted the positive audience experience, as most used words included: "great, day, brilliant, good, love, lovely, sound, watch".

Following the success of the *Beta Virtual Festival*, the charity, supported by the Beta team and the university partner, decided to use the same format to organise a national event during the second Covid-19 lockdown in November 2020. However, there were some noteworthy risks to be taken into consideration. For instance, it was unclear whether the concept of selling tickets to an event held in a private Facebook group conformed to Facebook policy, or whether Facebook algorithms would flag performing or copyrights violations during the livestream if cover songs were played, which could lead to the platform stopping the Watch Party. Therefore, the experimental concept of organising a national event on a social media platform with a short production period of six weeks was highly risky, and as a result it was decided that tickets would be priced at £5 only, as participants would probably be happy to donate such small amount to the charity in any case, even if the event could not go ahead.

However, despite the concerns related to delivering the festival on a social media platform, the national event ran smoothly and was considered a success in terms of audience experience as well as income generation. A total of 513 tickets were sold and over £3,000 raised for the charity. Based on the data collected via Facebook's analytical software, the national event attracted a slightly younger and more geographically dispersed audience than the Nottingham event, with the majority of audience members being based in cities such as London, Nottingham, Oxford, and Bristol. During the event, the online audience interacted actively with the organisers, performing artists and other audience members on the Watch Party chat. A total of 1,298 comments and 137 reactions (Emojis) were posted in the livestream chat during the ten-hour event. This time the word frequency analysis conducted in *Nvivo* analytical software (*Nvivo*, 2022) revealed most frequent words such as: "great, love, amazing, music, guys, good, lovely and voice".

The deployment of the Digital Commissioner business model created different types of value for Beta and their key stakeholders. The creation of cultural and social value strongly reflected in the livestream comments was further evidenced in the responses of two post-event audience surveys. For example, the survey conducted after the local event highlighted how 55 percent of the respondents (n=31) did something to make the event feel like a festival and 77 percent used multiple devices to maximise their engagement with the content and other participants. The interview data revealed that the events also created high levels of social value for the organisers, and as reported by Beta's manager, also for the performers, most of whom had not had a chance to perform to a live audience for many months due to repeated Covid-19 lockdowns. This social dimension of the festival was evident in the conversations with the Beta's team after the local event:

> I think it gave us a sense of purpose, if I'm being honest, because ... we love being involved in [the festival]. It's really important to us, you know…and considering the potential void that was going to be left by not being able to do anything. I think, you know...it gave people a bit of hope...during the dark days of the lockdown. (Beta, Interviewee 1)

Although the ticket sales and attendance were considerably lower than for comparable physical festivals (Beta's annual festival typically sells over 1000 tickets and raises around £15,000 for the charity), with regard to economic value, the festival organisers were pleased with the outcome and felt that the project met the financial goals set for their first fully digital venture. Furthermore, it offered other, difficult-to-measure benefits to the volunteer team such as new skills, contacts, and partnerships. In particular, the collaboration with the university partner on the technical side of the production of the online festival was thought to increase the brand value of Beta as well as that of the charity:

> Also having the kind of the backing of [the university partner] and having the technology expertise, you know... I think it has helped.... I

mean it's helped raise the profile of [the charity]. (Beta, Interviewee 1)

In particular, the technology expertise provided by the university partner contributed to the building of critical microfoundations of DCs (Teece, 2007) within Beta. Figure 6.2 outlines the value creation model (adapted from Bakshi and Throsby, 2010) for Beta. The key values created included social value for the festival organisers, audience, performers and volunteers, cultural value for the participants, brand value for the charity and Beta, economic value for the charity and Facebook as well as artistic value for the performing artists.

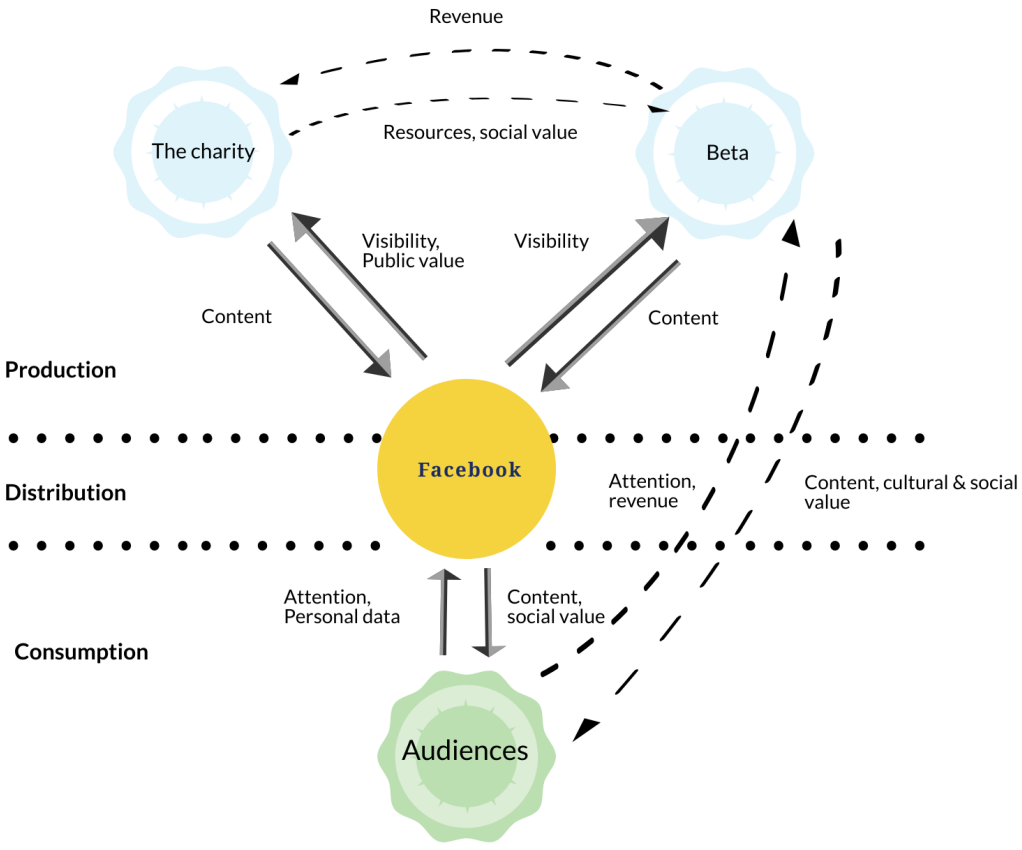


Figure 6.2 Value creation model for Beta

Based on the case study findings, at the start of the pandemic, Beta quickly developed the DCs required to engage in digital BMI and create a novel digital business model. Table 6.4 highlights the key microfoundations identified

within the Beta processes on team and individual levels with examples drawn from the case study data.

Higher-order DC	Microfoundations	Example
Sensing • Identifying opportunities and threats • Understanding business trends	• Creative digital R&D	*"And we were doing a test run and then you could still see ...the stage and it was tipping it down with rain, and I just remember I remember saying: "Oh, I really hope it doesn't do this on the day", you know, and we were so lucky. You know really lucky with the weather but overall, you know I mean I think just the professionalism of everybody. You know in terms of just managing the whole production you know. I mean it worked. It worked really. It worked really smoothly.* (Beta, Interviewee 1)
	• Experimentation and use of new technologies and innovations	The use of a private Facebook group and the Watch Party feature to distribute the online festival to audiences
	• Audience research	Collaboration with a university partner
Seizing • Engaging in business model innovation to seize new opportunities • Reconfiguring business models based on the opportunities and threats identified	• Business model design, development, and management	*"I guess we just saw an opportunity to try and do something virtual. And you know and whilst we could see that individual events were being run, we didn't, you know, we didn't see that there were festivals, so I guess we were wanting to do something innovative. I think yeah, and actually that's what it ended up being, which was amazing."* (Beta, Interviewee 1)
	• Ability to make unbiased decisions about new products and services	*"[Beta] could, you know, definitely do more virtual events, you know, with particular artists and maybe have more regular slots. I think it's just down to, you know, its capacity of volunteers to organise it. But I think that, you know, the idea of virtual events is becoming more popular, and I think people are now more willing to pay, you know, for events which again*

		would help us from a fundraising point of view." (Beta, Interviewee 1)
Transforming • Realigning business models, culture, and structure to respond to future challenges and opportunities	• Building new in-house skills and capacity	*"I think we had to become probably more bit more technically minded, because actually some of the solutions were quite technical, and I think whilst you know, there was obviously people from the university who really, really helped, you were pivotal on the day. But actually, you know there's people in the team that learnt new skills through it."* (Beta, Interviewee 1)
	• Innovating new products, services, and business models	R&D with the view of developing a new virtual festival platform

Table 6.4 Microfoundations of DCs identified in case Beta

As illustrated in Table 6.4, Beta engaged in a variety of microfoundational sensing, seizing, and transforming processes (Teece, 2007) when developing and deploying their novel Digital Commissioner business model. The sensing involved experimentation with new technologies and innovations, as well as engaging in creative digital R&D in collaboration with the university partner. During the collaborative R&D period, a novel concept of a virtual festival was developed, and through knowledge sharing, the volunteer team developed their digital skills and capacity with the view of deploying the new digital festival format. The iterative and learning-focused nature of the collaborative process emerged strongly from the research data as Beta team described how they went on to develop the festival concept.

The seizing focused on developing the different elements of the new digital business model, such as the selection of a ticketing platform and the training of the volunteers to act in various digital audience experience, marketing, PR, ticketing, and technical support roles. This stage was also characterised by

unbiased, internal decision-making processes with regard to the new festival concept, as based on the success and careful evaluation of *Beta Virtual Festival*, the charity decided to organise another, national event using the same festival format and deploying the newly designed Digital Commissioner business model.

The transforming took place following the conduct of the two online festivals. During this stage, Beta and the charity engaged in microfoundational processes such as embedding the newly learned digital skills across the organisation through training, and together with the university partner, began to innovate a novel, bespoke digital festival platform. The idea for the new platform emerged as a result of the experience of using an existing digital platform (Facebook) to deliver online festivals. Although both local and national festivals were deemed successful, the use of Facebook as a distribution platform was not without challenges. A core issue was that despite the festival organisers' attempts to reach out to Facebook to clarify potential risks regarding performing and copyrights, receive support in their attempts to customise the user journey according to the festival requirements or ask if Facebook perhaps wished to collaborate to organise the online festival on their platform, the discussion with a Facebook account manager did not provide any further information to that already available online.

A representative of the university partner reflected how the delivery of the two online festivals on Facebook revealed the pressing need for a bespoke digital platform, where a more blended festival experience could be delivered: "Using off the shelf stuff without modifying it or building it, is fine, but I think it's put us in a position where we want to build something more experimental." (Beta, Interviewee 4). Therefore, the partners included in the project concluded that it was in everybody's best interest to explore the Digital Hub model and develop a new VR/360 virtual festival platform with a goal of delivering more social, customisable, and accessible hybrid festivals. This decision echoes the findings from the second PhD study (see 5.3.5), which highlighted how 20.1 percent of PAEs in the netnographic sample

experimented with the Digital Hub business model, as it granted them sole control over digital content distribution including monetisation and allowed for the creation of customised user journeys.

6.2.3 Case Study Gamma

Gamma is a micro-enterprise, specialised in performing arts and film production. The Gamma team consists of two people: an artistic director and a producer. Gamma is specialised in novel forms of storytelling that include the use of AI technologies within performance to capture physiological data, and to develop new scientific insights in parallel with high-quality artistic work. Over the last five years, Gamma has collaborated with a university partner on several practice-led research projects.

During the months preceding the Covid-19 pandemic, Gamma had received Engineering and Physical Sciences Research Council (EPSRC) impact funding aimed at digital storytelling initiatives and was preparing a tour of ten venues with their live score sci-fi film/performance. The interactive film is constructed based upon three interlinking stories and edited in real time via a brain-computer interface. The physiological data that informs the editing is obtained through a headset worn by a randomly selected audience member, and the visual rhythms, sound mix, and narrative combinations are derived from their neural reactions. The performances planned for the 2020 tour included the interactive film being screened, whilst the soundtrack was improvised by two composers performing live. Each performance would have two back-to-back screenings, so that the audience could appreciate the differences in the film content and live musical performance.

When the pandemic closed all cultural venues, Gamma's live tour was put on hold for the foreseeable future. After an initial period of reflection, the Gamma team realised that the only way the tour could go ahead was to transfer the performance online. However, the task was challenging, as the live

performance involved three performers, one of whom was based in Iceland and the two others in different cities in the UK. Gamma therefore decided to initiate a six-month period of creative digital R&D, which was focused on experimentation with new technologies with the view of understanding how the performers could work together from different geographic locations and what the software requirements for the new online performance would be. The producer of Gamma reflected upon these initial creative explorations, how they were driven by the team's ability to sense and seize opportunities (Teece, 2007; 2010) and the desire to adapt and remain active, despite the global crisis-time conditions:

> ...it was just really important to do as much as possible. Yeah, instead of just being complacent and go, oh, there's nothing I can do. It's like, right, how can we change? What can we do to adapt to this? So, kind of just work within the constraints, really, to turn them into positives. (Gamma, Interviewee 1)

As part of the creative digital R&D, Gamma began to explore the possibilities of Twitch as a distribution platform and develop their Performer business model (Rex *et al.,* 2019) into a novel Digital Performance business model. Moreover, Gamma's new digital business model also encompassed elements of the Streamer model, as it involved streaming live content on a third-party platform. Table 6.5 outlines Gamma's business model for distributing the interactive film online.

Value proposition	**Digital business model type(s)**	**Activities**	**Assets**	**Value logics**	**Underlying model (Baden-Fuller et al. 2017)**
Online performance/ screening	Digital Performance (Streamer)	Creating a series of digital performances to be offered in real time on a streaming platform	Creative, production and digital distribution expertise	Creating brand and artistic value (PAE and partner), social and cultural value (audiences)	Solutions model: the creator and audience are connected through digital technologies in real-time
		Revenue model	**Distribution platforms**	**Funding**	**Partners**
		Ticketed, PWYW, tickets priced at £0, £4 and £8 Donations encouraged	Twitch, Eventbrite for ticketing and donations	EPSRC funding, ACE project funding	University partner

Table 6.5 Gamma's Digital Performance business model

The first online tour took place in November – December 2020 on Twitch and included ten livestreamed performances. Each performance consisted of two consecutive screenings and was accompanied by two musicians playing an improvised live score. The events were hosted by Gamma's artistic director, who also edited the films in real-time via the brain-computer interface. The physiological data informing the live editing was obtained through a headset worn by Gamma's producer.

Following the first online tour, further funding was secured from ACE to conduct an additional online tour in February-June 2021. This included another ten performances on Twitch, using mostly the same format as with the first online tour, however, one of the screenings was a collaboration with a US-based independent cinema, who sold tickets for people to attend the screening at their venue. All online performances were followed by a Q&A.

The twenty live streamed performances on Twitch attracted a rather modest, yet highly international audience. Data obtained from Twitch's analytical software revealed that the one-hour livestreams had 262 unique viewers with a total watch time of 198 hours. Although the audience numbers were

relatively low, the average watch time of 47 minutes indicated that the audiences typically stayed to watch the whole performance. Audience members were also actively engaging with the performers on the live stream chat, and a total of 410 chat messages were received. Word frequency analysis conducted on the Twitch livestream comments in *Nvivo* analytical software (*Nvivo*, 2022) reflected a generally positive audience experience with most frequent words including: "thank you, watching, loved, experience, good, version, chat".

Ticketing data collected through Eventbrite revealed that of the 213 audience members who booked a ticket, 25 percent opted for a paid ticket, whilst 75 percent chose a free ticket. A gross revenue of £394 was generated through ticket sales and donations. The Eventbrite data also highlighted that the live screenings attracted a very geographically dispersed audience. Over 50 percent of audience members were based in the UK, but the other half was dispersed across the globe in countries such as the United States, Germany, Russia, Iceland, Ireland, The Netherlands, Spain, Italy, France, Canada, South Africa, Finland, Mexico, Ukraine, and Brazil.

In line with the findings by Rex *et al.* (2019) that arts enterprises typically generate and capture different types of value through their business models, various types of values were also created through the deployment of Gamma's Digital Performance business model. As reflected in the interview data, perhaps the most pronounced values were artistic, cultural, and social, since the online performances gave the artistic team a purpose during a time when they could not perform in front of live audiences and created social value for audiences through interaction. The producer of Gamma discussed how during the livestreams, the performers were experiencing very much the same emotions as when performing to a live audience:

> I think certainly for the musicians, there was kind of almost like an emotional benefit of being able to play, and doing it was really interesting, particularly [one of the musicians] really responded in a way that he would if he was doing a live show … going through the

> same emotions as he would doing a live show. And when it went well ... all of us could feel a good performance … there was a real feeling of having accomplished a really nice piece of work there. And it was quite interesting how strong that feeling was. (Gamma, Interviewee 2)

Furthermore, the cultural and social value generated through interaction with audiences was manifested in the live chat messages as well as in the verbal feedback received during the post-performance Q&As. Figure 6.3 (adapted from Bakshi and Throsby, 2010) illustrates the value creation process. The values created included artistic and brand value for the creators and performing artists, brand value for Twitch as the distribution platform, public value for funders and partners, cultural value for audiences, social value for audiences through chat interaction, economic value for the Gamma team through ticket sales and donations, for Twitch through advertising revenue and personal data and for Eventbrite through ticket sales commissions.

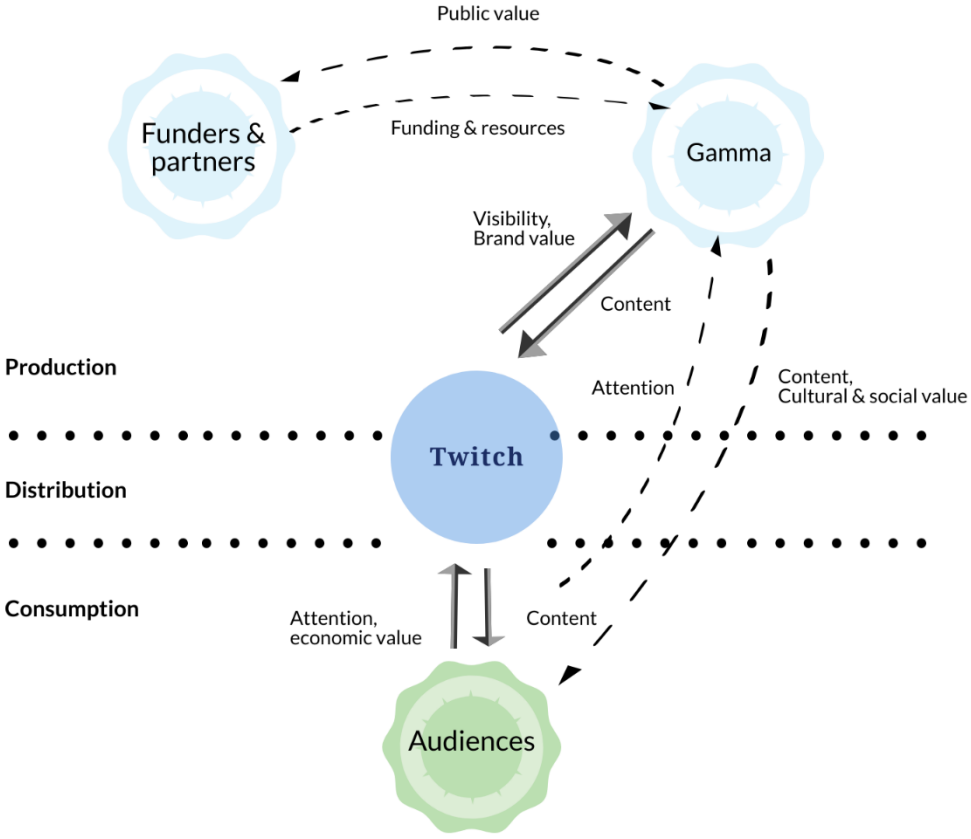


Figure 6.3 Value creation model for Gamma

The case study findings evidenced a high level of DCs within the organisation on both team and individual levels. When the pandemic put the original touring plans on hold, Gamma developed the DCs required to rapidly engage in digital BMI and design and deploy a novel digital business model. Table 6.6 lists the key microfoundations of DCs, identified in the research data.

Higher-order DC	Microfoundations	Example
Sensing • Identifying opportunities and threats • Understanding business trends	• Creative digital R&D	*"That meant tried to figure out how he worked remotely with musicians and the UK and Iceland. And as well as the film itself being remote from those two musicians. Yeah, that took a while even like figuring out what the setup would be, and a lot of rehearsing, training different software. Until we figured out where that was pretty much what works, although, during the*

		performances, we changed a few things, just to improve it. (Gamma, Interviewee 1)
	• Experimentation and use of new technologies and innovations	*"So what we did was …. we did like more performances at the time and more of the budget was put more towards development. So developing, how it would work online, testing the different software, getting that all working."* (Gamma, Interviewee 1)
	• Audience research to address audience needs	Collaboration with university partner to gather audience data.
Seizing • Engaging in business model innovation to seize new opportunities • Reconfiguring business models based on the opportunities and threats identified	• Business model design, development, and management	*"In addition to developing the online performance, we're also looking at how it can develop the films to work online as standalone films, using front facing cameras, and computer vision to control that's also something we're looking into."* (Gamma, Interviewee 1)
	• Ability to make unbiased decisions about new products and services	*"I was just questioning the liberty of art, being online .... It's almost like a trap that people are trying to get away from. And that's what I was trying to do, I was trying to stay away from computer screens ...and ... I've seen quite a few artists, including some colleagues say something similar... it was ...a question of us existing on this screen... But yeah, so I had to get my head around that. Which took a few months of just like rallying against."* (Gamma, Interviewee 1)
	• Ability to secure funding for new products, services, and processes	*"So, yeah, so we've got around 5k ACE funding to do a number of more online events and a single in person event in June."* (Gamma, Interviewee 2)
Transforming • Realigning business models, culture, and structure to respond to future challenges and opportunities	• Realigning existing resources and capabilities	*"So I'm … with the next project, which… is made so that people at home can experience stuff. Maybe that wouldn't have been the case so much if the pandemic hadn't happened. So, it's like …. impacted by the changes happening out there. And the changes that we make to our processes and the products we*

		make … because you have to plan, you have to make and then you have to put it out there. I think we respond a bit faster than a lot of places. Just because we're smaller and we're able to do it." (Gamma, Interviewee 2)
	• Innovating new products, services, and business models	*"I've started doing workshops, based on the knowledge I've gained from doing these, these streams. So, I'm doing workshops for artists and for organisations on especially how to use the software."* (Gamma, Interviewee 1)
	• Recruiting and retaining experts	*"We got somebody [a marketing person] just on a freelance basis."* (Gamma, Interviewee 2)
	• Building new in-house skills and capacity	Learning to use new streaming technology
	• Building cross-sectoral networks and partnerships	Initiating discussions with a software company to build interactive films with a view of expanding to the video gaming market

Table 6.6 Microfoundations of DCs identified in case Gamma

The deployment of Gamma's digital business model encompassed a variety of microfoundational processes. In line with the findings from the previous case studies, Gamma's sensing competences were composed of processes of creative digital R&D, experimentation with novel digital technologies as well as digital audience research. During the initial R&D period, Gamma focused on adapting the performance online and, in particular, experimenting with diverse livestreaming technologies, which were required for the distribution of the digital performance.

The seizing was characterised of business model design and management that involved making unbiased decisions about the new digital performance while the pandemic-time external conditions kept changing. At this stage, further funding was secured to conduct additional online screenings. Following the two online tours, Gamma also engaged in transforming their organisation digitally, which involved engaging in the microfoundational processes of innovating new digital products and services based on the

knowledge gained from deploying the novel digital business model, realigning existing resources and capabilities more towards a hybrid delivery, recruiting an online marketing expert and building new in-house digital skills and capacity.

In the final interview conducted in August 2021, Gamma's artistic director reflected upon how the deployment of the new digital business model had been a valuable learning experience for the team regarding potential cross-sector collaborations and in terms of better recognising new entrepreneurial opportunities available in the digital economy. In the near future, Gamma planned to build upon the pandemic-time experience and create interactive films, with which they could expand their operations to the video gaming market:

> We're talking to a software company who does full motion video, interactive films. And, and what they're saying is the real market for their stuff is the gaming market. Because there's a market... because people pay for games … there's a financial market for that. (Gamma, Interviewee 1)

6.2.4 Case Study Delta

Delta, founded in 2016, is a small theatre company, specialised in immersive audio performances that typically take place in full or partial darkness. When the Covid-19 pandemic started in March 2020, Delta had to temporarily halt their touring activities, as the government-imposed lockdown closed all cultural venues and banned in-person social gatherings. Thus, Delta quickly started to think how they could remain active and continue to make their content accessible to people confined in their homes. Although Delta had previously used digital technologies in their live performances, they had limited experience of producing solely digital work.

The interview data highlighted how following the halting of touring activities, an idea for a Digital Product business model (see Table 6.7) rapidly emerged among the Delta team. The concept involved producing immersive audio performances that people could experience in different rooms of their houses, via a smartphone application and a pair of headphones. Creating at-home performances was something Delta had already considered exploring pre-pandemic, but the time constraints due to a busy schedule of live performances had prevented them from proceeding further with the idea. However, as the Covid-19 pandemic acted as an External Enabler of digital entrepreneurship (Davidsson *et al.,* 2021), it provided Delta with a creative break from live work, and financial resources in the form of government emergency funding. These events enabled Delta to engage in creative DC practices, namely in creative digital R&D, from which emerged *Delta At Home*.

Delta At Home's first season was launched in July 2020 and consisted of three immersive digital audio performances that were released subsequently during summer-autumn 2020. Season two was launched in June 2021 as a trilogy*,* and its settings were extended to include outdoor locations, such as a car and a bench in a park. Table 6.7 outlines the key characteristics of Delta's business model. Although it can be argued that Delta's business model was predominantly a Digital Product business model –since its core activities involved creating a series of pre-recorded digital products– it also encompassed elements of a Digital Performance business model, as the digital performances were not to be consumed on-demand, but distributed at specific, pre-scheduled times. This increased the event-like feeling of attending a live performance, even though the performance content was pre-recorded.

Value proposition	**Digital business model type(s)**	**Activities**	**Assets**	**Value logics**	**Underlying model (Baden-Fuller et al., 2017)**
Immersive, at-home audio experiences Season One: •Three separate audio experiences Season Two: • Trilogy of audio experiences	Digital Product (Digital Performance/ Digital Hub)	Creation of a series of pre-recorded digital products to be consumed at a specific time	Creative, digital production and digital distribution expertise	Creating brand, artistic and economic value (PAE and partners), social and cultural (audiences)	A product model, arts producer creates a digital product, and appoints a number of third-party distributors
		Revenue model	**Distribution platform**	**Funding**	**Partners**
		Ticketed	Bespoke smartphone application	Culture Recovery funding, ACE project funding, commissions	Film and performing arts festivals, international distribution partners, universities, and a marketing agency

Table 6.7 Delta's Digital Product business model

Furthermore, with *Delta At Home*, Delta also engaged in the design and development of a digital platform. First, an existing smartphone application was repurposed and turned into a distributing platform for season one, and later, for season two, Delta decided to update the application to include an improved ticketing system and language versions for international users. The digital platform was managed by the Delta team and developed iteratively according to the requirements of the new digital performances. Thus, it can be posited that their digital business model also involved a dimension of a Digital Hub model. These findings reveal that the digital business model types highlighted in the novel framework of digital business models for performing arts (see Table 3.1 in 3.4.2) are not mutually exclusive, but PAEs actively merge them through digital BMI.

All the audio content for *Delta At Home* was recorded in-house, and the Delta production team oversaw ticketing and distribution. A key finding, illustrated in Table 6.8, underscores that digital BMI does not happen in isolation, but

diverse partners are required, in particular, to ensure the fluidity and viability of distribution, revenue generation, marketing and research activities. For instance, to diversify revenue generation methods, Delta marketed the digital experiences to their existing international partners in South-Korea, Taiwan, Australia, and the USA, who purchased the rights to distribute the digital performances locally. In this respect, Delta's approach to reaching a global digital audience was different to the other case study organisations, as they were already an international touring company prior to the pandemic.

From the start of the project, Delta also collaborated with film and performing arts festivals, who conducted all their programming online at the time. Two of the audio experiences were, in fact, co-produced with performing arts festivals, and during 2020-2021 each of the at-home performances featured in the programmes of international, high-profile film festivals. As Delta had limited experience of marketing digital-only work, they hired a marketing agency to design and execute a multiplatform marketing campaign with the view of reaching new digital audiences, as well as to collect audience data. Diverse research activities were also undertaken by several university partners to gain in-depth audience insights. However, the data gathered by third parties was not used for the purpose of this research.

The *Delta At Home* performances were successful both in terms of audience response and value generation. User research was conducted in February 2021, which involved a test audience of 33 international university students, who experienced one of the audio experiences and filled in an audience survey immediately after taking part in the digital performance. The test audience highlighted a plethora of benefits and reported great levels of enjoyment. In particular, they appreciated the realistic, immersive feel of the performance, the high sound quality, and the participatory, shared experience. One test user mentioned the novelty and immersiveness as key sources of enjoyment and described the online performance as follows: "This show makes me feel like it happened around me. It's so real. It's amazing." Furthermore, the test audience emphasised the ease of the technical

experience, particularly praising the smooth user journey of the smartphone application.

Delta At Home was also a success in financial terms, as according to Delta's ticketing data, over 26,200 tickets were sold globally, and additional income was generated from license fees and royalties. The data from social media platforms revealed that the online performances attracted a very international and metropolitan audience from four continents; indeed, most audience members were located in large cities such as London, Melbourne, and New York. The Delta team also noted that the digital shows received more reviews than any other Delta performances had previously and sparked interest particularly among the extended reality community and the film festival industry.

The interview data also revealed a number of benefits stemming from the deployment of Delta's digital business model. In particular, the Delta team reflected on how the digital distribution of *Delta At Home* had increased the global access to their work and acted as a proof of concept for potential buyers, who could not attend their live work:

> I think main benefits are expansion of audiences, in terms of geographically reaching different locations, and just being able to show partners something without them having to go anywhere, like ... anyone around the world can now do something by Delta at home. (Delta – Interviewee 2)

Furthermore, members of the Delta team observed how creating digital products and showcasing of them at prestigious film festivals, had helped them to explore new, previously unreachable markets, such as the film and extended reality industries. The deployment of one Digital Product business model also led to other opportunities for the same concept, as following the success of the first audio experiences, Delta was commissioned to produce a series of podcasts for the BBC's digital distribution platforms (BBC Sound, BBBC.co.uk). This provides evidence that digital product models can exist

independently and be distributed on different types of platforms without necessarily requiring the content producer's involvement.

Delta's founder and artistic director reflected on the pandemic-time events:

> We sort of expanded into this XR field, which was kind of the theme of what happened over the last year, the audiences were shifting quite a lot and all the reviewers and the podcasters, who have been recently engaging with us have come from this slightly different field. (Delta – Interviewee 1)

It was observed that through *Delta At Home*, Delta created artistic, brand and economic value for the firm and performers featuring in the audio experiences, public and economic value for their funders and partners, and cultural and social value for audiences through the interactive performance experience. Figure 6.4 (adapted from Bakshi and Throsby, 2010) illustrates the production, distribution, and consumption phases in relation to the value creation process.

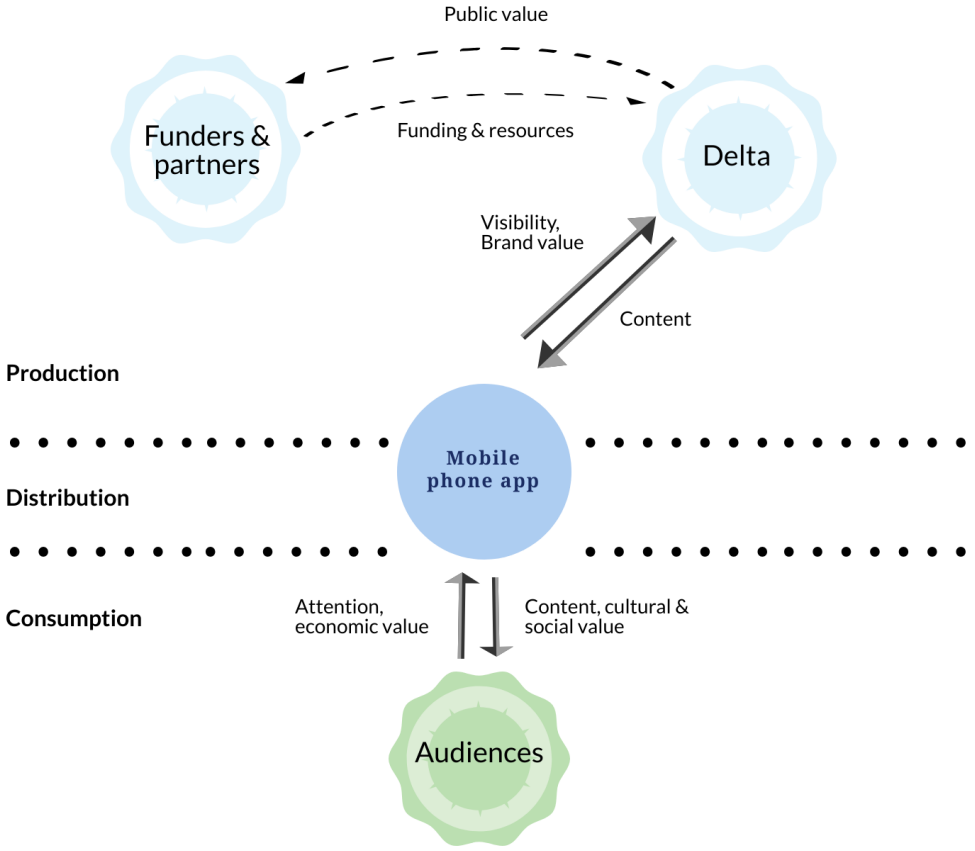


Figure 6.4 Value creation process for Delta

Based on the above findings, it can be posited that when the pandemic started and Delta's traditional business model was made temporarily obsolete by the global health crisis, Delta rapidly developed the vital DCs required to engage in digital BMI with a view of creating and deploying a novel digital business model. As strong DCs are required for a firm to engage in BMI (Achtenhagen *et al*., 2013), in Table 6.8, the microfoundations of DCs that acted as a foundation for Delta's sensing, seizing, and transforming capabilities, are explored in further detail.

Higher-order DC	**Microfoundations**	**Example**
Sensing • Identifying opportunities and threats • Understanding business trends	• Creative digital R&D	*"We spent some time to think how we would make these shows, and we didn't know whether they would work at all, because a key constituency of our work is darkness, and that*

		was no longer in our control, so we made [the first show], before we announced it, basically, and yeah, we carry on making them." (Delta, Interviewee 1)
	• Experimentation and use of new technologies and innovations	*"So, we decided to try and make some shows for a platform that already existed, that [the artistic director] had been using with his previous company, so the app already existed in a certain form, so we just adapted it in a certain way to fit our purpose"* (Delta, Interviewee 1)
	• Audience research to address audience needs	Collaborations with universities and a marketing agency
Seizing • Engaging in business model innovation to seize new opportunities • Reconfiguring business models based on the opportunities and threats identified	• Business model design, development, and management	Design, development, and management of Delta At Home
	• Ability to make unbiased decisions about new products and services	*"When the pandemic hit, we had to close [the containers] down, and we wanted to remain active and we didn't want to put all our content online in a sort of compromised version, we didn't want to just stream content in a way that other theatres were doing"* (Delta, Interviewee 1)
	• Ability to secure funding for new products, services, and processes	Received ACE project funding and Cultural Recovery Funding for Delta At Home
Transforming • Realigning business models, culture, and structure to respond to future challenges and opportunities	• Realigning existing resources and capabilities	Redirecting funds from live work budgets to digital activities
	• Innovating new products, services, and business models	*"I don't know many other companies in terms of the ACE, who are doing works specifically in the way we are. We're definitely reaching a lot of people globally, and I think that's the good thing that for, UK's, kind of arts reputation and the quality of what the Arts Council is funding."* (Delta, Interviewee 3)
	• Recruiting and retaining experts	Delta collaborated with a marketing agency to carry out the marketing of digital performances, and after season two, hired an in-house marketing expert to oversee all marketing and PR activities and develop an audience development strategy.

	• Building new in-house skills and capacity	*"There's been a lot of learning, I think for the company about the [digital] marketing, and it continues to happen, and we're thinking now how we can take any of those learnings to the live work, if any of them are applicable."* (Delta, Interviewee 2)
	• Building cross-sectoral networks and partnerships	Building new cross-sectoral partnerships with documentary makers and universities.

Table 6.8 Microfoundations of DCs identified in the case Delta

As illustrated in Table 6.8, the key processes that acted as microfoundations for Delta's sensing competences centred upon the exploration with digital technologies, as well as researching the new, turbulent market for potential opportunities. The purpose of this was to sense novel digital opportunities, but also to understand market demand and competitors' responses to the unprecedented conditions of the Covid-19 pandemic. Confirming Teece's (2007) arguments regarding the role of R&D in the building of strong DCs, Delta's sensing phase also marked the beginning of creative digital R&D with the view of developing a novel digital business model.

The seizing saw Delta secure funding for the implementation of the new digital business model, make unbiased decisions about the use of digital technologies and move onto the execution stage. Finally, the transforming centred upon learning and innovation, which included microfoundational processes, such as building new in-house skills and capacity, increasing collaboration on a global scale, and innovating the novel digital business model further to ensure its viability post-pandemic, when digital business model innovation would become less necessity-driven in performing arts.

Teece (2007) posits that sensing and seizing capabilities play a crucial role for firms to create novel products and services and respond to turbulent market conditions. The above table demonstrates how Delta, despite being a rather young firm, engaged in sensing, seizing, but also in transforming activities when designing and developing the business model for *Delta At Home*. This was particularly apparent towards the end of the lockdown period, when Delta's pandemic-time focus on digital-only activities began to shift,

and they started to reflect upon how live and digital work could be combined in the post-pandemic world: "We're starting to make the connection between the two [live and digital], and an ongoing question is, how do we support one with the other?" (Delta, interviewee 2)

When the pandemic restrictions began to ease, cultural venues reopened and social gatherings were allowed again, in contrast to many other PAEs who quickly defaulted back to live activities only, Delta was determined to continue with a digital offering and explore the possibilities of a hybrid delivery. Such crossover activities included, for example, using the online performances to market live performances to festival bookers and agents who could not attend in person to provide them with an idea of the sound, which is the main feature of all Delta performances, or when one of Delta's live performances premiered live, audience members received a flyer with a promotional code for online performances, which encouraged them to also engage with Delta's digital work. In the final interview conducted with Delta in November 2021, the team agreed that the nexus of live and digital; hybridity, was where they envisioned the company's future:

> So, there are all these intersections of how we do both things [live and digital], but also there's like the bit in the middle, hybridity, where we might have certain shows online, and then other versions of them in a physical place. (Delta, Interviewee 2).

6.2.5 Case Study Epsilon

Epsilon is a theatre collective specialised in digital storytelling and audience-centric work for small audiences. The Epsilon core team is composed of three artistic directors/co-founders, who have varied backgrounds in theatre, academia, and the technology industry. When the Covid-19 pandemic swept across the globe in March 2020, Epsilon was in a far better position than most PAEs as they were further in the digital transformation process than many of

their peers. For instance, Epsilon already had a portfolio of interactive performances that could be distributed online or easily adapted for online distribution, and they possess considerable in-house digital expertise, as one of the co-founders is a creative technologist. Therefore, when the world moved into a strict lockdown in March 2020, Epsilon already had several existing digital platforms at their disposal, which they had built and previously used in the context of their interactive live performances.

Epsilon's immediate response to the global crisis was to bring forward a run of their piece *Murder Weapon*, which had been created pre-pandemic. By coincidence, *Murder Weapon* was their first digital interactive performance that targets a geographically dispersed audience and is experienced through a smartphone application. *Murder Weapon* unfolds over five days, which worked well in the pandemic context, and the online performances sold out rapidly. After distributing *Murder Weapon* online, Epsilon took some time to consider which of their previous interactive performances might work best if adapted to be distributed online. After careful consideration they selected *The Courtroom,* an interactive courtroom drama, which when performed in a live setting, involves audience members acting as a jury: reviewing textual, audio and video evidence on tablet computers, discussing the evidence with their fellow audience members/jurors and trying to reach a verdict on a murder case. *The Courtroom* was originally commissioned and developed in collaboration with a university partner specialised in forensic science, who also agreed to financially support the online adaption of the show.

Epsilon undertook a creative digital R&D process to adapt the existing software (designed for tablet computers with an audience in the same room) used in *The Courtroom* to fit the requirements of the online version, which needed to work on a range of browsers and devices. The process involved creating a bespoke, embedded video calling system that allowed audience members/jurors to see and hear each other during the performance, have conversations during the discussion phases and scrutinise evidence in real time. Epsilon's co-founder noted that the decision for choosing *The Courtroom*

for online adaption was made based on a longer-term strategy of developing a digital platform for distributing online work that could also be used for future courtroom-style performances:

> I think there was also, almost a strategic point of view of choosing a [court room] style show ... we've got many shows that use the same platform ... there was a strategic kind of decision made in the sense that if we were going to adapt one of the platforms to work, from a tech point of view, online, it was probably better to go for the platform that shares shows, rather than go for a one of our other platforms, which maybe will only enable us to do one show, potentially. So, I think we decided that if we were going to do this, it was a big, big job, we might as well make something that would carry across to other shows. (Epsilon, Interviewee 1)

Through the creative digital R&D process, Epsilon developed a novel Digital Performance/Digital Hub business model, an online version of *The Courtroom* that takes place on a bespoke digital platform. The show was first launched in July 2020 and performed 23 times in July- August 2020. The capacity of each online performance was 12 people, and the shows sold out immediately. Table 6.9 outlines Epsilon's digital business model.

Value Proposition	Digital business model type(s)	Activities	Assets	Value logics	Underlying model (Baden-Fuller et al. 2017)
Interactive online performance	Digital Performance /Digital Hub	The creation of a digital performance to be offered in real time to an extended audience via bespoke digital platform	Expertise in creative, digital production and digital distribution, programming, audience development and data	Creating brand, artistic and economic value (PAE and partners), social and cultural (audiences)	Solutions model: the creator and audience are connected through digital technologies in real-time, e.g., during a live streamed performance
		Revenue model	**Distribution platform**	**Funding**	**Partners**
		Ticketed PWYC, recommended price £13	Bespoke digital platform	ACE emergency funding, funding from the university partner	University partner

Table 6.9 Epsilon's Digital Performance/Digital Hub business model

The Courtroom's online adaption was very well received by audiences and critics alike and attracted the attention of national and international press. No two performances were identical, as no juries were identical, and there was a plethora of factors (e.g., social, technical) impacting the overall performance experience. However, the performances, which often lasted for over two hours, succeeded in maintaining the audiences' attention due to their highly interactive, fast-paced, and unpredictable nature.

Data collected through an in-built audience survey on Epsilon's novel digital platform revealed that *The Courtroom* performances attracted an English speaking, predominantly female audience (69.0 percent), aged between 26-45 (59.8 percent). 80 percent of audiences were located in the UK, five percent in the USA, three percent in Australia, two percent in the Netherlands and the remaining 10 percent were scattered around the globe in countries such as Ireland, Sweden, Brazil, Nigeria, France, Denmark, and Finland.

Nearly half of the audience members (47.2 percent) worked in arts, design, entertainment and media occupations, 20.6 percent in education and five percent were judges or lawyers.

Observations of three *The Courtroom* performances revealed a predominantly positive audience experience. Although the concept of joining a video call with strangers can initially appear intimidating, the Epsilon team ensured that audience members felt at ease, provided clear instructions on how to navigate the online platform, clarified the online etiquette and provided real-time technical support via email and/or phone. The audience members appeared to take their role as jurors very seriously: they listened to the instructions attentively, scrutinised the evidence carefully and discussed excitedly with their fellow jurors. Indeed, it was observed that the discussions would have carried on for far longer, had the time on each piece of evidence not been strictly limited.

Following the online performance, audience members were invited to a debrief session, where they could ask Epsilon and their university partner questions about the show. Whilst audience members seemed mostly very impressed about the performance and expressed their gratitude profusely, some critique was also received. For instance, during one debrief session, an audience member made a point that the evidence was coming to them at a rapid pace, which was very challenging even for a relatively educated person. Audiences were also keen to hear the representative of the university partner discuss how the performance could potentially have real life implications as a pilot for actual online courtrooms.

The online distribution of *The Courtroom* offered manifold benefits to Epsilon and the university partner. One of Epsilon's artistic directors noted how their first fully digital performance had created brand value for the organisation as well as helped to remove geographical barriers of access to their content:

> We definitely have a more international audience... what we put out now gets a little bit more of an international viewership ... since moving online, it's become a lot easier for people to access our content. So,

> we've just actually reached a more international market (Epsilon, Interviewee 1)

Various other types of value were generated through the deployment of Epsilon's digital business model. Social and educational value creation were particularly pronounced in the context of the highly interactive performances, which mimicked the events of an actual courtroom. Epsilon's artistic director reflected how, driven by the desire to continue working, they seized (Teece, 2007) the opportunity to provide social value for online audiences during the early months of the Covid-19 pandemic:

> Especially during the first lockdown, people being quite hungry for shows, they wanted some kind of interaction … they really wanted to speak and really wanted to see people, like on screens, or wanted to talk to new people, I think there was a massive advantage in the fact that we were able to suddenly provide that during one of the worst parts of the first lockdown. Because I think, people just loved the fact that they were meeting new people, when they'd been forced in their house for many, many weeks. So, I think that was also really a massive advantage for us. (Epsilon, Interviewee 2)

With regard to educational and scientific value creation, the benefits for Epsilon's university partner were notable. For instance, they were able to educate online audiences about forensic science, test an online courtroom format in a real-life context and gather valuable research data through the in-built audience survey. Furthermore, other values created through Epsilon's digital business model included artistic and economic value for Epsilon and the performers, public and political value for the university partner and cultural value for online audiences. The value creation process (adapted from Bakshi and Throsby, 2010) is highlighted in Figure 6.5.

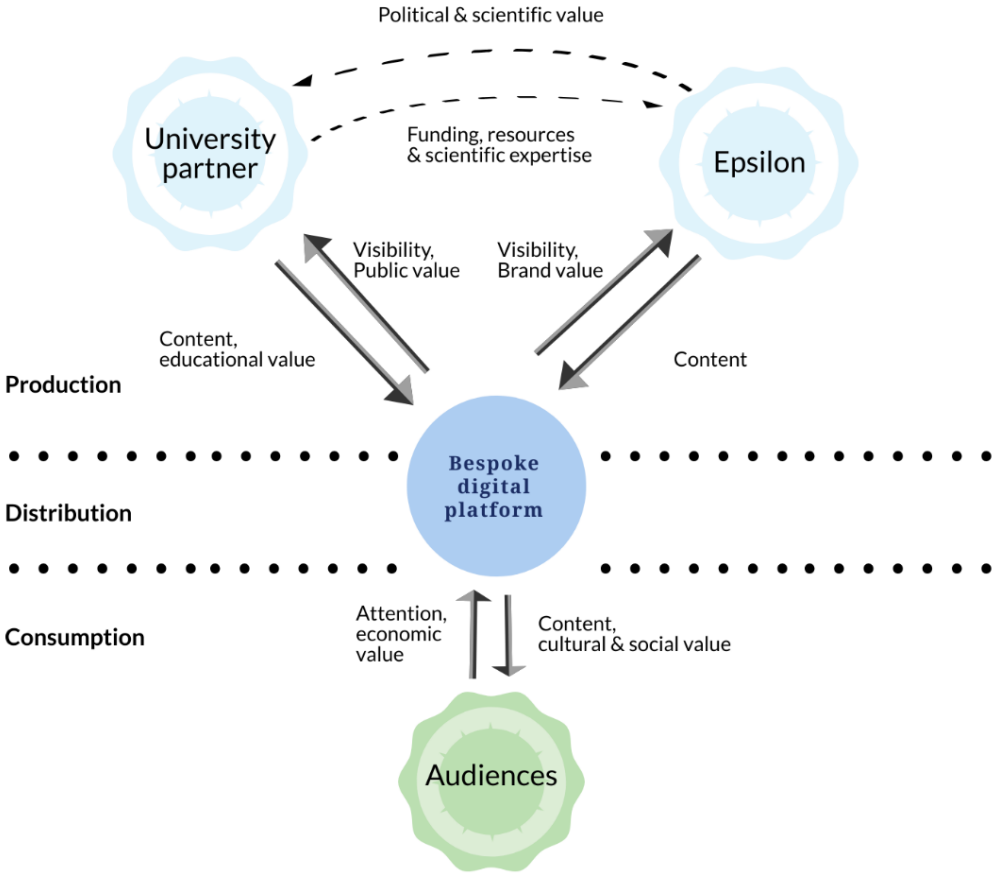


Figure 6.5 Value creation model for Epsilon

Following the success of the online adaptation of *The Courtroom,* Epsilon went on to innovate other new digital products, and entirely unrelatedly to their pre-pandemic plans, designed and developed a series of online escape rooms. The project resulted from the fact that during the lockdown, the Epsilon team had played a number of online escape rooms for entertainment and found themselves dissatisfied with the lack of good narrative and acting in the experiences. Thus, Epsilon also reached a new online escape room audience, very different from their typical core audience in terms of taste and demographics.

Based on the case study data, it was evident that Epsilon possessed strong DCs that enabled them to engage in digital BMI (Teece, 2010) and strategic

decision making, as well as to design and deploy a portfolio (Li, 2020) of novel digital business models. The key microfoundations (Barreto, 2010; Day and Schoemaker, 2016; Teece, 2007, 2010) of DCs identified in the case study data are outlined in Table 6.10.

Higher-order DC	Microfoundations	Example
Sensing • Identifying opportunities and threats • Understanding business trends	• Creative digital R&D	*"We had a software system that [The Courtroom] worked on, on iPads. So, we had this idea, we had some sense, it might be possible to translate to that same software to work not just on iPads, but across different internet browsers. So, I think we maybe thought it was possible."* (Epsilon, interviewee 1)
	• Experimentation and use of new technologies and innovations	*"When we were talking about adapting the platform for online was that we wanted to make sure that it felt as similar as possible to the physical performance. So same content, but we didn't really want to make it feel too different. One of the key aims for me was to create a video call platform that kind of just blended in, it just felt natural, it just was there, you never thought twice about it."* (Epsilon, interviewee 2)
	• Audience research to address audience needs	Collaboration with a university partner
Seizing • Engaging in business model innovation to seize new opportunities • Reconfiguring business models based on the opportunities and threats identified	• Business model design, development, and management	Design, development, and management of a portfolio of new digital business models
	• Ability to make unbiased decisions about new products and services	*"... there was a strategic kind of decision made in the sense that if we were going to adapt one of the platforms to work, from a tech point of view online, it was probably better to go for the platform that shares shows, rather than go for a one of our other platforms, which maybe will only enable us to do one show, potentially. So, I think we decided that if we were going to do this, it was a big, big job, we might as well make something*

		that would carry across to other shows." (Epsilon, Interviewee 2)
	• Ability to secure funding for new products, services, and processes	*"...funding so yeah, [the university partner] were behind it, who originally funded the creation of the piece... we included a proposal to do performances of it in one of the Arts Council's call outs so … we got Arts Council funding to do the online performances during the lockdown."* (Epsilon, interviewee 1)
Transforming • Realigning business models, culture, and structure to respond to future challenges and opportunities	• Realigning existing resources and capabilities	Repurposing and adapting existing digital platforms for online work.
	• Innovating new products, services, and business models	*"We played quite a few online escape rooms during the pandemic. And then we were like...we really wanted them to have better story, and better acting. So we were just like, we wish someone would make an escape room ... with a really good story and we could do that for 10 bucks ... And then we thought that could be us. So we've made it, we've just, we're in the process of making a third of those now, we have released two of them."* (Epsilon, interviewee 1)
	• Recruiting and retaining experts	The Epsilon team includes a creative technologist.
	• Building new in-house skills and capacity	*"So yeah, all the things that we made... a number of them we will do, again, we'll do more shows, so in a way we were, I mean, I don't tend to think in these terms very much. But in a way we were maybe like generating value that we can continue to use, or however you might do. We made it out of stuff that we can keep."* (Epsilon, Interviewee 1)

Table 6.10 Microfoundations of DCs identified in case Epsilon

As Epsilon had the advantage of being further in their digital transformation process than many of their competitors when the Covid-19 pandemic started, the microfoundational processes identified in the case study data centred more upon digitally transforming their organisation to better respond to future opportunities and challenges, than upon sensing and seizing

opportunities available in the digital economy. However, there was a brief sensing phase in beginning of the pandemic, where Epsilon focused on creative digital R&D and experimentation with new technologies to adapt the existing digital platform to fit the requirements of online performances.

As argued by Li (2020), creative industries organisations typically deploy portfolios of digital business models to serve different market segments, and this was also the case of Epsilon. Their seizing was characterised by the design, development and deployment of a portfolio of digital business models, which –as revealed by the case study data– included several types of digital business models, such as a Digital Performance/Digital Hub model (courtroom performances) and a Digital Product model (online escape rooms) For example, Epsilon's co-founder commented how one of their online escape rooms was aimed at a new audience segment of younger children, which enabled them to enter a new market of primary schools:

> The audience is also … different for [the online escape rooms]. So, it's for younger, younger kids. And also, the idea is that schools will play it with their students as part of a kind of activity. So, it kind of guarantees people playing it on iPads in the classroom. So that's quite a good model. (Epsilon, Interviewee 1)

At the seizing stage, unbiased decisions were also made about the novel business models and further funding for digital BMI was secured from ACE and the CRF.

As noted above, the presence of microfoundational processes of transforming emerged perhaps the most prominently from the Epsilon case study. These included a strong focus on building new in-house skills and capacity; indeed, the Epsilon team commented on how during the pandemic they had developed not one, but three digital platforms for online productions that they planned to utilise for future work:

> We now have these three, three main platforms now... [one of them] is … phone based, we have the puzzle game platform, and we have the

> courtroom-style platform, and I think we might try … to continue doing the pieces we've already made for those platforms, or make new things for those platforms, rather than necessarily building a new platform every five minutes. (Epsilon, Interviewee 1)

These findings are in line with Truant *et al.* (2021), who posited that in a turbulent business environment, SMEs tend to innovate and pivot towards digital platforms in order to boost value creation. Furthermore, other microfoundational transforming processes included innovating new digital business models as well as considering how digital and online performances may be merged or exist in parallel. In the final interview with the Epsilon team, conducted in October 2021, the two co-founders reflected upon the impact of the pandemic on their organisation, and how following the lockdown periods, they had realigned their existing resources and capabilities more towards a hybrid business model, where the boundaries of live and digital work had become increasingly fluid:

> I think in general … it just afforded us the flexibility. It's strange being in this kind of position where … we're now moving towards a hybrid model … It's terrifying but exciting. But it is nice to have that flexibility and almost a bit of a safety net, knowing that we can move back online at a moment's notice, because we've done this before. That makes me feel at least quite happy. (Epsilon, Interviewee 2)

Thus, consistent with the comments of Delta, Epsilon also envisioned a future where their creative practice would blend traditional and digital approaches, reflecting the trend towards the hybridisation of performing arts.

6.3 Cross-case analysis

In this chapter, the digital business models deployed by PAEs during the Covid-19 pandemic, and the microfoundations of DCs that enable PAEs to engage in digital BMI have been explored through within-cases analysis to

shed light onto the unique patterns of each case. As noted by Eisenhardt (1989), cross-case analysis is a useful method for synthesising the findings from case studies, examining the similarities between them, and drawing meaningful comparisons across the cases (Yin, 2014).

In this section, findings from the cross-case analysis are presented. The purpose of the cross-case analysis was two-fold. First, common characteristics of the digital business models that emerged as a result of the digital BMI by PAEs during the Covid-10 pandemic are highlighted. The characteristics of the digital business models were identified from the research data and categorised according to the business model components of arts and cultural organisations as defined by Rex *et al.* (2019) (see Table 2.2 in 2.2.1.2). Next, common microfoundational DC practices in performing arts SME that enable digital BMI are explored under the three categories of higher-order DCs (Teece 2007), starting from sensing and seizing capability practices, and finishing with transforming capability practices. Finally, a conceptual model is presented that synthesises the key findings related to each business model component (Rex *et al.,* 2019) and each higher-order DC capability (Teece, 2007).

6.3.1 Digital business models

Following the guidance by Yin (2014), a word table was created to compare the key findings from the five case studies (see Table 6.11). The cross-case analysis conducted on the components of digital business models (Rex *et al.,* 2019) deployed by the case study organisations yielded some noteworthy findings. As illustrated in Table 6.11, the digital business models deployed by the five case study organisations differed somewhat along their types and activities across the cases, but were quite similar in terms of assets, value logics and key partners.

Name	Digital business model type(s)	Activities	Assets	Values logics	Partners
Alpha	Digital Product/ Digital Performance	Creating a pre-recorded digital product to be consumed at a specific time or on-demand	Creative, digital production and digital distribution expertise	Brand and artistic value (PAE and partner), social and cultural value (audiences)	Receiving venue
Beta	Digital Commissioner/Digital Hub	Commissioning digital performance(s) and/or related activities to distribute to audiences	Reputation, expertise in relationships, digital production, and distribution	Social, economic, artistic and brand value (PAE and partners), social and cultural value (audiences)	Charity partner, university partner
Gamma	Digital Performance / Streamer	Creating a series of digital performances to be offered in real time on a streaming platform	Creative, production and digital distribution expertise	Brand and artistic value (PAE and partner), social and cultural value (audiences)	University partner
Delta	Digital Product/ Digital Performance	Creating a series of pre-recorded digital products to be consumed at a specific time	Creative, digital production and digital distribution expertise	Brand, artistic and economic value (PAE and partners), social and cultural (audiences)	Film and performing arts festivals, international distribution partners, university partners, marketing agency
Epsilon	Digital Performance / Digital Hub	The creation of a digital performance to be offered in real time to an extended audience via bespoke digital platform	Expertise in creative, digital production and digital distribution, programming, audience development and data	Brand, artistic and economic value (PAE and partners), social and cultural (audiences)	University partner

Table 6.11 Key components of digital business models

Drawing on the research data, it can be thus posited that the digitalisation of the case study organisations' traditionally live activities-based business models contributed to the creation of new business model innovations and entrepreneurial opportunities (Afuah and Tucci, 2001; Amit and Zott, 2001). In particular, the deployment of digital business models helped PAEs to reach novel markets and expand their operations to new industries, such as the film

industry (cases Alpha and Gamma), extended reality industry (case Delta) and the online escape room industry (case Epsilon). The most common assets gained from the deployment of digital business models included digital production and distribution expertise (all cases).

In line with the findings from Rex *et al.* (2019) and McDonald *et al.* (2021), PAEs' choice of business models was strongly impacted by the economic, political and social conditions of their operating environment, which during the research period, were disrupted in unprecedented ways by the Covid-19 pandemic. Furthermore, the use of digital technologies did not only scale up the PAEs' existing business models, but PAEs were innovative in merging different digital business model types to create their own variants. Indeed, the case study organisations often developed several types of digital business models in parallel or introduced digital business model portfolios to target newly identified markets and audience segments (Li, 2020).

With regard to value logics, consistent with the findings by Rex *et al*. (2019), the various types of value (e.g., brand, artistic, economic, social, and cultural) were created and captured through the deployment of digital business models by the case study organisations. Furthermore, the findings confirmed those of recent Covid-19 focused performing arts research (Haferkorn *et al.,* 2021; Misek *et al.* 2022) that the use of digital technologies can contribute to increased creation of brand value through exposure, and thus help arts enterprises reach more international and geographically dispersed audiences. The findings also highlighted the complex nature of PAEs' value creation process that can make BMI challenging (McDonald *et al.*, 2021). This was apparent in the interview data, which highlighted how the case study organisations' mission-based motivations to conduct artistic work were not primarily driven by the prospect of economic value creation or achieving growth, but by their desire to carry on working under the unprecedented crisis-time conditions and keep providing their audiences with social and cultural value (Rentchler, 2003).

Furthermore, echoing the findings from the first PhD study, the cross-case analysis strongly indicated that initial investment from public funding is necessary for PAEs to engage in digital BMI. For instance, four out of the five case study organisations received funding from ACE, and one operated on a voluntary basis supported by the salaried personnel of their charity partner. This direct financial or in-kind support enabled them to conduct creative experimentations with digital technologies, engage in digital BMI and deploy business models in the digital economy. The ticketing data gathered from the case study organisations further evidenced that revenue generation was not a priority when experimenting with digital business models (McDonald *et al.*, 2021). Although PAEs generated revenue through tickets sales, this income was typically quite low, implying that the digital business models deployed were rarely profitable, or as with case Beta, the income was raised for charitable purposes only, and even then, funds raised were lower than would have been achieved through a live activities-based business model. Moreover, two case study organisations experimented with the 'Pay-What-You-Can' pricing model, letting their audiences decide whether they wished to pay to take part or at what financial level, and those PAEs who charged for tickets, priced them between £5-12, which is considerably less than the ticket prices of their live performances.

Another key insight that emerged from the cross-case analysis is that digital BMI does not occur in isolation, but the role of diverse partners and stakeholders is pronounced. In particular, the role of university partnerships appeared crucial in PAEs' digital BMI. Indeed, four out of the five case study organisations collaborated with universities, who provided them with valuable support in the form of funding, training in the use of digital technologies and in collecting and analysing audience data. This is in line with Walmsley *et al.* (2022), who posited that research plays a key role in supporting the complex infrastructure of the cultural industries and in pinpointing key areas for improvement.

6.3.2 Dynamic capabilities practices

The cross-case analysis highlighted common microfoundational DC practices within the five case study organisations that enabled them to engage in digital BMI. Below, the key DC practises are discussed under each higher-order DC (Teece, 2007) category.

6.3.2.1 Sensing capabilities

The key microfoundational processes that emerged from the research data that allowed the PAEs to develop their sensing capabilities were, 1) Creative digital R&D, 2) Experimentation with novel digital technologies, and 3) Audience research. Starting from the first one, when the Covid-19 pandemic halted the live activities of the case study organisations, driven by their desire to keep working and providing value to their audiences, they all immediately engaged in a period of creative digital R&D. This period typically involved either working on an existing performance with the view of adapting it for digital distribution (cases Alpha, Beta, Gamma, and Epsilon) and/or creating novel digital products (cases Delta and Epsilon). As highlighted by the expert interview data in Chapter 4, these creative explorations are a unique part of sensing, specific to arts enterprises that shape the development of crucial DCs.

The second core microfoundational process of sensing was experimentation with novel digital technologies and innovations. This process was characterised by the interviewees' aspirations to learn novel digital skills to better respond to the challenges imposed on them by the global pandemic. The new digital technologies typically included video and livestreaming technologies (cases Alpha, Beta, Gamma, and Epsilon), digital platform and mobile application technologies (all cases) and digital marketing technologies (cases Beta, Gamma, and Delta).

Finally, the third key microfoundational process of sensing related to audience research activities. The collaboration with universities and other partners, such as marketing agencies (case Delta), charities (case Beta), and large, high-profile PAEs (case Alpha) was crucial to gather data on digital audiences. Furthermore, the research revealed how PAEs actively used social media to stay attuned to the latest news and trends from the sector, for tracking the actions of their peers in response to the ever-changing pandemic-time conditions, and for real-time, crisis communication with their audiences. This alertness with regard to the external events helped them to understand emerging business trends and identify new opportunities in the turbulent and fast-evolving crisis-time market.

6.3.2.2 Seizing capabilities

With regard to microfoundational seizing processes, three key processes were identified from the research data: 1) Business model design, development, and management, 2) Ability to make unbiased decisions about new products and services, and 3) Ability to secure funding.

As noted by Teece (2018), the management's ability to develop new business models is a key microfoundation of DCs. The case study data evidenced how as a response to the drastic changes in their operating environment caused by the Covid-19 pandemic, all the case study organisations went on to design and develop a variety of new digital business models (see 6.4.1). Furthermore, it was observed that this process was typically conducted in close collaboration with key partners and stakeholders. Thus, the seizing of novel business opportunities was strongly influenced and largely enabled by the microfoundational processes of sensing outlined above.

As discussed in the previous section, the case study organisations did not design their business models with the primary aim of seeking profits or achieving growth but echoing the definition of AE by Chang and Wyszomirski (2015), they emphasised how their business model development was

typically driven by the desire to remain active and continue providing social and cultural value to their audiences. Only one of the five case study organisations (case Delta) generated considerable income from the ticket sales of their online performances, which covered the majority of the costs of their digital project, and it is noteworthy that they also had the widest array of partners involved. Others relied heavily upon public as well as in-kind funding and on support from their key partners. Therefore, drawing on Ritter and Pedersen (2020) and echoing McDonald *et al.* (2021), PAEs' digital business models during the pandemic can be depicted as 'vulnerable and aided', as they would have been unable to support themselves during the crisis without external help.

A common microfoundational process of seizing was the ability to secure funding for the deployment of novel business models. These findings echo those of Misek *et al.* (2022) in that digital business models in arts and culture are rarely profitable. As illustrated by the research data, none of the digital projects could have gone ahead without in-kind or direct financial subsidy. This is partly, as argued by Dümcke (2015), because digital transformation has not fully taken place in performing arts yet, and therefore these digital business models are still in the experimental phase, and perhaps in the future PAEs will need to look into other more lucrative industries for potential options for digital business models (Misek *et al.*, 2022).

Another microfoundational process of seizing that emerged from the research data was PAEs' ability to make fast, unbiased decisions about their novel digital products and services. This ability appeared to stem from the case study organisations' understanding of industry trends, acquired during the sensing stage. The key decisions typically related to the choice of target audiences, revenue models, and ticketing and distribution platforms, and were strongly impacted by the changing pandemic conditions. Whilst the first PhD study highlighted how PAEs' senior executives generally lacked digital skills and understanding of digital technologies, the cross-case analysis demonstrated that this was not the case of the case study organisations, who

were all SMEs. On the contrary, the managers of these performing arts SME demonstrated agile decision-making skills and were very eager to learn to use new digital technologies, which enabled them to seize novel opportunities in the digital economy and engage in creative digital BMI.

6.3.2.3 Transforming capabilities

The third higher order DC, transforming, is typically more applicable to mature, large firms that are required to reconfigure their existing ways of operating, and less critical to younger firms and SMEs (Zahra and George, 2002). Therefore, it was quite surprising to discover that all the case study organisations despite being SMEs, engaged in developing transforming capabilities through microfoundational DC processes. Such processes included 1) Realigning existing resources and capabilities, 2) Innovating new products, services, and business models, 3) Recruiting and retaining digital experts, 4) Building new in-house digital skills and capacity and 5) Building cross-sector networks and partnerships.

The process of realigning existing resources and capabilities became more common towards to the end of the lockdown periods, when the research participants were faced with questions about how live and digital work could be combined after the pandemic. Typically, resources are very scarce in SMEs (Wapshott and Mallet, 2021), and therefore running a digital and live offering in parallel was not necessarily considered a viable way of operating in the future. However, all the case study organisations were determined to continue embedding digital technologies in their products, services, and business models, and considered creating hybrid offerings in the future. The shift towards hybridity and the emphasis on cross-sectoral partnerships (cases Gamma and Delta) that were illustrated through the research findings, are consistent with Teece's (2018) theorizations about how the transforming phase typically involves reconfiguring the firm's overall structure, business models and culture in a way that enables it to better respond to future

challenges and seize novel opportunities in different markets. They also confirm the argument by Day and Schoemaker (2016, p.65) that a focus on external networks and partnerships is crucial when building transforming capabilities, as an organisation with "transforming capabilities is one where agile, entrepreneurial mindset is actively cultivated within, with a broad expansive approach to external network-building."

With regard to innovating new products, services and business models, many (cases Alpha, Beta, Gamma and Epsilon) planned to carry on creating or developing new digital platforms, some (cases Delta and Epsilon) described how they were involved in various live-digital crossover activities, such as the use of digital performances to market live performance, and others (cases Gamma and Delta) recounted how based on the knowledge gained during the pandemic, they planned to create novel digital products and services for newly identified audience segments.

There were apparent commonalities across the cases in terms of building new digital in-house skills and capacity. All the participating PAEs considered that the new digital business models they had deployed during the pandemic had added value to their organisations in the form of increased in-house skills, capacity, and digital assets. Key skills and capacities included digital marketing skills (cases Beta, Gamma, and Delta), skills related to the livestreaming of performances (cases Beta, Gamma, Delta, and Epsilon) and skills related to building and managing digital platforms (all cases). Case Epsilon was clearly further in this microfoundational process than the others, as they had built three digital platforms during the pandemic, and had an in-house digital expert, who could maintain and develop the platforms for future projects. Finally, similar patterns were identified in the PAEs' recruitment and retention of digital experts. Most commonly, the recruitment was done on freelance (cases Gamma and Delta) or volunteer-basis (case Beta), and those who already had digital experts within their organisation or among their key partners acknowledged the value the experts brought to their organisation and planned building on that expertise in the future.

6.4 Discussion

Recent studies from the arts and culture industries (e.g., Bradbury *et al.,* 2021; Misek *et al.,* 2022; Walmsley *et al.,* 2022) have underscored how the Covid-19 pandemic acted as a catalyst of digital transformation in performing arts, however, research on the DCs that enable digital BMI in PAEs remains scarce. Therefore, the aim of this chapter was to explore the microfoundational DC practices that contribute to digital BMI in performing arts SMEs and, in particular, address RQ2: *"How do the dynamic capabilities of performing arts enterprises change in order to enable digital business model innovation?"* An additional objective was to offer preliminary insights into how PAEs might choose to engage with DCs post-pandemic, when digital BMI is perhaps less necessity-driven, and live and digital activities may co-exist in parallel.

As posited by Čirjevskis (2019), business model components are strongly influenced by DCs. Therefore, this study offers several theoretical contributions, the main contribution being a novel conceptual model drawing from the findings from the cross-case analysis related to how different business model components of performing arts SMEs are impacted by microfoundational DC processes to enable digital BMI. The model is presented in Figure 6.6, and it summarises the key microfoundational processes for each higher-order DC category (Teece, 2007) in each business model component (Rex *et al.,* 2019).

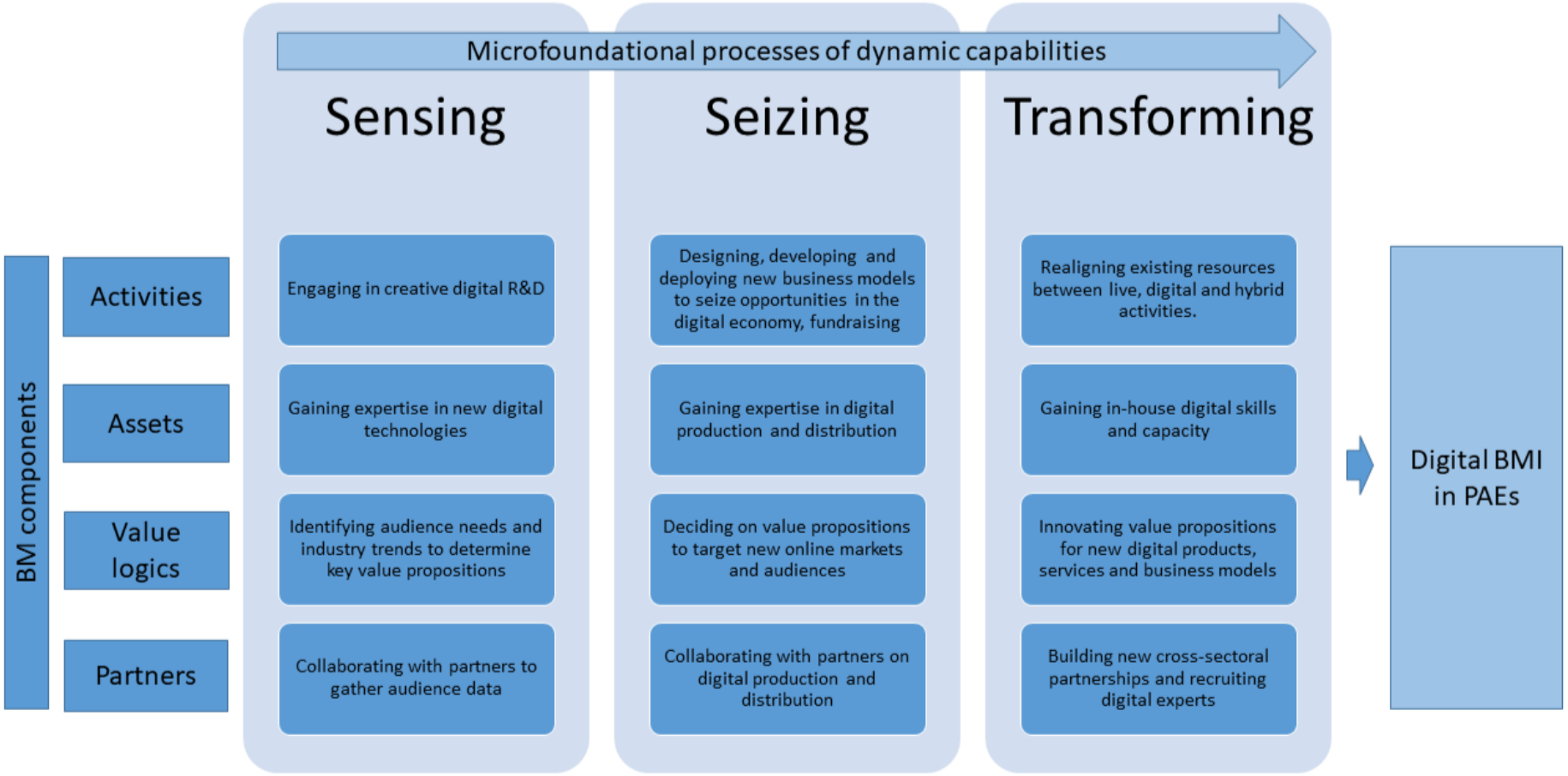


Figure 6.6 DC practices that enable digital BMI in performing arts SMEs

The research findings provide evidence that despite the heterogeneous digital business model types developed, the DC practices that enable digital BMI are relatively similar in performing arts SME, and that microfoundational DC practices actively impact the different components of digital business models. Drawing on Teece's (2007) theorisations of microfoundations of DCs and Rex *et al.*'s (2019) conceptualisation of the typical components of an arts enterprise's business model, it can be posited that the core processes of sensing capabilities related to creative digital R&D, experimentation with novel digital technologies and to collaborating with key partners to identify audience needs and industry trends. As evidenced by the research data, during the pandemic, when engaging in microfoundational sensing activities, the processes of creative, digital experimentations replaced the usual live activities of case study organisations, making creative digital R&D a crucial foundation for digital BMI.

As illustrated in Figure 6.6, the microfoundational seizing capability processes centred upon developing and designing new business models to seize the newly identified opportunities in the digital economy. An apparent change was observed in the level of digital assets within the case study organisations during the pandemic, as they gained expertise in digital production and distribution, which to most of them was a previously unexplored terrain. In contrast to the findings of the first PhD study (see Chapter 4), the case study organisations were observed to engage in quick, iterative, and inclusive decision making, when creating value propositions for the newly identified target audience segments and when fundraising for new projects.

Indeed, all the performing arts SMEs displayed strong managerial microfoundations relating to knowledge of digital ventures, ways of managing their organisations and to willingness to recruit young, digitally literate talent. Therefore, the levels of their DCs that enable digital BMI grew dramatically during the pandemic, when compared to those of pre-pandemic that were evidenced in the first PhD study. In the seizing stage, key partners also had

an important role in the execution and implementation of the novel digital business models as they provided expert support and sometimes concrete finances.

A key change observed in PAEs' transforming capability processes related to realigning resources between live, digital and hybrid activities, and to building new, cross-sectoral partnerships. At the time of the data collection, all case study organisations considered the production of digital or hybrid work as an important part of their future, and felt that digital programming complemented their traditional, live activities-based business model. The research findings illustrated how the digital offerings strengthened the case study organisations' traditional business models, and thus contributed to their overall sustainability.

6.5 Conclusions

In this chapter, the digital business models deployed by five performing arts SMEs during the Covid-19 pandemic have been explored to provide insights into their use and characteristics. Furthermore, the individual and group level DCs that enable PAEs to engage in digital BMI and develop digital business model have been investigated, to address the gap in the literature relating to their emergence in performing arts, and in particular, in the SME context.

The chapter aims to offer both theoretical and practical outcomes. First, a new conceptual model is presented that details how microfoundational DCs impact the different business model components of PAEs, furthering our understanding of the core individual and group level processes that support digital BMI in performing arts. Second, the chapter presents an in-depth analysis of the types, components and characteristics of the digital business models deployed by performing arts SMEs during the Covid-19 pandemic. To conclude, it can be posited that the digital BMI that took place within performing arts during the pandemic contributed to the development of new DCs within PAEs, assisted in the creation of digital innovations and supported

the discovery of new entrepreneurial opportunities (Afuah and Tucci, 2001; Amit and Zott, 2001). Specifically, it helped PAEs to reach novel markets and industries, and through the development of their digital skills and capacity, to build a stronger brand presence in the digital economy, and form new, international, cross-sectoral partnerships.

6.6 Chapter summary

This chapter presents the findings from five case studies conducted on performing arts SMEs, who designed and deployed digital business models during the Covid-19 pandemic. A micro-level perspective is adopted to investigate the characteristics and components of the digital business models deployed and the team and individual level DCs that enable digital BMI in performing arts. In the following chapter, the conceptual and empirical contributions are presented and their implications to research, policy and practice are discussed, with a particular focus on the post-pandemic performing arts landscape.

Chapter 7 Discussion

In this chapter, drawing on the findings from performing arts enterprises' (PAEs) crisis-time practices during the Covid-19 pandemic presented in the previous chapters, the final thesis discussion highlights how PAEs may choose to engage with dynamic capabilities (DCs) and deploy digital business models in the post-pandemic world, when digital BMI is no longer necessity driven, and live and digital activities co-exist in parallel. The chapter will centre upon how the DCs developed during the global pandemic can help PAEs to better navigate the hybrid future, particularly whilst engaging in digital entrepreneurial ventures and digital BMI. The discussions from Chapters 4, 5 and 6 are considered in relation to extant literature on arts entrepreneurship, business model research and DCs research.

The chapter begins with revisiting the research questions and the aims of the research. Then, the conceptual and empirical contributions are presented, and their implications discussed in relation to the following core research areas: 1) Arts entrepreneurship 2) Business model research, and 3) Dynamic capabilities research. In the end of the chapter, limitations and potential avenues for future research are highlighted.

7.1 Introduction

The findings of the three PhD studies addressed the research gaps identified through the literature review in Chapter 2. The discussions in Chapters 4, 5 and 6 explored the characteristics of digital business models deployed by PAEs, and unpacked the organisational, group and individual-level DCs that enable PAEs to engage in digital BMI with the view of developing new business models for the digital economy. In doing so, the following research questions and research objectives were addressed.

Research questions:

- RQ1: How can performing arts enterprises deploy business models in the digital economy?
- RQ2: How do the dynamic capabilities of performing arts enterprises change in order to enable digital business model innovation?

Core objectives:

- To capture the insights from the crisis-time practices of PAEs during the Covid-19 pandemic
- To identify the core microfoundational processes that enable PAEs to engage in digital business model innovation (BMI) and deploy digital business models
- To investigate what this means for the post-pandemic performing arts landscape

The findings from the three studies have implications for the following key research areas: arts entrepreneurship, business model research and dynamic capabilities research. Conceptual and empirical contributions to these research areas will now be discussed in further detail, and the implications for practitioners and policy will be highlighted.

7.2 Conceptual contributions

A conceptual contribution refers to a new idea, theory, or framework that advances the understanding of a particular field or discipline. It is a contribution that is based on abstract concepts and ideas (McInnis, 2011). Conceptual contributions often involve the development of new theories, models, or frameworks that help to explain complex phenomena or address gaps in existing knowledge.

The research offers two core conceptual contributions. The first contribution has implications to DC literature, and it relates to the microfoundations of DCs within PAEs that enable digital BMI, whereas the second contribution has implications for digital business model literature in the context of arts enterprises.

7.2.1 Novel conceptual model: Microfoundations of DCs in PAEs

The findings presented in the thesis contribute to the dynamic capabilities literature by offering insights into the emergence and evolution of dynamic capabilities (DCs) within PAEs, during the disruptive events of the Covid-19 pandemic. The research culminates in the development of a conceptual model (initially presented Figure 6.6 in 6.5 and summarised in Figure 7.1) synthesising insights acquired through the research and extending existing literature. The new conceptual model offers a framework for understanding how microfoundational DC processes influence different business model components of PAEs and thus enable digital business model innovation.

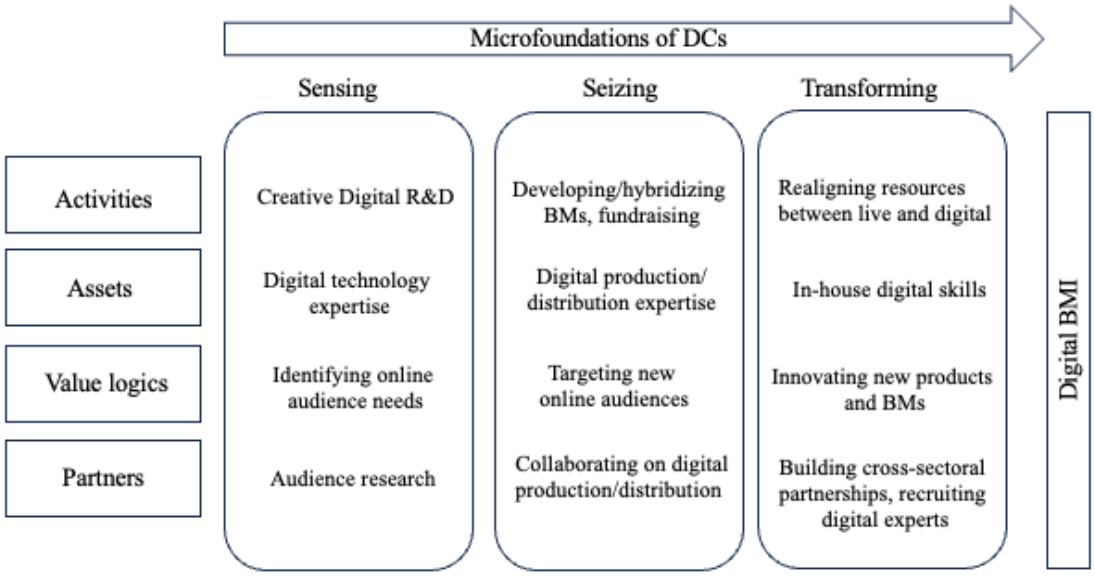


Figure 7.1 DC practices that enable digital BMI in PAEs

In particular, the conceptual model highlights the heightened microfoundations of sensing, seizing, and transforming capabilities of PAEs during the pandemic, enriching our understanding of DCs and their relation to external changes. This adds to the ongoing debate outlined in the critique regarding the nature of DCs – whether they are 'abilities', 'routines', 'rules', or 'processes' (see 2.3.3). The insights illustrated in the conceptual model align with the views expressed by Helfat *et al.* (2007) and Eisenhardt and Martin (2000), who consider DCs as managerial and organisational processes. Furthermore, the detailed exploration of some of the key microfoundations of DCs within PAEs in the thesis, such as creative digital R&D and building of cross sectoral partnerships, provides tangible examples of these processes in action, thereby addressing some of the vagueness and elusiveness of DCs as a concept that has previously faced critique (Kraatz and Zajac, 2001).

Another significant aspect revealed by the conceptual model is the unique nature of DCs within PAEs. Unlike traditional business settings where competitive advantage is central, PAEs typically prioritise financial autonomy and self-sufficiency (Rodriquez, 2016). This perspective enriches the debate on DCs, as it contrasts with the traditional view of DCs primarily as a means to achieve competitive advantage (Teece, 2007). It indeed suggests that the value of DCs may extend beyond traditional commercial frameworks, adding a novel layer to our understanding of DCs in different contexts. The focus on PAEs, which seek financial autonomy rather than competitive advantage, adds an interesting dimension to this debate, suggesting that DCs' value in these settings may be oriented towards sustainability and innovation rather than traditional competitive metrics.

The integration of Teece's (2010; 2018) theories on Business Model Innovation (BMI) enabled by DCs complements the discussion on the outcomes of DCs. Teece's (2007) perspective that sees DCs as a source of competitive advantage is expanded, which demonstrates how by impacting different components of business models, DCs facilitate BMI in PAEs, especially in response to digital transformation and rapid environmental changes. This integration is a crucial

contribution to the literature, providing clear evidence on role of identifiable microfoundations of DCs in digital BMI.

Finally, the conceptual model presented in the thesis contributes to the dynamic capabilities literature by providing a fresh perspective and conceptual insights in the context of performing arts. It addresses some of the critiques and debates in the field by offering a detailed exploration of DCs as processes and their application in a non-traditional business setting. This enriches our understanding of DCs in diverse contexts and challenges us to consider their application and impact beyond conventional business paradigms.

7.2.2 Novel theoretical framework: Digital business models in performing arts

As stated by McInnis (2011), a conceptual contribution may also serve to revise existing perspectives on theoretical concepts or frameworks. Therefore, the second conceptual contribution of the thesis centres upon revising the framework of common business models business models for arts and cultural organisations (see Table 2.6 in 2.2.7) by Rex *et al.* (2019) and extending it to the context of the digital economy. This revision was necessary for identifying and analysing common digital business models deployed by PAEs during the Covid-19 pandemic.

Therefore, the research's key contribution to business model research literature is the novel framework of common digital business models in performing arts (initially presented in Table 3.1 in 3.4.2 and summarised in Table 7.1) Drawing on research by Rex *et al.* (2019) and Baden-Fuller *et al.* (2017), the novel framework provides an overview of digital business models deployed by PAEs and sheds light onto their core components and characteristics.

Digital business model type	***Activities***	***Assets***	***Revenue generation***
Digital Performance	The creation of a digital performance or other digital content to be offered in real time to an extended audience	Creative, production and digital distribution expertise	Ticket sales, funding
Digital Product	The creation of a digital product e.g., a pre-recorded performance or educational video that can be consumed on-demand	Creative, production and digital distribution expertise	Selling or renting digital products to audiences
Digital Commissioner	Commissioning digital performance(s) and/or related activities to distribute to audiences	Reputation, expertise in relationships and digital data	The commissioner might pay a fee or offer visibility to content producers. Revenues are generated from ticket sales or box office splits
Streamer	Producing live or pre-recorded content to be distributed on third-party platforms such as YouTube	Creative, production and digital distribution expertise, expertise in building and managing digital communities on third-party platforms	Income from advertising revenue from the third-party platform, sponsorship, merchandise sales
Digital Hub	Running a digital platform	Expertise in programming, audience development, digital technology skills and data	Income from funders, and/or ticket sales income (e.g., subscription or freemium pricing model)
Digital Service	Delivering online events e.g., workshops, courses, or other educational activities in real time	Expertise in teaching, training, and filming/ broadcasting	Ticket sales, donations, funding

Table 7.1 Novel framework for common digital business models in performing arts

The research identified six types of digital business models, of which, all but one, 'The Streamer", were scaled-up versions of live activities-based business models. Consequently, the research has the following implications for business model research: 1) the research expands the Rex *et al.* (2019) framework to the context of performing arts in the digital economy, 2) it provides an in-depth overview of each digital business model type, and 3) it offers insights

on how PAEs deploy digital business models, for example, as business model portfolios.

The research adopted the activities-based perspective on business models and thus responds to Zott and Amit's (2010) call for more research investigating the 'black box' of business model activities and the micro-mechanisms of business models. The framework outlined in Table 7.1 contributes to the extant scholarly discourse regarding the evolution of business models within the arts and cultural sector. In particular, it places emphasis on the imperative for arts enterprises to design new digital business models that reduce traditional reliance on public funding and align with broader societal impact and sustainability goals.

Furthermore, the novel framework illustrates the digital business model innovation (BMI) that is ongoing within the sector, addressing the extant critique that arts enterprises typically lack strategic planning and are unable to coherently implement new business models (Schiuma and Lerro, 2017). The digital business models encapsulated within the framework—ranging from "Digital Product" to "Digital Service"—reflect a profound institutional shift towards embracing digital transformation within the sector, rather than highlight a temporary, ad-hoc response to external pressures, such as those brough upon PAEs by the Covid-19 pandemic.

Moreover, the framework suggests a resolution to the dichotomy between financial imperatives and social purpose, a recurrent theme in the literature on cultural entrepreneurship and business model innovation within the arts. By delineating novel business models, such as the "Streamer," or "Digital Hub" the framework implies a potential pathway for PAEs to augment their innovation capabilities and transform traditional business models, which have typically been characterised as unsustainable, 'market failure' business models. This change is set to bring together the goal of creating value — whether cultural, social, or economic— with the need for financial stability, a balance that has been acknowledged as crucial in extant literature (e.g., Rodriguez, 2016).

The framework also presents an implicit critique of the current state of academic research on business models in the arts and cultural sector, which remains scarce. By offering a clear classification of digital business models, the framework contributes to a deeper scholarly understanding of BMI in this context and paves the way for further investigations. Furthermore, the framework may act as a potential device for both practitioners and scholars, aiding in the pursuit of business model innovations that are economically viable, culturally resonant, and socially impactful.

7.3 Empirical contributions

Beyond the conceptual insights, this research makes important empirical contributions, enhancing our understanding of the DC processes that drive digital BMI in PAEs. The research gathered valuable perspectives from senior experts in performing arts and highlighted the trajectories of different-sized PAEs, amidst the challenges posed by the turbulent conditions of the digital economy during the Covid-19 pandemic. By doing so, it demonstrated how these organisations can adapt and innovate, thereby rendering complex theoretical concepts to life through real-world examples.

This not only enriches the academic discourse with real-world applications of Schumpeterian innovation (1934) and Teecean Dynamic Capabilities (DCs) (Teece, 2007; 2010;2018) but also offers valuable insights for practitioners. The findings thus serve as a critical reference point for both scholars and industry professionals, offering a comprehensive empirical framework that reveal the mechanisms of resilience and adaptability in the cultural sector. The research, therefore, contributes to a deeper, more structured understanding of how PAEs can sustainably evolve and maintain competitiveness through continuous innovation and strategic planning.

The key empirical contributions of the research related to three key areas: arts entrepreneurship, business model research and dynamic capabilities research. Below, contributions to each research area are discussed in further detail.

7.3.1 Relating to arts entrepreneurship

Drawing on the rich empirical data collected from PAEs, the research highlighted the typical characteristics of a performing arts SME, and whether such characteristics act as barriers when engaging in digital entrepreneurial ventures and deploying business models in the digital economy. The research explored PAEs during an exceptional time of a global coronavirus outbreak. The research findings indicated that prior to the pandemic the performing art sector had been slow to explore the opportunities of the digital economy, and PAEs had shown limited interest in digital entrepreneurship, despite recent encouragements from their funders to become more entrepreneurial and explore alternative revenue streams to traditional public funding.

This was particularly evident among performing arts SMEs, who were observed to display many of Wapshott and Mallet's (2021) ideal type SME characteristics (see Table 2.1 in 2.1.1). Considering that in 2019, 95 percent of creative industries organisations were micro-enterprises, employing fewer than ten people (DCMS, 2022), and UK-based performing arts SMEs typically generate an annual revenue of less than £100,000 (Arts Council England and NESTA, 2019) and employ personnel mostly on freelance basis, it is key to further investigate the characteristics of a typical performing arts SME, and the impact of such characteristics on PAEs' ability to sense and seize opportunities in the digital economy.

As a response, drawing upon the empirical research findings, the research adapts Wapshott and Mallet's (2021) Ideal SME framework to the context of performing arts. Table 7.2 outlines the adapted framework.

Characteristics of a performing arts SME	Consequence
Takers, not makers of the external environment	Performing arts SMEs are poorly positioned to influence their operating environment and the choice of their business models
Owner-manager prerogative	Founder/Artistic Director has significant scope to run the business operations and artistic creation as they wish
Lack of spatial and social proximity	Small staff numbers, increased use of freelancers, and no fixed location or virtual location businesses that offer limited opportunities for familiarity and close collaboration
Informal and ad hoc	Tend not to rely on pre-defined processes, but emphasise flexibility and utilise ad hoc practices and "what works"
Low task specialisation	Staff are required to undertake several job roles in order to get things done
Resource poverty	Resource constraints, primarily with regard to financial resources, but also human and time resources

Table 7.2 Ideal type performing arts SME Framework (adapted from Wapshott and Mallet, 2021)

Echoing the findings of Rex *et al.* (2019), the pre-pandemic research findings provided evidence that performing arts SMEs were poorly positioned to influence their operating environment as they were often dependent upon larger firms to distribute their performances to the audiences, and their business models were typically determined by external factors, such as the complex policy environment. Further, as observed from the research data, founders/artistic directors had a key role and significant say in the running of business operations and the creation of artistic content. In addition, staff numbers were typically very small; the teams often included only two to three employees, supported by freelancers and/or volunteers.

As suggested by Wapshott and Mallet (2021), the business processes of SMEs tend to have a high degree of informality. This was also reflected in the research data, as the expert interviews unveiled informal and *ad hoc* managerial processes within PAEs, in particular with regard to digital entrepreneurial ventures, and how employees were typically in charge of several different tasks. Furthermore, as revealed by the first study (see Chapter 4), significant levels of disparity were observed within the sector in terms of financial resources, as well as digital maturity, skills, and capacity.

Again, this was pronounced among SMEs, who lacked both human and financial resources, mainly because the public funding available was distributed unequally and the total amount was not sufficient to cater for the whole sector, due to the current funding model being structured in a way that supported large, leading enterprises. Finally, the lack of R&D funding aimed at SMEs was identified a key issue preventing PAEs from exploring the entrepreneurial opportunities available in the digital economy.

The characteristics outlined in Table 7.2 can be considered as significant constraints hindering performing arts SMEs from engaging in digital entrepreneurial activities, which, based on this research, indeed appeared to be the case prior to the pandemic. However, particularly the second and third research studies that were conducted during the peak period of the pandemic, revealed that performing arts SMEs suddenly demonstrated an exceptionally entrepreneurial mindset, and through the engagement in creative digital BMI, deployed diverse business models in the digital economy. Thus, it can be posited that the pandemic strongly impacted the characteristics of performing arts SMEs outlined in Table 7.2. To track the origins of this change in the key characteristics, the factors identified in the research findings are discussed below.

The first apparent change in the performing arts SMEs' characteristics related to their external conditions. Based on the research findings, the pandemic itself acted as an External Enabler of entrepreneurship (Davidsson *et al.,* 2021) in performing arts, changing the external environment of performing arts SMEs so that they were no longer dependent upon larger firms (Rainnie, 1989) to create value for their audiences, but, as highlighted through the value creation processes outlined in 6.2, could access audiences directly via either their own or third-party digital platforms. A key factor in this change were also the national lockdowns, which confined arts audiences in their homes, and changed their cultural consumption practices overnight. Many PAEs seemed particularly attuned to these trends, which helped them to sense and seize the novel digital opportunities created by the pandemic.

However, perhaps the most significant change in the characteristics of performing arts SMEs during the pandemic related to the level of resources available for them. Whilst performing arts SMEs typically operate on a hand-to-mouth basis, the closure of cultural venues provided them with a creative break from everyday activities, as a result of which they had more time resources available, and to mitigate the impact of the closure, the UK government introduced unprecedented funding opportunities for digital ventures, e.g., the Culture Recovery Fund (CRF) and ACE's Covid Emergency scheme, which enabled arts enterprises to apply for emergency funding regardless their size and had a good success rate for applicants (Bradbury *et al.*, 2021).

The core aim of the thesis was to capture the insights from the crisis-time digital BMI practices of PAEs during the Covid-19 pandemic to help performing arts entrepreneurs and enterprises to better navigate in the post-pandemic world. It can thus be posited therefore that most of the performing arts SME characteristics listed in Table 7.2, although seemingly constraining, do not prevent PAEs from engaging in successful digital entrepreneurial ventures if resources are available to fund these explorations. When the pandemic provided performing arts SMEs with the resources required for initiating digital entrepreneurial ventures, they were able to engage in entrepreneurial activities and use their business models as "calculative and narrative device[s] to explore a market and to bring their innovation – a new product, a new venture and the network that supports it – into existence." (Doganova and Eyquem-Renault, 2009, p.1560).

Therefore, it was evident from the research findings that only the lack of financial, human and time resources acted as a significant constraint preventing performing arts SMEs from exploring the entrepreneurial opportunities available in the digital economy. This lends support to other researchers' (e.g., Misek *et al.,* 2022, Walmsley *et al.* 2022) calls for more funding aimed at arts SMEs' digital initiatives and underlines the key role of public funding as a catalyst of digital transformation of the performing arts

sector. However, as noted by Schiuma *et al.* (2022), for firms to sustain themselves in the digital economy, they need a specific organisational culture and in particular, managerial capabilities that can foster the on-going digital transformation. The role of these crucial DCs will be discussed in further detail in 7.3.3

The research also offers some noteworthy contributions to digital entrepreneurship literature. For PAEs, the global coronavirus outbreak served as an (often first) experience of digital entrepreneurship. As highlighted by the research, PAEs engaged in diverse digital entrepreneurial ventures, and adapted "a new way of creating and doing business in the digital era" (Le Dihn *et al*. 2018, p.1). Kraus *et al.* (2018) underscore how digitalisation has not only enabled the development of novel digital businesses, but also marked a transformation of existing offline businesses into online businesses. As highlighted in 2.1.2, prior to the pandemic, digital transformation was in its infancy in performing arts, and most organisations lacked an organisational culture that supports it. However, the Covid-19 pandemic accelerated digitalisation of processes and infrastructures within PAEs, thus giving birth to digital entrepreneurship and a new breed of digital entrepreneurial activities. As observed in the case studies in Chapter 6, these digital entrepreneurial endeavours had mostly a very positive impact on PAEs' business operations and offered different types of value and many benefits to their audiences. Confirming the findings from other Covid-19 focused research projects (e.g., Haferkorn *et al.,* 2021; Misek *et al.,* 2022), the case study findings from this research underscored how the use of digital technologies in entrepreneurial ventures enabled PAEs to new reach audience groups further afield, who would have struggled to access their live performance content.

The research also provided strong indications that PAEs' digital entrepreneurial activities have the potential to support their live activities. One example of this novel type of blended entrepreneurship approach was that of case Delta (see 6.2.4), who were determined to continue with a digital offering post-pandemic. Their hybrid activities included, for example, using online performances to

market live performances to potential international partners who were too far away to attend in person, or marketing digital performances in the context of live performances by handing out flyers with QR-codes through which the online offering could be accessed. Delta's co-founder expressed aptly what the future may hold for PAEs operating in the digital economy:

> So, there are all these intersections of how we do both things [live and digital], but also there's like the bit in the middle, hybridity, where we might have certain shows online, and then other versions of them in a physical place. (Delta, Interviewee 2).

Indeed, the post-pandemic world is likely to offer new digital entrepreneurial opportunities for PAEs, as leading technology companies determinedly push towards an agenda focused upon Internet 3.0 and the Metaverse. These emerging immersive technologies will allow for the creation of 3D virtual worlds that will represent a new wave of unprecedented opportunities for creative digital entrepreneurs, including novel forms of virtual or hybrid performance. Therefore, it is key that performing arts SMEs do not abandon their digital ventures but continue to seek new ways of blending live and digital activities.

7.3.2 Relating to business model research

Despite the increased deployment of digital business models in performing arts during the Covid-2019 pandemic, there remains a paucity of empirical research on PAEs' digital business models. As argued by Li (2020), digital business models deployed by creative industries organisations are typically scaled-up versions of live activities-based business models, and thus new in terms of being unprecedented.

As unveiled through the empirical findings from three studies, there were notable differences in the deployment of digital business models among PAEs. The pre-pandemic data from the first study illustrated how high-profile enterprises and sector leaders were already quite advanced in embedding

digital technologies in their business models and were commonly deploying Digital Product and Digital Performance business models, as well as experimenting with Streamer and Digital Hub models. However, this was not the case of performing arts SMEs pre-pandemic, to whom most digital business models were simply not accessible due to their high initial cost and challenging human resource and technology requirements. Indeed, it appeared that SMEs could only experiment with digital business models if they received considerable support from sector-support organisations or one-off grants from digitally focused, industrial, or public funding schemes.

However, as the Covid-19 pandemic acted as an External Enabler (Davidsson *et al.,* 2021) of digital entrepreneurship in performing arts, consequently, the findings from the research conducted during the pandemic revealed a significant rise in the deployment of digital business models by PAEs of all sizes. The six types of digital business models, outlined in the novel framework of common digital business models for performing arts, were all identified through the analysis of the netnographic data collected on PAEs' pandemic-time digital initiatives for the second study (see Figure 5.9 in 5.3).

The Digital Product model was the most common digital business model type identified in the data, followed by the Digital Performance model. The previously less common Digital Service and Digital Commissioner models gained unprecedented popularity during the pandemic period, as PAEs temporarily transferred their live activities-based business models in the digital realm, which involved providing lessons and other educational events online or commissioning or producing online performances. In a similar vein, an increase was observed in the number of PAEs experimenting with the Digital Hub and Streamer business models, which, however, appeared to remain somewhat rare in performing arts.

The type of the organisation seemed to strongly influence PAEs' choice of digital business models. For example, as highlighted in Figure 5.9 in 5.3, Digital Product and Digital Performance models were only deployed by touring and producing companies, and the Digital Commissioner model was deployed by

most receiving companies, which strongly reflects their live activities-based business models based on producing, touring, and commissioning live performances. This further confirms that digital business models in performing arts are typically scaled up versions of traditional business models (Li, 2020).

However, the research also provided evidence that PAEs did not only use digital technologies to scale up their traditional business models, but through creative digital R&D, merged different digital business model types to create novel business model innovations, and deployed several digital business models in parallel to target new markets and audience groups. These findings are in line with Li's (2020) empirical study, which posited that creative industries organisations commonly deploy portfolios of digital business models. The case studies in Chapter 6 revealed that with regard to value creation, the digital business models designed and deployed by performing arts SMEs typically created and captured different types of value, such as artistic, cultural, economic, and social.

Furthermore, this value benefited a wide array of stakeholders, ranging from the PAEs themselves to their audiences and various partners. However, as the pandemic-time digital BMI was mostly enabled by public funding, the research unveiled that financial value creation was usually not considered as a primary aim when deploying digital business models (McDonald *et al.*, 2021), and although revenue was generated through most digital business models deployed, it was far lower than PAEs' typical income from live activities. These findings are consistent with Haferkorn *et al.* (2021), who posited that the income arts enterprises typically earn from their digital initiatives currently do not have the potential replace the income from their live activities.

Drawing upon Ritter and Pedersen's (2020) theorisations on how business models are impacted by a crisis (see Table 2.4, in 2.2.3), based on the research findings it can be posited that PAEs' business models were mostly 'vulnerable' and 'aided' as they were not able to support themselves during the crisis, but with external help from the government in the form of public subsidy, were able to adapt to the new operating environment. Furthermore, Misek *et al.*

(2022) noted that digital business models by arts and cultural organisations are costly to implement and rarely profitable, and therefore arts enterprises should perhaps not try to scale up their traditional business models with digital technologies but adopt digital business models from other —more lucrative— industries, such as, for example, video gaming.

The research findings provided indications of this already happening during the pandemic, as highlighted by the seemingly profitable deployment of a Streamer model on YouTube by the Indian classical music organisation Darbar Arts (see 5.3.6). Finally, the research data also revealed that digital BMI in performing arts is predominantly a collaborative process, in which the role of partners is pronounced. This strongly echoes Rex *et al.*'s (2019, p.55) definition of an arts organisation's business model that places emphasis on how value is created and captured in collaboration with various stakeholders in a manner that benefits them all: "A business model describes how an organisation's assets and activities are combined to co-create and capture different types of value for individuals, groups and society through a particular value logic." In the case of performing arts SMEs, the research findings demonstrated that particularly the role of university partners appeared necessary when engaging in digital BMI.

This research investigated digital business models during the exceptional conditions of the Covid-19 pandemic. Post-pandemic, the majority of arts and cultural enterprises have abandoned their pandemic-time digital programming and defaulted back to live activities only (Misek *et al.* 2022). However, there are valuable lessons to be learned from the pandemic-time activities, as the creation and deployment of diverse digital business models by PAEs during the global health crisis can act as a foundation for future digital BMI in performing arts. Further research would be required to investigate the forms such digital BMI may take post-pandemic, but the findings from the case studies provided strong indications that the hybridisation of products, services and business models that is already ongoing in performing arts is likely to accelerate.

7.3.3 Relating to dynamic capabilities research

A core aim of the research was to investigate the of DCs that enable PAEs to engage in digital BMI, and thus the research contributes to extant DC literature in two ways. First, it offers empirical insights into how the DCs of PAEs change in order to enable digital BMI and second, it draws attention to the nature of key microfoundational processes of DCs in PAEs. The following sections explore each contribution in further detail.

BMI can only occur if a firm possesses strong DCs, as the ability to engage in BMI is, itself, an output of a firm's DCs (Teece, 2018). The pre-pandemic research findings indicated that the UK performing arts sector —apart from a few high-profile sector leaders— had been rather lethargic in experimenting with digital BMI. This stemmed from a notable lack of both microfoundational and higher order DCs (Teece, 2007), which had prevented PAEs from engaging in digital BMI and delayed the introduction of digital business models in performing arts.

In particular, the unequal distribution of R&D funding within the sector and the lack of managerial microfoundations within PAEs emerged from the research data as key barriers. For example, issues with team and individual level microfoundational processes relating to senior executives' insufficient knowledge of digital ventures, the long-established, hierarchical ways of managing PAEs and organisations' inability to retain young, digitally literate talent seemed to prevent performing arts SMEs, in particular, from engaging in digital BMI. Furthermore, the significant disparity among PAEs in terms of digital skills, capacity and financial resources further underscored the disparity within the sector between large organisations and SMEs.

Indeed, already pre-pandemic, large, high-profile PAEs possessed strong DCs and were thus in a much better position to experiment with digital technologies, engage in digital BMI and deploy various business models in the digital economy. As posited in Chapter 4, these business models were not necessarily accessible to SMEs, as both financial resources and strong DCs are

required for their sustained deployment, and the research findings provided evidence that performing arts SMEs often lacked both. However, a notable change in the levels of DCs was observed during the pandemic, as the research revealed a significant increase in the previously low or absent microfoundations of DCs within PAEs. The findings from the netnographic research demonstrated how PAEs —regardless of the size or type of their organisation— were able to sense and seize digital opportunities, engage in digital BMI, and introduce a plethora of heterogeneous digital business models.

These findings are consistent with the key recommendations of the *Boundless Creativity* report (DCMS and ACE, 2021), which encouraged arts and cultural organisations to take a stronger focus on cross-sectoral R&D with a view to creating cultural and economic value, and to focus on developing new ways of reaching and monetising international online audiences. However, as revealed by the *Boundless Creativity* report (DCMS and ACE, 2021) and Misek *et al.* (2022), these goals cannot be achieved without adapting the current funding framework to better support creative digital R&D in SMEs, and the co-existence of creative live and digital activities in PAEs.

Moreover, the research suggested that digital business models have the potential to complement traditional business models, and therefore contribute to PAEs' overall sustainability. This echoes the findings from From-Live-to-Digital report (AET Consulting, 2016), which highlighted the potential complementarity effect of having a digital offering alongside a live offering. The success of pandemic-time digital productions and the in-house digital skills gained through them also encouraged PAEs to engage in innovating new digital products and services, and in rethinking their value propositions to target new markets and wider international audiences.

The research provided evidence that in the post-pandemic world, once live and digital activities co-exist again, the realigning of resources between the activities was likely to be a significant challenge, particularly in performing arts SMEs. Therefore, it can be concluded that with future digital BMI, attention should be directed to developing business models that are inherently hybrid,

and seamlessly encompass both live and digital activities. Valuable empirical insights into this hybridisation process are provided through the case studies on Delta (see 6.2.4) and Epsilon (see 6.2.5), who already during the pandemic, envisioned their future creative practice to be increasingly hybrid, began to explore the possibilities of a blended delivery, and successfully combined both live and digital activities under novel hybrid business models.

Finally, the research unveiled a pronounced Schumpeterian dynamic in the conduct of PAEs during the Covid-19 pandemic. This entrepreneurial spirit is in line with what Schumpeter (1943) described: organisations are not merely passive respondents to change, but rather they engage proactively in innovation and evolution. This behaviour was particularly evident as PAEs developed and refined their DCs, essential for navigating the turbulent, pandemic-time, business landscape. Such findings resonate with the arguments of the Teece school (e.g., Teece and Pisano, 1994; Teece et al., 1997; Winter, 2003), signalling that PAEs were not merely responding to immediate external challenges but actively shaping their futures through innovation and strategic transformation.

7.4 Implications for policy

The thesis offers a number of implications for policy, as it provides insights into the nature and characteristics of PAEs' digital business models and highlights the core DCs required for PAEs to engage in digital BMI. This is clearly important for understanding how PAEs can sustainably deploy business models in the digital economy, and for gaining a better understanding of the pre-requisites for digital BMI, but the insights can also serve as evidence for policymakers of how the prevailing cultural policy is supporting the digital BMI process and the development of critical DC in PAEs. One noteworthy implication is that the research findings are largely in line with the recommendations of the *Culture is Digital* policy paper (DCMS, 2018), and thus

confirm that the overarching aims of the current cultural policy are mostly consistent with the needs of the sector.

Furthermore, the thesis aims to pinpoint the key issues and loopholes with the current arts funding infrastructure with regard to supporting and fostering creative digital R&D and digital innovation in performing arts, in particular, in the SME context. The focus on SMEs is particularly valuable to policymakers, as current support infrastructures and resources often struggle to reach creative freelancers and micro-enterprises (Walmsley *et al.,* 2022), and because performing arts SMEs also face considerably more challenges than their large, well-resourced peers, when trying to engage in digital BMI and seize the opportunities of the digital economy.

7.5 Implications for practice

The research contributes to practice in a number of ways. First, it is important for practitioners, as it highlights potential entrepreneurial opportunities for PAEs operating in the digital economy. The novel framework of digital business models in performing arts (see Table 3.1 in 3.4.2) can provide guidance to performing arts practitioners when choosing suitable digital business models for their entrepreneurial pursuits. In addition, practitioners who are looking to engage in digital BMI with the view of developing business models for the digital economy may use the findings of this research to assess whether they and their organisation possess the crucial DCs required for PAEs to engage in digital BMI.

The thesis also captures the empirical narratives of five performing arts SMEs as they engaged in digital BMI and deployed digital business models during an exceptional time of the Covid-19 pandemic. These unique documentations further our understanding of how digital BMI takes place within PAEs during a crisis, but also provide practitioners with information about the challenges they may face when engaging in digital BMI and deploying digital business models

in the future, as digital transformation accelerates within the creative industries.

Finally, the post-pandemic landscape is proving challenging for performing arts. Following the cultural sectors' digital pivot during the pandemic, the cost-of-living crisis has drastically reduced the spending on leisure activities, including those provided by the performing arts sector. Therefore, for performing arts practitioners, the research is valuable, as it provides indications on how future performance production may look like. As the digitally mature sectors of the creative industries such as film, animation and TV already are already largely hybridised and increasingly focus on seizing the potential opportunities of Web 3.0 and the Metaverse, a profound digital transformation is now accelerating across the more traditional sectors of the creative industries such as performing arts.

Therefore, it is crucial for PAEs' to adopt an entrepreneurial mindset and remain attuned to the possibilities of hybrid and fully digital delivery with the view of expanding their operations to new markets such as XR, video gaming and take advantage of emerging technologies such as Artificial Intelligence (AI). Hopefully, the research findings can prepare performing arts entrepreneurs and PAEs for digital BMI that will undoubtedly become more common in the near future, guide practitioners through potential pitfalls, and encourage them to engage in creative digital R&D through university and cross-sector partnerships.

7.6 Limitations

As most qualitative research, also this thesis has some theoretical, methodological, and analytical limitations that need to be taken into consideration. Most importantly, it is appropriate begin by noting that the findings and conclusions are not generalisable to all PAEs, due to the relatively small number of research participants interviewed and the limited sample of

organisations observed for the netnography. However, the rich, empirical data originating from the research provides unique insights into the practices of purposefully selected, heterogeneous sample that did include a diverse range of voices from different types of PAEs. Furthermore, the sampling was done with a specific focus on performing arts SMEs, who are the driving force of the sector.

With regard to theoretical limitations, the DCV offers a fitting theoretical lens for the research, however, as DC theory is very broad, it was decided early on that the research would mainly focus on Teece's (2007) categorisation of DCs, and in particular on the microfoundations of DCs, as defined by Teece (2007, 2010), Barreto (2010) and Day and Schoemaker (2016). This implies that the research is limited to specific conceptualisations of DCs, and in this sense, only serves as a necessary starting point for future research. Indeed, due to extant research on PAEs' digital business models being still limited, this research is exploratory in nature on many levels, merely presenting one of the first attempts to contextualise the concepts of digital business model and digital BMI to performing arts.

In terms of methodological limitations, the research subjects interviewed for this study were all quite experienced in using digital technologies in their professional practice. While this was clearly beneficial for the research as it provides interesting insights into their often-innovative practice and visionary paradigms, interviewing 'digitally mature' participants only offers one point of view, excluding that of the less digitally savvy or digitally excluded practitioners, who may have different opinions, for example, about the digital future of performing arts. Therefore, more research is needed to explore the experiences and viewpoints of the sector at large.

Relatedly, the majority of the research data was collected during an exceptional time of the Covid-19 pandemic, which impacted the operating environment of PAEs in an unprecedented way. Therefore, the research findings do not necessarily reflect the most suited DC and digital BMI practices for PAEs operating in the post-pandemic world. Nevertheless, the above

concerns are somewhat mitigated by the importance of documenting and investigating these unprecedented digital BMI practices that emerged in performing arts as a result of the global crisis to provide practitioners and researchers alike with information about what can be achieved in the digital realm.

Finally, the research is not without some analytical limitations. As highlighted in the beginning of this chapter, this research focused on identifying and investigating the business models deployed by PAEs' in the digital economy, as well as on highlighting the DCs that enable PAEs to engage in digital BMI. During the data analysis periods, an emphasis was placed on the most common digital business models and DCs practices, with a specific focus on performing arts SMEs' activities, and to detecting similarities between the case studies. This meant that less attention was given to the large sector-leaders and their practices, or to the less common digital business models and DCs practices deployed by PAEs. In particular, the microfoundations of DCs, the team and individual level processes that are required for building strong DCs within an organisation, were given preference over the higher-order DCs that are more prominent on executive and organisational level. Although this may be considered as a limitation, the focus on microfoundations was chosen because it was in line with the research's overall focus on performing arts SMEs.

Despite the limitations outlined above, the three, rich qualitative studies provide unique insights into PAEs' digital BMI and DC practices, as well as an interesting starting point for performing arts entrepreneurs and PAEs to reflect on their future choice of digital business models.

7.7 Future research

Drawing on PAEs' pandemic-time activities, this research advances our understanding of digital business models, digital BMI, and DC practices in PAEs. However, due to the strictly qualitative nature of this research, more

research is needed, especially that of quantitative nature, in order to reach conclusions about the sector at large and make systematic comparisons between PAEs. For example, it would be interesting to utilise the framework of common digital business models in performing arts developed through this research as a starting point for a large, sector-wide survey to identify and investigate the digital and hybrid business models deployed by PAEs post-pandemic. In doing so, the research could go beyond the scope of this thesis and highlight current practices in performing arts beyond the Covid-2019 pandemic when digital BMI is no longer necessity driven, but digital and live activities exist in parallel.

Digital transformation in performing arts is still ongoing, however in the technology industry, sector leaders are increasingly pushing towards Internet 3.0 and the Metaverse, where immersive technologies will allow for the creation of 3D virtual worlds with their own economies and digital currencies. This will likely represent a new wave of unprecedented opportunities for the creative industries, including the performing arts. Some examples of what the Metaverse may look like are ready present in the daily activities of the digital natives of Generation Z, who spend increasing time on gaming platforms, such as Roblox with 43.2 million monthly users in 2022 (Statista, 2022), where they socialise, create new virtual worlds, and enjoy various immersive experiences across the platform. Indeed, a recent market research report (Research and Markets, 2022) revealed that the virtual reality market is expected to grow 32.75 percent between 2021-2026.

Although the sustained deployment of business models in the Metaverse may yet seem like a distant dream for many performing arts practitioners, collaborative research involving creative digital R&D is needed to ensure that performing arts entrepreneurs and PAEs possess the strong DCs that will enable them to engage in digital BMI with the view of designing viable business models and income generation infrastructures for future virtual performing arenas.

7.8 Chapter summary

This chapter presented the conceptual and empirical contributions of the research linking them with extant literature on arts entrepreneurship, business model research, and dynamic capabilities research. Furthermore, implications to policy and practitioners were discussed, and limitations to the research discussed.

The chapter established the impact of the Covid-19 pandemic as and External Enabler of entrepreneurship (Davidsson *et al.,* 2021) and a catalyst of digital entrepreneurship in the sector, and the lack of R&D funding aimed as SMEs as a key barrier when engaging in digital entrepreneurial ventures and deploying digital business models. Further implications for arts entrepreneurship included outlining the typical characteristics of a performing arts SMEs, and indications were provided on PAEs' digital entrepreneurial activities' potential to support live activities.

With regard to business model research, the research presented a new conceptual framework of digital business models in performing arts by expanding the Rex *et al.* (2019) framework to the context of performing arts in the digital economy. The novel framework provides an in-depth overview of each digital business model type and offered insights on the way PAEs deploy digital business models. Regarding the implications for DC literature, the chapter detailed the insights into how the DCs of PAEs change in order to enable digital BMI; drew attention to the key microfoundational processes of DCs in PAEs and presented a new conceptual model illustrating the DC practices that enable digital BMI in performing arts SMEs.

Chapter 8 Conclusions

The core objective of this PhD research was to explore the digital business models deployed by performing arts enterprises (PAEs) during an exceptional time of the Covid-19 pandemic and shed light onto the microfoundational processes of dynamic capabilities (DCs) (Teece, 2007; Barreto, 2010; Day and Schoemaker, 2016) that enable digital BMI in PAEs. An additional focus was set on investigating the implications of PAEs' pandemic-time practices for the post-pandemic performing arts landscape. These aims were captured through the two research questions: "RQ1: How can performing arts enterprises deploy business models in the digital economy? ", and "RQ2: How do the dynamic capabilities of performing arts enterprises change in order to enable digital business model innovation?" As a conclusion, this final chapter of the thesis summarises the key conclusions in relation to the two research questions.

The implications of the Covid-19 pandemic on PAEs' business models and operating environment emerged strongly from the research findings, making the industry context a key factor in the analysis of PAEs' DCs (Eisenhardt and Martin, 2000). The research provided evidence that the Covid-19 pandemic acted as an External Enabler of entrepreneurship (Davidsson *et al.,* 2021), creating unprecedented funding opportunities, accelerating organisational decision-making and the development of DCs (Teece, 2007, 2010) within PAEs, which enabled them to conduct unforeseen experimentations with novel and innovative digital business models. Whilst the levels of digital BMI evidenced during the pandemic have decreased since the lifting of the pandemic restrictions, and many PAEs have now abandoned their pandemic-time digital programming (Misek *et al.,* 2022), the performing arts sector is, nevertheless, firmly in the process of undergoing a digital transformation, the pace of which is likely to only increase in the years to come. Therefore, even after five years of PhD research, the research questions outlined above remain timely and important.

Despite the cultural sectors' digital pivot during the pandemic, the relationship between performing arts and digital technologies remains complex. It needs to be remembered that not all PAEs engaged in digital BMI during the pandemic, and there are still sceptical attitudes prevalent in the sector towards the compatibility digital technologies and performing arts that exist alongside manifold organisational and sector-level issues. For example, urgent measures are still required to develop standardised licensing and rights models for performing arts to facilitate digital capture and digital distribution of performances, and meaningful initiatives are needed from policymakers to decrease the disparity within the sector in terms of digital skills and capacity and for performing arts to keep pace with digital transformation.

Therefore, it can be concluded that at this, fairly initial point of the digital transformation process, it is clear that PAEs —and in particular performing arts SMEs— can rarely deploy digital business models without considerable support from various partners and investment from public funding. Indeed, in the post-pandemic era, digital BMI in performing arts does not happen in isolation, but through strong partnerships that span across sectors and industries, and investment from inclusive funding schemes designed to support creative digital R&D in all sized and types of PAEs. Fortunately, there are signs that policymakers are increasingly acknowledging the significance on creative digital R&D and university partnerships, as demonstrated by the recent Convergent Screen Technologies And performance in Realtime (CoSTAR) funding scheme (UKRI, 2023) that aims to strengthen the UK creative digital R&D infrastructure and enable researchers, practitioners, and institutions to access new cutting-edge facilities.

It can also be concluded the digital BMI that took place within performing arts during the Covid-19 pandemic increased the levels of critical DC that enable digital BMI as well as contributed to the development of new DCs within PAEs. These changes in the levels of DCs evidenced through the research were observed to help PAEs to reach novel markets and industries, develop in-house digital skills and capacity, build a stronger presence in the digital economy,

and form new, international, and cross-sector partnerships. In particular, microfoundations of DCs such as creative digital R&D, collaboration with university partners and realigning resources between live, digital and hybrid activities were crucial when developing new digital business models, strengthened PAEs' traditional business models, and contributed to their overall sustainability.

It is particularly noteworthy that access to technology expertise and resources through university partnerships was often the only way for performing arts SMEs to engage in digital BMI and develop new business models for the digital economy. As the future of performing arts appears increasingly hybrid and performances of tomorrow will likely to have at least a digital dimension added to the physical performance and reach audiences through novel ways such as immersive 3D technologies, smart devices and AI, the role of universities that specialise in digital, immersive performance is pronounced in supporting the performing arts sector in their journey to the digital era.

References

Abrahams, M. (2015) *Understanding the impact of event cinema: an evidence review For Arts Council England and British Film Institute*. Available at: www.tbr.co.uk (Accessed: 11 February 2022).

ACE (2013) *Great Art and Culture for Everyone 10-Year Strategic Framework*. Available at: https://www.artscouncil.org.uk/sites/default/files/download-file/Great_art_and_culture_for_everyone.pdf (Accessed: 25 February 2020).

ACE (2015) *Digital Toolkit for Arts and Culture - Making Digital Work*. Available at: https://www.artscouncil.org.uk/sites/default/files/download-file/digi_toolkit_book.pdf (Accessed: 25 February 2020).

ACE (2018) *The data: 2018-22 | National Portfolio Organisations*. Available at: https://www.artscouncil.org.uk/national-portfolio-2018-22/more-data-2018-22 (Accessed: 27 February 2020).

ACE (2019) *Our National Portfolio in Numbers, 2018-2022*. Available at: https://www.artscouncil.org.uk/sites/default/files/download-file/Investment__factsheet_14062019_0.pdf (Accessed: 25 February 2020).

ACE (2020) *Our strategy 2020-2030 | Arts Council England*. Available at: https://www.artscouncil.org.uk/publication/our-strategy-2020-2030 (Accessed: 25 February 2020).

ACE and NESTA (2019) *Digital Culture 2019*. Available at: www.artscouncil.org.uk (Accessed: 3 March 2020).

Achtenhagen, L., Melin, L. and Naldi, L. (2013) 'Dynamics of Business Models – Strategizing, Critical Capabilities and Activities for Sustained Value Creation', *Long Range Planning*, 46(6), pp. 427–442. doi: 10.1016/J.LRP.2013.04.002.

Acs, Z. J. *et al.* (2009) 'The knowledge spillover theory of entrepreneurship', *Small Business Economics*, 32(1), pp. 15–30. doi: 10.1007/s11187-008-9157-3.

Adorno, T. and Horkheimer, M. (1944) *Dialectics of Enlightenment*. Edited by T. by J. Cumming. New York: Herder and Herder, 1972.

Afuah, A. and Tucci, C. L. (2001) *Internet business models and strategies: Text and cases*, *McGrawHill international editions Management organization series*. Irwin/McGraw-Hill. Available at: http://dl.acm.org/citation.cfm?id=579520 (Accessed: 19 May 2020).

AHRC & DCSM (2021) *Boundless Creativity report*. Available at: https://www.gov.uk/government/publications/boundless-creativity-report/boundless-creativity-report (Accessed: 17 March 2022).

Al-Debei, M. M., El-Haddadeh, R. and Avison, D. (2008) 'Defining the business model in the new world of digital business', in *14th Americas Conference on Information Systems, AMCIS 2008*, pp. 1551–1561.

Ambrosini, V. and Bowman, C. (2009) 'What are dynamic capabilities and are they a useful construct in strategic management?', *International Journal of Management Reviews*, 11(1), pp. 29–49. doi: 10.1111/J.1468-2370.2008.00251.X.

Amit, R. H. and Zott, C. (2012) 'Business Model Innovation: Creating Value in Times of Change', *SSRN Electronic Journal*, 5. doi: 10.2139/ssrn.1701660.

Amit, R. and Schoemaker, P. J. H. (1993) 'Strategic assets and organizational rent', *Strategic Management Journal*, 14(1), pp. 33–46. doi: 10.1002/SMJ.4250140105.

Amit, R. and Zott, C. (2001) 'Value creation in E-business', *Strategic Management Journal*, 22(6–7), pp. 493–520. doi: 10.1002/smj.187.

Andersson Schwarz, J. (2017) 'Platform Logic: An Interdisciplinary Approach to the Platform-Based Economy', *Policy and Internet*, 9(4), pp. 374–394. doi: 10.1002/poi3.159.

Anwar, M., Anwar and Muhammad (2018) 'BUSINESS MODEL INNOVATION AND SMEs PERFORMANCE — DOES COMPETITIVE ADVANTAGE MEDIATE?', *International Journal of Innovation Management (ijim)*, 22(07), pp. 1–31. doi: 10.1142/S1363919618500573.

Aronson, J. (1995). 'A Pragmatic View of Thematic Analysis.' The Qualitative Report, 2(1), 1-3. Retrieved from https://nsuworks.nova.edu/tqr/vol2/iss1/3

Baden-Fuller, C. *et al.* (2017) 'Business models and value: Analytical comparisons of scalable solutions and digital platforms', in *2017 Annual Meeting of the Academy of Management, AOM 2017*. Academy of Management. doi: 10.5465/ambpp.2017.90.

Bakhshi, H., Freeman, A. and Higgs, P. (2013) *A DYNAMIC MAPPING OF THE UK'S CREATIVE INDUSTRIES*. Available at: www.nesta.org.uk (Accessed: 11 December 2019).

Bakhshi, H., Mateos-Garcia, J. and Throsby, C. D. (2010) *Beyond live : digital innovation in the performing arts*. NESTA. Available at: https://books.google.com/books/about/Beyond_Live.html?id=3JCTygAACAAJ (Accessed: 10 March 2023).

Bakhshi, H. and Throsby, D. (2010) *Culture of Innovation An economic analysis of innovation*. Available at: https://www.nesta.org.uk/report/culture-of-innovation/ (Accessed: 13 May 2020).

Barney, J. (1991) 'Firm Resources and Sustained Competitive Advantage', *Journal of Management*, 17(1), pp. 99–120. doi: 10.1177/014920639101700108.

Barney, J. B. (1986) 'Organizational Culture: Can It Be a Source of Sustained Competitive Advantage?', *The Academy of Management Review*, 11(3), p. 656. doi: 10.2307/258317.

Barreto, I. (2010) 'Dynamic Capabilities: A review of past research and an agenda for the future', *Journal of Management*. SAGE PublicationsSage CA: Los Angeles, CA, pp. 256–280. doi: 10.1177/0149206309350776.

Belleflamme, P., Lambert, T. and Schwienbacher, A. (2012) 'Crowdfunding: Tapping the Right Crowd', *SSRN Electronic Journal*. doi: 10.2139/ssrn.1578175.

Benjamin, W. (1969) *The Work of Art in the Age of Mechanical Reproduction*. Edited by H. Arendt. New York: Schocken Books.

Best, B. *et al.* (2021) 'Mission or margin? Using dynamic capabilities to manage tensions in social purpose organisations' business model innovation', *Journal of Business Research*, 125, pp. 643–657. doi: 10.1016/J.JBUSRES.2020.01.068.

Block, J. H., Thurik, R. and Zhou, H. (2013) 'What turns knowledge into innovative products? The role of entrepreneurship and knowledge spillovers', *Journal of Evolutionary Economics*, 23(4), pp. 693–718. doi: 10.1007/s00191-012-0265-5.

Boellstorff, T. *et al.* (2012) *Ethnography and Virtual Worlds: A Handbook of Method*. Princeton and Oxford: Princetown University Press.

Bogner, A., Littig, B. and Menz, W. (2009) 'Introduction: Expert Interviews — An Introduction to a New Methodological Debate', in *Interviewing Experts*. Palgrave Macmillan UK, pp. 1–13. doi: 10.1057/9780230244276_1.

Bouncken, R. B., Kraus, S. and Roig-Tierno, N. (2021) 'Knowledge- and innovation-based business models for future growth: digitalized business models and portfolio considerations', *Review of Managerial Science*, 15(1), pp. 1–14. doi: 10.1007/S11846-019-00366-Z.

Bourdieu, P. (1990) *The logic of practice. Cambridge: Polity Press.* Cambridge: Polity Press.

Bourdieu, P. and Wacquant, L. J. D. (1994) *An Invitation to Reflexive Sociology.* 1st edn. Chicago: University of Chicago Press. doi: 10.2307/2168398.

Bowler, G. M. (2010) *The Qualitative Report Netnography: A Method Specifically Designed to Study Cultures and Communities Online*. Available at: https://nsuworks.nova.edu/tqr/vol15/iss5/13 (Accessed: 30 March 2019).

Bradbury, A. *et al.* (2021) *The Role of the Arts during the COVID-19 Pandemic*. London.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), pp. 77–101. doi:

10.1191/1478088706qp063oa.

Brennen, J. S. and Kreiss, D. (2016) 'Digitalization', in *The International Encyclopedia of Communication Theory and Philosophy*. Wiley, pp. 1–11. doi: 10.1002/9781118766804.wbiect111.

Brewer, J. and Hunter, A. (2006) *Foundations of multimethod research: synthesizing style*. Thousand Oaks, CA: Sage. Available at: http://www.sciepub.com/reference/155561 (Accessed: 13 March 2023).

von Briel, F., Davidsson, P. and Recker, J. (2018) 'Digital technologies as external enablers of new venture creation in the it hardware sector', *Entrepreneurship: Theory and Practice*, 42(1), pp. 47–69. doi: 10.1177/1042258717732779.

Brinkmann, S. (2015) *Qualitative Interviewing*, *Qualitative Interviewing*. Oxford University Press. doi: 10.1093/acprof:osobl/9780199861392.001.0001.

Bromley, D. P. (1990) 'Academic contributions to psychological counselling. 1. A philosophy of science for the study of individual cases', *Counselling Psychology Quarterly*, 3(3), pp. 299–307. doi: 10.1080/09515079008254261.

Bryman, A. (2006) 'Integrating quantitative and qualitative research: How is it done?', *Qualitative Research*, 6(1), pp. 97–113. doi: 10.1177/1468794106058877.

Bryman, A. (2007) 'Barriers to Integrating Quantitative and Qualitative Research', *Journal of Mixed Methods Research*, 1(1), pp. 8–22. doi: 10.1177/2345678906290531.

Burgheim, J. (2016) *Live Performances in Digital Times: An Overview*. Brussels. Available at: https://www.ietm.org/en/system/files/publications/live-performances-digital-times_ietm_march2016_1.pdf (Accessed: 11 May 2022).

Bygrave, W. D. and Hofer, C. W. (1992) 'Theorizing about Entrepreneurship', *https://doi.org/10.1177/104225879201600203*, 16(2), pp. 13–22. doi: 10.1177/104225879201600203.

Caliandro, A. (2018) 'Digital Methods for Ethnography: Analytical Concepts for Ethnographers Exploring Social Media Environments', *Journal of Contemporary Ethnography*, 47(5), pp. 551–578. doi: 10.1177/0891241617702960.

Callander, A. and Cummings, M. E. (2021) 'Liminal spaces: A review of the art in entrepreneurship and the entrepreneurship in art', *Small Business Economics*, 57(2), pp. 739–754. doi: 10.1007/s11187-020-00421-0.

Callon, M. (1986) 'The Sociology of an Actor-Network: The Case of the Electric Vehicle', *Mapping the Dynamics of Science and Technology*, pp. 19–34. doi: 10.1007/978-1-349-07408-2_2.

Cameron, R. (2011) 'Mixed methods research: The five Ps framework', *Electronic Journal of Business Research Methods*, 9(2), pp. 96–108. Available at: https://espace.curtin.edu.au/handle/20.500.11937/3001 (Accessed: 26 May 2022).

Casadesus-Masanell, R. and Zhu, F. (2013) 'Business model innovation and competitive imitation: The case of sponsor-based business models', *Strategic Management Journal*, 34(4), pp. 464–482. doi: 10.1002/smj.2022.

Casson, M. C. (1982) *The Entrepreneur: An Economic Theory*. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.

Castells, M. (2010) *The Rise of the Network Society: With a New Preface, Volume I: Second Edition With a New Preface*, *The Rise of the Network Society: With a New Preface, Volume I: Second Edition With a New Preface*. Wiley-Blackwell. doi: 10.1002/9781444319514.

Caves, R. E. (2000) *Creative industries : contracts between art and commerce*. Harvard University Press.

Centre for Economic and Business Research (2019) *Contribution of the arts and culture industry to the national economy An update of our analysis of the macroeconomic*. Available at: https://www.artscouncil.org.uk/sites/default/files/download-file/Economic impact of arts and culture on the national economy FINAL_0_0.PDF.

Chandler, J. . A. D. (1962) 'Strategy and Structure: Chapters in the History of the Industrial Enterprise'. Available at: https://papers.ssrn.com/abstract=1496188 (Accessed: 16 September 2020).

Chang, W. J. and Wyszomirski, M. (2015) 'What Is Arts Entrepreneurship? Tracking the Development of its Definition in Scholarly Journals', *Artivate: A Journal of Entrepreneurship in the Arts*, 4(2), pp. 11–31. Available at: https://artivate.org/artivate/article/view/42 (Accessed: 18 May 2020).

Chavez, C. (2008) 'Conceptualizing from the Inside: Advantages, Complications, and Demands on Insider Positionality', *The Qualitative Report*, 13(3), pp. 474–494. doi: 10.46743/2160-3715/2008.1589.

Chesbrough, H. and Rosenbloom, R. S. (2002) 'The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies', *Industrial and Corporate Change*, 11(3), pp. 529–555. doi: 10.1093/icc/11.3.529.

Čirjevskis, A. (2019) 'The role of dynamic capabilities as drivers of business model innovation in mergers and acquisitions of technology-advanced firms', *Journal of Open Innovation: Technology, Market, and Complexity*, 5(1). doi: 10.3390/JOITMC5010012.

Clarke, T. (2019) 'Creative Destruction, Technology Disruption, and Growth'. doi: 10.1093/ACREFORE/9780190625979.013.393.

Committees - UK Parliament (2022) *National Audit Office to investigate management of Unboxed Festival*. Available at: https://committees.parliament.uk/committee/378/digital-culture-media-and-sport-committee/news/173454/national-audit-office-to-investigate-management-of-unboxed-festival/ (Accessed: 7 March 2023).

Conroy, T. *et al.* (2016) 'Does gender matter for job creation? Business ownership and employment growth', *Small Business Economics*, 47(2), pp. 397–419. doi: 10.1007/S11187-016-9735-8.

Coombs, W. T. (2007) 'Protecting Organization Reputations During a Crisis: The Development and Application of Situational Crisis Communication Theory', *Corporate Reputation Review*, 10(3), pp. 163–176. doi: 10.1057/PALGRAVE.CRR.1550049/TABLES/3.

Constas, M. A. (1992). Qualitative analysis as a public event: The documentation of category development procedures. American Educational Research Journal, 29(2), 253-266.

Creative Industries Federation (2018) *Growing the UK's Creative Industries*. Available at: https://www.creativeindustriesfederation.com/publications/growing-uks-creative-industries (Accessed: 3 February 2021).

Creative Industries Federation (2021) *Statistics - Creative UK Creative UK*. Available at: https://www.wearecreative.uk/champion/statistics/ (Accessed: 2 December 2021).

Creswell, J. W. and Plano Clark, P. V. L. (2011) *Designing and conducting mixed methods research: SAGE Publications. Inc.* 2nd edn. Thousand Oaks, CA: SAGE.

Cucculelli, M. and Bettinelli, C. (2015) 'Business models, intangibles and firm performance: evidence on corporate entrepreneurship from Italian manufacturing SMEs', *Small Business Economics*, 45(2), pp. 329–350. doi: 10.1007/S11187-015-9631-7/METRICS.

Cunningham, S. (2002) 'From Cultural to Creative Industries: Theory, Industry and Policy Implications', *Media International Australia incorporating Culture and Policy*, 102(1), pp. 54–65. doi: 10.1177/1329878x0210200107.

Cyert, R. M. and March, J. G. (1963) *A behavioral theory of the firm.* Prentice Hall/Pearson Education. Available at: https://psycnet.apa.org/record/2003-00031-000 (Accessed: 11 March 2023).

Danneels, E. (2008) 'Organizational antecedents of second-order competences', *Strategic Management Journal*, 29(5), pp. 519–543. doi: 10.1002/SMJ.684.

Davidsson, P., Recker, J. and von Briel, F. (2021) 'COVID-19 as External Enabler of entrepreneurship practice and research', *BRQ Business Research Quarterly*, 24(3), pp. 214–223. doi:

10.1177/23409444211008902/ASSET/IMAGES/LARGE/10.1177_2340944421
1008902-FIG1.JPEG.

Davidsson, P., Recker, J. and Von Briel, F. (2020) 'External enablement of new venture creation: A framework', in *Academy of Management Perspectives*. Academy of Management, pp. 311–332. doi: 10.5465/amp.2017.0163.

Day, G. S. and Schoemaker, P. J. H. (2016) 'Adapting to Fast-Changing Markets and Technologies', *http://dx.doi.org/10.1525/cmr.2016.58.4.59*, 58(4), pp. 59–77. doi: 10.1525/CMR.2016.58.4.59.

DCMS (1998) *Creative industries: Mapping document, 1998*. London.

DCMS (2018) *Culture is Digital*. Available at: https://www.gov.uk/government/publications/culture-is-digital (Accessed: 18 May 2020).

DCMS (2019) *Total income of DCMS-funded cultural organisations 2018/2019*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/847670/Statistical_Release_Total_Income_of_DCMS-funded_cultural_organisations.pdf.

DCMS (2020) *DCMS Sectors Economic Estimates 2018 (provisional): Gross Value Added*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/863632/DCMS_Sectors_Economic_Estimates_GVA_2018.pdf (Accessed: 30 September 2020).

DCMS (2021) *Third round of Culture Recovery Fund to secure future of thousands of organisations - GOV.UK*. Available at: https://www.gov.uk/government/news/third-round-of-culture-recovery-fund-to-secure-future-of-thousands-of-organisations (Accessed: 15 February 2023).

Demil, B. and Lecocq, X. (2010) 'Business model evolution: In search of dynamic consistency', *Long Range Planning*, 43(2–3), pp. 227–246. doi: 10.1016/J.LRP.2010.02.004.

Dempsey, N. (2016) 'Arts Funding: statistics', *Hou*, (Commons Briefing papers CBP-7655), pp. 1–41.

Denscombe, M. (2010) *The good research guide: for small-scale social research projects.* Maidenhead: Open University Press.

Denzin, N. K. (2012) 'Triangulation 2.0*', *Journal of Mixed Methods Research*, 6(2), pp. 80–88. doi: 10.1177/1558689812437186.

Department for Culture, M. A. S. and Department for Business Innovation & Skills (2009) *Digital Britain*, *Education*. doi: 10.1590/S0212-16112011000500043.

Department for Culture Media and Sport (2001) *Creative industries: Mapping documents 2001. le*. London. Available at: https://www.gov.uk/government/publications/creative-industries-mapping-documents-2001.

Department of Communications and the Arts Australia (1995) *Creative nation: Commonwealth cultural policy*. Canberra.

Dewey, J. (2008) 'Experience and nature', in Boydston, J. and Hook, S. (eds) *The later works of John Dewey, 1925-1953*. Carbondale: Southern Illinois University Press., p. Vol. 1, pp. 1–437.

Dickinson, S. (2017) *Exploring the role of arts and culture in the creative industries Arts Council England Report*. Available at: www.sdgED.com (Accessed: 18 May 2020).

Digital Culture Media and Sport Committee (2020) *Impact of COVID-19 on DCMS sectors: First Report Third Report of Session 2019-21*. London. Available at: www.parliament.uk/copyright. (Accessed: 18 May 2022).

Van Dijck, J., Poell, T. and Waal, M. de (2018) *The platform society : public values in a connective world*. New York: Oxford University Press.

Le Dinh, T. (2018) 'TOWARDS A LIVING LAB FOR PROMOTING THE DIGITAL ENTREPRENEURSHIP PROCESS', *International Journal of Entrepreneurship*, 22(1), pp. 1939–4675.

Dümcke, C. (2015) *New Business Models in the Cultural and Creative Sectors (CCSs)*. Available at: http://www.interarts.net/descargas/interarts2540.pdf (Accessed: 19 May 2020).

Easterby-Smith, M., Lyles, M.A. and Peteraf, M.A. (2009), Dynamic Capabilities: Current Debates and Future Directions. British Journal of Management, 20: S1-S8.

Eikhof, D. R. and Haunschild, A. (2007) 'For art's sake! Artistic and economic logics in creative production', *Journal of Organizational Behavior*, 28(5), pp. 523–538. doi: 10.1002/job.462.

Eisenhardt, K. M. (1989) 'Building Theories from Case Study Research', *The Academy of Management Review*, 14(4), p. 532. doi: 10.2307/258557.

Eisenhardt, K. M., Furr, N. R. and Bingham, C. B. (2010) 'CROSSROADS—Microfoundations of Performance: Balancing Efficiency and Flexibility in Dynamic Environments', *https://doi.org/10.1287/orsc.1100.0564*, 21(6), pp. 1263–1273. doi: 10.1287/ORSC.1100.0564.

Eisenhardt, K. M. and Martin, J. A. (2000) 'DYNAMIC CAPABILITIES: WHAT ARE THEY?', *Strategic Management Journal Strat. Mgmt. J*, 21, pp. 1105–1121. doi: 10.1002/1097-0266.

Eriksson, T. (2014) 'Processes, antecedents and outcomes of dynamic capabilities', *Scandinavian Journal of Management*, 30(1), pp. 65–82. doi:

10.1016/J.SCAMAN.2013.05.001.

Escobar, A. *et al.* (1994) 'Welcome to Cyberia: Notes on the Anthropology of Cyberculture [and Comments and Reply]', *https://doi.org/10.1086/204266*, 35(3), pp. 211–231. doi: 10.1086/204266.

European Commission (2017) *Mapping the creative value chains* . Available at: https://op.europa.eu/en/publication-detail/-/publication/4737f41d-45ac-11e7-aea8-01aa75ed71a1 (Accessed: 10 March 2023).

Evans, S. *et al.* (2017) 'Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models', *Business Strategy and the Environment*, 26(5), pp. 597–608. doi: 10.1002/BSE.1939.

Feilzer, M. Y. (2010) 'Pragmatism as a Research Paradigm Doing Mixed Methods Research Pragmatically: Implications for the Rediscovery of', *Journal of Mixed Methods Research*. doi: 10.1177/1558689809349691.

Foss, N. J. and Saebi, T. (2016) 'Fifteen Years of Research on Business Model Innovation', *https://doi.org/10.1177/0149206316675927*, 43(1), pp. 200–227. doi: 10.1177/0149206316675927.

Futterer, F., Schmidt, J. and Heidenreich, S. (2018) 'Effectuation or causation as the key to corporate venture success? Investigating effects of entrepreneurial behaviors on business model innovation and venture performance', *Long Range Planning*, 51(1), pp. 64–81. doi: 10.1016/J.LRP.2017.06.008.

Gafni, H., Marom, D. and Sade, O. (2019) 'Are the life and death of an early-stage venture indeed in the power of the tongue? Lessons from online crowdfunding pitches', *Strategic Entrepreneurship Journal*, 13(1), pp. 3–23. doi: 10.1002/SEJ.1293.

Garnham, N. (2005) 'From cultural to creative industries', *International Journal of Cultural Policy*, 11(1), pp. 15–29. doi: 10.1080/10286630500067606.

Ghaziani, A. and Ventresca, M. J. (2005) 'Keywords and cultural change: Frame analysis of business model public talk, 1975-2000', *Sociological Forum*, 20(4), pp. 523–559. doi: 10.1007/s11206-005-9057-0.

Ghezzi, A. and Cavallo, A. (2018). 'Agile Business Model Innovation in Digital Entrepreneurship: Lean Startup Approaches.' Journal of Business Research, 110(110), pp.519–537. doi:https://doi.org/10.1016/j.jbusres.2018.06.013.

Gillespie, T. (2018) *Custodians of the internet: Platforms, content moderation, and the hidden decisions that shape social media*, *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media*. Available at: https://www.researchgate.net/publication/327186182 (Accessed: 13 October 2020).

Gioia, D. A., Corley, K. G. and Hamilton, A. L. (2013) 'Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology', *Organizational Research Methods*, 16(1), pp. 15–31. doi: 10.1177/1094428112452151.

Giotopoulos, I. *et al.* (2017) 'What drives ICT adoption by SMEs? Evidence from a large-scale survey in Greece', *Journal of Business Research*, 81, pp. 60–69. doi: 10.1016/J.JBUSRES.2017.08.007.

Girard, A. (1982) *Cultural industries: a challenge for the future of culture - UNESCO Digital Library*, *Cultural industries: a handicap or a new opportunity for cultural development?* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000049972 (Accessed: 25 February 2020).

Goodwin, T. (2018) *Digital Darwinism : survival of the fittest in the age of business disruption*. Koogan Page.

Google (2022) *Channel memberships eligibility, policies and guidelines - YouTube Help*. Available at: https://support.google.com/youtube/answer/7636690#zippy=%2Cminimum-eligibility-requirements (Accessed: 18 July 2022).

Greene, M. (2014) 'On the Inside Looking In: Methodological Insights and Challenges in Conducting Qualitative Insider Research', *The Qualitative Report*, 19. doi: 10.46743/2160-3715/2014.1106.

Greenman, A. (2013) 'Everyday entrepreneurial action and cultural embeddedness: an institutional logics perspective', *https://doi.org/10.1080/08985626.2013.829873*, 25(7–8), pp. 631–653. doi: 10.1080/08985626.2013.829873.

Groth, P. and Nielsen, C. (2015) 'Constructing a Business Model Taxonomy: Using statistical tools to generate a valid and reliable business model taxonomy'. doi: 10.5278/OJS.JBM.V3I1.1211.

Guba, E. G. and Lincoln, Y. S. (2005) 'Paradigmatic Controversies, Contradictions, and Emerging Confluences.', in Denzin, N. and Lincoln, Y. (eds) *The SAGE Handbook of Qualitative Research*. 3rd edn. SAGE.

Guest, G., Namey, E. E. and Mitchell, M. L. (2013) 'Collecting Qualitative Data: A Field Manual for Applied Research'. 55 City Road, London: SAGE Publications, Ltd. doi: 10.4135/9781506374680.

Guiñez-Cabrera, N. and Aqueveque, C. (2022) 'Entrepreneurial influencers and influential entrepreneurs: two sides of the same coin', *International Journal of Entrepreneurial Behaviour and Research*, 28(1), pp. 231–254. doi: 10.1108/IJEBR-08-2020-0563.

Haferkorn, J., Kavanagh, B. and Leak, S. (2021) *Livestreaming Music in the UK: Report for Musicians*. Available at: https://livestreamingmusic.uk/report.

Hall, J. N. (2013) 'Pragmatism, Evidence, and Mixed Methods Evaluation', *New Directions for Evaluation*, 2013(138), pp. 15–26. doi:

10.1002/ev.20054.

Hall, S. (1981) 'Notes on deconstructing "the popular"', in *People's History and Socialist Theory (Routledge Revivals)*. ROUTLEDGE, pp. 227–240. Available at: https://www.routledge.com/Peoples-History-and-Socialist-Theory-Routledge-Revivals/Samuel/p/book/9781138671317 (Accessed: 10 March 2023).

Hallett, R. E. and Barber, K. (2014) 'Ethnographic research in a cyber era', *Journal of Contemporary Ethnography*, 43(3), p. 306. doi: 10.1177/0891241613497749.

Hamel, G. (2000) *Leading the revolution*. Boston Mass.: Harvard Business School Press.

Harris, R. (2018) *The funding mix for arts organisations*. Available at: https://www.culturehive.co.uk/wp-content/uploads/2018/03/Funding_mix_for_arts_organisations.pdf (Accessed: 25 February 2020).

Hayes, R., Kyer, B. and Weber, E. (2015) 'The Case Study Cookbook'.

Haynes, J. and Marshall, L. (2018) 'Reluctant entrepreneurs: musicians and entrepreneurship in the "new" music industry', *The British Journal of Sociology*, 69(2), pp. 459–482. doi: 10.1111/1468-4446.12286.

Hedman, J. and Kalling, T. (2003) 'The business model concept: Theoretical underpinnings and empirical illustrations', *European Journal of Information Systems*, 12(1), pp. 49–59. doi: 10.1057/palgrave.ejis.3000446.

Helfat, C. E. (2007) 'Dynamic capabilities : understanding strategic change in organizations', p. 147.

Helfat, C. E. and Winter, S. G. (2011) 'Untangling Dynamic and Operational Capabilities: Strategy for the (N)ever-Changing World', *Strategic Management Journal*, 32(11), pp. 1243–1250. doi: 10.1002/SMJ.955.

Hesmondhalgh, D. (2007) *The cultural industries*. London: SAGE. Available at: https://uk.sagepub.com/en-gb/eur/the-cultural-industries/book250830 (Accessed: 12 May 2020).

Hesmondhalgh, D. and Pratt, A. C. (2008) 'Cultural industries and cultural policy', *International journal of cultural policy*, 11(1), pp. 1–14. doi: 10.1080/10286630500067598.

Higgs, P., Cunningham, S. and Bakhshi, H. (2008) 'Mapping the creative economy in the United Kingdom'.

Hine, C. (2000) *Virtual Ethnography*. London: SAGE.

Hine, C. (2005) *Virtual Methods: Issues in Social Research on the Internet*. Oxford: Berg.

Hine, C. (2011) 'Towards ethnography of television on the internet: A mobile

strategy for exploring mundane interpretive activities':, *http://dx.doi.org/10.1177/0163443711401940*, 33(4), pp. 567–582. doi: 10.1177/0163443711401940.

Hine, C. (2015) *Ethnography for the Internet: Embedded, Embodied, and Everyday.* London: Bloomsbury.

Holcombe-James, I. (2021) 'Digital access, skills, and dollars: applying a framework to digital exclusion in cultural institutions', *Cultural Trends*. doi: 10.1080/09548963.2021.1972282.

Howkins, J. (2001) *The Creative Economy: How People Make Money from Ideas*, *Allen Lane*.

Hull, C. E. *et al.* (2007) 'Taking advantage of digital opportunities: A typology of digital entrepreneurship', *International Journal of Networking and Virtual Organisations*, 4(3), pp. 290–303. doi: 10.1504/IJNVO.2007.015166.

Hume, M. *et al.* (2006) 'Understanding service experience in non-profit performing arts: Implications for operations and service management', *Journal of Operations Management*, 24(4 SPEC. ISS.), pp. 304–324. doi: 10.1016/j.jom.2005.06.002.

Ibarra, D. *et al.* (2020) 'Business model innovation in established SMEs: A configurational approach', *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3). doi: 10.3390/JOITMC6030076.

Itami, H. and Roehl, T. W. (1991) 'Mobilizing invisible assets', p. 186.

Kallinikos, J., Aaltonen, A. and Marton, A. (2013) 'The ambivalent ontology of digital artifacts', *MIS Quarterly: Management Information Systems*, 37(2), pp. 357–370. doi: 10.25300/MISQ/2013/37.2.02.

Kaplan, S. (2012) *The Business Model Innovation Factory*, *The Business Model Innovation Factory*. Wiley. doi: 10.1002/9781119205234.

Kaushik, V. and Walsh, C. A. (2019) 'Pragmatism as a Research Paradigm and Its Implications for Social Work Research', *Social Sciences*, 8(9), pp. 1–17. Available at: https://ideas.repec.org/a/gam/jscscx/v8y2019i9p255-d264760.html (Accessed: 11 March 2021).

Kim, S. K. and Min, S. (2015) 'Business Model Innovation Performance: When does Adding a New Business Model Benefit an Incumbent?', *Strategic Entrepreneurship Journal*, 9(1), pp. 34–57. doi: 10.1002/SEJ.1193.

Knorr Cetina, K. and Bruegger, U. (2002) 'Global Microstructures: The Virtual Societies of Financial Markets', *American Journal of Sociology*, 107(4), pp. 905–950. doi: 10.1086/341045.

Kotha, S. (1998) 'Competing on the internet: The case of Amazon.com', *European Management Journal*, 16(2), pp. 212–222. doi: 10.1016/S0263-2373(97)00089-3.

Kozinets, R. (2020) *Netnography - The Essential Guide to Qualitative Social*

Media Research. 3rd. SAGE Publications.

Kraaijenbrink, J., Spender, J. C. and Groen, A. J. (2009) 'The Resource-Based View: A Review and Assessment of Its Critiques':, *https://doi.org/10.1177/0149206309350775*, 36(1), pp. 349–372. doi: 10.1177/0149206309350775.

Kraatz, M. S., & Zajac, E. J. 2001. How organizational resources affect strategic change and performance in turbulent environments: Theory and evidence. Organization Science, 12: 632-657

Kraus, S. *et al.* (2018) 'Digital entrepreneurship in a resource-scarce context: A focus on entrepreneurial digital competencies', *International Journal of Entrepreneurial Behavior & Research*, 25(2), p. 483. doi: 10.1108/IJEBR-06-2018-0425.

Kraus, S. *et al.* (2020) 'Open innovation in (young) SMEs', *International Journal of Entrepreneurship and Innovation*, 21(1), pp. 47–59. doi: 10.1177/1465750319840778/ASSET/IMAGES/LARGE/10.1177_1465750319840778-FIG2.JPEG.

Kuhn, T. S. (1962) *The Structure of Scientific Revolutions*. 1st edn. University of Chicago Press. Available at: https://archive.org/details/structureofscie00kuhn (Accessed: 7 May 2021).

Kuhn, T. S. (2009) *Structure of Scientific Revolutions, The*. Chicago, UNITED STATES: University of Chicago Press. Available at: http://ebookcentral.proquest.com/lib/nottingham/detail.action?docID=4977933.

Lambert, S. C. (2015) 'The Importance of Classification to Business Model Research', *Journal of Business Models*, 3(1), pp. 49–61. doi: 10.5278/OJS.JBM.V3I1.1045.

Lange, B. (2011) 'Entrepreneurship and Regional Development Professionalization in space: Social-spatial strategies of culturepreneurs in Berlin'. doi: 10.1080/08985620903233978.

Latour, B. (1996) 'On actor-network theory: A few clarifications', *Soziale Welt*, 47(4), pp. 369–381.

Leininger, M. M. (1985). Ethnography and ethnonursing: Models and modes of qualitative data analysis. In M. M. Leininger (Ed.), Qualitative research methods in nursing (pp. 33-72). Orlando, FL: Grune & Stratton.

Leonard-Barton, D. (1990) 'A Dual Methodology for Case Studies: Synergistic Use of a Longitudinal Single Site with Replicated Multiple Sites', *Organization Science*, 1(3), pp. 248–266. doi: 10.1287/ORSC.1.3.248.

Leyshon, A. (2014) *Reformatted : Code, networks, and the transformation of the music industry*. University Press.

Li, F. (2020) 'The digital transformation of business models in the creative

industries: A holistic framework and emerging trends', *Technovation*, 92–93, p. 102012. doi: 10.1016/j.technovation.2017.12.004.

Li, L. *et al.* (2018) 'Digital transformation by SME entrepreneurs: A capability perspective', *Information Systems Journal*, 28(6), pp. 1129–1157. doi: 10.1111/ISJ.12153.

Lincoln, Y. S., Lynham, S. A. and Guba, E. G. (2011) 'Paradigmatic controversies, contra-dictions, and emerging confluences, revisited.', in Denzin, N. K. and Lincoln, Y. S. (eds) *The Sage Handbook of Qualitative Research*. 4th edn. ThousandOaks, CA: SAGE, pp. 97–128.

Linder, J. and Cantrell, S. (2000) *Changing Business Models: Surveying the Landscape*, *Accenture Institute for Strategic Change*.

Lotz, A. D. (2017) *Portals: A Treatise on Internet-Distributed Television*, *Portals: A Treatise on Internet-Distributed Television*. Michigan Publishing, University of Michigan Library. doi: 10.3998/mpub.9699689.

Magretta, J. (2002) 'Why Business Models Matter', *Harvard Business Review*.

Massa, L. and Tucci, C. L. (2013) 'Business Model Innovation. The Oxford handbook of innovation management.', in, pp. 420–441. doi: 10.1093/oxfordhb/9780199694945.013.002.

Massa, L., Tucci, C. L. and Afuah, A. (2017) 'A critical assessment of business model research', *Academy of Management Annals*. Routledge, pp. 73–104. doi: 10.5465/annals.2014.0072.

Matarazzo, M. *et al.* (2021) 'Digital transformation and customer value creation in Made in Italy SMEs: A dynamic capabilities perspective', *Journal of Business Research*, 123, pp. 642–656. doi: 10.1016/J.JBUSRES.2020.10.033.

McDonald, R. E., Masselli, J. J. and Chanda, B. (2021) 'Nonprofit business model innovation as a response to existential environmental threats: Performing arts in the United States', *Journal of Business Research*, 125, pp. 750–761. doi: 10.1016/J.JBUSRES.2019.12.022.

MacInnis, D. J. (2011). A Framework for Conceptual Contributions in Marketing. Journal of Marketing, 75(4), 136-154. https://doi.org/10.1509/jmkg.75.4.136

McVea, J.F. and Dew, N. (2021). Unshackling Imagination: How Philosophical Pragmatism can Liberate Entrepreneurial Decision-Making. Journal of Business Ethics. doi:https://doi.org/10.1007/s10551-021-04967-1.

Mertens, D. M. (2015) 'Mixed Methods and Wicked Problems', *Journal of Mixed Methods Research*. SAGE Publications Inc., pp. 3–6. doi: 10.1177/1558689814562944.

Meta (2022) *State of Small Business Report*. Available at: https://about.fb.com/news/2020/05/state-of-small-business-report/

(Accessed: 9 March 2022).

Mezger, F. (2014) 'Toward a capability-based conceptualization of business model innovation: insights from an explorative study', *R&D Management*, 44(5), pp. 429–449. doi: 10.1111/RADM.12076.

Mihelj, S., Leguina, A. and Downey, J. (2019) 'Culture is digital: Cultural participation, diversity and the digital divide':, *https://doi.org/10.1177/1461444818822816*, 21(7), pp. 1465–1485. doi: 10.1177/1461444818822816.

Miles, M. B. and Huberman, A. M. (1994) *Qualitative data analysis: An expanded sourcebook (2nd ed.)*. SAGE Publications Inc.

Miles, M. B., Huberman, A. M. and Saldana, J. (2013) *Qualitative data analysis : a methods sourcebook*. Los Angeles, Calif. [etc.]: Sage.

Mill, J. S. (1848) *Principles of Political Economy*. John W. Parker.

Miller, D. and Slater, D. (2001) *The Internet: An Ethnographic Approach.* London: Berg.

Misek, R., Leguina, A. and Manninen, K. (2022) *Digital Access to Arts and Culture Beyond Covid-19*. Available at: https://digiaccessarts.org/report/.

Mollick, E. (2014) 'The dynamics of crowdfunding: An exploratory study', *Journal of Business Venturing*, 29(1), pp. 1–16. doi: 10.1016/J.JBUSVENT.2013.06.005.

Morgan, D. L. (2007) 'Paradigms Lost and Pragmatism Regained: Methodological Implications of Combining Qualitative and Quantitative Methods', *Journal of Mixed Methods Research*, 1(1), pp. 48–76. doi: 10.1177/2345678906292462.

Morgan, D. L. (2014) *Integrating Qualitative and Quantitative Methods: A Pragmatic Approach*, *Integrating Qualitative and Quantitative Methods: A Pragmatic Approach*. SAGE Publications Inc.

Morgan, G. (1980) 'Paradigms, Metaphors, and Puzzle Solving in Organization Theory', *Administrative Science Quarterly*, 25(4), p. 605. doi: 10.2307/2392283.

Morozov, E. (2011) *The Net Delusion: The Dark Side of Internet Freedom*. New York: PublicAffairs.

Morris, M., Schindehutte, M. and Allen, J. (2005) 'The entrepreneur's business model: Toward a unified perspective', *Journal of Business Research*, 58(6), pp. 726–735. doi: 10.1016/j.jbusres.2003.11.001.

MTM (2018) *Arts Council England: Canvas programme evaluation*. Available at: https://www.artscouncil.org.uk/sites/default/files/download-file/Canvas Year 3 final report.pdf (Accessed: 22 April 2022).

Munoz-Seca, B. (2012) 'A Business Model for Cultural Services: Joint Design

and Production of a Customer Experience', *SSRN Electronic Journal*. doi: 10.2139/ssrn.1996570.

Muñoz-Seca, B. and Riverola, J. (2009) *The new operational culture : the case of the theatre industry*. Palgrave Macmillan.

Muñoz-Seca, B. and Riverola, J. (2010) *When business meets culture: Ideas and experiences for mutual profit*, *When Business Meets Culture: Ideas and Experiences for Mutual Profit*. Palgrave Macmillan. doi: 10.1057/9780230295117.

Naldi, L., Wikström, P. and Von Rimscha, M. B. (2014) 'Dynamic Capabilities and Performance: An Empirical Study of Audiovisual Producers in Europe', *International Studies of Management and Organization*, 44(4), pp. 63–82. doi: 10.2753/IMO0020-8825440404.

Nambisan, S. *et al.* (2017) 'Digital Innovation Management: Reinventing Innovation Management Research in a Digital World', *Management Information Systems Quarterly*, 41(1). Available at: https://aisel.aisnet.org/misq/vol41/iss1/13 (Accessed: 28 March 2019).

National Theatre (2019) *Annual report 2018/2019 - The Royal National Theatre*. Available at: https://beta.companieshouse.gov.uk/company/00749504/filing-history.

Nelson, R. R. and Winter, S. G. (1982) *An Evolutionary Theory of Economic Change.* Cambridge, MA: Harvard University Press, Cambridge, MA. - References - Scientific Research Publishing. doi: 10.2307/2393143.

Nieborg, D. and Poell, T. (2018) 'The platformization of cultural production: Theorizing the contingent cultural commodity', *New Media & Society*, 20((11)), pp. 4275–4292.

Nielsen, C. and Lund, M. (2018) 'A Brief History of the Business Model Concept', *SSRN Electronic Journal*. doi: 10.2139/ssrn.2579439.

Nooren, P. *et al.* (2018) 'Should We Regulate Digital Platforms? A New Framework for Evaluating Policy Options', *Policy & Internet*, 10(3), pp. 264–301. doi: 10.1002/POI3.177.

NVivo (2020) *Qualitative Data Analysis Software | NVivo*. Available at: https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home (Accessed: 29 October 2020).

Osterwalder, A. and Pigneur, Y. (2010) *Business Model Generation : A Handbook for Visionaries, Game Changers, and ...: EBSCOhost*. Wiley. Available at: http://web.a.ebscohost.com.esc-web.lib.cbs.dk/ehost/detail/detail?vid=2&sid=0977693b-2c74-46c1-b0cb-c28c38ca4ea3%40sessionmgr4006&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=335366&db=nlebk (Accessed: 19 May 2020).

Osterwalder, A., Pigneur, Y. and Tucci, C. L. (2005) 'Clarifying Business Models: Origins, Present, and Future of the Concept', *Communications of the*

Association for Information Systems, 16, pp. 1–25. doi: 10.17705/1cais.01601.

Owen, R. and O'Dair,M. (2020) 'How blockchain technology can monetize new music ventures: an examination of new business models,' Journal of Risk Finance, Emerald Group Publishing Limited, vol. 21(4), pages 333-353, July.

Øverby, H. and Audestad, J. A. (2021) 'Multisided platforms: Classification and analysis', *Systems*, 9(4). doi: 10.3390/SYSTEMS9040085.

Pateli, A. G. and Giaglis, G. M. (2004) 'A research framework for analysing eBusiness models', *European Journal of Information Systems*. Taylor & Francis, pp. 302–314. doi: 10.1057/palgrave.ejis.3000513.

Patton, M. Q. (2001) *Qualitative Research & Evaluation Methods.*, *Thousand Oaks, California*. Newbury Park, CA: SAGE.

Pearce, L. D. (2012) 'Mixed Methods Inquiry in Sociology', *American Behavioral Scientist*, 56(6), pp. 829–848. doi: 10.1177/0002764211433798.

Peirce, C. S. (1878) *How to make our ideas clear*.

Penrose, L. S. (1952) 'Data on the genetics of birth weight.', *Annals of eugenics*, 16(4), pp. 378–381. doi: 10.1111/j.1469-1809.1951.tb02490.x.

Peteraf, M., Di Stefano, G. and Verona, G. (2013) 'The elephant in the room of dynamic capabilities: Bringing two diverging conversations together.' Strat. Mgmt. J., 34: 1389-1410. https://doi.org/10.1002/smj.2078

Pettigrew, T. F. (1998) 'Intergroup contact theory', *Annual Review of Psychology*, 49, pp. 65–85. doi: 10.1146/ANNUREV.PSYCH.49.1.65.

Porter, M. E. (1991) 'Towards a dynamic theory of strategy', *Strategic Management Journal*, 12(S2), pp. 95–117. doi: 10.1002/smj.4250121008.

Porter, M. E. (2003) *Strategy and the Internet*. Available at: www.hbr.org (Accessed: 16 July 2020).

Pret, T., Shaw, E. and Drakopoulou Dodd, S. (2016) 'Painting the full picture: the conversion of economic, cultural, social and symbolic capital', *International Small Business Journal* , 34(8), pp. 1004–1027. doi: 10.1177/0266242615595450.

Prior, P. (2021) 'Phygital — What Is It And Why Should I Care?', *Forbes*. Available at: https://www.forbes.com/sites/forbesbusinesscouncil/2021/06/30/phygital---what-is-it-and-why-should-i-care/?sh=c2c2709587af (Accessed: 19 March 2023).

Rahm, E. and Do, H. (2000) 'Data cleaning: Problems and current approaches', *IEEE Data Eng. Bull.*, 23(4), pp. 3–13. Available at: http://wwwiti.cs.uni-magdeburg.de/iti_db/lehre/dw/paper/data_cleaning.pdf%5Cnpapers2://publi

cation/uuid/17B58056-3A7F-4184-8E8B-0E4D82EFEA1A%5Cnhttp://dc-pubs.dbs.uni-leipzig.de/files/Rahm2000DataCleaningProblemsand.pdf (Accessed: 9 August 2021).

Rainnie, A. (1989) *Industrial Relations in Small Firms: Small Isn't Beautiful*. New York: Routledge.

Rappa, M. (2001) *Business Models on the Web*. Available at: http://digitalenterprise.org/models/models.html (Accessed: 13 August 2021).

Rex, B., Kaszynska, P. and Kimbell, L. (2019) *Business Models for Arts and Cultural Organisations: Research Findings*. Available at: www.creativelenses.eu (Accessed: 11 May 2020).

Ritter, T. and Pedersen, C. L. (2020) 'Analyzing the impact of the coronavirus crisis on business models', *Industrial Marketing Management*, 88, pp. 214–224. doi: 10.1016/J.INDMARMAN.2020.05.014.

Ritzer, G. and Jurgenson, N. (2010) 'Production, Consumption, Prosumption: The nature of capitalism in the age of the digital "prosumer"', *Journal of Consumer Culture*, 10(1), pp. 13–36. doi: 10.1177/1469540509354673.

Robinson, M. and Lock, S. (2016) *Introducing the Business model Canvas for arts and cultural organisations*, *Culturehive*. Available at: https://www.culturehive.co.uk/wp-content/uploads/2016/01/Introducing-the-Business-Model-Canvas.pdf (Accessed: 19 May 2020).

Robson, C. (1993) *Real world research*. 1st ed. Oxford UK: Blackwell Publishers.

Rodriguez, J. (2016) *To Sell or Not To Sell? An Introduction to Business Models (Innovation) for Arts and Culture Organisations IETM Toolkit*. Available at: www.ietm.org (Accessed: 19 May 2020).

Rogers, R. (2013) *Digital Methods*, *Digital Methods*. The MIT Press.

Rokka, J. (2010) 'Netnographic inquiry and new translocal sites of the social', *International Journal of Consumer Studies*, 34(4), pp. 381–387. doi: 10.1111/J.1470-6431.2010.00877.X.

Rossello, P. and Wright, S. (2010) *Mapping the Creative industries: a toolkit*. Available at: https://creativeconomy.britishcouncil.org/media/uploads/files/English_mapping_the_creative_industries_a_toolkit_2-2.pdf (Accessed: 11 December 2019).

Royal Opera House - YouTube (2022). Available at: https://www.youtube.com/c/RoyalOperaHouse/about (Accessed: 28 February 2022).

Saldana, J. (2016) *The Coding Manual for Qualitative Researchers*. 3rd edn. London: SAGE.

Sassen, S. (1998) *Globalization and its discontents: Essays on the new mobility of people and money.* New York: New Press.

Say, J.-B. (1821) 'A Treatise on Political Economy; or the Production, Distribution, and Consumption of Wealth'.

Scapens, R. W. (1992) 'The role of case study methods in management accounting research: A personal reflection and reply', *The British Accounting Review*, 24(4), pp. 369–383. doi: 10.1016/S0890-8389(05)80046-0.

Schiuma, G. *et al.* (2022) 'The transformative leadership compass: six competencies for digital transformation entrepreneurship', *International Journal of Entrepreneurial Behaviour and Research*, 28(5), pp. 1273–1291. doi: 10.1108/IJEBR-01-2021-0087/FULL/PDF.

Schiuma, G. and Lerro, A. (2017) 'The business model prism: Managing and innovating business models of arts and cultural organisations', *Journal of Open Innovation: Technology, Market, and Complexity*, 3(3). doi: 10.1186/s40852-017-0066-z.

Schlesinger, P. (2017) 'The creative economy: invention of a global orthodoxy', *Innovation*, 30(1), pp. 73–90. doi: 10.1080/13511610.2016.1201651.

Schneider, S. and Spieth, P. (2013) 'Business Model Innovation: towards an integrated future research agenda Management of Social and Sustainable Business Models View project Exploration of digital business models and digital business model transformation View project', *Article in International Journal of Innovation Management*. doi: 10.1142/S136391961340001X.

Schumpeter, J. (1942) *Capitalism, socialism, and democracy*. First edition. New York ;London: Harper & Brothers.

Schumpeter, J. A. (1934) *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle (Vol. 55)*. Transaction publishers.

Schwab, K. (2017) *The Fourth Industrial Revolution*, *Journal of International Consumer Marketing*. New York: Currency Books.

Scott, E. (2022) 'Arts and creative industries: The case for a strategy'. UK Parliament - House of Lords Library. Available at: https://lordslibrary.parliament.uk/arts-and-creative-industries-the-case-for-a-strategy/ (Accessed: 29 March 2023).

Searle, N. (2017) 'Business models, intellectual property and the creative industries: A meta-analysis', *EMMA Conference 2017*, 09(June), pp. 1–46. doi: 10.5281/zenodo.808267.

Secundo, G., Del Vecchio, P. and Mele, G. (2021) 'Social media for entrepreneurship: myth or reality? A structured literature review and a future research agenda', *International Journal of Entrepreneurial Behaviour and Research*, 27(1), pp. 149–177. doi: 10.1108/IJEBR-07-2020-

0453/FULL/XML.

Seddon, Peter B *et al.* (2004) 'The Case for Viewing Business Models as Abstractions of Strategy', *Communications of the Association for Information Systems*, 13(1), p. 25. doi: 10.17705/1CAIS.01325.

Sedera, D. *et al.* (2016) 'Innovating with enterprise systems and digital platforms: A contingent resource-based theory view', *Information and Management*, 53(3), pp. 366–379. doi: 10.1016/J.IM.2016.01.001.

Shafer, S. M., Smith, H. J. and Linder, J. C. (2005) 'The power of business models', *Business Horizons*, 48(3), pp. 199–207. doi: 10.1016/J.BUSHOR.2004.10.014.

Shagrir, O. K. (2017) *Para-Interactivity and the Appeal of Television in the Digital Age*. Available at: https://rowman.com/ISBN/9781498540810/Para-Interactivity-and-the-Appeal-of-Television-in-the-Digital-Age (Accessed: 25 April 2022).

Shannon-Baker, P. (2015) 'Making Paradigms Meaningful in Mixed Methods Research':, *http://dx.doi.org/10.1177/1558689815575861*, 10(4), pp. 319–334. doi: 10.1177/1558689815575861.

Shavelson, R. and Towne, L. (2002) *Scientific Research in Education*. Washington.

De Silva, M., Al-Tabbaa, O. and Khan, Z. (2021) 'Business model innovation by international social purpose organizations: The role of dynamic capabilities', *Journal of Business Research*, 125, pp. 733–749. doi: 10.1016/J.JBUSRES.2019.12.030.

Sirmon, D. G., Hitt, M. A. and Ireland, R. D. (2007) *Managing firm resources in dynamic environments to create value: Looking inside the black box*, *Academy of Management Review*. doi: 10.5465/AMR.2007.23466005.

Smallbone, D. *et al.* (2012) 'Small business responses to a major economic downturn: Empirical perspectives from New Zealand and the United Kingdom':, *http://dx.doi.org/10.1177/0266242612448077*, 30(7), pp. 754–777. doi: 10.1177/0266242612448077.

Smith, A. and Cannan, E. (2003) *The wealth of nations*. New York, N.Y., Bantam Classic.

Spiro, N. *et al.* (2021) 'The Effects of COVID-19 Lockdown 1.0 on Working Patterns, Income, and Wellbeing Among Performing Arts Professionals in the United Kingdom (April–June 2020)', *Frontiers in Psychology*, 11, p. 4105. doi: 10.3389/FPSYG.2020.594086/BIBTEX.

Statista (2021) • *Most used social media 2021* | *Statista*. Available at: https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/ (Accessed: 10 May 2021).

di Stefano, G., Peteraf, M. and Veronay, G. (2010) 'Dynamic capabilities

deconstructed: A bibliographic investigation into the origins, development, and future directions of the research domain', *Industrial and Corporate Change*, 19(4), pp. 1187–1204. doi: 10.1093/ICC/DTQ027.

Taplin, J. (2017) *Move fast and break things: how Facebook, Google, and Amazon cornered culture and undermined democracy.* London: Macmillan.

Tapscott, D. (1995) *The digital economy: promise and peril in the age of networked intelligence.* New York, McGraw-Hill.

Tashakkori, A. and Teddlie, C. (2003) *Handbook of Mixed Methods in Social & Behavioral Research*, *Sage Publications*. Thousand Oaks, CA: SAGE.

Taylor, A. (2014) *The people's platform : taking back power and culture in the digital age*. Metropolitan Books.

Teece, D. J. (2007) 'Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance', *Strategic Management Journal*, 28(13), pp. 1319–1350. doi: 10.1002/SMJ.640.

Teece, D. J. (2010) 'Business Models, Business Strategy and Innovation', *Long Range Planning*, 43(2–3), pp. 172–194. doi: 10.1016/J.LRP.2009.07.003.

Teece, D. J. (2018) 'Business models and dynamic capabilities', *Long Range Planning*, 51(1), pp. 40–49. doi: 10.1016/J.LRP.2017.06.007.

Teece, D. J., Pisano, G. and Shuen, A. (1997) 'DYNAMIC CAPABILITIES AND STRATEGIC MANAGEMENT', *Strategic Management Journal*, 18, pp. 509–533. doi: 10.1002/(SICI)1097-0266(199708)18:7.

TEH - Trans Europe Halles (2015) *Creative Business Models: Insights into the Business Models of Cultural Centers in Trans Europe Halles*. Lund.

Tikkanen, H. *et al.* (2009) 'Exploring virtual worlds: Success factors in virtual world marketing', *Management Decision*, 47(8), pp. 1357–1381. doi: 10.1108/00251740910984596/FULL/XML.

Timmers, P. (1998) *Business Models for Electronic Markets*. Available at: www.commerce.net (Accessed: 28 August 2020).

Toffler, A. (1981) *The third wave*. Bantam Books.

Towse, R. (2014) *Advanced introduction to cultural economics*. Cheltenham: Edgar Elgar.

Towse, R. and Handke, C. (2013) *Handbook on the digital creative economy*. Edward Elgar.

Truant, E., Broccardo, L. and Dana, L. P. (2021) 'Digitalisation boosts company performance: an overview of Italian listed companies', *Technological Forecasting and Social Change*, 173, p. 121173. doi: 10.1016/J.TECHFORE.2021.121173.

Tufekci, Z. (2017) *Zeynep Tufekci Twitter and Tear Gas*. Available at: https://www.twitterandteargas.org/downloads/twitter-and-tear-gas-by-zeynep-tufekci.pdf (Accessed: 28 March 2019).

UK Government (2018) *Data protection: The Data Protection Act*. Available at: https://www.gov.uk/data-protection (Accessed: 15 March 2023).

UK Parliament (2010) *Digital Economy Act 2010*. Available at: https://services.parliament.uk/Bills/2009-10/digitaleconomyhl.html (Accessed: 15 May 2020).

UKRI (2019) *Audience of the future challenge – UKRI*. Available at: https://www.ukri.org/what-we-offer/our-main-funds/ukri-challenge-fund/artificial-intelligence-and-data-economy/audience-of-the-future-challenge/ (Accessed: 10 March 2023).

UNBOXED (2022) *UNBOXED: Creativity in the UK*. Available at: https://unboxed2022.uk/ (Accessed: 10 March 2023).

UNCTAD (2019) *VALUE CREATION AND CAPTURE: IMPLICATIONS FOR DEVELOPING COUNTRIES*.

UNESCO (2009) *The 2009 UNESCO framework for cultural statistics* . Available at: https://sdd.spc.int/digital_library/2009-unesco-framework-cultural-statistics-fcs (Accessed: 10 March 2023).

Veit, D. *et al.* (2014) 'Business models: An information systems research agenda', *Business and Information Systems Engineering*, 6(1), pp. 45–53. doi: 10.1007/s12599-013-0308-y.

Verhoef, P. C. and Bijmolt, T. H. A. (2019) 'Marketing perspectives on digital business models: A framework and overview of the special issue', *International Journal of Research in Marketing*, 36(3), pp. 341–349. doi: 10.1016/J.IJRESMAR.2019.08.001.

Visnjic, I. and Van Looy, B. (2013) 'Servitization: Disentangling the Impact of Service Business Model Innovation on Manufacturing Firm Performance', *SSRN Electronic Journal*. doi: 10.2139/SSRN.2407380.

Vogel, R. and Güttel, W. H. (2013) 'The dynamic capability view in strategic management: A bibliometric review', *International Journal of Management Reviews*, 15(4), pp. 426–446. doi: 10.1111/ijmr.12000.

Walmsley, B. *et al.* (2022) *Culture in Crisis Impacts of Covid-19 on the UK cultural sector and where we go from here*. Available at: https://www.culturehive.co.uk/CVIresources/culture-in-crisis-impacts-of-covid-19/ (Accessed: 4 February 2022).

Wang, C. L. and Ahmed, P. K. (2007) 'Dynamic capabilities: A review and research agenda', *International Journal of Management Reviews*, 9(1), pp. 31–51. doi: 10.1111/J.1468-2370.2007.00201.X.

Wapshott, R. and Mallett, O. (2021) 'HRM in small- and medium-sized

enterprises.', in Wilkinson, A. and Dundon, T. (eds) *Contemporary Human Resource Management: Text and Cases.* London: SAGE, pp. 469–485.

Warner, K. S. R. and Wäger, M. (2019) 'Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal', *Long Range Planning*, 52(3), pp. 326–349. doi: 10.1016/J.LRP.2018.12.001.

Whiting, R. and Pritchard, K. (2017) 'Digital Ethics', in Cunliffe, A., Cassell, C., and Grandy, G. (eds) *SAGE Handbook of Qualitative Business and Management Research Methods*. London, UK: SAGE.

Whiting, R. and Pritchard, K. (2020) *Collecting Qualitative Data Using Digital Methods*. SAGE.

Williamson, O. E. (1975) *Markets and Hierarchies Analysis and Antitrust Implications. Free Press, New York. - References - Scientific Research Publishing*. New York: Free Press.

Winter, S. G. (2003) 'Understanding Dynamic Capabilities', *Strategic Management Journal*, 24(10), p. 991. doi: 10.1002/smj.318.

Wirtz, B. W. (2011) *Business Model Management Design – Instruments – Success Factors*. 1st edn. Gabler Verlag .

Wong, A. (2012) 'Digital futures in policy and the cultural sector in the UK', *Journal of Cultural Management and Policy*, 2(2), pp. 60–72. Available at: http://www.meetup.com/Art-of-Digital-London/ (Accessed: 15 May 2020).

Xie, X. *et al.* (2022) 'Digital platforms and SMEs' business model innovation: Exploring the mediating mechanisms of capability reconfiguration', *International Journal of Information Management*, 65, p. 102513. doi: 10.1016/J.IJINFOMGT.2022.102513.

Yang, M. *et al.* (2017) 'Value uncaptured perspective for sustainable business model innovation', *Journal of Cleaner Production*, 140, pp. 1794–1804. doi: 10.1016/J.JCLEPRO.2016.07.102.

Yin, R. K. (2014) *Case Study Research Design and Methods*. 5th edn. Thousand Oaks, CA: SAGE.

Zaglia, M. E. (2013) 'Brand communities embedded in social networks', *Journal of Business Research*, 66(2), pp. 216–223. doi: 10.1016/j.jbusres.2012.07.015.

Zahra, S. A., Sapienza, H. J. and Davidsson, P. (2006) 'Entrepreneurship and Dynamic Capabilities: A Review, Model and Research Agenda*', *Journal of Management Studies*, 43(4), pp. 917–955. doi: 10.1111/J.1467-6486.2006.00616.X.

Zhang, M. J. (2007) 'IS Support For Top Managers' Dynamic Capabilities, Environmental Dynamism, And Firm Performance: An Empirical Investigation', *Journal Of Business & Management*, 13, pp. 57–77. Available at: http://digitalcommons.sacredheart.edu/wcob_fac (Accessed: 9 May

2022).

Zott, C. and Amit, R. (2010) 'Business model design: An activity system perspective', *Long Range Planning*, 43(2–3), pp. 216–226. doi: 10.1016/J.LRP.2009.07.004.

Zott, C., Amit, R. and Massa, L. (2011) 'The business model: Recent developments and future research', *Journal of Management*. SAGE PublicationsSage CA: Los Angeles, CA, pp. 1019–1042. doi: 10.1177/0149206311406265.

Appendices

Appendix 1 – Overview of business model definitions

Author(s)	Definition
Timmers (1998, p.4)	"an architecture for the product, service and information flows, including a description of the various business actors and their roles; and a description of the potential benefits for the various actors; and description of the sources of revenue"
Amit and Zott (2001, p.511)	"…we conceptualize a firm's business model as a system of interdependent activities that transcends the focal firm and spans its boundaries."
Linder and Cantrell (2000, p.1-2)	"The organization's core logic for creating value."
Chesbrough and Rosenbloom, (2002, p. 529)	"A successful business model creates a heuristic logic that connects technical potential with the realization of economic value."
Stewart and Zhao (2000, p.290)	''a statement of how a firm will make money and sustain its profit stream over time.''
Magretta (2002, p.4)	"story that explains how an enterprise works"
Osterwalder *et al.* (2005)	"A business model is a conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm. It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams."
Al-Debei *et al*. (2008, p.175)	«The business model is an abstract representation of an organization, be it conceptual, textual, and/or graphical, of all core interrelated architectural, co-operational, and financial arrangements designed and developed by an organization presently and in the future, as well as all core products and/or services the organization offers, or will offer, based on these arrangements that are needed to achieve its strategic goals and objectives
Casadesus-Masanell and Ricart, (2010, p.34)	"a reflection of the firm's realized strategy"

Osterwalder and Pigneur (2010, p.14)	"A business model describes the rationale of how an organization creates, delivers and captures value"
Demil and Lecocq (2010, p.227)	"the concept refers to the description of the articulation between different BM components or 'building blocks' to produce a proposition that can generate value for consumers and thus for the organization."

Appendix 2 – Overview of digital business model typologies

Author(s)	Typology name	Context	Number of BM types	BM types
Timmers (1998)	Business Models for Electronic Markets	Internet	10	E-shop E-procurement e-auction e-mall e-marketplace Virtual communities Value chain service provider Value chain integrator Collaboration platform Information broker
Tapscott et al. (2000)	B-webs	Internet/Digital economy	5	Agora Aggregation Value chain Alliance Distributive Networks
Mahadevan (2000)	Business Models for Internet-based E-Commerce	Internet/Digital economy	3	Portals Market makers Product/Service providers
Kozberg (2000)	Internet business models	Internet/Digital economy	7	Portals Content-community E-tailing Financial services Enablers ISP/Infrastructure Non-sensitive firms
Applegate (2001)	Emerging e-business models	Internet/Digital economy	6	Producers Focused distributors Portals Infrastructure distributors Infrastructure portals Infrastructure producers
Rappa (2001)	Business models on the web	Internet/Digital economy	9	Brokerage Advertising Infomediary Merchant Manufacturing Affiliate Community Subscription Utility
Weil and Vitale (2002)	Atomic business models	Internet/Digital economy	8	Content provider Direct to customer

				Full-service provider Intermediary Shared infrastructure Value net integrator Virtual community Whole of enterprise/government
Wang and Chan (2003)	Internet business models	Internet/Digital economy	4	Gift model Direct exchange model Indirect model Hybrid model
Weill et al. (2005)	Business model archetypes	General	16	Entrepreneur Manufacturer Inventor Human creator Financial trader Wholesale trader/Retailer IP trader Human distributor Financial landlord Physical landlord Intellectual landlord Contractor Financial broker Physical broker IP broker Human resources broker
Laudon and Traver (2008)	E-commerce business modes	Internet/Digital economy	7	Portals E-tailers Content providers Transaction brokers Market creators Service providers Community providers
Wirtz et al. (2010)	Internet business models	Internet/digital economy	4	Content Commerce Context Connection

Appendix 3 – Key definitions of dynamic capabilities

Author(s)	Definition
Teece et al. (1997, p. 516)	"The firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments."
Eisenhardt and Martin (2000, p.3)	"The firm's processes that use resources—specifically the processes to integrate, reconfigure, gain, and release resources—to match and even create market change. Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die."
Zollo and Winter (2002, p.5)	"A dynamic capability is a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness"
Winter (2003, p.991)	"Those (capabilities) that operate to extend, modify, or create ordinary capabilities."
Zahra et al. (2006, p.918)	"The abilities to reconfigure a firm's resources and routines in the manner envisioned and deemed appropriate by its principal decision maker(s)"
Helfat et al. (2007, p.4)	"The capacity of an organization to purposefully create, extend, and modify its resource base."
Teece (2007, p.1319)	"… The capacity (1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets."
Wang and Ahmed (2007, p. 35)	"a firm's behavioural orientation constantly to integrate, reconfigure, renew and recreate its resources and capabilities and, most importantly, upgrade and reconstruct its core capabilities in response to the changing environment to attain and sustain competitive advantage."
Barreto (2010, p.271)	"A dynamic capability is the firm's potential to systematically solve problems, formed by its propensity to

	sense opportunities and threats, to make timely and market-oriented decisions, and to change its resource base.”

Appendix 4 – Interview protocol for the first study

Interview questions – First interview

1. Could first just introduce yourself, stating briefly what's your role at [*Name of organisation*] and what it involves
2. So, let's start with a general question about the sector: Where, in your opinion, is the UK arts and cultural sector at regarding digital transformation? Maybe if you compare them to other sectors, are they coping well, or is it perhaps challenging for the arts organisations?
3. When talking about digital performing arts audiences, who do you think they are and where can we find them?
4. For performing arts organisations in the UK, what do you think are the best strategies for reaching digital audiences?
5. What kind of content are and should the performing arts organisations be producing for digital audiences?
6. How do you think the arts organisations can monetise or create value from these relationships with digital audiences?
7. As most of the cultural content is now on third-party platforms, in your experience, how do the arts organisations feel about it? (Do they see a problem, think it's a good thing…)
8. What do you think could be useful for the arts organisations in order to develop better digital relationships with their audiences? (Do they need maybe more funding, or training in digital skills, for example, or something else)
9. What are the current cultural policy trends and how do they support digital audience development? (When you think, for example, about ACE collaboration between arts organisations and the commercial sector or tech companies)
10. What do you think the impact of current political landscape (Brexit) is/will be on the UK arts and cultural sector?
11. Is there an example of an organisational approach that you think is best practice for the arts organisations to reach digital audiences?
12. Do you have an example of an organisation that have suffered a lot with digital transformation?

Interview questions – Second interview

1. What, in your opinion, has been the impact of the Covid-19 on the performing arts sector and performing arts producers?
2. How have the business models of performing arts organisations' changed since the start of the pandemic?
3. Have you noticed any changes in the performing arts audiences' willingness to pay for digital content?
4. What kind of pricing models have you observed performing arts organisations use?
5. How do you see the future of the sector beyond the pandemic?

Appendix 5 – Full list of codes for the first study

A priori codes/sub-codes	**Code/technique**
Sensing capabilities/Opportunity recognition *"the performing arts, or the arts in general, you know the journey is going on, and there are new emerging storytelling formats and organisations are embracing the opportunities...but there's still a long way to go"*	SEN Descriptive coding
Seizing capabilities/Ability to develop business models "*it's not necessarily the primary instinct of an arts institution to seize new opportunities, particularly in the technological field."*	SEI Descriptive coding
Microfoundations *"they have long established ways of working, long established arts forms to manage, and they have managed them in a certain way for decades if not centuries"*	MIC Descriptive coding
Digital transformation in arts and culture *"arts institutions, cultural institutions are probably behind the curve in terms of digital transformation"*	DIGT Descriptive coding
Digital business models/Event cinema *"I think the RSC does it well with the, with the, with the, um, with both the cinema broadcasts and the use of those digital products in education."*	DBM In Vivo coding
Codes from data corpus	**Code**
Distributing digital content *"I think there's a naivety about digital distribution and its ability to reach audiences in the arts sector"*	DIDC Descriptive coding
Public funding/Sustainability *"if you receive consistent public funding through the Arts Council, obviously, that does give your organisation some continuity and some confidence that you're going to be around for a bit longer."*	PUBF In Vivo coding
Monetising digital content/Educational content *"They will start doing online courses that you pay for, so they will give a certain amount away, or social media marks in, so they will give away some sort of tips, but if you want to know more about it, you can subscribe to their educational plan"*	MODC Process coding
Digital audiences *"they are essentially the same audiences that go to, erm, to live performance in general."*	DIGA Descriptive coding
Experimenting with digital "*I would like to see people exploring and experimenting with other ways of, erm, translating performance to the screen."*	EXPD Descriptive coding
Politics and Brexit *"I think the greatest uncertainty of the last few years, obviously, has been with Brexit and what that might mean to the arts and cultural sector."*	POBR Descriptive coding
Impact of Covid-19 pandemic	COV

"*The coronavirus pandemic has had an unprecedented effect on the number of organisations factoring digital capture and distribution into their short and long-term planning.*"	In Vivo coding

Appendix 6 – First and second order themes for the first study

First and second order themes	Description
1. Digital platforms 1.1. Competition over time and content 1.2. Ethical concerns 1.3. Keeping up with different platforms 1.4. Opportunities	How PAEs use digital platforms and the issues they encounter when trying to deploy business models on digital platforms
2. Cultural policy 2.1. Best practice for NPOs and intermediaries 2.2. Collaboration with other sectors is needed 2.3. Collaboration with large digital platforms	How cultural policy can support PAEs in their digital entrepreneurial ventures and when trying to develop new business models for the digital economy
3. Digital arts entrepreneurship 3.1. Diversity & Inclusion 3.2. Everyday creativity 3.3. Funding needs 3.4. Training needs	Digital entrepreneurial practices in the performing arts sector, opportunities, threats, issues, barriers, and needs
4. Digital audiences 4.1. Anyone anywhere 4.2. Culturally savvy 4.3. Geographically dispersed 4.4. Same as live audiences 4.5. Younger or digital natives	Defining digital performing arts audiences, who are they, where are they located and differences between in-person audiences
5. Digital organisation 5.1. Digital embedded in strategy (or not) 5.2. Digital with creatives, not marketing 5.3. Generational gap in terms of digital skills 5.4. Established digital culture 5.5. Sustainability of digital initiatives 5.6. Senior executives are not digital natives	How digital technologies are embedded in PAEs on organisational level. Processes that enable digital BMI on organisational level
6. Digital business models 6.1. Adapting existing products to digital 6.2. AI enabled digital products, VR and AR 6.3. Born digital products 6.4. Digital captures 6.5. Educational content 6.6. Event cinema 6.7. Live streams 6.8. Digital marketing tools 6.9. Membership-based models 6.10. Licencing and rights	Examples of existing digital business models designed and deployed by PAEs, value creation practices, issues related to the deployment of digital business models

7. Empirical examples of digital initiatives 7.1. Unsuccessful examples 7.2. Successful examples	Digital 'best practice' examples from the sector, failed digital initiatives and learnings from them
8. Dynamic capabilities practices 8.1. Experimenting with digital/Digital R&D 8.2. Managerial microfoundations 8.3. Long-established ways of operating an arts enterprise 8.4. Impact of Covid-19 8.5. Disparity within the sector 8.6. Lack of R&D funding 8.7. Lack of digital skills, capabilities 8.8. Leadership is not digitally native	Microfoundational processes on team and individual levels related to sensing, seizing, and transforming (Teece, 2007), or the lack of them
9. External factors 9.1. Licencing and rights 9.2. Arts sector is behind 9.3. Arts sector is doing well globally 9.4. Comparison with museum sector 9.5. Comparison with music industry 9.6. Disparity within the sector 9.7. Issues with digital talent 9.8. Issues with digital transformation 9.9. Sector leaders doing well 9.10. Politics and Brexit 9.11. Covid-19	External factors that may impact digital transformation and digital BMI in the performing arts sector
10. Monetisation 10.1. Creating other types of value than financial 10.2. Digital commissions 10.3. Selling merchandise online 10.4. Micro payments 10.5. Donations 10.6. Sponsorship 10.7. Subscription model 10.8. Income from third-party platforms 10.9. Touring digital products	Income generations strategies and revenue models utilised by PAEs in the digital economy
11. Strategies for reaching digital audiences 11.1. Audience focus (as a strategy) 11.2. Customising content (making it more mainstream) 11.3. Digital R & D (as a strategy) 11.4. Influencers 11.5. Marketing (as a strategy) 11.6. Partnerships 11.7. Peer-to-peer collaborations 11.8. Presence on social media platforms	Outlines strategies and best practice for reaching digital performing arts audiences

Appendix 7 – Selection of 35 PAEs for netnographic research

Name	Size	Business model type	FB page likes	Artform	Location
Wilkie Branson	micro	Digital Performance/Digital Product	**330**	Dance	London
Complicité	medium	Digital Product/ Digital Performance, DIgital Service	**18326**	Theatre	London
Apples & Snakes	medium	Digital Product/ Digital Performance	**9715**	Spoken word	London
Glydenbourne	large	Digital Product/Digital Performance	**27767**	Music	Midlands
Jacksons Lane	medium	Digital Commissioner	**5415**	Combined arts	London
New Adventures	large	Digital Product/Digital Service	**60722**	Dance	South East
Dance East	medium	Digital Product/Digital Service/Igital Performance	**4186**	Dance	South East
Tom Dale Company	micro	Digital Product	**1939**	Dance	Midlands
Deda Derby	medium	Digital Commissioner/Digital Service	**5156**	Dance	Midlands
Cheek by Jowl	small	Digital Product	**7510**	Theatre	London
Blast Theory	small	Digital Product	**4533**	Combined arts	South East
The Lowry	large	Digital Commissioner/Digital Product/Digital Performance	**56511**	Combined arts	North West
Headlong Theatre	medium	Digital Performance/Digital Product	**8718**	Theatre	London
Chronic Insanity	micro	Digital Performance/Digital Product	**340**	Theatre	Midlands
Mimbre	small	Digital Product/Digital Service	**7981**	Circus	London
Deafinitely Theatre	small	Digital Product/Digital Service	**5165**	Theatre	London
Tongue Fu	micro	Digital Performance /Digital Product	**3390**	Spoken word/Music	South West
Black Country Touring	small	Digital Performance /Digital Product	**1049**	Combined arts	Midlands
Take Art	small	Digital Commissioner	**2610**	Combined arts	South West
Darbar Arts	small	Streamer/Digital Hub	**39530**	Music	London

Emma Rice's Wise Children	medium	Digital Performance /Digital Service/ Digital Product/Digital Hub	**2323**	Theatre	South East
Rosie Kay Dance Company	small	Digital Product	**2683**	Dance	Midlands
The Lost in Translation Circus	small	Digital Performance/Digital Service	**3513**	Circus	North East
Soho Theatre	medium	Digital Hub	**49714**	Theatre	London
Breach Theatre	small	Digital Product	**1038**	Theatre	London
Tall Stories	small	Digital Performance/Digital Product /Digital Service	**7452**	Spoken word/Music	London
Lakeside Arts	medium	Commissioner	**10483**	Combined arts	Midlands
Rambert Dance	large	Digital Product/Digital Service/Digital Hub	**75579**	Dance	North East
Unicorn Theatre	large	Digital Product/Digital Performance/ Streamer	**12800**	Theatre	London
Fast Familiar	small	Digital Performance/Digital Product	**1033**	Theatre	South East
GRAEAE	medium	Digital Performance/Digital Product	**7449**	Theatre	London
Opera North	large	Digital Performance/Digital Product/ Digital Service/Digital Hub	**23567**	Music	North East
Oxjam Beeston	small	Digital Commissioner	**1845**	Music	Midlands
Darkfield	small	Digital Product	**1369**	Theatre	London
Albino Mosquito	micro	Digital Performance/Streamer	**76**	Combined arts	Midlands

Appendix 8 – Selection of five performing arts SMEs for case studies

Organisation	Digital BM type	Organisation type	Artform	Distribution platform	Location
Alpha	Digital Performance/Digital Product	Touring	Dance	Facebook and YouTube	London
Beta	Digital Commissioner/Digital Hub	Festival	Music	Facebook and YouTube	Midlands
Gamma	Digital Performance/Streamer	Touring	Combined arts	Twitch	Midlands
Delta	Digital Product	Touring	Theatre	Bespoke app	London
Epsilon	Digital Performance/Digital Hub	Touring	Theatre	Bespoke platform	South East

Appendix 9 – Summary of expert specialisations

Digital distribution refers to the ways digital content is distributed to performing arts audiences. This can include livestreaming, broadcasters, social media, and individual digital platforms.

Digital audiences refers to the audience groups who consume performing arts content via digital media. When specialising on digital audiences, experts usually have in-depth knowledge of these audience groups and on how to best reach them.

Digital content production refers to the production of digital content. This can be any digital content that is produced by a performing arts organisation, e.g., social media content, trailers, full length performance productions or livestreaming.

Digital policymaking refers to the creation of digital policy for arts and cultural organisations. Experts who specialise in digital policymaking usually work for sector-support organisations.

Digital broadcast refers to the production of digital arts content to be distributed on broadcast television or through individual broadcasting companies.

Digital business development refers to the identification of business opportunities available for performing arts organisations in the digital economy, and the development of performing arts organisations' digital business model.

Digital research refers to any type of audience or sector-focused research that is based on the use of digital technologies.

Appendix 10 – Digital Culture standard for defining the size of an arts enterprise

Organisation size was discerned using the Digital Culture survey (ACE & NESTA, 2019) standard:

- Micro organisations, annual turnover less than £50 000
- Small organisations, annual turnover less than £100 000
- Medium-sized organisations, annual turnover between £100 000-500 000
- Large organisations, annual turnover over £500 000

Appendix 11 – Digital business models identified as best practice in the first study

Name	Size	BM type	Income generation	Content
Glyndebourne	Large	Digital Performance, Digital Product	Ticket sales, beverage sales	Livestreams, event cinema outdoors on the estate, captures of staged performance
Apples and Snakes	Large	Digital Product	N/A	Pre-recorded content
Royal Shakespeare Company (n=6)	Large	Digital Performance, Digital Product, Digital Hub	Ticket sales, licence fees, royalties	Livestreams, captures of staged performance, educational content, globe.tv platform
New Adventures	Large	Digital Product, Digital Hub	Some free content, PPC content on own website, VR commission	Captures of staged performance, VR content
Phoenix Dance Theatre	Large	Digital Product	Licence fees, royalties	Captures of staged performance
English National Opera	Large	Digital Product	Licence fees, royalties	Captures of staged performance, music albums
National Theatre (n=4)	Large	Digital Performance	Ticket sales, licence fees	NT Live: Event cinema
Blast Theory (n=2)	Large	Digital Performance, Digital Product	Commissions, license fees	Interactive 'born digital' performances, VR/AR performances, educational content (Research/Higher education related)
Royal Opera House (n=2)	Large	Digital Performance, Digital Product, Streamer	Ticket sales, licence fees, advertising revenue from YouTube	Livestreams, captures of staged performance, live and pre-recorded content on YouTube
Complicite	Large	Digital Performance	Licence fees, commissions	Binaural livestreamed performance
Jazz Refreshed	Medium	Digital Product	N/A	Videos
TongFu	No information available	Digital Performance	N/A	Livestreamed poetry event

Royal Court	Large	Digital Product	Licence fees, royalties	Capture of staged performance
Darpar Arts	Large	Digital Hub	Subscription model	Pre-recorded and live audio content and captures and livestreams of live performance.
Emma Rice's Wise Children	Large	Digital Product	Commissions, licence fees	Captures of staged performance, event cinema

Appendix 12 – Code table for netnographic research

Pattern code name	Code	Description	Overarching theme
Monetisation methods	MON	Monetisation methods utilised during the Covid-19 pandemic identified to generate income from digital content	Digital business models
Pricing models	PRM	Pricing model utilised when deploying digital business models	Digital business models
Ticketing platforms	TIP	Ticketing platforms utilised to sell tickets to digital content	Digital business models
Digital business model types	DBMT	Digital business model types identified according to the new framework for common digital business models for PAEs	Digital business models
Practical responses to the pandemic	PRP	PAEs' responses to the external changes brought upon them by the Covid-19 pandemic, e.g., new digital initiatives introduced	Engagement with follower communities
Emotional responses to the pandemic	ERP	Emotional appeals, or other emotional communications between PAEs and their online audience	Engagement with follower communities
Audience response	ARE	How audiences responded to PAEs' digital initiatives and digital business models introduced	Engagement with follower communities
Disparity among PAEs	DAP	Differences in digital initiatives between large organisations and SMEs or different types of organisations (e.g., touring, receiving, producing or festival)	Engagement with follower communities
Distribution platforms	DPL	Distribution platforms and other approaches used when deploying digital business models or delivering digital content to the audiences during the pandemic	Digital Business models
Sector support mechanisms	SSM	Initiatives introduced by to support the sector through the pandemic, such as CRF, Culture in Quarantine etc.	Digital Business models

Appendix 13 – Interview protocol for the third study

Interview questions – First interview

1. Could first just introduce yourselves, what it is that you do and tell a little about your role at [the organisation] and what it involves.
2. So, due to the coronavirus pandemic, you had to halt your live activities and introduce new digital ones. Could you tell me a little a bit about how and why you came to the decision engage in these digital productions?
3. Did you receive any funding or in-kind support for the project?
4. How, in your opinion, was [your digital performance/product/service] received by the audiences? And what did you think about the audience response?
5. What were the benefits of [your digital performance/product/service] to you and the other members of the team?
6. What were the benefits to your partner organisations?
7. What other digital initiatives you have introduced during the pandemic and what did they involve?
8. Do you have any other ideas on how to generate income from an online environment?
9. If the coronavirus outbreak will go on for a long time, how do you see the future of your organisation?

Interview questions – Second interview

1. So, it has been over since months since we last spoke. If you think back to that time, could you reflect on the impact that the digital distribution of [your performance/product/service] and trace what has happened since?
    - Results, benefits
    - Impact on organisation level
    - Funding for new projects?
2. How was your digital performance/product received by the audiences? Have you heard any feedback recently from your audience members?
3. Did you notice anything you've done that might have helped to attract larger audiences?
4. Did you conduct audience research?
5. Last time we talked about the different types of value created by the digital distribution of your performance/product, now in hindsight, what do you think was the most important value or benefit?
6. Now when you think back would you have done something differently?]
7. Before the pandemic, you only toured with live shows, has your business model changed now?
8. What are the implications of the pandemic on your organisation and for the future?
9. Will you be continuing with digital programming/hybrid/live only?
10. Have you got ideas for new digital projects and if so, how do you aim to generate revenue from the online environment?
11. How do you see the future of your company beyond Covid?