



**SCHOOL OF
ECONOMICS AND
MANAGEMENT**

**Memorable and Digital:
Exploring Young Audiences Needs for
Cultural Experiences**

Master Thesis in Management

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Master's Programme in Management

MGTN59: Degree Project - Management Challenges

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Submitted June 2nd, 2023

Abstract

This thesis explores the provision of memorable digital cultural experiences (MDCEs) for young audiences, thereby addressing the existing gap in the literature concerning the experience economy, digitalisation in the cultural sector, and memorability of experiences. Based on qualitative in-depth interviews, the research explores cultural consumption trends, uncovers factors contributing to the memorability of cultural experiences, and offers guidance for their application for digital experiences. Ultimately, it provides a framework for designing MDCEs tailored to the needs of young audiences.

Key Words: Cultural Sector, Customers' needs, Digitalisation, Experience Economy, Memorability, Memorable Digital Cultural Experiences (MDCEs), Young Audiences.

Acknowledgements

Completing this thesis would not have been possible without the support and guidance of several individuals. We express our profound gratitude to our supervisor, Ola Matisson, and our MiM classmates, whose essential feedback significantly improved our work. We also extend our thanks to our respondents, who kindly agreed to take part in the research.

Special appreciation goes to our life partners, Patrick Sean Cullen and Hicham El Farissi, who have been our support pillars. Their guidance, patience, and role as our initial readers were instrumental in our progress and the completion of this work.

Last but not least, we are grateful to each other for the patience we expressed to unstoppably emerging ideas, for covering each other's backs when one of us needed rest, for our collaboration and exploration of our unique cultures, and for the eye-opening dialogues we shared.

Glossary

AR: Augmented Reality, a notion describing the tool and experience which extends the boundaries of reality and adds to it.

Cultural Experience: A term representing the intersection of culture and experience, it is defined more comprehensively later in the study.

Culture: Though we delve deeper into its definition later, in this study, we adopt a broad definition of culture ranging from core creative arts such as literature and music to related industries including architecture, fashion, and video games (Throsby, 2008).

Digital: In the context of this study, this term refers to everything related to “electronic technology” (TechTarget, 2021).

Digitalisation: In this research, it refers to the overarching socio-economic digital transformation and its impacts on industries and societies.

Digitalised: This term is used to refer to a blend of physical space and digital technology. In this study, It is used interchangeably with other terms such as “digitally enhanced physical setting”, “Phygital”, “hybrid”, or “mixed”.

Digital Natives: This term is used in this study to denote individuals who have grown up surrounded by technology and consider it an integral part of their everyday lives.

Experience: According to Pine & Gilmore (1999), experiences represent the 4th offering after commodities, goods, and services, and are designed to engage customers in a manner that generates a memorable event. “Commodities are fungible, goods tangible, services intangible, and experiences memorable” (Pine & Gilmore, 1998).

Experience Economy: Term coined by Pine and Gilmore (1999) describing the shift in the market requiring providers to stage experiences for customers as a separate offering.

Experience Realms: Experience provision framework offered by Pine and Gilmore (1999) which serves as part of the theory-based framework of this research.

Interested in Culture: This term denotes a certain level of cultural enthusiasm. An individual interested in culture is a person who shows interest in any type of cultural offering.

MDCE: Memorable Digital Cultural Experience, a central notion of this research, built on theories of experience economy, digitalisation and memorability adapted for the cultural sector.

Memorability: A concept explored extensively in this research, memorability signifies something that leaves a lasting impression and impact on individuals, making it easily remembered.

MTE Scale: Refers to Memorable Tourist Experience scale created by Kim, Ritchie, and McCormick (2012), which serves as part of the theory-based framework of this research.

Needs: This term refers to not only what people require but also their preferences when consuming cultural experiences.

VR: Virtual Reality, a notion describing tools and experiences creating artificial reality.

XR: stands for Extended Reality, a notion often used to encapsulate both virtual reality and augmented reality, technical tools, and experiences.

Young Audiences: In this study, this term represents individuals ranging in age from 18 to 34, spanning “Generations Y and Z” (Desi, 2022). They are considered digital natives in this study.

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1. Introduction

1.1. Background

Eurovision, a music contest and arguably a cultural diplomacy platform, has been ongoing for over 60 years. On this platform, various countries compete live to provide the audience at home with the most **memorable cultural experience** they can give to receive votes from the viewers who have only two hours to choose their favorite performance. Eurovision, as an experience provider itself, tries to stay relevant by extending its experience beyond competition, creating applications, TikTok trends, and applying Extended Reality (XR) technologies on the stage. It creates a phenomenon of blended experience that takes place on stage but targets those staying at home.

This presents an example of an active player in what Pine & Gilmore (1999) described as the **experience economy**, distinguishing experiences from services and claiming them to be the 4th offering. They created a model that framed the process by which experiences are provided, suggesting that enterprises stage the experience for the audience to capture new types of values and that these experiences need to be memorable and engaging. Later proven by Kim, Ritchie, and McCormick (2012); and Rasoolimanesh, Seyfi, Hall, and Hatamifar (2021), **memorability** is a crucial aspect of experience provision, as it leads to an increased likelihood of revisits or recommendations, enhancing their overall value. As Eurovision results show, the most memorable experiences sometimes fail to win, but they create a lasting audience affection for the contestant, extending years after the event (Eurovision TV, 2021). Hence, memorability can not only lead to financial benefits for cultural providers by increasing visitor numbers, but it can also have a significant impact on people.

Digitalisation has significantly broadened access to culture, creating experiences that are both memorable and accessible. For instance, notable projects such as Google Arts and Google Open Gallery have democratized cultural experiences, enabling virtual tours of hundreds of museums since the 2010s. These efforts have allowed people to explore diverse cultures from the comfort of their homes. Similarly, features like Google Street View have revolutionized virtual travel, providing glimpses of cities and countries across the globe. These digital experiences became especially valuable during the COVID-19 pandemic allowing virtual visits to various

locations while staying safe at home. Hence, even traditional cultural institutions in various countries, from museums to theaters, tried adapting to the stay-at-home order and engaging their audiences through offerings such as virtual tours or play recordings to provide cultural experience digitally. Research from the related tourism sector displays that virtual experiences can be valuable to attract audiences and as a lasting offering even after the pandemic (Lu, Xiao, Xu, Wang, Zhang, & Zhou, 2022). The same can be observed through the data collected by The Audience Agency (2022) in the UK, which estimated that the demand for hybrid interactions with cultural institutions is lasting and that economic anxieties will push people to choose entertainment services they can use at home. Hence, providing digital cultural experiences stays highly relevant even after the lockdown. However, the question of what customers need from these experiences remains relevant since anticipating customers' needs is essential for providing experiences (Batat, 2019; Radermecker, 2020).

Although the attention to **customers' needs** has been growing since the 2010s as cultural institutions were trying to get a higher level of visitorship (Ponsignon, Durrieu, & Bouzdine-Chameeva, 2017), these institutions still need to understand what makes their experiences memorable and what their customers need in this era of digitalisation as they still fail to recognise the importance of customers' perspective. It is true that many institutions have made advances to engage visitors by designing specific "experiences" focusing, for instance, on aesthetic experiences (Biehl-Missal & Vom Lehn, 2015) or learning experiences using virtual reality (VR) or augmented reality (AR) technologies (Dede, 2009). Yet, such attempts failed to consider the memorability factors that reflect customers' needs regarding cultural experiences. In this context, John Falk (2006) criticized most data collection conducted by museums, for instance, for its focus on demographics and attendance frequency, arguing that they were not fruitful in understanding the individual experiences of visitors. Similarly, since the cultural sector was heavily affected by the pandemic, Radermecker (2020) emphasized the need to investigate the changes in cultural consumption from the customer's perspective, as they will be the driver for the sector's recovery. She suggests exploring customer loyalty drivers and digital experiences in arts and culture. Thus, while memorability is a powerful tool for customer retention, no research has been conducted on the memorability of digital cultural experiences from the consumer's perspective.

In line with the previously stated, cultural experience providers should develop memorable digital cultural experiences (MDCE) by addressing users' needs. Recognizing these factors will enable them to create experiences that resonate with their users. This approach will help cultural institutions adapt to the digital landscape, ensuring their offerings remain relevant and appealing to users in the long term. Consequently, in the context of the growing emphasis on digital cultural experiences, addressing memorability alongside customers' needs is crucial for cultural experience providers. Doing so can boost engagement, encourage word-of-mouth, increase revisits, strengthen brand reputation, and foster long-term relationships, ultimately contributing to the success and sustainability of cultural institutions.

In this research, the choice has been made to focus specifically on the needs of **young customers** regarding digital experiences. Young audiences, often considered digital natives, have grown up surrounded by technology. They are already experienced in using digital tools and platforms, which can influence their expectations and desires when interacting with digital cultural content. Moreover, they are the future consumers of these cultural institutions, making their opinions and needs crucial for these institutions' long-term success. Therefore, understanding the young audience's needs can provide valuable insights into how digital cultural experiences can be made more memorable.

1.2. Problem Discussion and Research Gap

The rise of digital technology and changing lifestyles have significantly impacted cultural institutions, requiring them to adapt and remain competitive. The COVID-19 pandemic has further accelerated this digital transformation, pushing these institutions to engage audiences through digital channels and tools.

While most of the existing literature emphasized the potential of digital technologies to enhance cultural experiences and the importance of a customer-centric approach in the context of the digital experience economy, a gap was identified concerning the audience itself and a need for a better understanding of their digital needs when it comes to the creation of memorable cultural experience and effectively tailoring these experiences to these specific needs. Indeed, the gap was identified regarding what specifically constitutes a MDCE for young audiences. While post-pandemic research in the digitalisation of culture (Kristensen, Janssen, Myrczik, &

Verboord, 2022) and cultural consumption (Feder, McAndrew, O'Brien & Taylor, 2023) studied cultural practices of the general population through a quantitative approach, analyzing measurements and degrees of consumption, it has not yet addressed the specific needs of young audiences and their perceptions of those experiences. Hence, a qualitative approach is needed to assess these experiences and offer guidance for cultural institutions to design effective digital experiences tailored to the post-pandemic young audiences.

Consequently, the empirical problem this research seeks to address is the **identification of memorability factors** that can shape the **digital experiences** provided by cultural institutions **based on the needs of young audiences**. The chosen research problem will fill the existing gap by gathering customers' needs and provide cultural managers with valuable information to create MDCEs tailored to their audiences.

1.3. Purpose

This research aims to analyze how to develop memorable digital cultural experiences (MDCEs) based on young audiences' needs. To achieve this goal, the study focuses on the following sub-purposes:

1. To develop a framework for designing MDCEs that can be implemented by cultural providers.
2. To collect and describe data on young customers' memorable cultural experiences and their needs when engaging in such experiences.
3. To analyze the data to identify the memorability factors based on young customers' needs regarding digital cultural experiences.

1.4. Research Questions

How can cultural providers develop MDCEs for young audiences in the context of the experience economy and the digital age based on the factors that influence these audiences' memorability of digital cultural experiences?

To answer this main question, the following sub-questions will be addressed:

RQ1: What current trends can be identified regarding young audiences' cultural consumption?

RQ2: What constitutes a memorable cultural experience, and more specifically, a digital cultural experience, based on customers' needs?

RQ3: How can memorable digital cultural experiences be designed?

2. Best Available Knowledge

2.1. Cultural Sector

2.1.1. Cultural Sector: Definition

The cultural industry is a vast and multifaceted domain encompassing a wide range of sectors. Several authors have proposed frameworks to better understand and define the cultural industry and its various components.

The cultural sector is defined as the range of economic activities that involve the creation, production, distribution, and consumption of goods and services that embody cultural, artistic, or heritage value (Throsby, 2001). Throsby (2008) outlines a concentric circles model that classifies the cultural sector into various categories based on the degree of cultural content. The innermost circle of the model represents the core creative arts, which include activities such as literature, music, performing arts, and visual arts. The next circle comprises other core creative industries, including film, museums, galleries, libraries, and photography. The third circle represents the wider cultural industries, such as heritage services, publishing and print media, sound recording, television and radio, and video and computer games. The outermost circle includes related industries such as architecture, advertising, design, and fashion. Throsby (2001) also emphasizes the importance of artistic creation and the supporting industries that enable access to and consumption of cultural content. KEA (2006) and O'Connor (2007) provide a broader view of the cultural industries in their four-circle view, incorporating not only activities connected to heritage, literature, music, entertainment, arts, and media but also related “beneficiary sectors of cultural goods made available via ICTs, such as education and tourism” (ed. Bifulco & Spena, 2021, p.2).

Hence, this wide definition is found to be useful for the premises of this research allowing multifaceted interpretations of culture and cultural experiences.

2.1.2. Customer-Centric View in the Cultural Sector

As the cultural sector sought ways to increase attendance in their spaces, the customer-centered approach has dominated the literature since 2010 (Ponsignon, Durrieu, &

Bouzdine-Chameeva, 2017). For instance, the empirical research of Camarero, Garrido, and Vicente (2015) demonstrates that this orientation positively impacts museums' market and economic performance. Simultaneously, customer orientation has become widely associated with experience design as a tool for providing lasting impressions to visitors.

Ponsignon, Durrieu, & Bouzdine-Chameeva (2017) developed a framework for experience design based on quantitative analysis to create a “unique” experience that connects the design's intentions with the customer's realization within a cultural setting. This approach, based on touchpoints, customer journey, and both social and physical environments, had not been taken before, as it investigates both organizational and visitor perspectives. However, in this framework, only applied to physical experiences, the visitor's perspective is relatively passive and only used within the specific experience.

To understand museum visitors' experiences, John Falk (2006) suggests examining people's identities, needs, and motivations related to the setting. He develops a set of customer profiles based on their identity and motivation to attend the museum, ranging from those who came because it is socially required to those who came to accompany others. He argues that employing this approach can help design experiences better since these profiles allow museums, and by extension, cultural institutions, to tailor their offerings and experiences to the unique motivations and needs of their visitors, enhancing satisfaction and overall engagement. While this research is considered valuable as it draws attention to customers' needs, it remains limited since it is tied to physical settings.

Bifulco and Spina (ed. 2021) also focus on customer insights, engagement, and analysis, highlighting the importance of a customer-centric approach. They advocate for using customer data and analytics to understand visitors' needs and employing digital technologies to receive real-time feedback and evaluation for further optimization of their offerings.

2.2. Digitalization in the Cultural Sector

Digitalization has brought about significant changes in various industries, and the cultural sector is not an exception. For instance, digital technologies, such as VR, AR (Carrozzino & Bergamasco, 2010; Dede, 2009; Shehade & Stylianou-Lambert, 2020; Leopardi, Ceccacci,

Mengoni, Naspetti, Gambelli, Ozturk, & Zanolli, 2021), interactive tablets, or games (Giddings, 2015), have been increasingly employed by museums and other cultural institutions to create immersive experiences for visitors allowing them to explore and engage with cultural artifacts in new and innovative ways.

According to Bifulco and Spina (ed. 2021), “culture is a tool for social integration and territorial cohesion [...] and technologies are seen as agents spurring the economic and social potential at the foundation of cultural industry development” (p.2). They examine the challenges and opportunities of the digital era for cultural institutions, focusing on the transformative potential of technology to enhance audience engagement and reshape marketing strategies allowing organizations within this sector to remain relevant, innovative, and competitive. They emphasize the importance of adapting to the digital landscape, as it allows organizations to develop innovative experiences and reach previously unengaged audiences. The authors discussed successful digital initiatives in museums and cultural institutions, such as AR, VR, and mobile apps, highlighting the need for a user-centered approach to digital transformation. They also addressed marketing challenges in the digital age, emphasizing the importance of adapting marketing strategies to the evolving media landscape, leveraging social media, content marketing, and data-driven decision-making to engage target audiences effectively.

The rise of digital technologies has led to new ways of creating, distributing, and consuming cultural content and new opportunities for audience engagement and cultural preservation. Several authors have explored the impact of digitalization on the cultural industry, highlighting both the challenges and opportunities it presents. Kidd (2014) explores the role of digital media in transforming cultural institutions such as museums and argues that digital technologies have changed how these institutions operate and how their audiences perceive them. She suggests that digital media can help cultural institutions become more inclusive, participatory, and relevant, enabling them to reach new audiences and foster deeper connections with their visitors. Fletcher and Lee (2012) argue that digital marketing strategies, such as social media marketing, can help cultural institutions, specifically museums, effectively promote their offerings, reach, engage with, and retain their target audiences. Other authors have proven the efficiency of immersive technologies on visitor engagement. According to Carrozzino and Bergamasco (2010), these technologies have the potential to effectively communicate cultural

content by captivating audiences, particularly younger individuals who are more accustomed to new media. They can also evoke emotional responses in visitors, enriching their understanding and associations with cultural sites and provoking lasting transformations (ed. Micieli-Voutsinas & Person, 2021). Shehade and Stylianou-Lambert (2020) also revealed several advantages of using digital technologies in museums specifically, including visitor engagement through immersive storytelling, improved accessibility for online visitors and those with disabilities, and contributions to educational goals.

2.3. The Experience Economy

2.3.1. Staged Experience Design

This research aims to analyze the development of MDCEs based on young audiences' needs. To comprehend the concept of experience, the theoretical background of this research is built on the theories of the experience economy, first introduced by Pine and Gilmore (1999). The experience economy posits that businesses can now create value by offering unique and “memorable” experiences to their customers rather than simply providing goods or services. Memorability and engagement with the company create value, and these characteristics become central to the notion of experience as an offering. This shift in focus has significant implications for cultural institutions that can remain relevant and competitive by creating memorable experiences for their visitors.

Pine and Gilmore (1999) propose that businesses can “stage” experiences within four realms: **(1) educational, (2) entertainment, (3) esthetic, and (4) escapist**. Each realm represents a different way that experiences can be designed and delivered to engage customers differently. They add that each experience can engage customers on four key dimensions representing their level of involvement: **active vs passive participation and immersion vs absorption**.

Pine and Gilmore (1999) present passive participation as a dimension where customers act as observers or listeners without directly influencing the experience, which can include attending a performance or event as an audience member. In contrast, they explain that active participation involves customers actively contributing to the experience as they play an active

role, affecting the outcome or participating in the creation of the experience. They give the example of skiers actively participating in creating their own skiing experience. The third dimension, absorption, relates to the depth of mental engagement and attention that customers devote to the experience, which occurs when the experience captivates their minds and occupies their thoughts (Pine & Gilmore, 1999). Watching TV or listening to a lecture are examples of absorbing experiences, according to the authors. Finally, immersion focuses on customers' physical or virtual involvement in the experience itself, enabling them to become part of it, blending the boundaries between reality and the designed environment (Pine & Gilmore, 1999). This can include playing a VR game or being present at a sports event and feeling the atmosphere (Pine & Gilmore, 1999).

Pine and Gilmore (1999) argue that educational experiences, characterized by active participation and absorption, involve sharing information or knowledge with consumers, helping them learn and grow, while entertainment experiences, involving passive participation and absorption, focus on providing amusement or pleasure to consumers and engaging them emotionally. On the other hand, esthetic experiences, considered passive and immersive, appeal to the senses, offering visually or audibly pleasing environments for consumers to explore, and escapist experiences, characterized by active participation and immersion, allow consumers to immerse themselves in a different reality, temporarily leaving their daily lives behind (Pine & Gilmore, 1999).

In the context of this research, cultural institutions such as museums, art galleries, and theaters can utilize these realms to develop innovative strategies for creating memorable experiences tailored to the diverse needs of various audiences to attract and retain them. Hence, the experiences mentioned by respondents can be classified according to the above-mentioned realms of experiences.

Experience Design Factors		
Memorability	Absorption	Education: Sharing information or knowledge with consumers, helping them learn and grow (Pine & Gilmore, 1999)
	Passive Participation	Entertainment: Providing amusement or pleasure to consumers (Pine & Gilmore, 1999)
	Immersion	Esthetic: Offering pleasing environments for consumers to explore utilising sensory stimulations (Pine & Gilmore, 1999)
	Active Participation (Interactivity)	Escapism: Immersing customers in a different reality, temporarily leaving their daily lives behind (Pine & Gilmore, 1999)
		Education: Sharing information or knowledge with consumers, helping them learn and grow (Pine & Gilmore, 1999)

Table 1. Framework elaboration: Staged experience design based on Pine and Guilmore’s (1999) realms of experiences

2.3.2. Digital Experiences

Consumers have digital experiences whenever they interact with digital tools. This type of experience has recently become a focus of studies within the experience economy, as digitalisation drives the transformation of products into digital experiences (Batat, 2019). Digital experiences are perceived to be different from regular ones as they are more convenient, enable better buying decisions, and are less thought-consuming (Batat, 2019). However, Batat (2019) stresses that these qualities expose only quantifiable measures of digital experiences, as she stresses that what makes them unique is their “social-materialic” nature. She explains that digital experiences make geographic and temporal constraints irrelevant since they connect people and brands globally and can recreate the past or future; they enable interactivity; and they can recreate people’s imagination in ways no physical form can (Batat, 2019).

However, the ultimate digital experience happens when consumers experience the “flow” (a notion established in psychology by Mihaly Csikszentmihalyi in 1975), which is achieved through flawless web interaction and immersion of consumers in the offering (Bilgihan, Okumus, Nusair, & Bujisic, 2014; Batat, 2019). Experiencing flow in a digital context leads to

increased purchases and more time spent on the webpage (Bilgihan et al., 2014; Batat, 2019). The flow is an ultimate experiential feeling leading to customer loyalty and is also influenced by various antecedents, as demonstrated in studies on the e-commerce flow experience (Bilgihan et al., 2014) and mobile gaming shows (Su, Chiang, Lee & Chang, 2016). However, no such research has been done on cultural digital experiences. The flow happens during an experience and can influence memorability, but is not synonymous with it. Flow plays such an important role in digital experience studies as it increases purchases in the present. However, the ultimate goal of cultural experience providers is not only economic; it is to make cultural information accessible and transmittable to increase cultural awareness, thus making it memorable and impactful for consumers.

2.3.3. Memorability of Experiences

Pine and Gilmore (1999) claim that experiences should be engaging and memorable, however, they do not precisely define memorability, emphasizing engagement instead. As an essential attribute of experience provision, positive memory can increase the likelihood of further interactions with a company. Such a relation was assessed in the field of tourism, where memorable experiences increase the chances of revisiting a site (Kim, Ritchie, & McCormick, 2012; Rasoolimanesh et al., 2021).

This research explores memorable cultural experiences, however, there is no established definition for it either. The closest one is taken from tourism literature, specifically the **Memorable Tourist Experience (MTE)**. First defined by Kim, Ritchie, and McCormick (2012), MTE is seen as a constructed individual process as they state that “an MTE is selectively constructed from tourism experiences based on the individual’s assessment of the experience”(p.13) They highlight that its subjective nature creates a disparity between the experience at the time and setting of its provision and the memorable experience over time. Hence, subjective markers must also be defined to understand the nature of experience memorability. Further, Kim, Ritchie, and McCormick (2012) also developed a scale for assessing MTE, which includes (1) **novelty**, (2) **hedonism** (feelings and satisfaction), (3) local culture (quality of contact with a local culture), (4) **refreshment**, (5) **meaningfulness** (personal meaning), (6) **involvement**, and (7) **knowledge**. These elements were suggested for use by destination managers in experience design.

Several empirical studies have been conducted to define and prove the MTE scale, and so far, this scale has been validated multiple times (Rasoolimanesh et al., 2021). The same dimensions were tested on a cross-cultural level (Kim & Ritchie, 2014), making it applicable to diverse subjects. Further development of this framework and its specific application to cultural heritage tourism was conducted in destination marketing studies (Rasoolimanesh et al., 2021), exploring how memorability of experience influences the “electronic word of mouth”, thus increasing the likelihood of online recommendations for destinations. Additionally, they focused on visitors’ engagement, authenticity, and destination image as drivers of MTE, demonstrating through a mixed-method approach that such a connection exists. Engagement is essential to any experience but is too broad to be considered separately as a factor, while destination image is too specific for the tourism sector and does not present interest for this study. However, **authenticity** was considered as a relevant factor since it is particularly essential to experience memories, as suggested by Rasoolimanesh et al. (2021). According to Rasoolimanesh et al. (2021), authenticity is a feeling of cultural connection that tourists experience and their understanding of specific cultures encapsulating intangible and tangible elements. At the same time, Rasoolimanesh et al. (2021) emphasized the context-dependence of MTE when describing other possible factors, as some can be excluded or included in such measurements. For instance, the MTE scale by Kim, Ritchie, and McCormick (2012) initially included 85 items before being reduced to 7.

However, no such definition or factors have been developed specifically for cultural experiences. The only mention was found in a paper by Fan, Tsaur, Lin, Tsa, and Chang (2022), where the scholars identified the relationship between the intercultural competence of tourists and memorable cultural experiences, stating that higher cultural competence increases the likelihood of memorable cultural experiences and active participation. In that study, cultural experience is not defined, leading to the assumption that it is understood as contact with local culture through touristic activities. Additionally, memorable cultural experience is mentioned interchangeably with tourist experience.

Consequently, the aforementioned studies will serve as complementary references for understanding how the memorability of experience can be defined and interpreted. The MTE framework offered by Kim, Ritchie, and McCormick (2012) will be used to interpret the

meanings interviewees provide about their cultural experiences and tested accordingly, with attention also given to the other mentioned antecedents of memorability.

Experience Design Factors	
Memorability	Absorption Education or Knowledge: Sharing information or knowledge with consumers, helping them learn and grow (Pine & Gilmore, 1999; Kim et al., 2012)
	Passive Participation Entertainment or Hedonism: Providing amusement or pleasure to consumers (Pine & Gilmore, 1999). <i>Giving them a feeling of excitement and satisfaction (Kim et al., 2012)</i>
	Immersion Esthetic: Offering visually or audibly pleasing environments for consumers to explore (Pine & Gilmore, 1999)
	Active Participation or Involvement (Interactivity) Escapism or Refreshment: Immersing customers in a different reality, temporarily leaving their daily lives behind (Pine & Gilmore, 1999). <i>Giving them a sense of freedom, liberation, and revitalization (Kim et al., 2012)</i>
	Education or Knowledge: Sharing information or knowledge with consumers, helping them learn and grow (Pine & Gilmore, 1999; Kim et al., 2012)
	Novelty: <i>Providing unique and different experiences (Kim et al., 2012)</i>
	Meaningfulness: <i>Allowing visitors to engage in meaningful and important experiences and to learn about themselves while doing so (Kim et al., 2012)</i>
	Authenticity: <i>Feeling of cultural connectedness, along with an understanding of specific cultures, that visitors achieve while engaging in an experience (Rasoolimanesh et al., 2021)</i>

Table 2. Framework elaboration: Integration of Kim, Ritchie, and McCormick’s (2012) MTE factors and Rasoolimanesh et al.’s (2021) authenticity factor

2.3.4. Customers’ Needs

Pine and Gilmore’s theory has several limitations, even though it was widely used as a tool to classify experiences (Radder & Han, 2015). Alexiou (2020) identified three generations of the experience economy. While Pine and Gilmore’s (1999) approach gives more control over experience provision to the company, subsequent generations developed theories based on the idea of co-creation between businesses and customers (second generation), and further, on co-creation among customers themselves, which Alexiou (2020) referred to as the “third

generation.” Consequently, recent experience design has paid much more attention to the customers’ role and interaction between customers in realizing the experience (Batat, 2019; Alexiou, 2020). These findings allow to deepen the classification of experience by shifting the focus from the experiential offering to the process through which it is realized.

One of the biggest limitations of experience economy theories is the lack of explicit narrowing of the notion of “experience”. The applicable meaning was found in the domain of User Experience (UX) research, where experience is identified in relation to the response to users’ needs, values, and desires (Hassenzahl, Diefenbach & Göritz, 2010). The authors argued that though each experience is unique and can not be fully replicated, experiences can be categorized according to the needs they fulfill. They also stated that positive interactions with technology come from the realization of individual needs. Hence, the concept of **needs** seems to be central in the further analysis of experiences.

At the same time, as this research focuses mostly on customers’ perception of experience, it is important to distinguish between “intended” and “realized” experiences. The former refers to the design of experience by the organization, while the latter refers to its perception by the consumer (Ponsignon, Durrieu, & Bouzdine-Chameeva, 2017). Although the “realized” experiences are the main concern of this research from a methodological point of view, the intended result is to design a framework that would help organizations design experiences tailored to the consumer’s needs.

Batat (2019) also expanded Pine and Gilmore's theories focusing on a marketing perspective and customer relations, putting the customer at the center of experience creation. This puts her into the frames of the second generation, where the customer is at the center of experience creation. She offered a framework that focuses on experiential thinking underlining that experiences are the overall sensory and emotional interactions that customers have with an organization. In this line of thought, she highlights the importance of “empathy capital,” a concept that describes an organization's ability to understand and empathize with its customers’ needs, desires, and emotions. Batat (2019) also emphasizes “emotional touchpoints,” which are the various points of interaction between customers and organizations that evoke emotional responses and create memorable experiences. This suggests that senses and emotions are crucial elements in experience design, alongside the other factors previously identified.

Experience Design Factors	
Memorability	Absorption Education or Knowledge: Sharing information or knowledge with consumers, helping them learn and grow (Pine & Gilmore, 1999; Kim et al., 2012)
	Passive Participation Entertainment or Hedonism: Providing amusement or pleasure to consumers (Pine & Gilmore, 1999). Giving them a feeling of excitement and satisfaction (Kim et al., 2012)
	Immersion Esthetic: Offering visually or audibly pleasing environments for consumers to explore (Pine & Gilmore, 1999)
	Active Participation or Involvement (Interactivity) Escapism or Refreshment: Immersing customers in a different reality, temporarily leaving their daily lives behind (Pine & Gilmore, 1999). Giving them a sense of freedom, liberation, and revitalization (Kim et al., 2012)
	Education or Knowledge: Sharing information or knowledge with consumers, helping them learn and grow (Pine & Gilmore, 1999; Kim et al., 2012)
	Novelty: Providing unique and different experiences (Kim et al., 2012)
	Meaningfulness: Allowing visitors to engage in meaningful and important experiences and to learn about themselves while doing so (Kim et al., 2012)
	Authenticity: Feeling of cultural connectedness, along with an understanding of specific cultures, that visitors achieve while engaging in an experience (Rasoolimanesh et al., 2021)
	<i>Senses and Emotions: Evoke emotional responses to create memorable experiences and empathy with customers' needs (Batat, 2019)</i>

Table 3. Framework Elaboration: Integration of Batat’s (2019) Sensory and Emotional Factor

2.4. Theory-Based Framework

A theory-based framework for creating memorable cultural experiences has been developed from the literature. This framework integrates insights from various authors, including Pine and Gilmore (1999); Kim, Ritchie, and McCormick (2012); Rasoolimanesh et al. (2021); and Batat (2019). While the first three authors did not originally design their frameworks for digital experiences and did not explicitly address digitalization, their relevant factors were extrapolated from physical to digital experiences. The applicability of these factors in the digital realm will be validated through data collected from qualitative interviews. This theory-based framework will also serve as a guide for interpreting the meanings that interviewees provide about their experiences. It will provide the basis for the final framework for creating MDCEs that

cater to the young audiences’ needs, incorporating new factors derived from the interviewees’ insights.

Overall, Pine & Gilmore (1999) suggested designing memorable experiences within four realms: Educational, Entertainment, Esthetic, and Escapist, to cater to varying visitor interests. These realms are based on four dimensions: immersion, absorption, active participation, and passive participation. Certain components of Kim, Ritchie, and McCormick’s (2012) MTE items, including novelty, hedonism (feelings and satisfaction), refreshment, meaningfulness, involvement, and knowledge, were integrated and combined with Pine and Gilmore's realms. Rasoolimanesh et al.’s (2021) relevant authenticity factor was also added to this framework. Lastly, Batat (2019) underlined the importance of creating sensory and emotional experiences by evoking emotional responses and empathizing with customers’ needs, further enriching the framework with the last factor.

Experience Design Factors	
Memorability	Absorption Education or Knowledge: Sharing information or knowledge with consumers, helping them learn and grow (Pine & Gilmore, 1999; Kim et al., 2012)
	Passive Participation Entertainment or Hedonism: Providing amusement or pleasure to consumers (Pine & Gilmore, 1999). Giving them a feeling of excitement and satisfaction (Kim et al., 2012)
	Immersion Esthetic: Offering visually or audibly pleasing environments for consumers to explore (Pine & Gilmore, 1999)
	Active Participation or Involvement (Interactivity) Escapism or Refreshment: Immersing customers in a different reality, temporarily leaving their daily lives behind (Pine & Gilmore, 1999). Giving them a sense of freedom, liberation, and revitalization (Kim et al., 2012)
	Education or Knowledge: Sharing information or knowledge with consumers, helping them learn and grow (Pine & Gilmore, 1999; Kim et al., 2012)
	Novelty: Providing unique and different experiences (Kim et al., 2012)
	Meaningfulness: Allowing visitors to engage in meaningful and important experiences and to learn about themselves while doing so (Kim et al., 2012)
	Authenticity: Feeling of cultural connectedness, along with an understanding of specific cultures, that visitors achieve while engaging in an experience (Rasoolimanesh et al.,2021)
	Senses and Emotions: Evoke emotional responses to create memorable experiences and empathy with customers’ needs (Batat, 2019)

Table 4. Theory-Based Framework

3. Methodology

3.1. Research Design

This research aims to analyze how to develop memorable digital cultural experiences based on young audiences' needs regarding their cultural digital consumption practices. For that purpose, an exploratory approach is applied. To explore the suggested phenomenon in depth, it has to be studied without explaining the predisposed notions of “experience”, “culture”, or even “digital” as they can limit the varieties of meanings and ways in which selected audiences experience culture. Hence, qualitative methods have been chosen as they allow to grasp these varieties of meanings and experiences while minimizing any predetermined biases that might be imposed on the participants' responses by the researchers, which will allow them to describe their experiences in their own words and give their own definitions. This approach also enables in-depth insights collection and allows us to see the phenomenon of cultural experience from its customers' point of view, hence reinforcing the established purpose and research questions.

As qualitative research can be done in various forms, such as ethnographic observation or case studies, this research has opted for in-depth semi-structured interviews as its main method. Given that this research investigates the memorability of specific experiences, it seems more relevant to interview selected participants after they have had the experience, rather than observe their behavior in the setting. In the same way, since this research covers the global phenomenon of digitalisation in the cultural sector, a case study might also limit this research to a particular setting, limiting the respondents to predisposed meanings of space or event, as their insightful memorable cultural experience can be unique and outside of specific cases. The semi-structured approach was also chosen deliberately, as it ensured that the interviews will provide answers to the formulated research questions. The interview process will be described further in the Data Collection section.

The research based on the interpretation of qualitative data needs both a deep understanding of the contexts in which the explored phenomenon happens and open-mindedness towards the aspects going outside of established assumptions. Consequently, abductive reasoning was chosen as a research strategy. Abductive reasoning is rooted in a predisposed understanding of the existing contexts within which the research operates and enables the researcher to question

selected groups with open-mind, allowing the group to use their own language and meanings regarding the explored problem and the researcher to adapt it accordingly (Bryman, 2016). Consequently, this research first analyzed literature to create an initial framework, followed by data collection through semi-structured interviews, and then extracted both theory-based and new emerging themes, consequently leading to the readjusting of the pre-established framework.

3.2. Theory Choice

The theories employed in this research were selected based on their relevance to the research purpose and their availability. Research on the experience economy (Pine & Gilmore, 1999; Batat, 2019) and on memorable tourist experiences (Kim, Ritchie, & McCormick, 2012; Rasoolimanesh et al., 2021) provided the necessary memorability factors as initial themes for data analysis. These theories allowed the development of a theory-based framework. At the same time, some theories were deliberately excluded from the framework during the research development process, such as Batat's (2019) experiential marketing through the 7Es framework, which was used only partially, and Falk's (2006) profiles of museum visitors, as they did not align with the established research purpose and supposed the design of a more complex framework. Similarly, the research on experience flow (Bilgihan et al., 2014) was left out of the framework as it does not represent the memorability of digital experiences but rather its execution and deserves further investigation. Destination image and engagement as factors of memorability, offered by Rasoolimanesh et al. (2021), were also excluded from the framework as the first one is too specific for the tourism sector and was not salient in the findings, and the second one is expectable out of any experience (Pine & Gilmore, 1999) and thus is not distinguished as a separate factor.

3.3. Empirical Data Collection

3.3.1. Sampling Selection

In light of the chosen research questions and design, which called for conducting semi-structured interviews, the next step was to select the interviewees. Since the research addresses a global phenomenon, the target audience was not geographically limited. However, some limitations of the sample were entailed in the research purpose and questions, thus leading

to the application of purposeful sampling (Bryman, 2016). The research questions and purpose suggested two sampling criteria: age, as the young audiences are the target of this research, and interest in culture, as the study asks about the cultural experiences of these young audiences.

The “young audience” was broadly defined as individuals between 18 and 34 years old who have grown up surrounded by technology. Our inspiration for this age grouping came from the Cultural Habits Survey (Statistics Denmark, 2022), which used two age groups, 16-24 and 25-34, covering our target audience. It was ultimately decided to combine these two age groups. The lower age limit was chosen to ensure that participants could provide informed consent to participate in the interview, while the upper age limit was determined based on the aforementioned survey.

The second criterion was “Being interested in culture”, as it could suggest some level of participation in cultural consumption. This criterion was chosen based on the research purpose to explore the memorability of cultural experiences. Thus, it was necessary for the interviewed young individuals to show some level of cultural interest to be exposed to various memorable cultural experiences.

The interviewees were sourced through calls for participants on social media platforms, through the researchers’ personal profiles and in culture-themed online communities. Additionally, some interviewees were selected through a network of fellow students and acquaintances. To truly explore this global phenomenon, the maximum variation criterion (Bryman, 2016) was used for the geographical background. In total, 18 people were interviewed between the ages of 18 and 33, representing 13 different countries of origin. Out of these, 14 experienced living abroad, with nine currently residing outside of their home country, while four never lived outside of their country of origin. This ensured that a broad diversity of insights would be presented, effectively broadening the scope of the gathered data and reaching data saturation.

	Participant	Education/Occupation	Origin	Residence	Lived abroad	Age	Gender
1	P1	Social Entrepreneurship	Ireland	Denmark	Yes	29	M
2	P2	IT Consultant	Latvia	Latvia	Yes	28	M

3	P3	Communications	Denmark	Denmark	Yes	24	F
4	P4	Business Administration	Ukraine	Denmark	Yes	19	F
5	P5	Marketing	Ukraine	Germany	Yes	22	F
6	P6	Software engineer / Front and web developer	France	France	Yes	31	M
7	P7	Digital marketing specialist	Morocco	Sweden	Yes	29	F
8	P8	IT Student	Italy	Italy	Yes	21	F
9	P9	Numerical Science Student	Morocco	France	Yes	20	F
10	P10	Commercial for a cherry tomatoes producer and exporter	France	Morocco	Yes	32	F
11	P11	Orthoptist	Spain	Spain	No	27	F
12	P12	Aeronautics engineer	Turkey	Turkey	Yes	33	M
13	P13	Consultant in an E-Procurement firm	Belgium	Belgium	Yes	30	M
14	P14	Student of Political Science and Ethics	USA	Germany	Yes	21	M
15	P15	Student of Economics	Ukraine	Germany	Yes	18	F
16	P16	IT Student	France	France	No	23	M
17	P17	Professor and Marketing Specialist	Egypt	Egypt	No	30	F
18	P18	Dermatologist	Tunisia	Germany	Yes	31	F

Table 5. Respondents and their backgrounds

3.3.2. Interviews

As described in the Research Design, the data collection was conducted through the means of semi-structured interviews. The questions were open-ended and avoided using notions that may interfere with the personal interpretation of cultural experience, as memorable experiences are always individually constructed (Kim, Ritchie, & McCormick, 2012). All interviews were conducted in English, via Zoom, and were recorded. Several pilot interviews were conducted, revealing the limitations of the initial interview guide. The resulting changes ensured that the questions would provide answers to the research questions, reflect the theoretical background, and, at the same time, not bore respondents.

As the nature of the studied phenomenon can be complex, given that respondents might simply not have engaged with digital cultural experiences or struggle to recall them, the interview was designed to ensure a variety of responses, generalizability, and validity, and at the same time to ensure that respondents would provide insights for the research questions. Therefore, the interview process consisted of two parts: a collection of memorable experiences and experiencing through visual elicitation (Sage, 2023).

Collecting Memorable Experiences

The main objective of this part of the interview was to ask participants to recall memorable physical and digital cultural experiences. It consisted of three main blocks (a detailed guide is provided in Appendix 1):

- ***Perception of culture and cultural experience***: This block had several purposes. (1) By starting with a general question, reflection on the topic of culture was encouraged, establishing touchpoints for further conversation. (2) It allowed us to collect the meanings of culture and cultural experience, as well as stories about memorable experiences. Hence, this first block enabled the collection of data for RQ1 and RQ2.

- ***Cultural experiences and consumption (During COVID-19)***: This block was included in the interview guide as it was anticipated that respondents might face challenges recalling memorable digital cultural experiences, and assumed that their interest in culture would push them to seek digital experiences during the lockdown. At the same time, it provided insights into the limitations of digital experiences and attitudes towards them, responding to RQ1, RQ2, and RQ3.

- ***Cultural experiences and consumption (Post-COVID-19)***: This block enabled to see how forced digital interaction influenced cultural consumption after the lockdown, reinforcing insights from previous blocks and exposing current trends and needs, providing answers to RQ1, RQ2, and RQ3. As Ukrainian respondents had difficulties remembering the COVID-19 times, they were also asked to reflect on their cultural consumption after the full-scale invasion, as migration may have impacted their experiences.

Closing-up questions allowed to delve into participants' thoughts about the digitalisation of culture. This aimed to provide us with insights into how these young audiences perceive the

integration of digital elements in cultural experiences, complementing the answers to RQ1, and helping to further understand the trends and potential challenges associated with the digitalization of cultural experiences.

To dive deeper into the participants' perspectives and identify the memorability factors based on their actual needs, the follow-up question "why" was asked whenever a general statement was made, allowing us to uncover underlying specific information. Moreover, participants were encouraged to provide specific examples for a discussed topic in case their statements were too vague.

Visual Elicitation

Subsequently, to deepen the insights, the visual elicitation technique was employed (Sage, 2023) as it involves showcasing visual material relevant to the research to stimulate the participants' imagination and foster further discussion. While in the first part of the interview, participants were asked to "remember", in this part, they were asked to "experience". This is especially valuable given that such wide categories as cultural experiences can be hard to define, and it might be difficult for respondents to give other examples of digital cultural offerings, especially if they have never encountered them previously. The use of visual elicitation proved to be fruitful as it encouraged respondents to recall more experiences, reflecting on their needs regarding digital cultural experiences. This part was designed to solicit answers for ***RQ3. How can memorable digital cultural experiences be provided?***

Digital experiences were selected based on the examples offered by Batat (2019), which include websites and social media pages. These platforms present "phygital" experiences that connect customers to real-world institutions through digital means. Museums were selected as an example of these digital offerings. This choice was made based on availability, as museums have been using varieties of digital tools and can provide examples of different digital offerings.

The process comprised three parts: First, participants evaluated museum websites and Instagram pages (the Louvre in Paris, the MoMA in New York, and the David Collection in Copenhagen), allowing them to gather insights into their needs when they interact with these types of digital experiences. However, these examples could also be limiting, as described in the discussion of the validity of the results.

Secondly, participants explored various museums' online offerings. Following the results of pilot interviews, the visual materials, which initially represented three examples of the same phenomenon, virtual tours in museums ([the National Museum of Denmark](#), [the Natural History Museum of Denmark](#), and [the MET in New York](#)), were altered to provide examples of four different experiences referring to Pine and Gilmore (1999) realms:

1. [Video-essay](#) - passive, learning and esthetic, absorption
2. [Twitter page with art memes](#) - passive, entertainment, absorption.
3. [Louvre virtual tour](#) - active, escapist, esthetic, immersion.
4. [World Museum tour](#) - active, learning and entertainment, absorption.

Lastly, participants were asked to watch video commercials about digitalized physical (or phygital) experiences. These included [the Immersive Art and Music Dome Park](#) proposed by Wisdome in LA, USA, [the Hiroshima Peace Memorial virtual reality experience](#) in Hiroshima, Japan, [the Studio Play by the Cleveland Museum of Art](#), USA, and [the Meet Vincent van Gogh experience](#) by the Van Gogh Museum in Amsterdam, Netherlands. These videos summarized the overall experience of the exhibitions, thus, the participants' reactions to them provided valuable insights into their needs and the effectiveness of digital tools in meeting their expectations.

3.4. Data Analysis

Given that all interviews were recorded and researchers were facing significant time constraints, the interview transcription was done using AI tools. The original audio file was consulted to ensure accuracy in the developed transcripts.

Followingly, the data was manually coded through several stages of thematic analysis. The themes were provided by the research questions and the theory-based framework consisting of memorability factors. To initiate the coding process, the answers were divided and grouped into themes as "experiences" (consisting of stories respondents share about memorable cultural experiences they have had or experienced during the visual elicitation) and characteristics of consumption (gathering their habits and perceptions). Then all responses were transferred to an Excel sheet where each row consisted of answers in the form of quotes and columns representing identified themes. Initially, the quotes were assigned theory-based codes, for instance, if the answer was interpreted as responding to a previously identified memorability factor. However, if

the answers were providing additional information, a new column with a new factor would appear and all previous answers would be checked to identify if it corresponds to the new factor. After all the codes were assigned, the answers were filtered according to the factor and compared to each other. The comparison took into account the diversity of factors as well as types of experiences (digital, physical or mixed). The results of this comparison will be presented further in the findings section. These findings will be displayed in the form of memorability factors, illustrated by corresponding quotes and their interpretation. Presented in a narrative format, this style of presentation aims to enrich the reading experience, transforming the exploration of these findings into an engaging journey. The transcripts of interviews are available upon request.

3.5. Validity of the Results and Reflections on Methods

This research explores the phenomenon of digital cultural experiences and what influences their memorability among young audiences. Since this phenomenon has not been previously described in the literature, a qualitative approach was chosen as its research strategy.

Like any qualitative research employing elements of maximum variation sampling (Bryman, 2016), this research lacks statistical representativity and does not fit criteria applicable to quantitative methods. However, regarding other qualitative design approaches, a cross-sectional study (Bryman, 2016) was chosen to provide the generalizability of the research. To explore the broad and global phenomenon of digital cultural experiences, responses had to be heterogeneous; hence, a case study would have limited the research to a particular surrounding, and ethnography would not have corresponded to the research purpose given its focus on memorability which requires temporal distance from the events. Moreover, this research used maximum variation geographical sampling (Bryman, 2016) to extrapolate the results on the global young population.

Despite these measures, certain limitations of its generalizability exist. Since the research concerns the memorability of experiences among youth, the results cannot be generalized to the population outside of the defined age group, thereby implying limited external validity (Bryman, 2016).

4. Findings

This chapter presents the findings of our study, which were obtained through the analysis of qualitative data collected from interviews with young people interested in culture. Our objective was to gain insights into their needs related to their memorable cultural experiences in general and digital cultural experiences specifically and answer the following main research question: How can cultural providers develop memorable digital experiences for young audiences in the context of the experience economy and the digital age, based on the factors that influence young audiences' memorability for digital cultural experiences?

To address this research question, the three following sub-questions were proposed:

RQ1: What current trends can be identified regarding young audiences' cultural consumption?

RQ2: What constitutes a memorable cultural experience, and more specifically, a digital cultural experience, based on customers' needs?

RQ3: How can memorable digital cultural experiences be provided?

The organization of this findings chapter is designed to address these sub-questions in a sequential manner. The answer to RQ1 will be provided in section 4.1 titled "Trends in Cultural Experiences Consumption", while section 4.2 about "Memorability Factors and Their Digital Applications" will answer RQ2. RQ3 will be addressed in the section 5.1, "Discussion of the Results", where the suggested framework for designing memorable digital cultural experiences will be presented in relation to the previously discussed theories.

4.1. Trends in Cultural Experiences Consumption

4.1.1. Perception of Culture and Cultural Experience

The **perceptions of culture** varies as revealed in the interview responses, ranging from its educational aspect, as one interviewee emphasized, *"To me, culture is a way to gain knowledge about history and past events, as well as to learn new things in general"* (Informant #6), to forming identities and ways of life as another one stated *"I think culture is [...] what forms our identity"* (Informant #7). The perception of culture extends to food, language, social practices, and local productions as one participant noted: *"I think about culture like country's*

culture whether it's food or music or different productions, cultural productions.” (Informant #8). Another interesting perspective emerges from Informant #10 who saw culture as having dual significance: the culture of people or their way of living, and cultural events. This participant further emphasized the role of culture in bringing people together and opening minds, stating, *“I think it brings people together. It's a moment of sharing, and it can really open a bit your mind.”*

Cultural experiences, on the other hand, are often associated with exposure to other traditions and people from different cultures, traveling, and attending cultural events and festivities. Indeed, one participant related cultural experiences to *“getting to know [...] other traditions of different cultures... It's traveling for me, [...] it's cultural events”* (Informant #7). A second interviewee stated: *“For me, it means the interaction between different people from different cultures.”* (Informant #12). Another participant added: *“It could be like traveling abroad and experiencing something new.”* (Informant #13). Talking about something new, the cultural experience also entails discovering new concepts as stated by a participant: *“First thing that comes to my mind is something new, something I've never done. It's like I discover a concept”* (Informant #10), and escaping from reality *“It's something that I don't see every day. I want to escape from my routine. So everything that kind of help me do so, it's for me a cultural experience.”* (Informant #10).

These perceptions provide initial indications regarding the characteristics of memorable cultural experiences that will be further developed.

4.1.2. Influence of the Hybrid Order

The digital transformation, accentuated by the COVID-19 pandemic, impacted peoples' daily lives, reshaping fundamental routines like work habits. For many, the digitalization of work became the new norm, as one participant pointed out: *“So my job is quite, I would say, digital. So I work from home most of the time. And well, this happened like after the COVID”* (Informant #13). However, the enforced home-based lifestyle didn't significantly change the habits of some as one respondent stated *“the stay-at-home order didn't significantly change my lifestyle since I was already someone who spent a lot of time at home before the pandemic”* (Informant #6), indicating an already existing comfortability with digital activities.

Parallel to the shift in work habits, the pandemic also triggered a reconfiguration of cultural consumption. As physical sites closed their doors, the shift to a more home-based lifestyle led to an increase in digital consumption, with participants noting, *“I had to sign up for new video streaming services since I was unable to go to the cinema to watch the latest movies and keep up with the latest releases”* (Informant #6). The accessibility and convenience of these digital modes persuaded many to maintain their new habits post-pandemic: *“I maintained my digital activities habits from the pandemic as they feel more accessible and convenient”* (Informant #7). Another participant added *“But what I do now, I sometimes watch recordings of concerts or play them when and I play music”* (Informant #2). Moreover, the shift to home-based consumption provided an unexpected benefit, a newfound appreciation for family time, as an interviewee expressed: *“it was pretty good because we spent time watching movies with my parents. So it was a good moment to get in touch with my family.”* (Informant #8).

However, not everyone embraced this digital shift as some participants longed for the tactile and immediate nature of in-person cultural experiences: *“I wouldn't change my way of consumption. I wouldn't like it to be 100% digital, if that's what you are asking. I like to be physically present, see and feel things myself”* (Informant #9). This sentiment was confirmed by others who felt a renewed desire to create more in-person memories: *“I started seeing things differently. I want to create more memories with my family and with other relatives, such as my friends or colleagues”* (Informant #11). Despite the challenges brought about by the pandemic, it seems to have induced a newfound appreciation for in-person cultural experiences. One participant commented, *“Because of the pandemic, now we just enjoy it even more. [...] It's almost the same, but just we enjoy it more and we realize what it is.”* (Informant #16).

Interestingly, a majority of the interviewees expressed a preference for mixed experiences, which fuse the possibilities of digital with the tangibility of physical presence: *“It combines both advantages of digital immersivity and physical presence.”* (Informant #6). This suggests a growing trend towards mixed-reality experiences. When discussing tool preferences for these mixed experiences, XR technologies emerged as exciting and “realistic” possibilities offering enhanced experiences. Holographic displays were also suggested as a tool that requires little user effort and promotes collective interaction.

These shifts in cultural consumption trends highlight the potential of digital experiences to cater to a broader range of consumer needs while also stressing the importance of in-person cultural experiences and a clear preference for mixed experiences. The challenge for the future lies in harmonizing these two modes of cultural consumption, delivering digital offerings that augment, rather than substitute, real-world experiences.

4.1.3. Physical VS Digital: When are Digital Experiences Needed?

When respondents were asked about memorable cultural experiences both in physical and digital settings, separately, they provided examples of both. However, they stressed the importance of experiencing something in real life: *“It’s a non-digital that I’m really after”*(informant #1), *“It’s much more enjoyable because there is a difference between what you can see directly and, uh, through, uh, a screen.”* (Informant #12), *“For me, it’s different if I am physically present in a place, like seeing for example, a castle or ruins than seeing a picture of that.”* (Informant #7). One participant even added:

“I think like especially now, people are prone to [...] adding just digital technologies just because it’s like a thing now, it’s like really trendy. And sometimes I wonder why it was made, even though it doesn’t really bring anything new, or it [...] doesn’t really change anything. It’s just like made to be.” (Informant #15)

This need presents the highest barrier when it comes to consuming digital experiences and, thus, an important factor in the decision to consume digitally. When they were asked about memorable experiences in general, respondents would always think of physical experiences first, then of digital ones only when they were specifically asked about them. Hence, this mindset also creates a barrier to the memorability of digital experiences.

As it will be developed later, when it comes to experiencing authenticity and “realness”, the extent to which legitimacy is given to experiences plays its role. Looking at the picture of a paleolithic stone, one respondent said: *“It would be cool to see it in real life like this. This stone. Then I would be like, ok, I’m very close to some history”* (informant #2), and when challenged to reflect on how showcasing that stone behind a glass in a museum would make a difference, the respondent said: *“I’m next to it in real life.”*

For many respondents, interactions with digital cultural offerings became a necessity over the COVID period. Some of them would engage in digital experiences which gave them: *“Sort of feeling that I can experience the country without being there, and see what interesting is there”* (Informant #2). However, the attempts of replicating real life were also associated with negativity due to the challenging nature of the COVID-19 period:

“There were also 3D tours of museums [...]. It just made me feel worse. I think it was just kind of like because of the way it was done. It was nothing but transferring the museum into a digital thing. And that's not what the experience of a museum is like, you know. And trying to replicate a real museum, trying to replicate a real theater show online. So it [...] just made me want the real thing more” (Informant #14)

When comparing reality to digital experiences, respondents would refer to the atmosphere, the feeling of being somewhere, the novelty, and: *“you cannot say that you have been in Latin America, just because you view it online, you know, then you still have not really been there”* (Informant #3). The whole nature of an experience, as experienced in physical reality, hardly translates to digital. However, the current consumption of digital cultural experiences reveals scenarios where a digital solution is actually desirable:

When the respondent faces a particular barrier such as distance in time and space

Respondents particularly stressed the fact that digital would suit them if they could not attend an event personally, like a concert of a favorite artist on another continent or a setting they could not experience as it belongs to the past.

When digital experiences do not replicate reality and become an offering on their own

Respondent struggled to explain what exactly they found lacking in digital experiences, but when presented with a virtual tour of the Louvre Museum, which creates a sense of immersion, and a virtual tour of the Museum of the World by the British National Museum, which is a fully digital exhibition, they could tell the difference and explain why they preferred the latter: *“because this is not something that I would get if I went there physically. Because in the other ones it is like trying to make it as if I was there physically, but it will never be, you know 100% and you will lack something, but here it is a different experience which is nice.”*

(Informant #3). Therefore, there is a need to make digital experiences distinct from real ones as it keeps the essential element of experiencing; uniqueness.

When digital enhances real-life

Many participants highlighted the need for a balance between physical and digital realms, appreciating the complements that digital brings to physical cultural experiences: *“Okay, but if it is digitalization, like having more information about the culture, that would be a great thing. Like, but still having access to it physically, is very important”* (Informant #9). Informant #7 shared a similar perspective:

“I think it’s a good complement, to see things you can’t see right now, people, objects, scenes from before [...] For example during the World Cup, I saw that in Qatar they had this virtual reality glasses where people came in and learned about the Islam and how was life back then in the desert. I think that’s really cool because that’s something that you can’t experience nowadays anyways so it’s nice to experience it using digital tools.”

When digital experiences elicit a desire to attend real-life experiences

Respondents referred to watching videos about desired destinations as a digital habit which allows them to explore a place before visiting it. Here, the immersive virtual tours played their part, as respondents said that virtual tours give an idea of what a museum contains and make them curious about exploring them in real life. Respondents also expressed the willingness to engage again in digital experiences discovered during COVID before traveling somewhere: *“But I would experience it again especially if I’m planning on [...] taking a trip, for example. I would definitely go to Google Maps for a first time visit.”* (Informant #9).

Consequently, to tackle unavoidable comparisons to real life, digital experiences have to serve the above-mentioned four functions, as it would give respondents a **need to experience culture digitally**. However, it does not explain how the memorable experience can be designed even when it's needed. Hence, the factors influencing memorability will be analyzed subsequently as well as their digital applications.

4.2. Memorability Factors and their Digital Applications

A set of critical factors that significantly impact the memorable experience of consumers have been identified. These factors highlight the diverse range of consumer needs when engaging with cultural experiences, whether traditional or digital. These factors have been organized into two primary categories; (1) the known factors, which are presented in the theory-based framework derived from the literature review and have been corroborated by the qualitative interviews, and (2) the discovered factors that have emerged from these interviews.

(1) Known Factors	(2) Discovered Factors
<p>Ways of consumption</p> <ul style="list-style-type: none"> ● Absorption and Passive Participation ● Immersion ● Active Participation and Interactivity 	<p>Key Factors</p> <ul style="list-style-type: none"> ● Co-creation with others ● Storytelling
<p>Key Factors</p> <ul style="list-style-type: none"> ● Education and Knowledge ● Entertainment and Hedonism ● Esthetic and Atmosphere ● Escapism and Refreshment ● Novelty ● Meaningfulness ● Authenticity ● Emotions ● Senses 	<p>Facilitating Factors</p> <ul style="list-style-type: none"> ● Freedom of Experience and Exploration ● Dynamism ● Budget ● Comfort, Simplicity and Accuracy ● Quality ● Context ● Organization and Structure ● Taste

Table 6. Memorability Factors for Digital Cultural Experiences

Our findings will be explored with regard to their influence on **memorability**, as well as their **digital implications**, illustrating how consumers seek these factors in digital cultural experiences and how digital tools can potentially facilitate these factors. It is also important to note that these factors are intricately intertwined, each influencing and being influenced by the

others. When discussing each key factor, we will explore its connection to the rest, painting a comprehensive picture of the complex **interplay** at work.

Ultimately, the aim is to create a **final framework** in the form of a map, outlining the web of factors and their interrelations. This will represent the complex picture that emerged from our respondents' accounts of their experiences. This roadmap will help cultural experience providers understand the interplay of factors influencing the experiences they offer, and the potential synergies they can use to enhance these experiences.

4.2.1. Known Factors

The known factors have been classified into two categories: “**Ways of Consumption**” and “**Key Factors.**” “**Ways of Consumption**” describes the methods by which consumers engage with cultural experiences. This category is subdivided into Absorption and Passive Participation, Immersion, and Active Participation and Interactivity. These classifications represent a spectrum of engagement, from a more passive consumption of the cultural experience to a more active, interactive involvement. The “**Key Factors**”, on the other hand, represent the significant attributes that consumers look for in a cultural physical or digital experience. It is noteworthy that these key factors can be experienced across all ways of consumption, illustrating the intricate interplay between how cultural experiences are consumed and what they deliver to the consumer.

4.2.1.1. Ways of Consumption

Absorption and Passive Participation

Absorption and Passive Participation as Memorability Factors:

Absorption and passive participation are similar in that they both involve a lower level of active engagement and influence from customers in an experience. Although absorption emphasizes mental captivation and passive participation encompasses the overall level of involvement and influence customers have in shaping the experience (Pine & Gilmore, 1999), our interviews have not revealed any differences between the two. Therefore, they are combined under one dimension of engagement or one way of consumption, as referred to in this study.

Absorption and passive participation play an important role in shaping the needs of individuals when consuming cultural experiences. One interviewee expressed his inclination for observation over active involvement, as it allows for deeper contemplation of various aspects such as architecture: *“I like to observe more... I like architecture... that’s maybe one of my cultural experiences is to help observe architecture”* (Informant #2).

Digital applications:

As a passive form of consumption, absorption fits digital offerings well, as respondents recalled their consumption of art through online archives or search for cultural content on various platforms. Moreover, respondents often explore absorbing content to choose destinations or to have esthetically pleasing feeds.

However, the possibility of both absorbing and interacting can enhance an experience, as for instance, a meme page offered to a respondent shows that memes are her way of bonding with others: *“It’s like such a simple form, but you can like it, so much can be done with it. Just like for, again, just entertainment, but also like learning about something you know...”* (Informant #15). In the same way, respondents reacted to the digital museum of the British Museum, as they felt that it gives them the ability to absorb information and interact with the offering simultaneously. The digital cultural offerings based on absorption can use the advantages of interactivity with the offering and also enable the co-creation of experiences with others (see co-creation as a discovered key factor) as customers tend to find ways to co-create with absorptive experiences naturally.

Immersion

Immersion as a Memorability Factor:

Immersion implies that individuals fully participate and become integrated into the experience, blurring the distinction between the real world and the created environment (Pine & Gilmore, 1999). It has been proven that creating lasting memories in cultural experiences significantly relies on immersive elements. In fact, the word “immersion” was one of the most cited words during the interviews. Interviewees have highlighted the importance of being

transported to different places and times through these digital experiences. Informant #18 detailed an intense experience with these elements during a live reading of traditional folkloric tales, where she was fully immersed in the story's world through her imagination. She said: *“I remember an experience where a writer read [...] a book live about traditional tales. Oh, yeah. It was for me memorable because it was really... the reaction of other people around was really nice. [...] I was immersed in this fantastic world.”* (Informant #18).

Digital Applications:

In the sphere of digital cultural experiences, there is a clear desire among consumers for immersive components. Digital technology, with its evolving capacities, appears well-suited to meet these needs, thus offering rich and memorable experiences.

For instance, Informant #6 expressed his thirst for immersive digital experiences when recounting his attendance at the 2021 League of Legends opening ceremony saying, *“They transmitted the event from so many aspects that I felt I was physically attending the event.”* (Informant #6). This illustrates the wish for digital platforms that could provide a sensation of physical presence, thus enhancing the immersion factor.

VR, with its ability to engage multiple senses, is one digital tool that is particularly adept at offering immersive experiences through multi-sensory stimulation. Informant #18 highlighted this potential, saying: *“I’m a fan of virtual reality, my God. Especially when there is the audio that’s like good quality sound. When the sound is also 3D, it really immerse me. [...] I really got captured by the moment. I want to go now to Tokyo... everything about this Tokyo vibe, I really felt it.”* (Informant #18). This sentiment further shows the power of digital experiences to inspire curiosity and drive interest toward real-world exploration.

Lastly, digital experiences can transport users to different times and places, which significantly enhances immersion. Informant #1 captured this potential while evoking his experience with the video game, The Godfather: *“They give you that [...] touch of being somewhere, so you could play games and you could be in places that [...] don't exist at all. Let's say they exist in an alternate reality, or places that have existed just in past times.”* (Informant #1).

Active Participation and Interactivity

Active Participation and Interactivity as a Memorability Factor:

Active participation, as described by Pine and Gilmore (1999), entails customers actively contributing to the experience by taking on an active role, influencing the outcome or actively participating in the creation of the experience. Active participation and interactivity were also recurrent factors during the interviews, if not the most recurrent ones, and were highlighted as key factors contributing to the memorability of the accounted cultural experiences. As an illustration, Informant #18 recounted an experience at the London Dungeon: *“There were like actors, but they were touching you. They were showing you things like the great fire of London. It was really, really interesting.”* (Informant #18). This interaction, blurring the lines between performers and audience, added a layer of engagement that deepened the impression left by the experience.

Digital Applications:

Digital tools can offer unique opportunities for interaction, which can significantly enhance the memorability of these experiences. An interviewee appreciated a digitalized art exhibition that allowed her to modify the artwork virtually. She described, *“The thing I like the most is that they give the opportunity to be the artist, to change the art... You can virtually change the art and you can get creative. They are encouraging people to be more artistic.”* (Informant #9). Similarly, Informant #11 expressed about the same experience: *“I love that. It's interactive. we can feel things we can try to create new things [...] This one is really unique. when you can touch things, well it's wonderful.”* (Informant #11). Here, the digital tools enabled an unprecedented level of active participation, transforming the observer into a creator.

Furthermore, digitalization can allow a transcendental interaction with for instance an artist from another time and space as expressed by an interviewee *“The third video, you have the audio of the artist who is telling you how he did. It's him. He is in the audio guide, if you want. He is the guide.”* (Informant #16).

As digital tools continue to evolve, they offer exciting opportunities to cater to the deep need for multifaceted interactions and create more engaging and memorable cultural experiences.

4.2.1.2. Key Factors

Education and Knowledge

Education and Knowledge as a Memorability Factor:

Learning experiences are presented as memorability factors both by Pine and Gilmore (1999) as “educational” and Kim, Ritchie, and McCormick (2012), as “knowledge” in their MTE scale. The respondents of this research were also referring to learning as part of their memorable experiences, though mostly subtly. One respondent even drew the line between learning experiences and memorability in museums, stating: *“It’s more like, you know, they make you think in the moment, they add to your knowledge, but they’re not really for me that memorable in any case.”* (Informant #1). Thus, to make cultural experiences memorable, it is not enough to make them educational. It should be tied up with a variety of other factors.

Interplay with Other Factors:

The most salient influence on learning is observed in combination with **novelty**: *“I like to consume a lot of information and just to know that OK, today I have learned something. I have something new in my head and I’m satisfied.”* (Informant #5). Learning then becomes memorable in the context of exploring something respondents haven’t encountered before.

Informant #1 also shared how playing the shooter game in the setting referring to Japanese culture pushed him to explore information about Japan, hence this learning experience became closely related to **entertainment**, referring to Pine and Gilmore’s (1999) suggested concept of “edutainment”. However, their theory is limited to a combination of learning and entertainment, though our respondents have a subjective understanding of entertaining experiences. For them, it became entertaining when it was **escapist** (Informants #2 and 5) as it enables interaction with something outside of their time or space. In the same manner, a provision of context and **storytelling** provided respondents with prior knowledge which enhanced their experience (Informants #7 and 8).

Digital Applications:

Education seems to be an easily adaptable factor for digital experiences, as digital is already easily associated with the exploration of new information: “*Computer, it's more for studying. It's not about cultural experiences, I guess.*” (Informant #5). However, if cultural learning is tied up with the consumption of information, and consuming digitally is very common, it does not make it specifically memorable. Educational experiences need to surprise and entertain by using video format as respondents often look for videos to learn about new cultures. Similarly, the escapism provided by VR can be used to allow visitors to learn about the past or imagine the future, as one respondent described what he seeks in digital cultural experiences: “*Experiencing how it was or, like, how things could be.*” (Informant #2). Thus, to enhance the potential of digital experiences, cultural education needs to entertain visitors with new information presented in a storytelling manner, but also emphasize immersive experiences that utilize visual storytelling and escapism.

Entertainment and Hedonism

Entertainment and Hedonism as a Memorability Factor:

Entertainment can be defined as the act of engaging individuals in a pleasurable manner, occupying their attention and eliciting amusement through experiences that are often passively absorbed through the senses (Pine & Gilmore, 1999). In the context of cultural experiences, the integration of entertainment, fun, and games seems to encourage users to actively engage with the content, making it more enjoyable and thus memorable. As Informant #8 noted, entertainment can generate excitement, making experiences more impactful: “*So it was an action movie we can say and it was pretty good with the sound effects [...]. So it was pretty entertaining because I like that kind of movies, they give you some adrenaline when you watch them.*”

Interplay with Other Factors:

Pine and Gilmore (1999) stated that entertainment was absorbed through senses. The definition of entertainment automatically implies that **senses** are being engaged therefore making it the first factor it interplays with. One interviewee also expressed her enthusiasm for a museum

Instagram page that incorporated quizzes and games to test users' **knowledge** about the art and the museum's history: *"I like games, you learn through games, it's fun and educative."*(Informant #9). This interaction between entertainment and learning creates an experience that not only educates but also engages the user in a fun and memorable way.

Furthermore, the same interviewee appreciated entertaining experiences or games that involved **social interactions and co-creation with others**: *"And there are also challenges with real people... it was to keep people entertained and in touch with culture, even during the lockdown. I wish I had that during the lockdown."* Informant #3's remark about the Cleveland Museum exhibit further confirms the social and active nature of entertainment, *"It was more like a fun, more like active and a good way to socialize by being cultural."*

Digital Applications:

Digital tools can enhance cultural experiences by infusing them with entertaining elements. Informant #9 provides a good example of how digital platforms can incorporate them to make the digital experience more engaging and memorable: *"Oh there is a section for quizzes! And they test you for your knowledge about the art they have and about the Museum's History."*

The use of memes in digital cultural experiences adds a humorous element that not only entertains but also challenges traditional notions of art as informant #9 observed: *"I love that they distorted the meaning and the purpose of the painting, it's funny and witty."* Additionally, Informant #15's reflection showcases the accessible side of entertainment in digital cultural experiences, *"It's very cool because you can see very famous art [...] using these memes. Well, it's like any meme. It's funny."* This remark indicates how entertainment can simplify complex topics and make cultural experiences more approachable and enjoyable.

Moreover, the use of digital tools can significantly enhance the entertainment value of cultural experiences. As a participant highlighted about the digitalized experience offered by the Cleveland Museum: *"Yes, I definitely think this is more enjoyable and entertaining than going to a traditional museum. I'm not a person who typically enjoys museums that much [...]. Having*

these mixed experiences offered by digital tools can be a big advantage for me.” (Informant #7).

Entertainment significantly contributes to the memorability of digital cultural experiences and the use of digital tools further amplifies this by providing innovative ways to incorporate entertaining elements into cultural experiences.

Esthetic and Atmosphere

Esthetic and Atmosphere as a Memorability Factor:

Esthetic, described by Pine and Gilmore (1999) as an immersive experience where guests are captivated by the environment, appeared in the interviews too as a factor contributing to memorability. However, respondents referred to it as a feeling of “atmosphere” or “vibe”. This was evident when they recalled specific experiences they had, like this recollection of memory from the Roskilde festival: *“You’re literally subsumed by the actual atmosphere that to me, is what culture is all about. You know, that’s what I think of when I think of cultural experience.”* (Informant #1). They also referred to the atmosphere when speculating about their needs, aligning with what Pine and Gilmore (1999, p.35) described as “just wanting to be there”.

Interplay with Other Factors:

Esthetic or atmosphere is created both by the perception of beauty and **sensual** stimuli: *“When I change, uh, my routine and I want to go to good places, I will choose these kinds of places with a lot of color, with the music, with a mystical atmosphere with a lot... Yes, with that atmosphere that is really unique”.* (Informant #11). Respondents would refer to the music, to the setting, to the smell. However, it needs to be **authentic**, in the same way as Pine and Gilmore (1999) also pointed out that it needs to be perceived as “real”.

Digital Applications:

The digital recreation of the atmosphere/esthetic poses a challenge, as respondents articulated the lack of atmosphere when thinking about digital experiences: *“It doesn’t matter how good speakers you have at home or how good headphones you have, but still it’s a different thing from actually being in the concert. And it’s also about the atmosphere that you feel all*

around.” (Informant #2). This feeling of atmosphere is often connected to the setting in which the experience happens or the setting to which the experience refers, and it manifests itself as a central sensational need when it comes to experiencing culture. As such, it is deeply connected to the senses and in order to recreate the atmosphere, the experience needs to provoke sensory feelings, which are in turn stimulated by the setting. For the digital format, the use of visual and auditory senses is the most applicable.

Escapism and Refreshment

Escapism and Refreshment as a Memorability Factor:

As noted by Pine and Gilmore (1999), escapism is an important factor in the staging of memorable experiences, and allows users to disconnect from their everyday surroundings temporarily and immerse themselves in a different world. This factor was primarily cited by individuals who described their routine as work-intensive or wanted post-COVID-19 experiences to escape from the harsh reality. Informant #11 described the sense of escapism she felt while visiting a serene elevated tourist spot, saying, *“I felt like I was in a place that I had never seen before, far from everything that makes anxiety levels go up.”* This quote highlights the value of creating experiences that transport users to new environments, allowing them to escape their daily stress and anxiety.

Interplay with Other Factors:

Escapism interacts with other factors to create a profound impact on the memorability of an experience. **Novelty** is closely related to escapism as escapist experiences are meant to transport individuals to new and refreshing environments. Another essential factor is **emotional resonance** that can be provided by **entertaining** experiences, which was present in Informant #18's memorable tree climbing touristic activity in a German preserved forest *“I had this excitement that doesn't occur every day in my life”*. Additionally, **esthetics** and **storytelling** can heighten the feeling of escapism. Informant #7, who watched a series set in the 18th century on Netflix, felt transported to a simpler, less busy past life, providing an escape from the hustle of modern life: *“I really liked it [...]. Life was really nice back then, very simple. Very exquisite, like*

the way they were living in a lake, it wasn't as busy as maybe our world is right now.”

Digital Applications:

Digital tools can effectively cater to this need for escapism. For instance, during the COVID-19 quarantine, Informant #11 used social media to discover new places she wanted to visit but couldn't, expressing, *“It was a relief”*. Informant #9 similarly found escapism in using Google Maps' 3D feature to virtually visit places they aspired to see. The rise of digital tools like VR can also provide immersive experiences, allowing users to escape into different worlds as informant #6 described after watching Wisdome's digitalized experience video: *“I felt like I was in space, something mysterious and mystical, I was transported.”* Digital streaming and social media platforms also serve as simpler portals to different cultures, times, and places, offering an easy escape from daily life.

Novelty

Novelty as a Memorability Factor:

A sense of newness and uniqueness can stimulate interest, fuel curiosity, and provoke distinct emotional responses, leading to an overall enhancement of the memorability of an experience. This idea is confirmed in the informant's #6 statement about Wisdome's digitalized cultural experience: *“What makes it special is its originality, and the different feeling it provokes in me make me interested.”* (Informant #6). Moreover, novelty can alleviate the monotony and repetitiveness often associated with visits to cultural sites, as informant #7 pointed out: *“At some point it became boring for me to visit more churches because at some point they all look the same...”* Another participant expressed a similar sentiment about visiting the Louvre museum, feeling that the offerings were static and unchanging (Informant #6).

Interplay with Other Factors:

Novelty emerges as a foundational aspect of the entire experience concept, as defined by the interviewees who highlighted the significance of encountering something new when

engaging with cultural experiences (see 4.1.1. Perception of culture and cultural experience). Moreover, cultural experience providers must constantly seek fresh approaches, innovative ideas, and novel elements to captivate audiences and keep them interested. This emphasis on novelty indicates its interrelation with **all the other factors** contributing to memorability. For instance, each novel experience has the potential to evoke emotions, provide entertainment, offer escapism, or be meaningful, and vice versa. However, there is an exception with the factor of authenticity, as novelty cannot be applied to it by definition, although the way the authentic experience is staged can be novel.

Digital Applications:

In the digital realm, users are drawn to original, innovative digital presentations and digital tools can indeed offer a unique opportunity to provide ever-evolving offerings to avoid repetitiveness and boredom. One participant expressed her enjoyment of exploring new digital experiences, stating, *“Yes, I love digital experiences, new especially original ones. When they are original, I'm more attracted to it”* (Informant #9). Furthermore, digital platforms allow users to explore new content and trends as Informant #11 stated, she constantly enjoys discovering new viral things on social media and learning new things from specialized YouTube channels.

Moreover, the digital world provides users with the ability to engage in new and diverse cultural experiences despite time and space constraints. For example, Informant #18, a busy dermatologist, mentioned that culture for her means learning new things from different cultures and perspectives around the world, visiting new places or seeing new landscapes, which she can do at any moment using her computer.

Lastly, digital platforms can utilize data analytics and user behavior patterns to continually provide novel and surprising experiences tailored to individual users. As Informant #11 mentioned, her use of digital platforms to find new cultural activities, review places, and even purchase new fashionable clothes, shows that by understanding and predicting user needs, digital platforms can provide personalized novel experiences and enhance user engagement.

Meaningfulness

Meaningfulness as a Memorability Factor:

Users often desire a deeper connection with the cultural content that allows for personal relevance, a profound understanding, and a lasting impact. For example, informant #6 expressed about the Van Gogh digitalized exposition: *“I feel like I travel in time to the period where the artifacts were created and feel the meaningfulness of the purpose of their creation [...]. It gives value to the artist and his art, it has a deep meaning because you can see through his own experiences.”* In this case, exposure to the process and emotions behind the creation of art enriches the user's understanding, deepening the meaningfulness and thus enhancing the memorability of the experience.

Interplay with Other Factors:

Relating to the previous quote, **meaningfulness**, **learning**, and **emotional** engagement are thus all intertwined. The aspect of **authenticity** also plays a role in enhancing meaningfulness. Informant #7 highlighted this when she said, *“The two that I really liked (talking about the Wisdome and the Hiroshima digitalized experiences) were the first and the second one. They are really different I know, but both are so real. The first one is an enjoyable experience the second one, even if it's sad, [...] it's more real.”* This highlights that, even if authentic experiences evoke complex emotions, they can create a deeper sense of meaningfulness as emphasized by the informant #6: *“The second triggers any emotions you can have when you see war and people dying... It's good to get immersed in this kind of meaningful things, and to have a better context, understand how humans think”*. Additionally, **storytelling** is also linked to meaningfulness. For example, the digitalized Hiroshima exposition uses a meaningful narrative to frame the experience. The story allows participants to deeply connect with the experience, leading to lasting memories.

Digital Applications:

As evidenced by the previous examples, digital platforms and emerging technologies such as VR and AR can help users forge deeper and more meaningful connections with the content. They can help visualize and understand the context of cultural offerings, provide users with firsthand experiences of different perspectives, or engage users with challenging themes fostering empathy and deepening their understanding of human experiences and emotions. By focusing on meaningfulness, digital cultural experiences can engage users on a deeper emotional and intellectual level, increasing the memorability and impact of these experiences.

Authenticity

Authenticity as a Memorability Factor:

There is a theoretical quagmire when it comes to capturing authenticity or truth as part of the experience. How can it be true when it is staged? However, respondents express the need for true **stories** or true experiences when reflecting on the memorability of cultural experiences. Arguably, authenticity provides legitimacy for cultural experience, hence understanding what provides “authentic experience” is essential.

Interplay with Other Factors:

For respondents the “true” cultural experience comes from interacting with others and co-creating with them, as they are considered to provide legitimate insights: *“My friends are from different countries, so also like we share experiences, they tell me how life is in their country, what they eat, like what are their traditions, so I do experience culture through my friends, through their true stories”* (Informant #7). Authenticity then comes from **sharing stories** and **co-creative** actions.

Even fiction can be perceived as legitimate and authentic, when it reveals its awareness of reality, for instance, in satirical form: *“like GTA [...] I mean they put pop culture pop music into the thing, but they satirize everything as well. Like just a good blend of authenticity and satirical [...] you have something that replicates Facebook. Yeah, LifeInvader is what they call it.”* (Informant #1).

Overall, the feeling of authenticity can be stimulated by co-creative actions, like testimony and sharing of stories by representatives of a specific culture, as well as by fostering a sense of relatability (emotions) and satire (storytelling, entertainment).

Digital Applications:

The perception of digital as authentic deserves its own attention as it was described in the “Physical vs Digital: When are Digital Experiences Needed?” section. However, it is visible that some elements of authenticity replication can fit into the digital realm. The elicitation showed a need for testimony, storytelling, relatability and co-creation, when looking for authenticity. While watching Youtube videos about Kusama, one respondent expressed that if Kusama had given her own testimony, it would have made it more interesting: *“I would love to see the artist like here, Kusama talking or showing her art around.”* (Informant #18).

Memes, for instance, became similar to the satirical depiction of reality in Grand Theft Auto (GTA) that connects viewers to real life, as they find it relatable, even those who do not like memes: *“It's not my cup of tea, but [...] I like the effort and the way it's displayed because it's fun. It's fun and it's relatable”* (Informant #18). People feel more connected since the content is created *“by normal people like me”* (Informant #18), who probably share the same experiences, highlighting the co-creational aspect.

The above-mentioned approach refers to absorptive practices. They reflect the need for a legitimate depiction through testimony and learning experiences. Respondents can even feel a sense of authenticity in fiction, as long as it creates a touch of reality. However, many of them felt defensive against “authentic” immersive digital practices, which in their opinion lacked realness.

Emotions

Emotions as a Memorability Factor:

Both Pine and Gilmore (1999) and Batat (2019) stress the importance of moving visitors with emotional touchpoints. Respondents also refer to feeling emotions as a factor of memorable experience: *“You know, they're just dancing. But [...] they really raised some emotions and, you know, I thought that was just a super amazing experience.”* (Informant #3).

Empathy, in particular, which relates to an individual's capacity to share someone else's emotions or experiences (Cambridge University Press, n.d.), was viewed as a powerful emotional catalyst profoundly impacting the memorability of an experience. For instance, Informant #10 expressed how she was moved by the personal experiences of marginalized people from Agadir, Morocco, during a theatrical representation: *"It was a troupe [...] that takes young people to play theater. It was a special concept. So each one, [...] will talk about something that hurts in his life. So, for example, if he is homosexual, or if he is big, or if he is handicapped [...]. I'm out of this pressure, and it was interesting to see what they felt. I like the link and the sharing of these people in the society where I live."* This also illustrates how empathy can bridge cultural gaps, leading to a sense of shared humanity.

Additionally, **relatability**, perceived in this context as an emotional connection, held a unique importance for interviewees with diverse cultural backgrounds, particularly those living or having lived abroad. It facilitated a personal bond with cultural experiences, fostering deeper engagement. This was notably illustrated by an Arab Muslim interviewee living in Sweden, who preferred the David Collection over the Louvre's website because she found elements that she could relate to, saying: *"I like the David Collection because I see a workshop here 'Open Eid workshop' and I can relate to that. The first picture also looks like Arabic calligraphy, which I can also relate to."* (Informant #7). Relatability also contributes to making art more accessible, which is important for engaging diverse audiences. Informant #14 noted about a meme: *"I liked one. [...] It's fun and it's relatable. I feel like these memes are made from normal people like me."* This demonstrates the significance of incorporating relatable elements into digital cultural experiences and emphasizes the importance of creating personalized experiences that resonate with users' personal backgrounds and characteristics.

Interplay with Other Factors:

Emotions are necessarily created from something, which suggests an interplay with other factors. In the first incident, Informant #3 was referring to the **story** the play was depicting: *"It was inspired by the COVID situation where people had been very alone and now needed to figure out how to meet each other again."* This quote suggests that emotions are moved by the feeling of relatability and by the story, as the respondent refers to something she experienced

herself during the pandemic. The feeling of being able to relate and empathize creates a memorable experience in other encountered instances: *“I saw those drawings and then I went to their cemetery to see how many dead people... I really liked this experience because I already know the story, but now I somehow experienced it, I saw it with my own eyes, like their belongings, made a difference”* (Informant #7). However, it can refer not only to the actual experience individuals had, but to the predisposed information they knew, exposing **meaningfulness** and **story** as enhancing factors of the emotional experience. Additionally, empathetic experiences often lead to more profound understanding and **learning** as evidenced by informant #12 who expressed about the Van Gogh digitalized experience: *“If you put yourself in the shoes of this artist, [...] it's a good thing to see and to feel what they felt, what they saw at that time. So yeah, it's a good experience.”*

Digital Applications:

In digital format, emotional touchpoints can be realized in the form of storytelling and can be created, for instance, through absorptive experiences like documentaries or through XR technologies, which allow people to immerse in the story and setting, experiencing different perspectives firsthand, and feeling a connection with the artist and the offering. They should evoke feelings of empathy and provide meanings for consumers. For instance, informant #12 spoke about the potential impact of using VR to better understand the Hiroshima and Nagasaki bombings: *“I felt sad for them because Hiroshima and Nagasaki are the only cities in the world where the atomic bombs were dropped. I felt sorry for them, even before the trailer. [...] Maybe while using the VR, I will feel much more, I will have a deep understanding and a deep feeling about what happened.”*

Senses

Senses as a Memorability Factor:

Batat (2019) refers to senses as an important factor of immersive experiences and highly suggests its usage. Some of the respondents also recalled experiences which were specifically sensory. Those experiences were either physical or phygital and were memorable specifically because of the sensory stimulation they provided: *“...this is the kind of museum that I like, I*

think because it's dynamic, and you can experience all sorts of things. You can touch. You can see and you can hear also. So you can experience using three of the five senses: we had touching, seeing and hearing and it's pretty good.” (Informant #8).

Interplay with Other Factors:

Sensation in cultural experience makes sense when it highlights other factors. For some respondents the sensation of taste evokes a sense of **escapism** through imagination: *“Sometimes when I'm eating food like tortillas or something. I think about Mexico or even Spain”*(Informant #1). It also contributes to creating the **atmosphere/aesthetic**: *“It was the smell, the atmosphere, [...] the people around you.”* (Informant #12). Additionally, it provides a deep immersion into the offering itself: *“That was really, really memorable because we were dancing for like 7 hours in a row. Really good music. I really feel drum and bass and I feel like that's my type of dance music.”* (Informant #2).

Digital Applications:

The sensory part presents a challenge for replication in digital format. Informant #6 however recalled 4D cinema as a memorable experience that allowed him to feel the air, the water, and the movement, bringing the movie to life. This can so far be realized within physical settings using technology. At the same time, visual and audio materials can also enhance digital experiences by giving a sense of place and a story.

4.2.2. Discovered Factors

The factors we discovered have also been classified into two categories: **“key factors”** and **“facilitating factors”**. Much like the known key factors, the discovered ones represent emerging elements from interviews that define what customers need to remember the digital cultural experiences they engage in. Regarding the facilitating factors, while the literature on memorable experiences may have overlooked them, they actually play a crucial role in enhancing customers' satisfaction and indirectly contribute to the overall memorability of an experience. These facilitating factors, although not explicitly associated with the concept of memorability, are fundamental to the user experience. Their absence can act as a barrier to engagement and satisfaction.

4.2.2.1. Key Factors

Co-creation with others

Co-creation with others as a Memorability Factor:

Recently, theoretical schools in the experience economy shifted their focus from the offering itself to studying the ways in which customers create experiences together (Batat, 2019; Alexiou, 2020). The theme of co-creation of experience became central in these findings, as respondents referred to their family, friends, influencers, or online-communities as part of their experiences. They referred to people as those who recommended the experiences, those with whom they shared them, and, at the same time the experience itself became a mediator of connection between individuals, creating connection and discussion topics. Moreover, co-creation with others becomes central to the outcome of the experience: *“It can become an adventure if you are with good people. But it can be a really bad experience if you are with the wrong ones.”* (Informant #10).

Interplay with Other Factors:

As it was suggested, the cultural experience becomes a form of co-creational process for the respondents, since interactions with others enhances the experience. It is especially evident when respondents refer to absorptive experiences that are built on **esthetic** or **storytelling** grounds, as they provide interaction for the passive forms of consumption: *“This is what we could discuss together. Have you heard it? Have you read it? Do you see it? Let's discuss it. You also haven't. You also have seen it, so you already have something in common with the people around you.”* (Informant #5).

Interactions enabling shared experiences are perceived as valuable and desirable, with the perfect setting to play a game, for example, being: *“Playing with my friends”* (Informant #1). Respondents refer to sharing **emotions** with each other (Informant #3) and to grasping emotions from others (Informants #5 and #18). Furthermore, when a **novel** cultural experience is facilitated by other people, it also enhances the experience as it provides **authenticity**: *“Trying the food, with people not alone of course, but having it cooked by people who come from that country itself.”* (Informant #7).

Digital Applications:

Co-creative experiences, which are highly desirable, need to be taken into account when creating digital cultural experiences as it seems to be a suitable way to enhance the experience. As the findings show, respondents consistently find ways to make experiences interactive for themselves, either by sharing impressions or experiences with others: *“My form of bonding and like spending time with people is showing memes I saved in my gallery.”* (Informant #15). As respondents also referred to the need of having the right people by their side, the digital cultural experience could target specific interests and foster a community around it.

Storytelling

Storytelling as a Memorability Factor:

Another emerging theme in these findings refers to the need for quality storytelling when engaging with cultural offerings. Storytelling is identified as a key factor, as respondents openly express a need for the “story”. While they do not recall stories in detail, they remember if the story was moving *“if you can kind of understand this story that they want to tell and you can kind of relate to their feelings”* (Informant #3), well-developed *“how they go into it like GTA is the storylines are usually extremely well developed”* (Informant #1), or attractive *“the story should be like really attracting my attention”* (Informant #13). The story does not only contribute to the memorability of the experience, it is an expectation from the experience. It not only becomes the experience itself but also enhances other factors or is enhanced by others.

Interplay with other factors:

Like all the other memorability factors, storytelling also relates to the other experiential factors. However, the story becomes effective when it is **relatable**, as informant #3 enjoyed the theater play because she could relate to the story herself. Storytelling enhances the **learning** experience as it allows a deep understanding of the subject: *“I like that I could see his [...] way from the beginning until the way he became famous.”* (Informant #2). It also allows to connect with the artist: *“So you are inside his paintings, but also inside his head.”* (Informant #18). Effective stories become a part of the **co-creation** process as respondents not only refer to a connection with the art piece but also share those stories with others. Storytelling finally enhances **esthetic** experiences and is essential to **escapist** ones (Informant #1, #18).

Digital Application:

Storytelling fits well the digital format, as digital tools allow to tell stories in an absorptive manner through various platforms. Respondents specified that they seek and need stories. Digital storytelling also enhances immersive experiences in physical space if they offer the ability to connect to the past or the artist. When it comes to esthetic experiences, they are particularly enhanced by storytelling, as the setting becomes part of the story as well. For example, one respondent referred to the stories of video games which allow him to immerse himself into settings of the past or other countries if they are well replicated (Informant #1). However, visual and audio forms of storytelling should now be prioritized, as many respondents quickly lose interest with textual forms: *“Only the pictures and it keeps my attention more than the text on the previous page”* (Informant #4). To maintain audience attention, a digital story needs to rely on relatability, context, and brief textual context, combined with esthetic appeal.

4.2.2.2. Facilitating Factors

Freedom of Experience and Exploration

As users navigate through virtual environments, they may find that their exploration options are restricted due to limited databases, as one interviewee observed: *“It's a very limited database... It was a limited experience”* (Informant #9). Moreover, it is essential to ensure that users do not feel limited in their movement or control over the virtual environments. The same interviewee highlighted the importance of overcoming such limitations: *“the virtual visit should not be limited in terms of possibilities of movement, [I need] to have control over the virtual character.”*

Exploration and freedom of movement allow users to engage with the content at their own pace within a digital cultural experience: *“The movement experience is really nice, it's easy to access and you can see the whole 360 degrees. [...] You have full control over the camera.”* (Informant #9). However, informant #13 expressed his need for a more guided approach, suggesting that too much freedom of movement can sometimes be overwhelming due to the abundance of options: *“I would prefer to move like some kind of story that moves with me*

because if I have each time to click to go to some place...” He expressed a desire for a guided experience allowing for a more structured exploration.

These contrasting needs emphasize the importance of a balance between guidance and freedom of movement in digitalized cultural experiences. Offering users the option to choose their preferred mode of interaction can cater to their individual needs.

Dynamism

A monotonous experience can make users lose interest and disengage from the content being presented. As one interviewee suggested, enhancing social interactivity is one way to alleviate monotony: *“Maybe make the audio guide less monotonous, see people and maybe interact with them and with the artifacts too.”* (Informant #7).

Another approach to breaking the monotony is by incorporating multimedia elements, such as music or ambient sounds, to create a more enjoyable atmosphere. The same interviewee emphasized the significance of music in her virtual visit experience: *“The music plays a major role, [...] I get the choice to choose different rooms and like listen to the audio.”* In contrast, she found the virtual visit of the National Museum of Denmark unenjoyable due to the lack of audio elements: *“I didn’t like it because it feels dead.”* (Informant #7).

One aspect that users seem to be sensitive to is the perceived static nature of some offerings. As one interviewee mentioned comparing different websites, he found the MoMA museum website less appealing due to its static nature: *“[It] is just static, you just read it, it’s not engaging, it’s not interactive”* (Informant #9). Dynamism adds a sense of life and movement to the content, making it more engaging for users. Informant #11 described her experience with the Louvre’s website, mentioning how it felt as if she was moving along with the carousel video: *“It’s really moving with me, like I’m with a person that guides me through that place.”* Informant #6 praised the MET virtual tour, which allowed users to not only view the artwork but also witness animated artifacts: *“They are animated, with sound [...] There are effects, birds, smokes, moving objects. [...] Instead of looking at a frozen painting you can see water splashing outside of it for example. It gives it life, it’s moving.”*

However, it is again a question of taste as Informant #16 expressed his dislike of carousels on websites as he found it distracting and preferred a static layout that was easier to read and analyze: *“What I don't really like on any website is the sliding effect. When you decide to see the other information, there is something that goes this way, this way, this way...”*

Budget

Addressing budget constraints related to the perceived value of the cultural offering is essential to ensure that the experiences are accessible and appealing to a broad audience. As one interviewee mentioned, traveling to a cultural site like the Louvre Museum might not be feasible for some people due to financial and logistical reasons: *“if I'm in Saint-Étienne, I don't want to go to Paris just to visit the Louvre... It's a lot of money.”* (Informant #16). This highlights the importance of providing affordable and accessible digital alternatives to allow users to explore and appreciate cultural experiences without incurring significant costs. Additionally, offering membership options or special promotions could help make cultural experiences more accessible and appealing to users. As Informant #18 expressed: *“I would love if there is like membership [...] because I want to go back there. But it's really expensive, like 22 euros for the activity.”*

Comfort, Simplicity and Accuracy

Users may find it challenging to engage with an interface that is overloaded with information. Informant #6 shared his frustration with a complicated website: *“I don't know what are these contents, it's not very intuitive.”* He also mentioned challenges in using an interface with numerous icons: *“It's hard to click on all the little icons, there are so many, and they are very close to each other.”* Informant #2 added *“how do I zoom closer to it?”*. On the other hand, Informant #9 expressed her contentment while navigating a clear museum website: *“I also like the fact that it was very accessible to change the language [...], it's very efficient. There are also categories of the different arts in the museum, and of course you can book your visit.”* Informant #7 expressed her fondness for digital tools in providing her with a comfortable experience: *“Using the VR glasses [...] it's nicer than reading a text. It's more comfortable [...] more enjoyable too.”* Therefore, designers should focus on clear content presentation and easy-to-use platforms that allow customers to explore without feeling overwhelmed or frustrated.

Quality

Issues such as poor interface design, illegible text, or representation inaccuracies can significantly diminish the overall experience for users. As Informant #6 stated, he had difficulty with the National Museum of Denmark virtual tour due to problems with the interface and text readability: *“For the first visit I had a hard time finding out how to put full screen [...] and the texts are hardly readable.”* Because of that, the interviewee also expressed his concern about the authenticity of the artifacts, questioning whether they were presented in their real form.

Context

Providing context is essential for users to better understand and appreciate the offerings. As Informant #6 mentioned, he struggled to comprehend the significance and scale of certain artworks displayed on the MoMA museum website due to insufficient contextual information: *“you don't know where is what, where is it located, [...] is it a small or big.”* Another interviewee expressed about Wisdome digitalized experience: *“but you couldn't recognize the objects, or know and identify what the collection what the museum is about. Maybe it needed more context, but maybe that was the purpose to make you want to know more and scroll down.”* (Informant #13). Teasers do not suit everyone, and some users prefer a more comprehensive approach with contextual information to provide a better understanding.

Organization and Structure

“I wouldn't go back. They lack organization.” said Informant #9 about a music festival she attended. Organization and structure seem to play an important role in shaping users' experiences when engaging with cultural experiences, specifically digital ones, and its absence would constitute a major barrier. A well-structured and organized platform enhances user navigation and promotes a smooth exploration of the content. Informant #8 appreciated the organization of the Natural History Museum of Denmark's virtual visit, stating, *“it's split into rooms and I guess also themes. [...] That gives me the structure that I need.”* Informant #9 added about the instagram page of David Collection Museum: *“They also have highlighted stories. There's one named [...]the David collection Museum, there's the one named this week [...] and there's through your eyes [...], you can see through other peoples' eyes, other visitors' posts.”*

That's very well organized.” Such positive feedback underscores the importance of well-organized and user-friendly platforms in creating engaging digital cultural experiences.

Taste

Ultimately, although the factors that have been identified represent patterns in the interviews, there is no accounting for personal taste. The personal tastes of users play a significant role in their perception and enjoyment of experiences and sometimes they cannot explain where they come from, as some interviewees commented on their opinions about different museums’ websites, *“I like the Louvre website more”* (Informant #13), *“Not really my style. This one is really colorful.”* (Informant #8) or *“The other one is colorful, but in artsy way. This one is like in your face... it's not really attracting me.”* (Informant #18).

5. Discussion

5.1. Discussion of the results

5.1.1. Design of the Suggested Framework

This section provides a framework for designing memorable digital cultural experiences (MDCEs) in response to our third research question (**RQ3**): **How can memorable digital cultural experiences be designed?** The answer to this question is crucial in addressing the main research question: How can cultural providers develop MDCEs for young audiences in the context of the experience economy and the digital age based on the factors that influence these audiences' memorability of digital cultural experiences? The suggested framework is a combination of the insights gathered from answering the first two research questions:

RQ1: What current trends can be identified regarding young audiences' cultural consumption? Based on the trends in digital cultural consumption identified in response to this question, several contexts in which digital cultural experiences should be designed have been identified. The first part of the suggested framework focuses on distinct scenarios encapsulating the circumstances where young customers express a need for digital cultural consumption. Therefore, every digital experience should cater to one or several of these specified scenarios.

RQ2: What constitutes a memorable cultural experience, and more specifically, a digital cultural experience, based on customers' needs? From the answer to this question, "memorability factors" based on customers' needs have been extracted, constituting the second and main part of the suggested framework. These are all the elements that should be considered when designing MDCEs. Most of these factors originated from the theory-based framework, presented in the "Best Available Knowledge" chapter and were confirmed by the empirical study realized, as detailed in the findings chapter. Additional factors influencing memorability were also identified, and interconnections between these factors were revealed, which drove a shift from a simple list or a table framework to a more intricate map guide that will be presented later in this section. Moreover, while most memorability factors displayed in the theory-based framework were linked to physical settings, this research also confirmed their relevance in digital contexts.

5.1.1.1. RQ1: Trends of Cultural Consumption among Young Audiences

Current trends in young audiences' cultural consumption reflect a significant shift towards digital and hybrid experiences, catalyzed by the COVID-19 pandemic and the associated changes in everyday life. Convenience and accessibility have enhanced the attractiveness of these digital modes integrating them into their regular cultural consumption habits. However, despite the digital trend, there was a notable desire among some for the physicality and immediacy of in-person cultural experiences, which is likely due to the exhaustion brought on by extensive screen time during the pandemic. This shows a significant gap in what is perceived to be a forward-going digitalisation of experiences, as described by Batat (2019). Some young people continue to prefer tactile, physical encounters, pointing to a revived appreciation for real-world experiences and the creation of tangible memories. Interestingly, 13 respondents indicate a preference for hybrid experiences that merge digital potential with a physical presence, suggesting a growing trend towards mixed-reality experiences. Technological innovations, such as VR or holographic displays, for instance, are viewed positively for their potential to enrich these experiences.

Despite their potential, fully digital cultural experiences are still met with suspicion and presumably can not outstand real-life experiences that youth are after. However, we identified some possible trends in digital cultural consumption that depict when digital cultural experiences are needed. These trends were transformed into four scenarios, suggested in the subsequent framework, and imply the development of digital offerings according to these scenarios:

1. When the customer faces a particular barrier such as distance in time and space:

This scenario comes into play when respondents are unable to physically attend an event due to geographical or temporal constraints. In such situations, digital experiences serve as a bridge, enabling cultural consumption to occur regardless of these constraints.

2. When digital experiences do not replicate reality and become an offering on their own:

Respondents expressed appreciation for digital experiences that offer something unique, beyond simply imitating reality. They preferred experiences they couldn't access by physically visiting a cultural institution. Respondents criticized attempts to digitally

replicate physical experiences, viewing such attempts as incomplete and unsatisfying. The demand here is for digital experiences to have their own unique identity.

3. When Digital enhances Real life: Many participants emphasized the significance of a balanced interaction between the physical and digital realms. They appreciated how digital enhancements could enrich physical cultural experiences, such as by providing expanded information or visualizing experiences that would be impossible to replicate in today’s physical world, like seeing objects or people from different times.

4. When digital experiences elicit a desire to attend real-life experience: This scenario encompasses digital cultural experiences that stimulate curiosity and inspire respondents to pursue real-life experiences. Participants noted the use of digital tools, such as watching videos of desired destinations or exploring locations via Google Maps before visiting, as effective means of setting expectations and enhancing anticipation.

These four scenarios, confirmed by current trends in digital cultural consumption, serve as the first step of the suggested framework. They are also reflective of what was described by Batat (2019) as “unique socio-material characteristics of digital experiences” (p. 214) and are interpreted as needs of a young audience in these findings. While these scenarios don't delve into the specifics of designing memorable experiences, they establish the basis for incorporating memorability factors in the subsequent components of the framework.

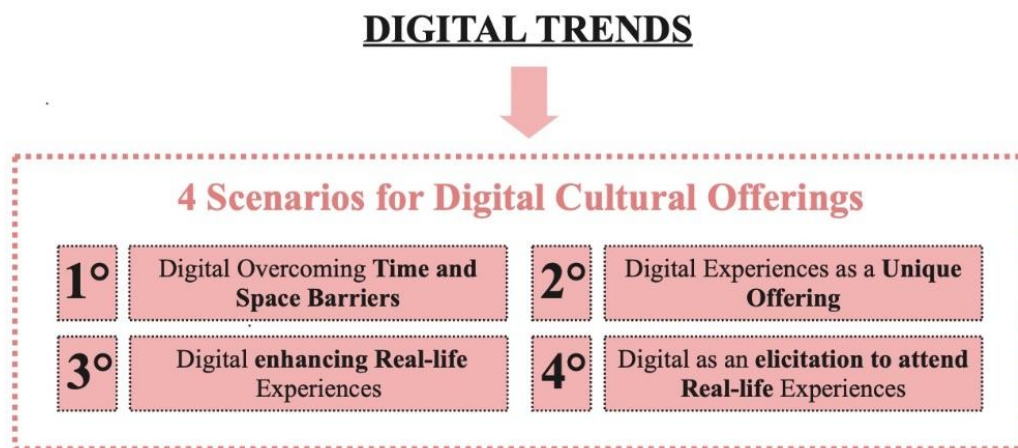


Figure 1. Framework elaboration: Scenarios for Digital Cultural Experiences

5.1.1.2. RQ2: Memorable and Digital Cultural Experiences Based on Young Customers' Needs

Memorability Factors

Upon determining the contexts for offering digital cultural experiences, the next step in the framework's development is the display of the identified factors affecting the memorability of cultural experiences. As described in the findings chapter, several key factors significantly influence consumer experiences. These factors illustrate the diverse needs of consumers when engaging with cultural experiences and have an impact on their memory.

These factors have been organized into two main categories; **(1) known factors**, derived from the theory-based framework and corroborated by the qualitative interviews, and **(2) discovered factors** that emerged from the interviews and were not found in the literature reviewed.

The **known factors (1)** are divided into two subcategories: **(a) Ways of Consumption** describing the methods consumers use to engage with cultural experiences which is further divided into **Absorption and Passive Participation; Immersion; and Active Participation and Interactivity**. These categories represent a spectrum of engagement levels, ranging from passive consumption to active, interactive involvement. **(b) Key Factors** represent significant attributes that consumers seek in a cultural digital experience. They include **Education and Knowledge; Entertainment and Hedonism; Esthetics and Atmosphere; Escapism and Refreshment; Novelty; Meaningfulness; Authenticity; Emotions; and Senses**. These key factors can be experienced across all ways of consumption. All these factors were taken from Pine and Gilmore's (1999) framework of experiences, from Kim, Ritchie, and McCormick (2012) MTE scale, authenticity was taken from Rasoolimanesh et al. (2021), and sensory and emotional experiences from Batat (2019). All were confirmed as relevant in the cultural context, as they were salient through the findings. However, their meanings were specified, as respondents, for instance, perceive esthetic to be atmosphere and authenticity for them relies on legitimacy, rather than connection or understanding as vaguely defined by Rasoolimanesh et al. (2021). Moreover, these findings were also pointing at the existence of other memorability factors. Hence, the previously mentioned antecedents of memorability, though still relevant, were not extensive.

The **discovered factors (2)** are also classified into two categories: **(a) key factors** and **(b) facilitating factors**. Complementary to the known key factors, the discovered key factors emerged from the interviews and represent what customers need to remember the digital cultural experiences they consume. These include **Co-creation with others** and **Storytelling**. They can also be experienced across all ways of consumption previously identified. In addition to these key factors, facilitating factors were identified. The literature on memorable experiences hadn't prioritized them but they are actually crucial in enhancing customers' satisfaction and indirectly contributing to the overall memorability of an experience. **Freedom of Experience and Exploration; Dynamism; Budget; Comfort, Simplicity and Accuracy; Quality; Context; Organization and Structure**; and finally **Taste** have all been identified as facilitating factors. While these factors are not explicitly associated with memorability, they are essential to the user experience as their absence could hinder engagement and satisfaction.

For clarity and easy reference, all the memorability factors have been compiled in the following table, with links to their detailed descriptions provided in the findings section:

(1) Known Factors	(2) Discovered Factors
<p>Ways of consumption</p> <ul style="list-style-type: none"> ● Absorption and Passive Participation ● Immersion ● Active Participation and Interactivity 	<p>Key Factors</p> <ul style="list-style-type: none"> ● Co-creation with others ● Storytelling
<p>Key Factors</p> <ul style="list-style-type: none"> ● Education and Knowledge ● Entertainment and Hedonism ● Esthetic and Atmosphere ● Escapism and Refreshment ● Novelty ● Meaningfulness ● Authenticity ● Emotions 	<p>Facilitating Factors</p> <ul style="list-style-type: none"> ● Freedom of Experience and Exploration ● Dynamism ● Budget ● Comfort, Simplicity and Accuracy ● Quality ● Context ● Organization and Structure

• Senses	• Taste
--------------------------	-------------------------

Table 6. Memorability Factors for Digital Cultural Experiences

Interplay between the Factors

Pine and Gilmore (1999) depict realms of experiences as mutually exclusive, where one experience can belong to one realm or another, but not to several. Kim, Ritchie, and McCormick (2012) created an MTE scale of seven elements and suggested using them in experience design, without explaining how. The findings of this research contradict Pine and Gilmore’s (1999) suggestion of mutual exclusivity, revealing that the factors are in fact intertwined. Each of them is influencing and being influenced by others, extending the scope of the MTE scale offered by Kim, Ritchie, and McCormick (2012). This interplay was outlined in the findings section, suggesting possible ways the key factors could be combined when designing digital cultural experiences. However, it is important to acknowledge that the connections shown were based on the responses of the interviewees. This implies that additional interactions could exist, which may be discovered in future research.

The factors categorized into “Ways of Consumption,” which describe the methods consumers use to engage with cultural experiences interplay between each other, as an experience can either involve one of these consumption strategies or incorporate all of them simultaneously. These factors also interact with all other key factors since they encompass them. This depends on the type of experience that cultural institutions aim to provide. Similarly, every user experience requires the facilitating factors, which consequently interact with all the other factors as well.

The following matrix summarizes the interplay between the key factors, which was developed in detail in the findings section:

Key Memorability Factors	Education and Knowledge	Entertainment and Hedonism	Esthetic and Atmosphere	Escapism and Refreshment	Novelty	Meaningfulness	Authenticity	Emotions	Senses	Co-creation with Others	Storytelling
Education and Knowledge	X										
Entertainment and Hedonism		X									
Esthetic and Atmosphere			X								
Escapism and Refreshment				X							
Novelty					X						
Meaningfulness						X					
Authenticity							X				
Emotions								X			
Senses									X		
Co-creation with Others										X	
Storytelling											X

Figure 2. Interplay Matrix

This interplay resulted in the second part of the suggested framework, in the form of a web of interconnections, depicting the network of factors and their interrelations. This represents the complex picture that emerged from the respondents’ accounts of their experiences and is intended to assist cultural experience providers in understanding potential synergies they can leverage to enhance these experiences.

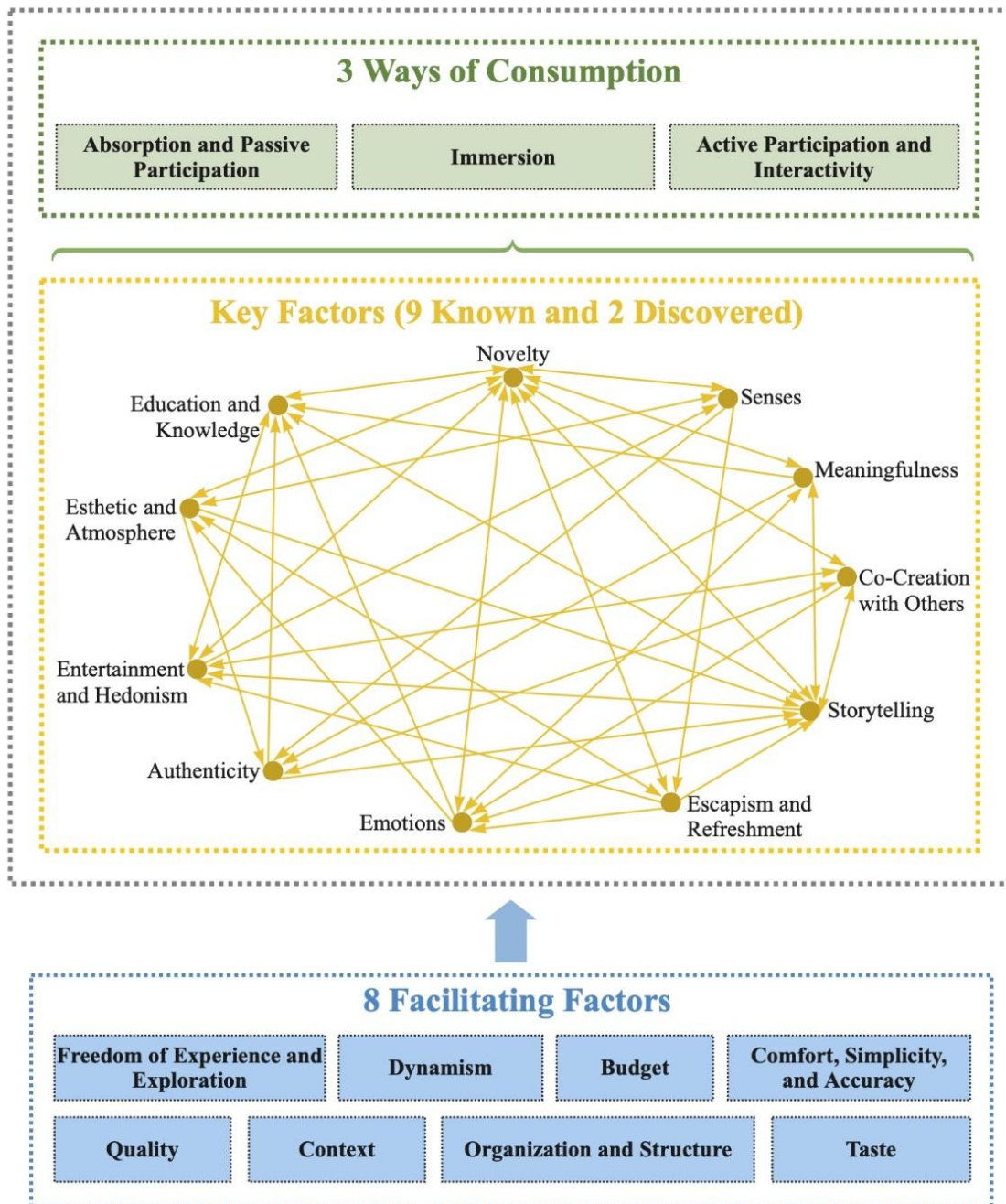


Figure 3. Framework elaboration: Factors for Designing Memorable Digital Cultural Experiences (MDCEs)

Digital Applications

It was also confirmed that these factors are effective in digital settings, indicating that consumers seek them in digital cultural experiences, and digital tools can potentially facilitate the realization of these factors.

Consumers' Needs in Digital Cultural Experiences:

Consumers have expressed a need for the previously identified factors for their digital cultural experiences. The ways consumers engage with digital cultural experiences are indeed categorized into absorption and passive participation; immersion; and active participation and interactivity. Users frequently absorb content passively through diverse platforms but also enjoy active participation and interactivity, which transform them from observers into creators. Additionally, immersive experiences are popular among young audiences, allowing them to explore different times and places.

The identified memorability key factors are also needed when consuming digital cultural experiences. Education and knowledge are inherent to culture, but the information presented should preferably be entertaining. Hence, entertainment is a significant factor that makes the experience more fun, enjoyable and thus memorable. Esthetics and atmosphere, evoking similar or better sensations as in physical settings, have also been highlighted. Moreover, digital cultural experiences should provide a sense of escapism, transporting users to far and new worlds and experiences away from daily realities. Talking about new worlds, in the innovative digital realm, consumers are continually attracted to original and unique experiences, thrilled about discovering new content and trends or gaining new knowledge. Lastly, meaningful content and connections, which are also linked to emotional and sensory experiences, are as needed as the other factors and as important in the digital realm as in the physical.

More key factors have been identified as important needs when consuming digital cultural experiences: Social interaction and co-creation with others enhance what might otherwise be solely absorptive experiences, and authenticity connects users more deeply with the offerings and their real-world context. Lastly, storytelling allows users to understand the cultural content or the creators on a deeper level, enriching the overall digital cultural experience.

How digital tools can leverage these factors:

Digital technologies hold great potential to provide cultural experiences in line with the needed memorability. They facilitate all the modes of cultural consumption. Users can passively absorb cultural content across different platforms such as websites, social media or video streaming platforms. They can also immerse themselves in different cultural worlds using

immersive tools like VR to enhance the sensation of physical presence that transcends time and space. XR tools also enable an active participation that would not be possible in physical settings, such as interactions with artifacts, or even with people and objects from other eras.

Digital tools also help guarantee the key factors needed in digital cultural experiences. Immersive tools like VR, for instance, can offer memorable education through visual storytelling, and interactive elements enhance entertainment making the experience more fun and enjoyable. For example, in a hybrid setting, AR allows museum visitors to play with a piece of art. Digital tools can also create amazing esthetics and atmospheres using visual and auditory effects while they offer various virtual landscapes for escapist purposes. The digital realm is also constantly innovating, delivering diverse content tailored to individual preferences through data analytics and behavior prediction algorithms.

Features promoting shared experiences, comments, or user-generated content facilitate social interaction and co-creation, enhancing the cultural experience, while emerging technologies like VR, AR, and holographic projections have the potential to bring people closer and offer emotional connections with the offerings, enhancing the impact and memorability of these experiences. Technologies offering 4D experiences, for instance, advance towards more immersive sensory experiences, even involving tactile and olfactory effects. Lastly, XR tools have the potential to replicate physical experiences authentically, making the digital experience feel even more “real”.

Facilitating Factors:

Several factors have been identified as indirectly contributing to the memorability of digital cultural experiences by enhancing user satisfaction. Freedom of experience and exploration is important, with users valuing the ability to navigate and control their experiences, although a balance between guidance and freedom should be included to allow users to choose following their needs. Dynamism prevents user disengagement from monotony through social interactivity and multimedia elements like videos, carousels, or ambient sounds. However, dynamism should be used carefully and allow adjustments according to user preference.

Budget concerns might also be prohibitive for many people, highlighting the need for affordable and accessible digital alternatives. Comfort, simplicity, and accuracy in the user

interface design are essential to prevent user frustration, thus digital offerings should be clear, intuitive, and easy to use. High-quality interface design, text readability, and accurate representation are also critical to a quality user experience, as poor quality can question authenticity. Context provision is essential for user comprehension and appreciation of offerings, as its absence can confuse users or lessen content appreciation. Finally, structure and organization are necessary to make the experience more enjoyable. It is also important to note that personal taste plays a significant role in user perception and enjoyment of experiences. Even with all the factors considered, personal preferences can significantly influence user satisfaction.

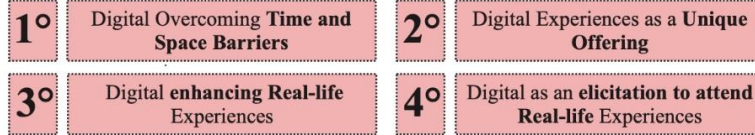
5.1.1.3. RQ3: Suggested Framework

Building upon the answers to RQ1 and RQ2, which were developed in the preceding chapter, the framework designed to guide the development of memorable digital cultural experiences for young audiences will be presented followingly. This framework, informed by in-depth analysis of young customers' memorable cultural experiences and their needs, aims to aid cultural providers in creating digital offerings that resonate with this demographic in various cultural settings. By defining the factors contributing to the memorability of such experiences and their interrelations, the intention was to establish a tool for designing MDCEs that not only engage young audiences but also leave a lasting impact.

DIGITAL TRENDS



4 Scenarios for Digital Cultural Offerings



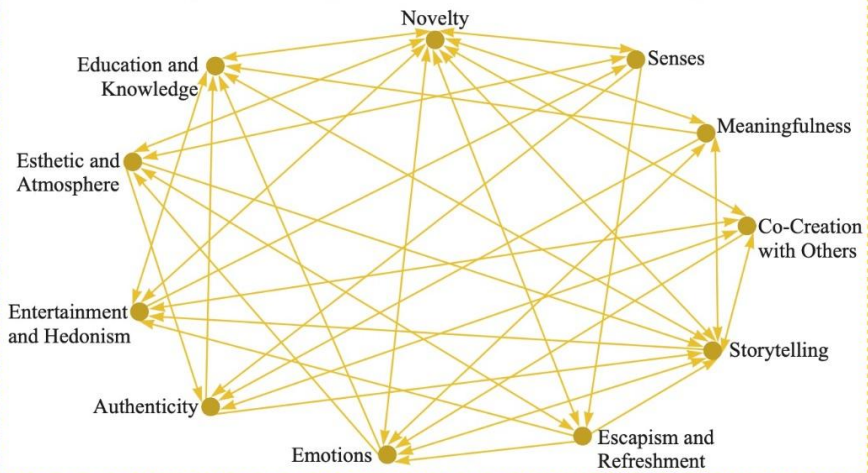
MEMORABLE DIGITAL CULTURAL EXPERIENCES



3 Ways of Consumption



Key Factors (9 Known and 2 Discovered)



8 Facilitating Factors



Figure 4. Suggested Framework

To understand how the framework functions, consider the following example:

Suppose a cultural provider wishes to design a promotional digital experience to entice potential visitors to Tokyo. This aligns with the fourth scenario of “**Digital as an Elicitation to Attend Real-life Experiences.**” This digital experience can be **absorptive**, captivating the minds of viewers, and **immersive** allowing them to visualize themselves within the reproduced environment. It can also be **interactive** by enabling viewers to interact with the content and navigate the environment as they wish.

To accomplish this, the cultural experience provider could offer a **novel interactive** map that allows users to navigate freely using their computer, complemented by links to **absorbing** images and video, as well as an option to simulate a virtual visit that **immerses** them in the space using a VR headset.

The content can be designed primarily using the **esthetic** factor, recreating the **authentic** atmosphere by playing on **sensory** elements like colors, visual effects, and sounds. Moreover, since esthetic interplays with **storytelling** and **escapism** in addition to **novelty**, **authenticity**, and **senses**, this digital offering could present the experience in the form of a narrative. For instance, it could be framed as a folkloric **tale**, depicting the viewer's **escapade** in different times and sites. Moreover, the integration of the maximum possible number of facilitating factors should be considered. This approach will enhance the viewers’ experience, making it memorable and potentially inspiring a future visit to Tokyo, if conditions permit. Alternatively, they might choose to relive the experience virtually, reflecting the first scenario of “**digital overcoming time and space barriers.**”

The integration of these factors is intended to enhance the memorability of the digital cultural experience. However, it is not obligatory to incorporate all interplaying factors, and other factors, even if they are not shown to directly interplay, can also be included. The choice of factors ultimately depends on the context of the specific digital cultural experience. This framework serves as a guide to assist and ensure these factors are not overlooked.

5.1.2. Sidenote: Retention and Ongoing Relationship

We have previously established that experience memorability influences its lasting impact on individuals and leads to an increased likelihood of revisits or recommendations (Kim, Ritchie, & McCormick, 2012; Rasoolimanesh et al., 2021). Therefore, **positive initial interactions** are a key element for consumers to extend their relationship with cultural institutions. As Informant #9 expressed about a festival she particularly enjoyed: *“Yes, since it was a nice experience [...] I went back every year.”* Informant #11 added about the Van Gogh hybrid exposition: *“I will remember it for sure. And the time I will go to that city, I will go first of all to that place [...] because I want to live the same feeling that I felt.”*

Nevertheless, the creation of **ongoing relationships** and an **experience continuum** that stretches beyond the initial experience, as suggested by Batat (2019), is also important in fostering long-term relationships and loyalty. This suggests that the experience remains ongoing and should incorporate the factors delineated previously. Indeed, the decision to engage in similar experiences in the future, though memorable, is not always guaranteed. Informant #7 commented: *“Once I have seen something, [...] it is enough unless they propose some very interesting experience.”* Informant #12 added: *“If there is something new, I would definitely visit the Louvre again. It's a good place, to be honest. I liked it when I visited the first time. It was a good experience.”* These statements highlight the necessity of continuous innovation and novelty to maintain engagement and foster ongoing relationships.

The use of **digital tools** emerged as an effective means of extension. To keep customers engaged in the long term, cultural institutions could easily consider implementing different strategies tailored to the needs of their audience. While some participants, like Informant #18, expressed a desire for a more structured, ongoing relationship with cultural institutions, such as through **memberships or newsletters**, others favored a more periodic and exploratory approach to cultural experiences. In this context, **social media platforms** have proven to be powerful tools for fostering ongoing relationships between consumers and cultural institutions. These platforms offer a dual function: they enable cultural institutions to share updates, news, and events, while also providing a platform for consumers to share their experiences, opinions, and feedback. As Informant #11 shared: *“Social media is like a digital must. It's where I can see what's new,*

what's coming up [...]. It's more dynamic and interactive than traditional ways.” Moreover, social media platforms allow for a degree of **personalization** that can enhance the consumer's engagement with the institution. They can tailor their posts and interactions based on their followers' interests and behaviors, and consumers can choose to follow or engage with the content that resonates with them. Informant #7 commented: *“I like how on Instagram [...], I see content and suggestions that I will like. It's more relevant to me.”*

While social media platforms provide a good option for ongoing engagement, Informant #6 expressed the need for a **centralized platform** for cultural institutions saying, *“It would be tedious to subscribe to all the museums, follow their updates, and receive each one's notifications. This relates us to the need for a centralized platform that would display all the information.”* This dedicated app for cultural institutions could also offer consumers an immersive and personalized experience, including features such as virtual tours, interactive exhibitions, personalized recommendations based on past visits and tastes, and a community forum for discussion and sharing.

Another innovative approach could be the use of AR to extend the cultural experience beyond the institution's physical location. This idea was also inspired by Informant's #6 comment about the MET's digitalized experience who commented: *“[It] is amazing! They advertise their products very well, even give you a chance to display them in your house.”* After visiting an art exhibition, for instance, a visitor would employ a dedicated application to digitally display a selected piece of artwork on their living room wall. This approach would allow individuals to **bring a portion of the experience home** with them, extending the cultural encounter into their personal space, which would drive their enthusiasm for future visits.

The process of extending the cultural experience and establishing ongoing relationships is therefore facilitated by positive initial experiences, continuous novelty, the diverse use of innovative digital tools, and an understanding of consumers' diverse needs. When these elements are successfully combined, they can foster a sense of connection and loyalty that encourages consumers to continue engaging with cultural experience providers.

Although the scope of this research could not cover it in detail, the concept of experience encompasses the entire customer journey; before, during, and after the interaction with the offerings. This end-to-end approach ensures that all interactions during all phases of the customer journey contribute to building a memorable and engaging cultural experience, suggesting that the design of MDCEs should be a holistic process. This could be a subject for further research.

5.2. Contribution to the Literature

This research contributes to the fields of experience economy and digitalization in the cultural sector by introducing a comprehensive framework for designing MDCEs based on the memorability factors confirmed by young audiences when recalling their cultural experiences and describing their needs. This study combines the four realms offered by Pine and Gilmore (1999), the MTE factors developed by Kim, Ritchie, and McCormick (2012) and Rasoolimanesh et al. (2021), and the emotional and sensory experiences proposed by Batat (2019). By combining these generic frameworks (Pine & Gilmore, 1999; Batat, 2019) and the specific frameworks related to the tourism sector (Kim, Ritchie, & McCormick, 2012; Rasoolimanesh et al., 2021), along with new factors extracted from respondents' accounts, this research proposes a new framework for devising memorable experiences tailored to the cultural sector, thereby filling a recognized gap in academic research. In addition, recognizing the role of digitalization in shaping the provision of experiences, this research affirms the necessity of the identified memorability factors in designing memorable digital cultural experiences specifically. It also uncovers potential trends in digital cultural consumption that illustrate when such digital cultural experiences are needed.

Moreover, while previous frameworks tend to focus heavily on the offerings or present the factors influencing memorability separately from each other, the framework developed in this study points to the interconnectivity of memorability factors, stating that one is highlighting the other and should not be seen as exclusive.

Significantly, this study also fills an identified gap in our understanding of the audience itself, emphasizing the necessity for an in-depth comprehension of their digital needs for creating memorable cultural experiences and effectively tailoring these experiences to meet these specific

needs. Most existing findings are predominantly quantitative and did not yet investigate the emergent cultural behaviors in the context of the post-COVID-19 era and digital experiences. As young audiences' needs have evolved, the qualitative approach of this research offers not only academic insights but also practical guidelines that cultural institutions can use to remain relevant and engaging.

5.3. Implications of the Research

This research serves as a guide to understanding customers' needs concerning cultural experience consumption in the digital age, where traditional approaches to cultural consumption are increasingly augmented or replaced by digital alternatives. It specifically focuses on delivering memorable and digital cultural experiences to young audiences.

This study is particularly relevant for managers of cultural institutions, as the proposed framework points to effective strategies for meeting the needs of young audiences and enhancing their engagement. Indeed, this framework emerges as a valuable tool that offers a comprehensive understanding of the trends in the digital consumption of cultural experiences and the factors to consider when designing memorable digital cultural experiences. Notably, it also proposes an interplay among these factors, providing a multitude of suggestions for creating a diversity of these experiences. This insight enables cultural institutions to better understand how to attract and particularly retain young customers effectively. By tailoring their offerings to the needs of young audiences and focusing on the memorability of their experiences, cultural institutions can cultivate lasting relationships with these audiences, ensuring long-term success and sustainability.

For young audiences, the research also holds significant implications. It supports the provision of relevant digital cultural experiences that leave a lasting impact on their memories. These experiences afford them the opportunity to engage with diverse cultures in a manner that resonates with them, whether from the comfort of their homes or in a digitally enhanced physical setting. This tailored approach expands their horizons and contributes to their personal and social development.

In a broader societal context, the delivery of memorable cultural experiences digitally fosters greater cultural inclusivity. By making cultural experiences accessible and appealing to

the targeted audience, cultural institutions can play a pivotal role in nurturing a more culturally aware and appreciative society.

5.4. Limitations of the Study

Several limitations must however be recognized to ensure the credibility and reliability of this study. A significant limitation of this research is embedded in the nature of qualitative analysis and data collection chosen for this study. While this research explores the advantages of qualitative methods, allowing the investigation of various meanings of memorable cultural experiences and young audience needs, it also cannot be statistically representative. Thus, however the 18 interviewees come from diverse backgrounds enriching the exploration, their insights cannot be extrapolated to the entire youth population.

Similarly, the limited sample does not allow to state that the phenomenon was explored in depth. Although the study has reached its data saturation, its small size potentially might not have captured the full range of possible meanings and experiences. Furthermore, the collected insights cannot be applied to audiences outside of the purposeful selection of this study, which focused on people aged between 18 and 34 who express some interest in culture. Hence, the results may not be suitable to understand the cultural experiences of those who are not particularly interested in culture.

Moreover, as this research explores all possible varieties of experiences and factors influencing memorability, attention is paid to all possible mentions without regard to their frequency, thus not considering how prevalent they are for the group rather than the individual.

Another limitation is the researcher's bias as we adopt a social constructionist perspective that recognizes the role of subjectivity in shaping the participants' experiences and perspectives. However, our own subjective interpretations may also influence the analysis and interpretation of the data collected. For instance, the definition of culture and cultural experience may be influenced by the constructivist nature of the interview, where the participant might provide examples of cultural experiences based on those mentioned by the interviewer, consequently limiting the responses.

Additionally, since the interplay among memorability factors was identified from the interviewees' accounts, there may be other factors at play that were not specifically expressed. Indeed, this study suggests where the interconnections lie from the collected data, implying that the framework is not fixed and can be readapted by anyone who uses it. Moreover, the multitude of interconnections discovered also raises the question of their relevance since this abundance of interplays could potentially imply that the categorization of the key factors may need to be revised, with some factors being incorporated into others, resulting in more generic factors or categories of factors.

Lastly, a question arises regarding the application of the framework and the initial memorability factor to be considered when designing a digital cultural experience. Adopting visitor profiling, according to Falk's (2006) approach, could assist in identifying the factors most suitable for specific profiles, further enhancing the tailoring of the experience. Recognizing these profiles could even lead to more pertinent combinations of factors to employ in the design of these experiences.

5.5. Further Research

Despite the insights derived from this research, there are several opportunities for further exploration to refine and complete it. Firstly, while the current study centers on young audiences, we recommend future research to broaden the scope, incorporating a wider demographic range. This expansion would enhance the framework's applicability and generalizability.

Significant aspects that call for further examination are the effectiveness of the identified factors in fostering memorability in digital cultural experiences and the interplay between these factors. These could be empirically tested through a quantitative methodology such as surveys, which could be used to quantify the relative importance and influence of these factors and their combinations on audiences. This approach could generate a more statistically robust and generalizable understanding of these factors, potentially refining or even redefining the proposed framework. The interplay between factors and their impact on memorability could also be validated at a case study level or through an experiment. In this scenario, audiences would engage with various offerings designed using various combinations of key factors and follow-up interviews would then determine which experience had the most substantial impact over time

and identify any potential deficiencies of the others. Moreover, given that existing research on experience memorability often presents extensive, isolated lists of factors without considering their interrelation, a more comprehensive and unified model of memorable digital experience is needed. A meaningful study should aim to encapsulate and integrate these various theories as this research has begun to do.

Referring to the memorability factors, each one presents a broad range of meanings that could be considered as subfactors, which deserve further, more detailed investigation. For instance, a factor like “emotions” encompasses various nuances such as relatability or empathy. Regrettably, the scope of the current study does not allow for a deep dive into each variety of these factors. Therefore, future research could attempt to paint a more detailed picture of these facets within the framework, offering a richer understanding of their role in designing memorable digital experiences.

Given that this research defines digital experiences as any means connecting customers to real-world institutions digitally (Batat, 2019), and considering the influence of memorability on loyalty (Kim, Ritchie, & McCormick, 2012; Rasoolimanesh et al., 2021), a logical next step would be to develop a comprehensive framework covering all phases of the customer journey, from attraction to retention. These stages would be recognized as integral components of the overall cultural experience which implies that new design factors, or potentially the use of the same memorability factors identified in this study, should be considered when creating digital experiences both preceding and succeeding interaction with cultural offerings.

Additionally, a deeper dive into customer profiling and personalization within the cultural sector would further enrich the suggested framework. Identifying distinct visitor profiles could generate more detailed guidelines for tailoring digital cultural experiences to diverse audience groups. This profiling could also reveal the most suitable memorability factors for specific profiles, thereby suggesting more effective combinations of factors to employ in experience design.

Lastly, this study, while presenting a generic framework focusing on key factors when designing MDCEs, does not delve into the specifics of digital tools to be employed. Future research could enrich this framework by identifying suitable digital channels and tools, tailored

not only to the setting but also to each profile's unique characteristics. Further classification between fully digital and hybrid settings could provide additional insights for the practical implementation of the proposed framework.

6. Conclusion

This research aimed to analyze how to develop Memorable Digital Cultural Experiences (MDCEs) based on young audiences' needs regarding their digital cultural consumption practices. The purpose of this research originated from a significant research gap in the literature on cultural management and the experience economy, which neglects the assessment of cultural experiences' memorability drivers and young audiences' digital needs when it comes to cultural consumption. In order to fulfill this purpose the research adopted a qualitative method, conducting in-depth interviews with global young audiences to explore the previously undisclosed phenomenon of MDCE.

This research provides valuable insights on the creation of MDCEs for cultural providers in a broad meaning of the cultural sector going from arts to video gaming. While the study is not without methodological limitations, it presents empirical answers, generalizable to the young population, to the following research questions:

RQ1: What current trends can be identified regarding young audiences' cultural consumption?

RQ2: What constitutes a memorable cultural experience, and more specifically, a digital cultural experience, based on customers' needs?

RQ3: How can memorable digital cultural experiences be designed (by providing a framework for MDCEs based on customers needs)?

Regarding the trends in cultural consumption of the youth, this research spotted the significant pattern of consuming culture digitally. This shift was influenced by the global pandemic and the subsequent adaptation of a hybrid lifestyle. To engage in cultural experiences, young audiences are using varieties of digital platforms including streaming services, social media, websites, blogs and so forth, as they look for new cultural insights. However, though young audiences heavily consume culture digitally, they also look for real-life experiences and express defensiveness when thinking about exclusively consuming culture digitally. The digital cultural offering must therefore prove its utility, and analyses of young audiences' needs allowed to develop contexts in which MDCEs should be provided to them.

Followingly, the research, using a theory-based framework, delved into the identification of drivers for the memorability of cultural experiences and their application in digital settings. It proved the relevance of the theory-based framework and extended it. The findings revealed new factors driving memorability including co-creation with others, pointing to the need for collaboration when it comes to MDCE, and storytelling, suggesting the use of powerful narration practices. However, all the prior theories were providing lists of experience factors without depicting their dynamic picture, when in reality, these factors are interconnected. Additionally, a list of facilitating factors influencing the key factors was developed, though they had not been previously presented in the literature.

Finally, the answers to the previous research questions enabled the gathering of the needed bricks to create a framework for designing MDCEs tailored to young audiences. The developed framework suggested needs-based contexts, as digital experiences need to be context relevant to compete with real-life opportunities. Then, the application of a web of memorability factors was suggested to guide the design decisions, since the findings revealed that these factors are influenced and enhanced in relation to one another. Lastly, the framework was closed by facilitating factors that empower the key factors to drive MDCEs. As a final note, the research suggested paying close attention to the retention of young customers via MDCEs, as the experience does not end after its provision and memorability is indeed significant for cultural institutions since it can create lasting impact on the hearts and minds of the youth.

Consequently, this research serves as a starting point for investigations into the MDCE and suggests further research into the phenomenon. This could involve testing the results on other age groups, or employing quantitative methods, which could provide a more hierarchical or intertwined picture of the developed factors for MDCE, leading to a more generic model of memorable experiences.

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8. Appendices

8.1. Appendix 1: Interview guide

Interview Duration: Between 45 and 90 minutes

Part I: Getting to Know Each Other
1. What is your name?
2. What is your age?
3. What is your gender?
4. What country are you from?
5. What is your occupation or field of study?
6. Can you describe your daily routine, including your work and other activities?
Part II: Collecting Memorable Experiences
Bloc 1: Perception of Culture and Cultural Experience / Most Memorable Experience
1. What does culture mean to you and how do you see its role in your life?
2. When we say “cultural experience”, what comes to your mind first?
3. Can you give us examples of the most memorable and enjoyable cultural experience you engaged in?
Bloc 2: Cultural Experiences and Consumption (During COVID-19) / Digital Experiences
1. How did the stay-at-home order influence your experience of culture?
2. During the pandemic, were you looking for digital cultural experiences? If yes, please provide an example of the most memorable one, if not, please explain why.
3. Follow-up question: How did you feel about the quality of these digital cultural experiences?
4. Follow-up question: Would you engage in this experience again and why?
Bloc 3: Cultural Experiences and Consumption (Post-COVID-19) / Consumption Trends
1. How did the end of the pandemic change your daily life?
2. What are your current methods for consuming culture?

3. Do you think your cultural consumption habits will change permanently? If so, why?

Closing-up Questions: Opinion about Digitalisation of Cultural Experiences

1. What do you think about digitalisation of culture?

2. How do you think digital experiences can complement or enhance physical cultural experiences? (e.g. more interactivity, compelling visual design, immersive stories, etc.)

Part III: Visual Elicitation

A. Websites and Social Media Pages

Websites:

- [Dauids Samling Art Museums, Copenhagen, Denmark](#)
- [Louvre Museum, Paris, France](#)
- [MoMA, New York, USA](#)

Social media pages:

- [Dauids Samling Art Museums, Copenhagen, Denmark](#)
- [Louvre Museum, Paris, France](#)
- [MoMA, New York, USA](#)

1. Which webpage did you engage with the most and which one did you enjoy the least? Could you explain the reasons behind your choice?

2. Which social media page did you engage with the most and which one did you enjoy the least? Could you explain the reasons behind your choice?

3. Would you consider visiting these pages as a cultural experience? Why?

B. Virtual Experiences

- [Louvre, Paris, France](#)
- [The Museum of the World by the British Museum, London, UK](#)
- [Artistic Memes](#)
- [Yayoi Kusama - Great Art explained, infinity rooms](#)

1. Which virtual experience did you engage with the most and which one did you enjoy the least? Could you explain the reasons behind your choice?

2. Would you consider visiting these pages as a cultural experience? Why?

C. Digitalized Physical Experiences

- [Immersive art and music dome park in LA, USA](#)
- [Hiroshima peace memorial in Hiroshima, Japan](#)

- [Studio Play, by the Cleveland Museum in Cleveland, USA](#)
- [Meet Vincent Van Gogh Experience, by the Van Gogh Museum in Amsterdam, Netherlands](#)

1. Which announcement commercial did you engage with the most, and why?

2. Which one did you like more, the fully digital or the digitalised physical experience and why?

3. Would you consider these examples as a cultural experience? Why?