A Strategic Co-creation Framework
for European Design Museums

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Abstract: The creative economy, especially in the design industry, has become increasingly important to many European countries. This provides a good opportunity for European design museums to establish themselves as platforms for innovation. Design museums already possess incredible resources for promoting innovation, e.g. design knowledge and conference facilities. However, most museums concentrate on showcasing world-class designs and overlook the possibility of using their capabilities to support people to create and exchange innovative ideas, e.g. allowing people to exhibit creative content and collect feedback from the public. Apparently, there is a need to explore new roles of European design museums in co-creation. This study used a number of qualitative research methods for engaging with all parties to explore the needs and barriers for design museums being co-creation platforms. The study suggested that most stakeholders perceived co-creation with design museums as an effective way to enhance visitors' creative experience and disseminate design knowledge. Moreover, allowing people to exhibit creative content could support creative entrepreneurship. Nevertheless, there are practical and emotional barriers that need to be addressed. Subsequently, a strategic co-creation framework was proposed to tackle key barriers identified. While some strategies focus on changing organizational cultures and people's mindsets, others recommend activities/tools that could assist people in co-creating content with design museums, while maintain the high quality of the exhibits.

Key words: Co-creation, Experience Design, Design Museum

1. Introduction

1.1 The Creative Economy

The creative economy is an emerging concept. Although, there is no single authoritarian definition of this concept, it is generally agreed that "creativity" will be at the heart of the future economy. According to the United Nation's Creative Economy Report 2008, creativity leads to the creation of artworks, cultural products, functional artifacts, scientific inventions and technological innovations [1]. Thus, there is an economic aspect in creativity. This report highlighted that creativity could contribute to entrepreneurship, income generation, job creation, export earning, productivity and economic growth. While many European countries face financial difficulties caused by the recent economic downturn, their creative industries still continue to grow. For example, NESTA reported that the UK creative industries contributing more than £50 billion to the UK economy every year [2].

Subsequently, the creative economy, especially in the design aspect, has become a top national agenda of many European countries such as the United Kingdom and Denmark [3]. The study commissioned by the UK Design Council showed that good use of design could help a company outperformed leading organizations in the FTSE

100 Index [4]. However, most organizations are still unaware of value that design could bring and therefore fail to integrate design into their businesses. This might be because most people still perceive design as art rather than strategic tools. Apparently, there is a need to educate people about value of design beyond tangible products.

This situation provides a good opportunity for European design museums to play a key role in educating people about design and its contributions to creative economy. However, most European design museums are currently concentrating on showcasing world-class design artifacts and overlook the possibility of providing an immersive creative experience that could help the general public as well as the young generation of designers develop a better understanding about design thinking and design process. This gives a research gap to investigate the possibilities and barriers of European design museums offering a more immersive creative experience through co-creation. By allowing people and the young generation of designers to collaborate with experienced designers, they could develop a better understanding of design thinking and design process. Moreover, good use of co-creation could provide a platform that promotes creative collaborations between design disciplines and the general public.

1.2 The Co-creation in Cultural Institutions

Recently, a shift in the way cultural institutions operate has been perceived. Cultural institutions (such as museums) have an important role to play in the creative economy. For example, the United Nations suggested that cultural institutions are "*the interface among creativity, culture, economics and technology, as expressed in the ability to create and circulate intellectual capital*" [1]. Museums can no longer operate as an authoritarian institution. They have to start engaging with people and communities and addressing contemporary needs.

As early as 1975, Jelinek, a museologist, pointed out that: "*museums only fully develop their potential for action when they are actually involved in the major problems of contemporary society. Museums are institutions intended to serve society, and only thus can they continue to exist and function*" [5]. This statement has become more pertinent in the 21st century. Simon [6], an experienced designer and a museum director, observed that the participatory design approach is a practical way to enhance museum experiences and reconnect with the audiences, since they enable people to participate in designing experiences – thereby increasing the satisfaction level.

Over the past forty years, participatory design, co-design and co-creation have attracted designers and design researchers' attention and increasingly been used in the design industry as well as (to a minor extent) the cultural sector. These terms are often used as synonyms, but they convey different meanings. According to Sanders and Stappers [7], co-creation can be defined as "*any act of collective creativity shared by two or more people, applied across the whole span of a design process*". The term, co-creation, is considered to be broader than co-design and participatory design. The word *'design'* in both co-design and participatory design implies that these approaches focus on collective creativity within the design process, e.g. users design a product with designers.

The concept of participatory design, co-design and co-creation are often applied in the context of the new product development process. The idea was introduced back in the early 2000's by Prahalad and Ramaswamy [8]. The researchers claimed that customers would no longer be satisfied with just giving feedback on what a company offers. According to these authors, "*consumers become a new source of competence for the corporations as they bring in skills and a willingness to learn and experiment*". Subsequently, they proposed the idea of *'harnessing'* consumers' competencies in a flexible organizational structure. While their idea may challenge organizational configurations, it allows companies to transfer knowledge across boundaries and create values/new opportunities. Although the majority of co-creation studies were carried out in the commercial context, certain challenges

identified in private companies (e.g. a hierarchical structure) can also be found in cultural institutions. However, there is a new to explore the possibility of applying co-creation in the cultural institutions further.

2. Aim and Objectives of the Study

The background research pointed out that museums need to reconnect with the audience and to demonstrate their significance in contemporary society. Due to their nature and unique characteristics, European design museums have a strong potential to engage people who are increasingly looking for more complex forms of engagement and immersive creative experience. As a result, this research aimed to explore opportunities for and barriers to an effective use of co-creation practices in design museums in order to bring value to all the stakeholders involved in the creative experience. Accordingly, this research aimed to develop a strategic co-design framework for European design museums.

3. Research Methodology

A number of qualitative research methods were employed to engage with all key stakeholders, namely museum curators, visitors, designers and co-creation researchers (Figure 1). The study also engaged with experts in the digital media, since the application of co-creation in design museums could be achieved online and/or offline.
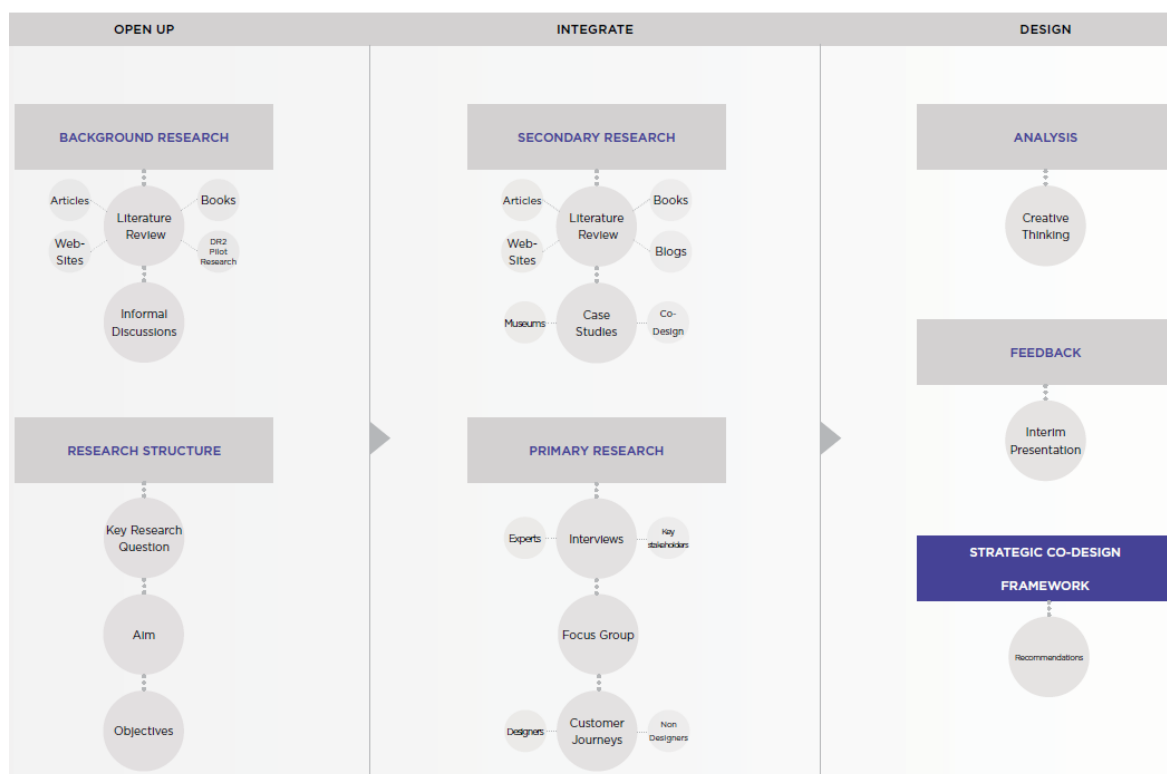

Figure.1 The research's structure

3.1 Focus Group

The focus group was carried out with seven young creative professionals to identify support/activities that they would like design museums to provide in order to help them develop design knowledge further and connect with the general public. The process lasted approximately one hour. The purposive sampling strategy was employed to select the participants – in this case, educational backgrounds are considered to be the main criterion.

3.2 Customer Journeys

In the co-creation process, users are considered to be the most important stakeholder. The process is no longer about designing for users, but with users. To gain in-depth understanding of user expectations, requirements and the current satisfaction levels of creative experience that design museums offered, two sets of customer journey were carried out at Design Museum, London. The first set of customer journey was conducted with four visitors with a strong interest in design and good understanding of design due to their educational backgrounds. The second of customer journey was carried out with three visitors with some interest in design, but without in-depth understanding of design (their educational backgrounds ranging from finance to medicine). The purposive sampling strategy was employed to select the participants – in this case, lifestyles were regarded the main criterion. The visitors with and without design educational backgrounds were selected in order to contrast similarities and differences of their requirements and expectations in regarding to immersive creative experiences.

In order to help participants record their thoughts, feelings and experiences in three stages (pre-experience, real-time experience and post-experience), three simple templates adapted from the Customer Journey Canvas [9] were created and pilot tested to ensure the comprehensibility – see an example in Figure 1. The form was sent to every participant in advance along with the detailed descriptions of the journey. They were requested to start recording their impressions regarding the pre-experience. The form was collected a week after the journey to allow people to reflect on the post-experience as well. During the actual visit, participants' behaviors were also observed. After the visits, reflective interviews were carried out to discuss their impressions of the experience.

Figure.2 The template for recording pre-experience

3.3 Semi-Structured Interviews

Due to the multidisciplinary nature of the research, expert interviews were essential in order to get opinions and insights from all of the stakeholders. The profiles of all interviewees are listed below:

1. The Head of New Thinking at a leading design and branding agency with 18 years of work experience in the field of strategic design. He has worked with over fifty organizations, including Tate and National Trust, UK. He teaches branding for the Clore Leadership Programme and the Museum Leadership Programme.

2. A researcher of the "Strategic design for valorization of the cultural heritage" research unit at Politecnico di Milano. Her research interests are focused on the innovative role of design as a strategic and community centered approach for the enhancement and activation of tangible and intangible Cultural Heritage; in particular *"design processes, strategies and techniques improving sustainable cultural heritage awareness and development, and also implementing local knowledge and creative and artistic activities"*.

3. An experienced design with many prestigious design awards. He also held lectures in many design schools and academies. His designs were exhibited in many international exhibitions. In 2010 the Design Museum of the Triennale di Milano featured the personal exhibition about his work, where he was involved as a *"designer in residence"* – literally carried out design works in the museum in front of the public for a certain period of time. The idea was to provide interactive experience for visitors in order to help them understand the design process.

4. The Professor of Modern Art History and Contemporary Museology at Politecnico di Milan – he is a fellow of the Harvard University Center for Italian Renaissance Studies. He is also the Director of Superintendence for the Artistic and Historical Heritage of Milan and Vice-Director of the Pinacoteca di Brera.

5. A cultural brands expert – she is the Director of an independent consultancy specializing in helping cultural organizations – in education, museums, visual and performing arts – to define and communicate who they are through building strong brands. She recently gave a talk on the future of museums at the conference *"Communicating the Museum 2012"* held in New York at the end of June.

6. The founder of MakeTools, a consultancy specializing in helping companies applying co-design effectively across different disciplines. She is also a renowned co-design researcher. Her work focuses on generative tools which allow people to participate in the design process at the very beginning in the idea generation phase.

7. The Director of Web and New Media Strategy at the Smithsonian Institution in Washington DC. This institution is a forefront cultural institution: their web and media strategy is based on sharing contents and encouraging people's participation has been taken as an example by many other museums around the world.

8. The Executive Director at the Museum of Art & History at McPherson Center in California. She trained and worked as an experience designer and she can be considered an expert in understanding visitors' needs and requirements on the creative and cultural experience. Moreover, she is also the author of "The Participatory Museum", an inspiring book that offers insights on participatory practices in the cultural sector.

9. The Head of Curatorial at the London Design Museum where she has the responsibility for the Touring Exhibitions Programme, Collection, Archive and Interpretation.

4. Principal Findings

4.1 Opportunities for Design Museums

Design museums have very distinctive features compared to other cultural institutions. The Head of Curatorial at the London Design Museum stated that design museums "*exist to celebrate and document the way that design impacts on, and improves people's lives*", and therefore content, methods of display and interpretation are very different to those presented at an art museum. In this context, back stories (the process that led to a design artifact) and forward stories (the impact of an object in the society) become as important as the object itself.

It was observed that there are four major trends currently influencing the cultural sector: Digitalization, Connectivity, Personalization and Informality. (In this case, "*informality*" is referred to the tendency to break

down hierarchies and traditions.) These four trends were thoroughly examined in the focus group. The results suggested that the idea of using active participation as a means to enrich visitors' experiences has slowly been adopted by cultural institutions, such as museums. Since most participants of the focus group identified the "*need of inspiration and learning*" as one of the main reasons why they usually attend design exhibitions in museums, they expressed strong interests to be more actively involved in designing the content of museum experience.

According to the results of both sets of customer journey, most participants were disappointed by the current offer (see Figure 2). They suggested that visitors' experiences should be personalized and this could be achieved by allowing visitors to access different levels of exhibitions' contents through appropriate digital technologies. One interviewee stated that museums could no longer enhance their offering by becoming more cross-cultural. Museums should see themselves more as "*platforms that people can use to express themselves*". It was observed that most people expect this kind of platform. However, cultural institutions are rather slow to respond to their expectation. One expert pointed out that design museums in the future should mainly be a source of inspiration: "*they can encourage creativity and fuel creative businesses*", not only for designers but also for a wider audiences.

While most interviewees from the creative industries foresaw more co-creation activities in design museums, an interview with the museologist resulted in a more traditional view. The interviewee could not visualize future creative collaborations between audiences and museums. The reluctance to engage with people demonstrates potential barriers that need overcoming. Thus, the following section will discuss barriers and suitable solutions.
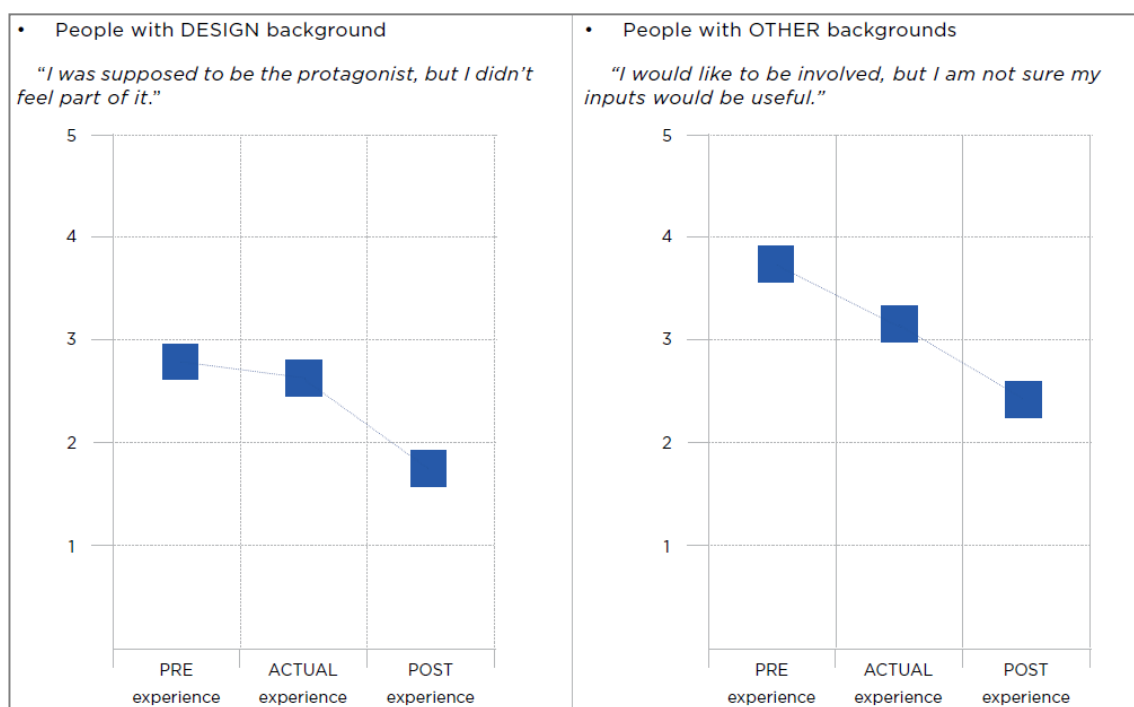

Figure.2 Results of customer journeys at carried out at London Design Museum
(Satisfaction levels: 5 = very satisfied; 1= very dissatisfied)

4.2 Barriers and Solutions

A first barrier identified through the research is "**motivation**". Motivation is essential to the success of any radical change. A strong motivation is especially important in situations where tradition and heavy heritage in terms of management processes dominate the scene. In the cultural sector, the organizational structure is highly hierarchical and the decision making process is rather slow and not effective. To overcome the first barrier, it is

important to **change the mindset** of people in an organization. In order to convince people to embrace new ideas, it is vital to examine organizational goals and demonstrate how new changes will help them achieve their missions. It is also necessary to direct them toward pioneers in their fields and show practical benefits of the changes. To accelerate the process, it is crucial to enhance internal communication so that staff understand and appreciate the reasons behind the changes, and help identify best ways to integrate the changes into their current practices.

A second barrier is "**control**". According to the interview results, participatory strategies are often seen as challenging in the cultural sector. Involving external people who are not trained as curators and do not understand terminologies is perceived as a threat of losing control. Generally, museums have an innate aversion to risk – most museums concentrate on preserving the past and traditions and this reflects in the way they manage their resources. Instead of perceiving creative collaborations as opportunities, they mostly see them as risks. It was noted that from a curatorial point of view, one of the main concerns in involving people in designing experiences could affect the quality (amatory content design and poor narrative). Some experts pointed out that the reluctance to co-create may be a result of intellectual property concerns – e.g. do not want to share certain information with external people. To overcome this barrier, strong **support and supervision** should be put in place to ensure the quality of the outcomes and help audiences achieve their ideas. This collaboration should be seen as another way of educating the general public about design thinking and design process which is one of the key activities of design museums.

A third barrier is the "**mindset**" of the audiences. It is important to point out that not every visitor is interested in active participation. It is not practical to expect all visitors to participate at the same levels. Several experts observed that most people do not see themselves as *'creative'* and therefore are reluctant to be involved. Therefore, it is necessary to break down experience design tasks into small activities so that the majority of visitors can participate. Good use of co-creation activities could **inspire** people to learn more about design and **empower** them to get involved further in the future. A variety of co-creation methods should be carefully selected to suit the needs of both museums and visitors – ranging from create content to voting for other people's ideas – see Figure 3.
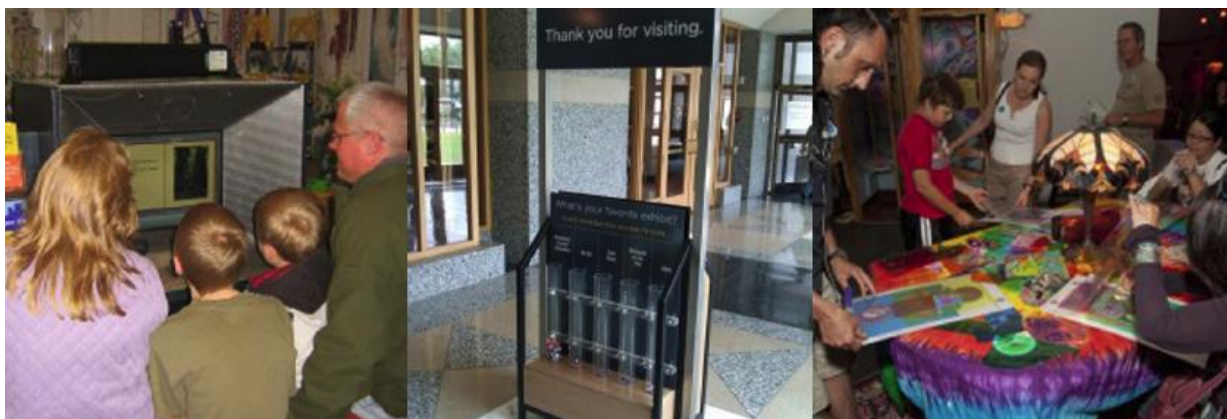

Figure.3 Different levels of participation (Source: http://www.participatorymuseum.org/)
Left-hand side: A family creates a multi-media story to send home; Middle: Exhibit voting bins outside the Minnesota History Center exit; Right-hand side: Poster making activity

The next barrier is "**time and cost**". The recent economic downturn has serious impacts on the cultural sector. Many organizations received significant budget reductions. Subsequently, it is difficult for several museums to embark on new activities, such as participatory experience design. Nevertheless, good use of digital media could help museums achieve active participation without serious cost implications. For instance, **crowdsourcing** (which refers to the process in which content, solutions and suggestions are solicited from an undefined set of participants

via online platforms) has been employed by leading institutions. For example, the Smithsonian American Art Museum invited the audience to vote on their website on which video games to select and include in its "Art of Video Games" display. Several cultural institutions, including the Children's Museum of Indianapolis and the British Museum, have opened positions for *"Wikipedians in Residence"*. The Wikipedians' role is to upload museum images and data into the the Wikipedia universe and to manage contents created by the Wikipedia users.

The final barrier is "**evaluation**". One expert from the cultural sector pointed out that "*One of it is very difficult to control and evaluate the success of this kind of initiative.*" The slow acceptance of participatory techniques in the cultural sector is due to the lack of good evaluation systems. This is because the audience is constituted by a variety of different people and it is therefore impossible to set an unambiguous measure. An effective way to evaluate participatory projects is to set criteria that embrace diversity. By acknowledging different audiences have different expectations regarding museum experience, **different sets of criteria** can be developed and applied.

5. Conclusion

This research investigated the possibilities of European design museums offering a more immersive creative experience through co-creation. The results showed that both visitors with and without design knowledge demanded a more immersive experience from museums and expressed their interests in creating content and planning the experience with the museums although the level of participation varies from one person to another. While progressive museums, such as the Smithsonian American Art Museum, have already made good use of co-creation to educate, collaborate, inspire and empower people, many organisations are slow to adopt co-creation. The study revealed that current barriers included both practical (e.g. costs) and emotional aspects (e.g. mindsets). However, all these barriers can be overcome. Nevertheless, changes have to be made at the strategic level.

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