

Design thinking as a tool for more sustainable cultural heritage tourism experience

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Abstract

This paper discusses the concept of design thinking in the business/management context, making a parallel with cultural tourism management, and attempting to portray it as a tool for a more sustainable tourism experience of cultural heritage. The main goal of the paper is to initiate a conversation of the design thinking concept within the tourism realm and show, on a practical example, how design thinking can be used as a tool for creation of an innovative tourism project, aimed at making a change in cultural tourism experience and making it more sustainable. The very concept of design thinking is discussed first, followed by its interpretation and usage in management sphere and the implications of its usage in cultural heritage tourism realm. Finally, a practical example of a project created in Porto, Portugal is used as a case study.

Keywords: *Design thinking, Cultural tourism, Heritage, Sustainability, (Customer/Visitor/Tourism) Experience, Innovation*

Introduction

Cultural heritage is a legacy of entire nations, it surpasses its creators and generations to follow, it defies time and nature conditions. Thus, we all have an absolute duty to contribute to its preservation, longevity and sustainability, especially in case of cultural heritage of outstanding universal value, classified as such by the UNESCO. In order to do so, the education and awareness-raising about the importance and value of heritage are essential, both with visitors and the locals. Could new tools or methods for a more sustainable and, at the same time, different and innovative tourist experience be generated

as a result of design thinking? – it is the principal question that this paper tries to answer. Is design thinking either superior and more successful, or ‘messier’, if being interdisciplinary, i.e. being a result of networking and involvement of connoisseurs from different areas of expertise? In order to question this problem in a concrete, pragmatic case, a project involving Portuguese “azulejos” (traditional ceramic tiles, which are part of constructed cultural heritage) is to be used as a case study, in the setting of the Historic Centre of Porto, Portugal.

When it comes to the existing literature on the topic, it is concentrated mainly on examples of good practices, i.e. successful implementations of design thinking by companies and/or managers. In terms of scientific, academic literature, it is very scarce, practically non-existent, especially when it comes to tourism area. With this in mind, the paper tends to contribute to the state of the art in tourism, trying to make a parallel between cultural tourism in the managerial context and design thinking. Therefore, the main focus of the paper is two folded:

- Draw a parallel between design thinking and (cultural) tourism management context and open the door for further academic research of the design thinking concept within the tourism realm;
- Demonstrate, through a practical example, the indispensable contribution of usage of design thinking as a tool for dynamization of cultural heritage tourism experience, which makes it more sustainable.

Conceptualising Design Thinking

Design thinking is a concept used in theory and practice, in both design realm, as well as the business/management realm (Johansson-Sköldberg, Woodilla & Çetinkaya, 2013). It is a whole creation system that goes from inspiration, through ideation, to implementation (Brown & Wyatt, 2010). It is intimately connected to concepts of creativity and innovation, a designers’ way of thinking and applying their sensibility and methods to concrete problem solving situations. It is based on people’s ability to be perceptive, innovative and creative, to recognise patterns and construct ideas that have emotional meaning, apart from being functional and purposeful (Brown & Wyatt, 2010). This form of thinking is rooted in how knowledge advances from one stage to another through the ‘knowledge funnel’ – from something we cannot explain (mystery), through a rule of thumb that guides us towards a solution (heuristic), to a predictable formula that produces an answer (algorithm) (Martin, 2009). Lockwood (2009) sees it as a human-centred innovation process, a methodology for innovation, which “[...] emphasizes observation, collaboration, rapid learning, visualization of ideas, rapid concept prototyping, and concurrent business analysis, which ultimately influences innovation and business strategy” (p. xi).

According to Martin (2009, p. 6), “the most successful businesses in the years to come will balance analytical mastery and intuitive originality in a dynamic interplay [...]”, that the author calls design thinking. The model for value creation requires a balance between these two – the analytical and the intuitive, used by the two opposing schools of thought that prevail in the world of business today. On one hand, we have the analytical thinking based on strategy that involves rigorous quantitative analysis encompassing deductive and inductive reasoning. At this extreme are analytical thinkers, who refine the already existing models, proven and established. On the other hand, there is the opposing school of thought which bets on intuitive thinking believed to be the generator of innovation and creativity, originality and invention. At this extreme are intuitive thinkers who use merely their instinct and deny to be using any logic. So what makes someone a design thinker? A design thinker is someone who bridges the two extremes and works towards the abductive logic – again, according to Roger Martin (Creelman, 2009). It is, certainly, risky to walk down the unestablished and uncertain paths, but being innovative and establishing something not just new, but better, often requires that. There is always a risk of failure and of things not turning the way we wished or hoped for even in case of using the already proven premises, and especially when the premises are unestablished. Great changes and inventions never came out as a result of something certain and conventional.

Countless authors (e.g. Beckman & Barry, 2007; Brown, 2008, 2009; Creativity at Work, n.d.; Johansson-Sköldberg, Woodilla & Çetinkaya, 2013; Lockwood, 2009; Martin, 2009; Verganti, 2009; Vianna, Vianna, Adler, Lucena & Russo, 2013; Wylant, 2008) repeatedly include concepts of design and design thinking in discourses on innovation, incorporating them into different contexts of innovation. Same goes for creativity (e.g. Creativity at Work, n.d.; Dorst & Cross, 2001). Being innovative and creative inescapably implies creating, i.e. designing something innovative and creative. ‘Being’ it, therefore, infers ‘designing’ it. Likewise, design per se is simply incomplete and unsuccessful even, if it is not creative and innovative, unique and different. However, Verganti (2009) warns that not any creative or innovative activity should be linked to design, which has particularly opened it to various ambiguous interpretations within the management context.

General innovation processes can be applied across multiple areas of design, from design of different technological products, through business models, processes and services, to institutions, constructions and working spaces (Beckman & Barry, 2007). Verganti (2009) argues that innovation in meaning of design is as important as technological innovations, extending Krippendorff’s semantic and philosophical approach to the meaning, which the latter author considers the core of every design process, where the object is simply a medium that communicates these meanings. As for creativity, even though there can be no guarantee that a creative occurrence will happen during a design process, there is a certain dose of creativity in every design project, if not in an evident form, then at least in the

evolution of a particular problem solution that possesses some degree of creativity (Dorst & Cross, 2001).

Design thinking in the context of management

Apart from its usage in the design realm, design thinking is a term that is increasingly being used by non-designers and in areas unrelated to design, mostly business and management but also other social sciences, and applied to different kinds of problems – organizational, strategic, operational, etc. (Cooper, Junginger & Lockwood, 2009; Johansson-Sköldberg, Woodilla & Çetinkaya, 2013; Verganti, 2009). It is a term that integrates innovation, customer experience and brand value (Lockwood, 2009), aiming towards a distinctive, competitive position on the market. It can be seen as managers' way of understanding design practice and being curious about designers' way of thinking. Alex Osterwalder defines it as "Applying the methodologies and approaches of design to a broader sector of issues and problems in business and society" (Design & Thinking, 2012). This simple, yet clear definition shows the true nature and purpose of design thinking, which is far beyond the design area. However, we emphasize once again that not every creative, innovative or designerly endeavour should instantly be attributed/related to design, or be seen as a result of design thinking. Also, being a designer and thinking like a designer is not quite the same thing (Brown, 2009).

Design thinking can also be used as a tool in marketing realm (Cooper, Junginger & Lockwood, 2009), even though there has been a shift from a marketing-focused to user-centred designing, which, according to Tonkinwise (2011), "[...] was paralleled by the shift in branding from integrated visual identity to experience design" (p. 540). Companies dedicated to understanding their clients and clients' needs, such as IDEO (Brown & Wyatt, 2010), move away from designing consumer products to designing consumer experiences. Here we wish to emphasise how different authors draw attention to the importance of customer's experience in different business areas (in this case – marketing and design), and to the swing from a more traditional, industry-centred way of operating to a user-centred one, which is continuously emphasised throughout the study.

Design is nowadays shifting focus from products and brands towards a broader and more strategic range of organizational activities, in order to meet demands of the increasingly competitive marketplace (Cooper, Junginger & Lockwood, 2009). It is enabling people, who haven't previously been in touch with design, to apply designers' methods and techniques to idea-generation and problem solving, business transformation and reinvention, and the other way around – enabling designers to engage in business and management domains. According to Brown (2009), design thinking is an approach used by creative leaders for creative problem solving, which can be infused into different facets of

all sort of businesses, and even the society – from improvement of a visitor’s experience at a hotel, through encouragement of a bank customer to save more, to development of a public campaign. Design thinking and business increasingly go ‘hand in hand’.

Design thinking and cultural heritage tourism

Design thinking is being increasingly used in reference to services and processes, apart from the most common reference to product¹ design (Brown & Wyatt, 2010; Lockwood, 2009). Service design, however, is not to be mistaken for a marketing activity (Stickdorn & Schwarzenberger, 2016). Through embracement of design thinking, without exclusion of neither analytical nor intuitive thinking (Martin, 2009), organizations or individuals working in tourism area can, too, refine within the current stage of knowledge, and generate the leap beyond the existing practices, tendencies and possibilities, just like business companies or individuals do.

Tourism is an industry/activity so complex and multifaceted, that it comprises all types of products – both tangible (goods) and intangible ones (services and processes), and so competitive and changing, that it calls for constant changes and improvements. It is highly dependent on demand fluctuations, as well as the offer provided by the competition. Therefore, all tourism products need to be customer-oriented and designed with the objective to provide quality customer experience, and so it is natural that design thinking skills can contribute to their attractiveness and differentiation on the tourism market. Customer experience has come to play a central role in demand for certain products and, as such, has become a decisive factor of success for businesses in general, and not only (Stickdorn & Schwarzenberger, 2016), but tourism businesses and activities, too. Tourism is an experience of culture, which assists in generating distinguished, new cultural forms, while tourism products can be seen as expressions of culture, in a way that culture is consumed by the tourist (Robinson & Smith, 2005).

When it comes to cultural tourism, in particular, it is an activity fully based on said experience, it provides experience, it is experience per se. ICOMOS International Scientific Committee on Cultural Tourism (2002, p. 22) defines it as “[...] that form of tourism that focuses on the culture and cultural environments, including landscapes of the destination, values and lifestyles, heritage, visual and performing arts, industries, traditions and leisure pursuits of the local population or host community. It can include attendance at cultural

¹ The term ‘product’ used here is further replaced by the term ‘goods’, since we do not delimitate the term ‘product’ to merely tangible products, as it is suggested here. ‘Products’ are seen by the authors as a wider term, including both tangible products (goods) and intangible products (processes and services).

events, visits to museums and heritage places and mixing with local people. It should not be regarded as a definable niche within the broad range of tourism activities, but encompasses all experiences absorbed by the visitor to a place that is beyond their own living environment". And there it is, something so beautifully complex and far-reaching, encompassing all experiences one lives while visiting a place. It includes the experience of both tangible cultural elements – that of landscapes, sites and museums, to experience of intangible cultural elements, such as traditions, values and lifestyles.

Heritage is a broad concept that encompasses a community's natural, indigenous, historic and cultural inheritance, landscapes, historic places, sites and built environments, biodiversity, past and current cultural practices, knowledge and living experiences, and all of the moveable articles that may be associated with a place, an activity, a process or a specific historical event (ICOMOS International Scientific Committee on Cultural Tourism, 2002). It is the main actor of cultural tourism and a powerful tool for international dialogue, interculturalism, miscegenation and exchange of values and experiences among peoples (Richards, 2005). It is something to be respected, admired and preserved, but yet 'dynamized' and actively participated in, spreading the word and educating both local and foreign visitors about its history and importance.

The constructed heritage, whether architectural, urban, or in a form of a landscape, is a powerful factor of social distinction and identification of nations and individuals, as well as an engine for qualification and development of places and territories (Instituto da Habitação e da Reabilitação Urbana, I. P. & Ministério da Agricultura, do Mar, do Ambiente e do Ordenamento do Território, n.d.). With the growing globalization nowadays the protection, conservation and communication of the significance of heritage and cultural diversity is becoming imperative worldwide, even more so since they represent major tourism attractions (ICOMOS International Scientific Committee on Cultural Tourism, 2002). And 'even more so', not because of the prolonged economic gain that comes with the exploration of well-preserved heritage sites through tourism, but because of the increased degradation and commercialization of heritage that comes with tourism.

Although tourism generates many positive impacts in terms of enhancing conservation, revitalization and protection of cultural heritage, some authors had argued over a decade ago (Smith, 2003, cited by Richards & Wilson, 2004) the linkage of tourism with the decline in cultural values and loss of local individuality, local customs and traditions. Following Smith's line of thought, Richards and Wilson (2004), consider that the marketplace already degrades culture, especially the globalised market which degrades it utterly, and have particularly picked out tourism as a major socio-economic and cultural force that carries the seeds of global destruction to localities worldwide. These are some very strong statements that, unfortunately, have a lot to do with the reality we live in

nowadays, and the ones that call upon the utter need for sustainability measures when it comes to cultural heritage tourism experience. This is where design thinking ‘steps in’.

So, how can design thinking contribute to sustainable (cultural) tourism experience? Even though it involves goods, services and processes, cultural tourism, just like tourism in general, is essentially considered a service industry. Stickdorn and Schneider (2010, cited by Stickdorn & Schwarzenberger, 2016) suggest there are five basic principles of service design thinking: (i) user-centrality; (ii) co-creativity; (iii) sequencing; (iv) evidencing; and (v) holism. Following these, though not necessarily rigorously, can surely contribute to success of projects within cultural tourism area, even though they were put together as general steps to follow in all sorts of service design thinking processes, not exclusively the ones related to tourism. However, the last principle was specially emphasized as crucial in tourism industry, in a way that perceiving the whole context of a tourism service is essential for high quality service provision.

Case study: Project “Tile your visit”

In order to show how design thinking can lead to creation of a cultural tourism project, whose aim is to contribute to education and awareness-raising about the value and importance of heritage, a concrete example of such project is used as a case study. The project involves Portuguese “azulejos” – traditional ceramic tiles, which are part of constructed cultural heritage at the national level, and it takes place at the Historic Centre of Porto, Portugal, classified as the World Heritage Site by the UNESCO. “Tile your visit” is a project created as a pragmatic part of a PhD research, resulting from brainstorming, design thinking sessions of an interdisciplinary network of students and researchers from different areas of expertise (e.g. tourism, architecture, design, software engineering, etc.), but all focused on or interested in the area of cultural heritage.

It is an initiative aiming to allow the tourists to leave their mark on the city of Porto, through a mark that the city has so far left on them, to give something to the city through something the city has given them, and in that way contribute to sustainable dynamization of the cultural tourism experience. The project is still in its initial phase, though everything is defined and set for its application. The core idea of the project is for tourists to be invited to place a traditional Portuguese tile at the hostel they are staying – to “tile their visit”. Each traveller will choose one tile containing a QR code, which is to be linked to a story describing their experience/impressions concerning the city and its heritage. Each story is to be published on a Facebook page of the project, which will promote not only the project itself, but the city and its heritage (e.g. the history of tiles, facts about culture and cultural heritage, events related to it, etc.). At the moment, the negotiations are being made with a number of hostels at the historic centre, although we are also considering to expand the

project to a certain public space at the historic centre, once the project takes off. The role of hostels here is in providing the visitors with this experience, and doing something for their city, being the direct promoters of the initiative.

Could new tools or methods for a more sustainable, different and innovative tourist experience be generated as a result of design thinking? We believe that it undoubtedly can, and this project is the proof of that. Even though it is still in its initial phase, the project aims to include both the locals and the visitors, through a joint action of promoting Porto and its heritage as a tourism destination, but at the same time contributing to its sustainability, learning about it and being actively involved in a give-receive relation with the city and its heritage.

The approach to research of this topic, the manner we looked into it, is based on qualitative observations, informal conversations and brainstorming sessions with different partakers. The project is a result of an action research – an exploratory, empirical process using a participatory and collaborative method for accomplishing our goal. Put in simpler words, we identified a problem (a concrete situation where we wanted to make a difference) and decided to do something about it involving people that can, not only profit and learn from it, but contribute to the positive change of the problem itself. And how did we do this – using human-centred (as opposed to technology-driven), system-centred (as opposed to product-oriented) design thinking. And how can this project be considered a tool? It is a tool in a sense that it is used as an instrument to promote the importance of heritage and its sustainability, to bring the attention not only to the tiles that are just pieces of a puzzle, but on that puzzle too, inductively almost. Tiles are covering vast surfaces of historic, heritage, modern, private and public buildings all over Portugal. They are both purposeful and beautiful. Unfortunately, they are being increasingly pilfered by both locals (vandalism) and visitors (keepsake), therefore the need for educating both target groups of their importance and the importance of their preservation. And we believe that a non-formal education through active participation is the best way not only to learn, but to spread the message. We all learn best and apply more easily what we have learned, by doing it ourselves.

Is design thinking either superior and more successful, or ‘messier’, if being interdisciplinary, i.e. being a result of networking and involvement of connoisseurs from different areas of expertise? It can most definitely be superior, especially when used within the action research context, and in a collaborative way, benefiting with an input of not just people from different areas, but people from both academia and industry. In the concrete case of our project, we dare to say that the final idea would have never been shaped into what it is now, if it hadn’t been for all the people who ended up creating this informal interdisciplinary network. The input of each and every person added to the project and its

viability. The network is varying in a way that new new people are constantly being included, and the ones that are not as involved at the moment, as they might have been initially, are still available and open to dialogue and further contribution. With all this being said, we can nothing but conclude that design thinking can only turn into an even more powerful, more creative and more innovative tool if being interdisciplinary. Nevertheless, all parties need to be interested in making it work, dedicated and aimed towards a common goal.

We cannot yet analyse or evaluate the success of the project itself, but what we can do is evaluate the design thinking process as extremely successful and helpful in the creation of the project. Not only did it bring so many different people together, where each and every one of them contributed with their particular set of skills, but it proved how unconventional, innovative new approaches can create something beautiful, interesting and something to be proud of. We believe that making even a meticulously small difference, it still is a difference, nonetheless. And we believe that, within this project, there is one such difference in making.

Summary

Design thinking is a concept used in both theory and practice, in the design realm, as well as the areas unrelated to design. It as a human-centred innovation process, a methodology for innovation. Design thinker is someone who bridges analytical and intuitive logics, and works towards the abductive logic. Apart from the usage in design realm, design thinking is increasingly being used by non-designers, and in areas such as business, management and other social sciences. Its indispensability in the management realm lays in the fact that design is nowadays shifting focus from products and brands towards a broader and more strategic range of organizational activities, in a human-centred way, in order to meet demands of the increasingly competitive marketplace. Customer experience has come to play a central role in demand for certain products and, as such, has become a decisive factor of success for different businesses, and tourism businesses and activities are no exception.

In order to show how design thinking can lead to creation of a cultural tourism project, with an aim to contribute to education and awareness-raising about the value and importance of heritage, a concrete example of such project is used as a case study. The project is a result of exploratory, participatory action research – brainstorming, design thinking sessions of an interdisciplinary network of students and researchers from different areas of expertise in Porto, Portugal. Its goal is to include both locals and visitors in a joint action of promoting Porto and its heritage as a tourism destination, but at the same time contributing to its sustainability, learning about it and being actively involved in a give-receive relation with the city and its heritage. The project is the proof that new tools for a more sustainable and

innovative tourist experience can be generated as a result of design thinking, and that design thinking can turn into an even more powerful, more creative and more innovative tool, if being interdisciplinary.

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