



COME AND PLAY SERVICE DESIGNER WITH US! – CO-CREATING A PLAYABLE CUSTOMER JOURNEY INSTALLATION

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Abstract: This paper introduces a platform enabling prototypical and manipulable envisioning of experiences related to tourism (such as services provided by ski resorts) through a three-dimensional installation also understood here as a *playground*. Combining the service design concept of the customer journey with a gamified and playable ski slope installation, it is possible to visualize the customer journey prior to, during and after the skiing holiday, as users can play with the experience of their ski holidays. In the proposed approach, a gamified ski slope installation presents a novel way for both service providers and customers to interact with the customer journey through a three-dimensional model that is playable through its form and gamified through its rules of engagement.

Keywords: *Comicubes, Customer Journey, Service Design Method, Interactive Installation, Gamification, Playification, Toyification*

1. Introduction

The ludification of leisure time means that people are spending more and more time in playful environments, with playful object and experiences. We suggest that ludification functions an umbrella term under which cultural phenomena and concepts such as gamification and playification reside (Ihamäki & Heljakka 2017a). Gamification is one of the most perceivable cultural phenomena related to the ludification of culture. Garner (2014) defines gamification as the use of game mechanisms and experience design to engage and motivate people to achieve their goals. He describes, that game mechanics are the key elements, which are common to many games, such as points, badges, and leader boards. The goal of gamification is to motivate people to change behaviours or develop skills, or drive innovation (Garner 2014, Ihamäki & Heljakka 2017a, b). That is why gamification focuses on enabling players to achieve their goals – and as a consequence the stakeholder achieves its goals.

This exploratory paper introduces a playful platform enabling prototypical and manipulable envisioning of experiences related to tourism destination such as ski resorts. We propose an object-oriented approach to ideation of gamified services by suggesting how a customer journey installation can be co-created. In this case study, *playification* as a parallel concept to gamification, takes an orientation towards the less rule-bound and more open-ended (or casual) forms of play. By playification we mean that we have used casual game design elements. In the case study presented, we have explored the ski resort as a potentially gamifiable and playable *playground*. The physical

platform of the installation built out of cardboard cubes, functions at the same time as a design method. The method highlighted is useful in exploring participants playing and creating their own gamified customer journeys in relation to ski slopes. The presented service design method based on the Comicubes ideation tool, builds on the practice of designing different customer journey scenarios. In our initial study, we invited ski resort personnel to play and create their gamified customer journeys of a particular ski resort and at the same time collected data (by photographing, videoing and a thematic survey) (Ihamäki & Heljakka 2017a, b). This inspired us to create the three-dimensional installation of the ski slope playground, which we here suggest to function as a playable artefact that generates knowledge about potential customer journeys, whilst being manipulated and used to play out scenarios, individually created and narrated by each user of the installation.

The current use of gamification by the tourism industry can be divided into two types; social games (used for brand awareness to attract potential customers to build a destination, The Real Time Report 2012) and location-based mobile games for example, REXplorer aims to persuade tourists to explore and enjoy the history (Walz & Ballagas 2007). Moreover, as suggested in this paper, the gamification of tourism may be approached by the conceptual framework of the *playground*, which we consider to represent another alternative to explore the dimensions of the ludifying culture.

Game design elements are considered important in making customers more engaged with the destination but may also propose an important new type of marketing tool, which can provide entertainment to customers in order to make an emotional connection between the playground-based game and the special destination (of a ludically enhanced ski resort). The site-specific ***Location-based Playground*** has been used to encourage playification, creative engagement and enjoyment, to enhance the tourist experience to become a more creative and fun way to experience the ski resort destination. The concept of gamification, should in this light, be extended to the playification of for example services, which entail a more ‘playful’ and less competitive, ‘funification’ of services, embracing more open-ended play and forms of creativity.

Finally, we propose the concept of playground to be included in the *strategies of intentional ludification of culture*, such as in design or enhancement of new services, as the term allows us to understand how any space where playful interaction takes place between people, objects and services, may be considered an arena for play. The three-dimensional installation used in this exploratory paper as a conceptual model for service design, functions as a platform or as a playground, resembles a diorama, a setting for play where characters and environments are presented in the name of playful interaction. The installation, which in the presented case is a manipulability and modifiable prototype or model for a playground may also be considered as a construction toy play or game that affords playful interaction.

2. Service Design

Service design describes a strategic and holistic approach to consciously design, create and manage customer’s experiences. Moritz’ (2005) definition of the concept follows: “*Service Design helps to innovate (create new) or improve (existing) services to make them more useful, usable, desirable for customers and efficient as well as effective for organisations. Service design is a new holistic, multi-disciplinary, integrative field*”. Researchers suggest different approaches to map the complex process of designing services, for example, two different approaches “insight-idea-prototyping-delivery” (Livework 2009) and “discovering-defining-developing-delivering” (Creativity at Work 2014). Service design aims to look at the customer journey in holistic view while working on details of a single experience. The service development becomes an important competitive concern in many service industries. The designing of a service means defining an appropriate mix of physical and non-physical components (Goldsteing et al. 2002) and the service systems should be designed for the realization of customer processes and achieving the service performance. Service design is systematically applying design methodology and principles to the design of services. Service design is always considered from the customer perspective and it integrates the visualize solutions, qualities, service strategy and participatory design. Service design in this sense, aims to create services that are

useful, usable, desirable, efficient and effective. Consequently, service design is all about making services that are easy to use, usable and same time desirable. Service design is the process of creating these touchpoints and defining how they interact with each other and with the user. In designing a great service it is important to get the user engaged with the service and providing the possibility for them that enables new solutions to be developed. Service design can be used to re-design an existing service to make it work better for users, or it can be used to create an entirely new service.

In this case study we are interested in the concept of customer journey, which represents the service process from the customer's point of view. It is a sequence of structured steps, grouped into different service stages (pre-service, service and post-service). Each step can be enriched with additional information, either form of text and images. We can compare a customer journey to a movie: the consecutive steps should tell a coherent story about the service taking place. Different layers of additional information could be added to enhance the customer journey.

2.1 Playifying the Customer Journey

We suggest that the concept of customer journey can be quickly prototyped by building it with the Comicubes tool. In our case, each side of the Comicubes is used to visualize the customer journey - to illustrate the channels (online, face-to-face, or action on ski slope etc.), in which a single step of the customer journey takes place. Emotional journeys describe the feelings of the customer in each step and dramatic arches help to understand the tension of a given situation. (Stickdorn & Schwarzenberger 2016)

The gamification of the customer journey refers to a series of touchpoints, involving all activities and vents related to the delivery of the service from the customer's perspective. We understand that Comicubes works, besides a conceptual ideation tool as a multisensory prototyping tool, which invites the user to manipulate/rotate/organize-stack/build sequences of the parts in either random order or according to the customer journey's needs. In this paper, we seek answers in both the nature of envisioned concept of gamification/playification of the customer journey and the processes, which evolve around it, once put into the real life context of a ski resort.

Expected results will be that when participants see the gamified ski slope installation, which comes with a written story to read (scenario), they will be inspired to play it with the cardboard cubes and create their own individual customer journey experience out of the materials that the Comicubes tool provides. Thus, the ski slope installation invites participants to play and create their own ski slope experiences. The idea is to use game design elements to create different kinds of gamified and playified ski slope experiences with different customer segments. Players of the installation are free to work either alone or with a group of people to co-create their customer journey experiences and in this way present this three-dimensional visualization of the playground of the customer journey at their envisioned ski resort. This describes one potential exercise in which participants need to solve a problem related to the ski slope with a group of people.

3. Earlier research and Comicubes

One aspect of our research agenda is to explore what a service prototype might be, and how service prototypes can be evaluated. This meant that we needed to understand service experiences, designers need to capture both physical and immaterial qualities in service representations. In addition, a sequence of interactions between a service provider and customer, mediated by different artefacts, needed to be taken into account. When dealing with service that can be described or understood as a journey, with a clear temporal and sequential nature, there are some interesting ways to approach prototyping. Earlier research on the subject has knowledge about visualisations generated within service design (Segelström 2010; Paker & Heaby 2006) and representing services as journeys is one ways in which service designers' work distinguishes itself (Kimbell 2009; Ihmäki & Heljakka 2017a; Ihmäki & Heljakka 2017b). How these journeys can be prototyped and tested, as whole service experiences, is an area that still requires further investigation (Blomkvist & Holmlid 2010; Ihmäki & Heljakka 2017a; Ihmäki & Heljakka 2017b). Prototypes in service design can focus one touchpoint or service moment, or it can describe in detail what kind of information should flow through it and

what behaviours or interactions should occur at various service moments. The fidelity of prototypes can range from rough sketches to prototypes carried out with the actual customers in the actual implementation context (Blomkvist 2011).

In this paper our *Comicubes* prototyping method and tool focuses on concept prototyping and a walkthrough of the service design methods. A concept prototype is used to assess the adoptability of an early concept among teams and with potential users by giving in physical form that can be experienced. Concept prototypes embody the principles of 'building to learn' in that the process of giving a physical form to a concept facilitates discoveries about it that often cannot be foreseen until it is made tangible. Concept prototypes address both the appearance (what it looks like) and the performance (how it works) on an offering (Kumar 2013, 235). A service walkthrough is performed with a physical representation of how a service unfolds over time. It allows designers to explore, evaluate and communicate service concepts in an embodied and holistic way. In this case embodiment that actual people take part in the service representation and understand the service by being physically and emotionally present. By holistic we mean that the service parts, the service moments and touchpoints – when understood and experienced as a whole sequence – will reveal something about the service that cannot be accessed through the individual service constituents (Arvola et al. 2012).

We have developed the *Comicubes* into a prototyping tool and service design method, but this tool originated as a toy and game hybrid. The original *Comicubes* represents a mash-up of comics and toys, but also seems to be a hybrid of an open-ended storytelling device, a construction toy (or puzzle) and an experimental and research type of game (system). In earlier research, we describe the results of a study investigating the *Comicubes* playability and play potential of the initial physical prototype, as it allows comic-style storytelling to extend itself over previous boundaries of its traditional format and in this way opens up new possibilities for open-ended play usually associated with three-dimensional toys (Heljakka & Ihamäki 2016).

The original *Comicubes* concept utilize 24 foldable cardboard cubes with six sides each. The *Comicubes* concept as a multisensory play concept also invites the reader to manipulate/rotate/organize/stack/build sequences of the parts in either random order or according to the reader/player's wishes. *Comicubes*, as a multi-sensory play medium, affords various play patterns: it allows the user to explore, organize and display it like building blocks; to arrange, rotate, stack and display its pieces by animation of the user's hands (Heljakka & Ihamäki 2016).

There are many ways to manipulate the cubes. Movement is essential in how the user will access the images and texts displayed: The player may 'read' one cube at a time, moving from one side of the cube to another, simultaneously turning around the cube. The open-endedness of *Comicubes* limits itself on onehand in terms of its physical dimensions. On the other hand, the visual and textual information in the frames of the cubes is equally limited. However, it is in the creativity and playful attitude of the reader to decide where the limits for arranging the cubes are (Heljakka & Ihamäki 2016).

4. Research Design

This research is explorative as it investigates a new an emerging area co-creation a playable customer journey installation. It aims to explore how co-create a playable customer journey and can be used in a ski resort context and how consumers can benefit from a gamified playground build on ski slopes in a ski resort destination. Since this is a new area it needs to be explored with qualitative research paradigms are followed (Ihamäki, Heljakka 2017a). We have used focus groups with earlier studies and this study based on also conference audience make different solution customer journey with the ski slope installation. The focus group method is usually used for topics that are not well understood to discover new insights. This paper aims to explore the new topic of a gamified customer journey installation (Ihamäki, Heljakka 2017a) and to discuss the new topic of a playified of ski resort. As an exploratory study on the new emerging area of playful customer journeys of tourism destinations, a representation of the sample of testers as part of the tourist population in a ski resort is not a major

concern, as the method aims to explore the dimensions and create constructs rather than measure variable and representation, and as a larger scale of quantitative sample will be used at future stages of this project with different target groups.

4.1 Case Study

This case study describes the enhancement of customer engagement by exploring the gamified location-based playground ski slope by combination with a solution prototype, Comicubes. The study was carried out in a Finnish ski resort destination, with marketing managers, a game developer, a development manager and all them are professional snowboarders and skiers. In Finland, ski resorts offer a lot of services and winter fun in Lappish (Northern Finland) settings (Ihamäki, Heljakka 2017a). This study also extends findings of our earlier study, because the conference participants of the upcoming conference event can also be part of the research by building their own own ski slope experiences with Comicubes and in this way, co-create a playful customer journey installation together with others.

Play(ful) testing of the concept and tool

The Comicubes tool and method has been tested with various user groups and used in different contexts, such as learning environments, the academic environment and the tourism business environment. We are interested to continue to discover the potential that Comicubes carries in the creative processes of for example professional brand designers, primary school students, artists, digital game designers, and so on. Earlier, we have tested the tool consisting of cardboard cubes with different user groups with the aim to understand the potential of the Comicubes platform to communicate ideas about interactive and engaging design. For example, the tool has been tested with university students of early education testing the playful capacity of the tool.

In a previous case study, the Comicubes was tested with 9 different groups of altogether another 50 university students. The participants in this study used Comicubes in two ways; both as a playful tool to create new solutions in creating game concepts and in the formation of the physical prototypes of their envisioned ideas. Participants reported to like the idea that Comicubes offers the possibility of being used simultaneously by multiple users. In our understanding, this could extend the design experience into a social experience, as using social interaction is the driving force in gameplay, which Comicubes also envisions. Results indicate that a combination of pleasurable and creative elements causes a sense of deep enjoyment so rewarding that participants feel that manipulating Comicubes is worthwhile simply to be able to have a creative experience (Ihamäki & Heljakka 2016).

Furthermore, we have also tested Comicubes with ‘digital natives’, i.e. preschool-aged children of 6 to 7 years, who were asked to create a plaything of their choice out of two cardboard cut outs, which could be turned into cubes and art supplies, such as coloring pens, pictures and letters printed on cardboard squares. In this case study, the test group consisted of 13 participants. In the workshop, the participants of preschool-aged children were able to observe each other’s work and exchange ideas while prototyping. When the creation of their play concepts ended, the children were encouraged to communicate about potential play affordances of their creations by illustrating their interactions with their playthings. The information layer used by most of the children on their cubes (ready-made images) was considered as an important part of the created play concepts (Heljakka & Ihamäki 2017). Finally, as presented in the paper at hand, we have used the Comicubes as a service design method and as a solution prototype with 5 professional participants in two groups to create a gamified customer journey. The results of this case study shows that Comicubes functions as a platform, which participants can engage freely with and exhibit the key behaviours one seeks to understand in the envisioned experience (Ihamäki & Heljakka 2017a).

Build your own gamified customer journey with the ski slope installation!



Materials: The Comicubes are three-dimensional cardboard cubes, which users (designers, marketing and tourism professionals etc.) employ in creation of playifying and gamifying customer journeys in tourism destinations, such as ski resorts.

Images and letters or words: Images and letters or words can be placed on the cubes to describe experiences related to the customer journey, as well as touchpoints (places within the playground).

Figure 1. The Comicubes represent simple, yet playfully inviting paper technology, which may be enhanced with digital dimensions.

4.2 Scenarios

As described in earlier research, we have tested Comicubes tool as service design method. In this case study, we have created a hypothetical scenario, which gives a story to participants that they may use as a starting point when designing their own playified customer journey. In order to demonstrate the interaction that the physical installation introduced here provokes, we created a scenario of the possible building blocks of the gamified and playable ski slope. We have chosen, through the use of the conceptual framework of the customer journey and the application of the simple paper technology consisting of cardboard cubes, to illustrate potential uses of the ski slope installation for both the service provider and the customers of the service.

Example of a scenario: A Playable Family Skiing Journey

The scenario introduced in this paper exemplifies a family point of view. The imaginary ‘Family Smith’ is searching a skiing holiday in Lapland and find a website, where they see a video commercial that tells the story of a gamified ski holiday in Lapland. The family downloads other customers’ video diaries for their holidays, from which they get ideas how they want to enjoy their upcoming skiing holiday. In the following, we present the possible building blocks of the gamified and playable ski slope that offer a starting point for design and co-creation of other types of customer journeys as well: participants, provocation, play patterns and play phases, which constitute the elements to be considered, when envisioning the customer journey.

5. Results

In a service design sense, the customer journey installation presented here, offers a fresh approach to design or enhancing experiences related to tourism. The installation represents a playful, three-dimensional object to modify, and letting designers to play with the Comicubes tool, with the creation of new experiences in mind. Additionally, it describes the place where play takes place – modelling the territory of the location-based playground.

Our gamified, playified and finally, toyified ski slope installation presents a three-dimensional playing tool, which allows users to describe the customer journey through scenarios including the building blocks of participations, provocations, play patterns and play phases. Finally, we encourage

participants (who in further research consist of designers, marketing and tourism professionals etc.) to play with the concept of the customer journey with a special focus on the theme of the ski slope. In future phases of research, our aim is to photograph and interview participants of workshops, who engage with our installation in order to create their own customer journeys.

5.1 Participants

The *participants* refer to the counterparts in our scenario. We have imagined a family of four, seeking a skiing holiday. The family in our scenario consists of a mother and father with two children: John Smith (45 years, likes moving about in nature) a paramedic, Joanna Smith (43 years, active on social media) an engineer, daughter Jasmin (14 years, likes photographing), a student and son Joel (8 years, player of digital games), a school-aged child who goes to primary school.

5.2 Provocation

With *provocation* we mean the imagined trigger for the Smith's family to become motivated to find a skiing holiday most suitable for them. In our imagined scenario, this trigger is a video commercial that the family sees together about a ski resort that promises to provide a new, ludic skiing holiday experience.

5.3 Play Patterns

The envisioned play patterns that provide a framework for the potential ludic experiences the ski slope offers, are imagined as the following:

- *Play of the mind* (e.g. admiring the landscape of the skiing area)
- *Gamified play* (i.e. games of speed, skill and knowledge to be played on the slope)
- *Creative play* (i.e. games that include the use of imagination and self-expression, such as photographic play, or, *photoplay*)
- *Object/material-based play* (e.g. playing with snow and various artefacts on the slope)

5.4 Play Phases

The suggested phases of the customer journey to be played with through the use of the Comicubes tool, may be considered from the viewpoint of a theoretical continuum consisting of four parts of the experiences related to the customer journey, namely:

- *Wow*, meaning the first, enthralling stage of the experience that captures the users' attention and motivates him/her to continue the customer journey.
- *Flow*, describing the immersion in the experience.
- *Double-wow*, to be understood as a suddenly emerged, surprising but pleasant element of the experience.
- *Glow* – An enjoyable 'afterglow' (or 'memory trace' cast by the experience reflected upon after the actual lived experience).

5.5 Invitation to Play with the Installation

With the proposed elements of our playable scenario created to be further played by the users of our installation, we investigate the solutions of play in terms of envisioned customer journeys, which are created by the users of our installation through manipulative play and storytelling. By documentation and later analysis of the envisioned customer journeys, we are able to gain new knowledge about potential experiences in relation to customer journeys within the playground of the ski resort, providing its users with new ludic ways to experience the destination.

We see the customer journey installation built with Comicubes as a platform of a location-based playground, which we have used in this case as a playable tool to describe the customer journey. The proposed installation makes it possible to interact with the concept through play with the cardboard cubes and to create individual solutions for customer journeys of the ski slope.

6. Conclusions

To sum up, the concept of playification can be used successfully by encouraging customers to participate in fun and creative activities, in terms of ski resorts, for example by having them find treasures in the ski resort area. This makes the customers' skiing holiday more meaningful and at the same time engages the customer more in ski resort activities. Through a playification of tourism destinations such as ski resorts, the providers of the experience are able, to a certain extent, to control the movements of their customers, that is, the users/players of the gamified service. Furthermore, it allows them to guide the users/players to spend a certain amount of time in particular locations on the slope.

The scenarios envisioned in our paper and communicated to participants together with the customer journey installation, are designed to support the development of other gamified services. In this way, it presents a service design method interested in the playification of existing services. The method of gamifying and playifying ski slopes with cardboard cubes – introducing and employing a playable customer journey installation, presents a novel take on the subject of service design within the tourism industry. The aim of the paper at hand was at the same time to present results of earlier studies and to envision, how new research materials may be collected to explore user experiences in relation to creating their playified customer journeys. We understand the proposed installation as a location-based playground, which presents a creative and interactive tool to aid the formation of solutions of how ski resorts could be designed and enhanced through the ludic strategies of gamification and playification. We see that the users would not only represent designers of these experiences, but the users of the tourism experiences themselves as well.



Figure 2. A gamified customer journey installation: An example of a 3D visualisation of the gamified customer journey at a ski resort.

The gamification of the customer journey makes it possible to manipulate, identify, stimulate and evocate – and in this way enhance - the customer journey to invite the customer to enjoy and engage more playfully with the ski resort. The gamification of a ski resort provides its users multiple possibilities to play in not only a unique, natural setting, but play with earlier experiences with skiing holidays past and present.

Further, in this paper we propose that the tourism industry could benefit from a stronger focus on ludic experiences as not only a provider of their products and services, but also as a dedicated design partner co-developing play(ful) activities through playification of their existing or future offerings.

Usually, customer journeys will be created during unique prototyping workshops, with focus groups or as scenario-based workshops. In our case we have organized workshops, during which we have collected research materials of two gamified customer journeys of the ski resort by enabling the participants to play with our Comicubes tool. In the next phase our aim is to collect more data on how designers use our method and installation. Furthermore, we ask You, the conference participant, to become involved in playing with us and to build your own gamified customer journey of the ski resort, with the conceptual framework and three-dimensional installation presented and discussed in this paper. The question remains – will You come and play service designer with us and to co-create

your own version of the ski resort (or other tourist experience) – your unique playable customer journey installation?

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