Gamification of the Customer Journey at a Ski Resort

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This paper explores the enhancement of the customer journey at a Finnish ski resort and aims to create a theoretical framework for using gamification in the service design process. We have used the service design method and design tool Comicubes as a solution prototype, which ski resort workers engaged with to create a new gamified concept for its target consumers. The customer journey map provides a structured visualisation of a user’s experience at a ski resort. The customer journey enhanced through gamification creates a value-creating system for the ski resort, which presents the network of actors and their relationships that jointly create an offering. This study presents the results of a service design process for a customer journey, which goes through four stages presented in new play theory, namely wow, flow, double-flow and glow. These stages guide the designers and developers using gamification to give customers an overall more interactive and engaging experience in a real ski resort context.

Keywords: gamification, Comicubes, customer journey, service design, new play theory

Introduction
This paper introduces the Comicubes concept - a service design method that is used in our case study in the gamification of the customer journey in a productive brainstorming session with a ski resorts marketing staff and game developer. The study explores the enhancement of the customer journey and our aim is to create a journey with more engagement and enjoyment for the customer by using the concept of gamification. Gamification is defined
as the use of game design elements and game thinking in a non-gaming context (Deterding et al. 2011).

Customer journey is a visual oriented method for conceptualising and structuring peoples’ experiences. The customer journey usually starts when the customer wants or needs a product or services and will continue to the point where the product is reclaimed, redeemed or renewed. The organisation’s aim is to manage this journey in such a manner that maximises value both the customer and for the organisation. (Nenonen et al. 2008)

We suggest that by gamifying the various stages of the customer journey throughout the ski resort’s services, more consumer engagement will follow. Gamification has already been successfully used in marketing, business, health, education and tourism. (Feifei et al. 2014) The application of the game design elements in tourism is already present but to our knowledge, gamification of the customer journey of a ski resort has not been explored before.

The Comicubes tool is both a service design method and a solution prototype with many concepts that make up solutions. We suggest that Comicubes could be used as a basis for creating appearance or performance-based prototypes. The Comicubes functions as a platform, which participants can engage freely with and exhibit the key behaviours one seeks to understand in the envisioned experience.

Case Study

In Finland ski resorts offer a lot of services and winter fun in Lappish (Northern Finland) settings. Customers can enjoy well maintained slopes, efficient ski lifts and stunning views. In the resort under scrutiny, the ski season lasts more than 200 days. The multifaceted ski area is suited for children, adults, beginners and experts. In our case study, the ski resort wants to enhance its service design and make the resort more inviting for today’s customers through gamification. Using the Comicubes service design method and tool to design enhancements of the customer journey the resort staff aims to highlight the touch points, which are important for the gamification of the ski resort.

Our study tries to understand the service design of the customer journey through the concepts of gamification, and to propose a conceptual framework, which aims to evaluating how the Comicubes solution prototypes may offer implementing solutions for the ski resort.

Our research questions are the following:

- How can the concept of gamification together with a framework introduced in new play theory be used to enhance consumer engagement at the ski resort under scrutiny?
- What kind of design outcomes does the use of the Comicubes tool and service design method provide in designing of the gamification of the customer journey?

The gamification of the customer journey refers to a series of touchpoints, involving all activities and events related to the delivery of the service from the customer’s perspective. This view helps in understanding the service experience across multiple contacts but does not offer an overall view of the service structure or an integrated approach the different levels of gamification service design.
Defining Comicubes

In this study, we have used the Comicubes concept as a starting point to design the gamification of the customer journey. The original Comicubes concept consists of 24 foldable cardboard cubes with 6 sides each. Altogether, in the one-side version this makes 144 sides, and the double-sided version 288 sides of information layers to fill with either images (such as photographs) or text (letters, onomatopoetic utterances or words), or as in classical comics, juxtaposes and serial images together with text. In previous workshops as in the one presented in this paper, we are using a small number of (blank) cubes only.

Comicubes concept as a multisensory gamification concept invites the user to manipulate/rotate/organize-stack/build sequences of the parts in either random order or according to the customer journey wishes. The Comicubes, as seen from the perspective of this paper, is a solution prototype and potential implementation tool that may stimulate creativity, which allow exploration of dimensions of its gamification for customer journey. (Ihamäki, Heljakka 2016) Through a test pilot study, described in this paper, we seek answers in order to understand both the nature of envisioned concept of gamification customer journey and the processes, which evolve around it, once put into the real life context of a ski resort.

Service Design and the Customer Journey

Service design is one strong way to bring the new customer power into the design and improvement of services in a structured and productive manner. (Reason et al. 2016, 3) The goal of service design is to provide positive and meaningful experiences or interactive solutions. (Hassezahl 2010) In the service design, we can describe that creative design process can seem both frivolous and confusing at first, but prove to have massive impact on bringing innovative services to market and bringing the organization along on challenging change journeys. (Reason et al. 2016, 8) One of the methods in service design is the Customer Journey, which is the visualisation of the touchpoint where users interact with the service are often used in order to construct a “journey” – an engaging story based upon their experience. When you design a new service, you need to identify the touchpoints where users interact with the service, which is crucial and sometimes even difficult to make decision the place where you think that customer want to interact with service. Customer experience in contrast, is process-oriented including all the moment of contacts and emotions during the experience (Schmitt 1999).

Service design has been traditionally viewed as a specific stage of the new service development process (Edvardsson et al. 2000) The Customer Journey is the cycle of the relationship or buying interaction between the customer and the organisation. It is a visual, process-oriented method for conceptualising and structuring customer’s experiences. (Nenonen et al. 2008) The Customer Journey means that customer will change, that is why the model will take into account user’s mental models, the flow of interactions and possible touch points. They may combine user profiles, scenarios and user flows and reflect the thought patterns, processes, considerations, paths and experiences that user go through in their daily lives.

The customer life cycle usually starts when the customer wants or needs a product or service and will continue to the point where the product is reclaimed, redeemed or
renewed. The organisation aim is to manage this journey as maximises values both for the customer and for the organisation. Once the touchpoints have been identified, they can be connected together in a visual engaging enough to make it easily accessible to all, but should also incorporate enough to make it easily accessible to all and incorporate enough detail to provide real insights into the journeys being displayed. This means that the customers doing the journeying become far more than just names on a page. Basing the map around materials the customer themselves has produced helps facilitate empathic engagement, which is crucial for conveying the myriad emotions that most journeys are made up for. (Stickdorn, Schneider 2011, 158-159)

Service design takes the customer journey as a starting point. It describes the service from the customer’s point of view before, during and after engagement. The customer journey is a systematic approach designed to help organisation understand how prospective and current customers use the various channels and touch points, how they perceive the organisation at each touch point and how they would like the customer experience to be. This knowledge can be used to design an optimal experience that meets the expectations of major customer group, achieves competitive advantage and supports attainment of desired customer experience objectives.

**Principles of Gamification Used in Creating Social Engagement**

Gamification platforms offer complex tools for design thinking, “gamification” the term offer a shared currency across the academic and business divided, while the concepts’ process can support effective business solutions. (Herger 2012) Pragmatically “gamification” also has a growing focus of academic communication, and we are using this in our work as a dialogue with authors sharing common interests.

**Gamification**

The term of “gamification” did not see widespread adoption before 2010, when Deterding define gamification is the use of game design elements in non-game context. (Deterding 2010). Garner (2014) define gamification as the use of game mechanism 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. Garner also present that experience design is the journey that players take with elements such as game play, play space and story line. Garner proposes that gamification is a method to digitally engage rather than personally engage, meaning that players interact with computers, smartphones, wearable monitors or other digital devices. The goal of gamification is to motivate people to change behaviours or develop skills, or drive innovation. That is why gamification focus on enabling players to achieve their goals – and as a consequence the organization achieves it is goals. (Garner 2014, 6) McGonigal (2010) proposes to construct games to solve real-world problems. She identifies player, while gaming to be “super-empowered hopeful individuals” supported by an environment that provides superior abilities for blissful productivity, social fabric, optimism and epic meaning. One San Francisco based technology company mentions that the core of gamification lies in increasing “…engagement and user retention by applying game mechanics such as levels, badges, quests, rewards and more to your products”. This official mission statement on the company’s website focuses on achieving business goals and influence the customers’ behaviours by means of gamified systems. In our research we
understand gamification as a concept to be used in order to motivate users to more creativity, become more active, perform more goal-oriented tasks, and create social experiences through challenges and competitions.

**Social Engagement**

Social engagement is the utilization of communities and support networks of users with similar interests, which users connect via the product or services site or application. Scott (2012) presents his study of meaningful play in which he described that in social engagement a change of behaviour is more likely because goals and objectives are reinforced and encouragement is provided to help accomplish tasks that will improve wellbeing. Combining meaningful play and social engagement provides a platform for users and their objective to evolve with the system while participating in a supportive and sometimes competitive community adding additional motivational factors. (Scott 2012) Social engagement can also be facilitated through discussion boards, chat spaces, and other methods of allowing players to talk to each other. Social engagement can also be facilitated through encouraging the user to connect their social networking spaces to their in-game profile, although this should not be forced upon a player. Social engagement can come through comparative scoring systems such as leader boards, players creating challenges for each other, players interacting with each other through game elements, or players working together toward a shared goal. By gamifying a system means to bring people together. These systems can tap existing friendships and social networks to encourage players to recruit others whom they already know, and allow friends to work together as a team in the system. The system can also create challenges that require cooperation to create people to work together in short-term encounters or get to know each other for longer-term engagement. These systems can also create the platform for those who are more experienced and keep them as mentorship-based relationships. (Nicholson 2015)

**Gamification in Tourism**

Gamification is a major trend for the coming years in tourism, which will appeal to consumers across all age demographics (WTM 2011). The application of gamification in tourism is still in its infancy which is mostly affiliated to the limited academic research discussing game design patterns and game design mechanism for service and marketing (Huotari and Hamari 2012) Motivation is a central topic in gamification as gamified systems are implemented to change customer behaviour for wanted and desirable activities. As in this case study we want to motivate customers to enjoyment and engagement of the gamification customer journey at a ski resort. Motivation in gamification uses a two-folded approach. First, *extrinsic motivation* focuses on applying gamified elements into a non-gaming context to stimulate external motivation. Second game thinking and motivational design has a positive influence on *intrinsic motivation* as it is done because of an internal desire to play (Groh 2012, Nicholson 2012) In tourism experience indeed motivating people needs a deeper approach to be successful and to encourage people into an activity, which is engaging and meaningful. As in this case study skiing and at the same time playing mobile game activities present new experiences for ski resort customers. Intrinsc motivation is defined as the doing of an activity for the pure enjoyment of the activity per se, rather than of its rewarding value, pressure or external stimulates (Ryan and Deci 2000) In tourism
gamification tries to address this intrinsic motivation by applying game design thinking in order to engage people into meaningful and effective tourism activities. Hence, companies need to have an understanding of the activity and customer journey, which is aimed to be designed as a gamified system in order to employ game mechanics in the right way and for the intended purpose. Addressing the intrinsic motivation of a customer is the most powerful motivator of gamification, as it leads to deep engagement into activities and with other people. A company’s ability to create a meaningful and effective gamified system will open the prospect of happy customers and committed employees. A well-designed gaming mechanics refers to both intrinsic and extrinsic motivation through gaming elements. One example advergames in tourism industry is “Ireland Town” from the National Tourism Development Authority of Ireland or “Holmenkollen Ski Jump” form Visit Norway. Those games are specially produced for the purpose of branding and advertisement to aim for strong recall of the game. The game gives tourist the opportunity to take advantage of special promotions or share check-ins and travel tips with their social networks. (Xu et al. 2014)

A Conceptual Framework for Gamifying the Customer Journey

Based on a continuum related to user experience in the context of object play (or i.e. interaction with material playthings) and proposed in new play theory (Heljakka 2013), we suggest that the conceptual framework of gamification of the customer journey has the following stages:

- **WOW** it is based on structured framework which organizes the wow experiences using gamification as a key phase;
- **FLOW** for each phase identifies the most important drivers as flow experiences and provide a set of the features of each driver;
- **DOUBLE WOW** provides a way of understanding how the customer who already has experienced a wow experience with the service perceives something unexpected.
- **GLOW** compares the customer experiences to what they have experienced before and gives them a pleasant memory footprint, which they want to re-experience. This means that the customer who has engaged with the service wants to come back again and again.

The stages as defined shortly above, will be discussed in more detail in the following.

**WOW**

As wow is a pleasant experience and what particular emotion we experience is depend of the underlying appraisal type. Desmet (2003) has developed a typology of emotion types that we generally experience in response to consumer products. There have five types represent pleasant emotions and three of these five are considered to combine to a wow experiences. They are pleasant surprise, fascination and desire. Pleasant surprise means that we experience surprise in response to products that we appraise as novel, both in terms of sudden and unexpected. To experience a pleasant surprise the product or service must be appraised unexpectedly and suddenly matching a concern. Fascination means that we experience fascination in response to products that we appraise as unfamiliar. If the product or service touches on our need of curiosity, we will experience the pleasant sense of
unfamiliarity that we call fascination. Desire means that one desire for product that we appraise as fit objects that call for possession. The product is appraised as a fit object because using or owning it will fulfill a goal, its design is delightful, or it expresses some desirable quality. This means that the one who experience wow in fact experiences a combination of pleasant surprise, fascination and desire implies that one who wants to design for Wow should design a product or service that is appraised unexpected, unfamiliar, promising and fit for possession. In our case the goal was to enhance a ski resort’s Customer Journey through gamification elements and prototyping with the Comicubes tool with the aim to design Wow elements at the beginning of the customer journey process.

FLOW
Flow is an optimal psychological state, which Csikszentmihalyi introduced in 1975. When a person will get into a flow state, the person becomes totally involved in an activity and experiences a number of positive experiential characteristic, including freedom from self-consciousness and get enjoyment of the process. Flow has been described as an intrinsically enjoyable state and is accompanied by an order in consciousness whereby the person experiences clarity of goals and knowledge of performance, complete concentration, feelings of control, and feelings of being totally in tune with the performance. Korzaan (2003) combines flow and the theory of reasoned action (Azjen 1991) to show that the psychological state of flow influences users’ exploratory behaviours and attitudes towards using the services. In our case we try to create the possibility for Flow experiences to occur in the Customer Journey process and design activities where customers can get completely involved and get immersive experiences.

DOUBLE WOW
In new play theory Double-Wow means that a plaything, once employed in play reveals a hidden feature which extends the ‘wowness’ of the artefact beyond the first encounter with it and wows the user again. In the context of service design, Double-Wow could mean a surprise encountered during the active use of the service, which will give the user a secondary wow experience.

GLOW
In new play theory Glow refers to user-generated value-creation in reference to a material artefact. For instance, when the player has creatively cultivated a toy e.g. interfered with its material substance in a creative and productive way, s/he has given it an added (auratic) value, namely Glow. In the context of service design, glow may refer to a lived experience that the user has contributed to personally by for example the creation and social sharing of personal content.
Prototyping the Customer Journey in the Case Study

Service design is an emerging field (Mager 2009) whose methods are still being developed and are often borrowed from related areas. The customer journey is a systematic approach designed to help organisations understand how prospective and current customers use the various channels and touch points, how they perceive the organisation at each touch point and how they would like the customer experience to be. This knowledge can be used to design an optimal experience that meets the expectations of major customer groups, achieves competitive advantage and supports desired customer experience objectives. (Nenonen et al. 2008) The overview of the customer journey provides enables the identification of both problem areas and opportunities for innovation, whilst focusing on specific touchpoints allows the service experience to be broken down into individual stages for further analysis. This structures visual presentation makes it possible to compare several experiences in the same visual language, and also facilitates quick and easy comparisons between a service and its competitors. (Stickdorn, Schneider 2011, 159)

We have used the Comicubes prototype tool in designing enhancements to the customer journey. The Comicubes concept is creative prototype tool, a hybrid combining images with a physical, three-dimensional tool. Hybridity means that the cube as physical material gets a digital layer or digital elements. Hybridity may occur in many ways in a plaything and prototyping. For example, Comicubes can get digital layer, which have QR code where you can add for sound, picture or video material. (Ihamäki, Heljakka 2016) We describe the Comicubes solution prototype as a method which users are observed engaging in planned activities around prototypes of proposed solutions. There are two types of solutions prototypes are used in this method: 1) Appearance Prototype, which simulates the appearance of the intended offerings, and 2) Performance Prototypes, which primary simulates the functions of the intended offerings. Through the observation on these prototypes, user experiences are revealed to validate or invalidate assumptions about proposed solutions. (Kumar 2013, 273) In our study the Comicubes solution prototypes are tested and validated in simulated environment ski resort area in Finland. Information is
gathered through observing the interaction and is recorded with video and taking pictures. The observations are then analysed to understand customers’ experiences and the impact they might have on proposed solutions.

We have tested the Comicubes solution prototype during a building session, in which participate five people participated. The participants are responsible for the ski resort’s services and their service design. We have started the prototyping session by explaining the theories behind service design, customer journey and gamification. After this, we have given the tool Comicubes including four blank cardboard cubes, from which the participants have been asked to create the Customer Journey for the ski resort area. The whole session took 4 hours and during the next day we recorded and analysed the developed Customer Journeys and re-designed the Customer Journey of the ski resort further.

![Figure 2  Ski resort gamification – Comicube solution prototype 1](image)

Our focus groups have used the Comicubes tool to create the customer journey through storytelling. They also make prototype of the game in ski slope, where they have designed activities familiar from game play. The main goal of the purposed session was to encourage ski resort staff to create gamification customer journey and to explore the possible engagement forms and elements of the enjoyments.

**Framing the creative space:** We prepared type of physical structures: first, diverse paper materials (cubes) that were open for multiple interpretation, like different types of cardboards, paper, scissors, glue, threads and rods. As a methodological structure, we decided to use the representation of prototype form of photograph ski resort map to serve as a basis for the generation of ideas, but we also elaborated specific critical questions to challenge the existing idea of the thinking cap to open the creative space for new design ideas. Critical questions based on places, what activities (to gamification of the ski resort area) you have to create that specific place for the customer.

**Reflection:** As a social structure, we worked as a two design teams. Both groups defined their idea and particularly their visualisation created an implicit mental structure that framed the selection of the materials for the prototyping activities. Customer journey gets
real meaning when groups present their ideas as the participants have taken into account small details which provide more ludic enjoyment for the customer.

**Result of Developing the Customer Journey at a ski resort through the Gamification Concept**

In this study we have described the gamification of the customer journey by using Comicubes as a solution prototype. The concept of gamification can be used successfully by encouraging customers to participate in activities, for example to find treasures in ski resort area. This makes the customer’s skiing holiday more meaningful and at the same time engage the customer more in ski resort activities. This case study describes the enhancement of customer engagement by exploring the customer journey by the use of the gamification concept in combination with a solution prototype, Comicubes. Results show that groups have designed game elements for the ski slope that generate social interaction, for example one exercise is that you need to solve problem with a group of people.

The gamification customer journey proposes a three-stages transformative gamification customer journey: **onboarding, habit-building** and **mastery**. The **onboarding** describes what the customer experienced before, when he begins the journey. It is stage of practice that helps customer (newbie) understand what to expect on gamified customer journey in ski resort. Game elements merge together and result into the “learn – practice – master”, that is one reason to use Comicubes as supported by compelling story of the customer journey.

![Comicube solution prototype 2](image)

*Figure 3  Comicube solution prototype 2 shows a visualisation of the gamification of the customer journey, which ‘wows’ the customer in the first encounter with the resort’s ‘playground’.*

The ski resort’s aim is to get customers to try new services. In this case study we have named the ski resort service created in the workshop as “The slope game”. The concept targets
families who want to gamify their skiing holidays. This is a unique concept planned in a Finnish ski resort, which does not have similar products or services to offer yet. The idea is to make story which lead the customer through the skiing and making exercises for example taking pictures and sharing them on ski resort’s screen.

Second state called **habit-building**, which mean that after some level of practice, that customer starts to understand the mechanics and purpose of the gamification customer journey. This means that activity loops and feedback system help him/her turn from a newbie to a regular. The customer experiences flow experiences at the second stage of the customer journey.

The third state is called **mastery**, which appears towards the end of the customer journey. The customer turns from a newbie to an enthusiast.

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**Conclusion and Future Research**

This paper provides a conceptual framework of using gamification in combination with new play theory in enhancing the customer journey in a ski resort by discussing game mechanisms that are applicable in the tourism industry. The Comicubes presents a solution prototype, which helps ski resort staff to enhance the customer journey through gamification. 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 playfully with the ski resort.
The Customer Journey with using the Comicubes solution prototype method offers a systemic view of gamification service design levels and a flexible approach that accommodates the co-creative nature of customer experiences. Building upon concept and techniques from different research field, we present the Wow, Flow, Double-Wow and Glow framework which contributes in designing and developing new service models. We demonstrate that it can be effectively applied in different service innovation contexts, which opens new insights into developing new services like gamifying a ski resort.

One path of using the concepts of gamification when developing the Customer Journey is to start with unmet needs and use a light reward based layer as the tutorial to bring customer into the new service. These rewards should be quickly replaced with meaningful elements, such as Wow experiences, Flow experiences, Glow activities and opportunities to experience Double-Wow. The gamification services should be designed as layers that are create moments of authentic engagement between the participants, the external context, and the lead user groups. The goal of this journey is to present the service design customer journey with the framework of Wow, Flow, Glow and Double Wow, which all contribute to the process of detecting new needs and in ensuring that customers will get pleasant and surprising experiences throughout their personal journey which they want to share with other customers as well.

As proposed in the paper at hand, the Comicubes tool helps to tell stories about the customers’ current experiences and envision future ones, which can lead to greater customer insight and better service design concerning the Customer Journey.

References


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