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DESIGN THINKING FRAMEWORK OF EXPERIENCE INNOVATION

Master´s Thesis
in International Business

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1 INTRODUCTION

1.1 Preconditions of experience innovation conceptualization

During the last decades, technological changes and globalization have shaped market rules and ways of gaining competitive advantage all around the world. Gradual operationalization and mass exploitation of unique resources have created the need of a new differentiation criterion. The global access to information and international networking disrupted the age of information. (Bernoff et al. 2011, 4; Fraser 2009, 57.)

At the same time, global sourcing lowered the entry barriers to the markets; companies can easily imitate each other's strategies and offerings, therefore the competition between them intensified. These trends widened the range of market offerings, and customers have more alternatives to choose. Hence, the emerging changes have caused a shift of market power to customers. They search for the emotional engagement with offerings and brands rather than only satisfaction of rational needs. The age of customers has begun, which makes consumer experience and loyalty the keystone for the leading positions in the markets. (Bernoff et al. 2011, 4-6; Gobé 2009, 111-112.)

Experience is a multidimensional concept (Gentile et al. 2007), which defines the process of interaction with an offering and knowledge or impression about an offering (Prahalad & Ramaswamy 2004; Pine & Gilmore 1998; Schmitt 2000). Moreover, experience contains emotions and feelings related to an offering (Hirschman & Holbrook 1982; 1986, 220-251; Schmitt & Zarantonello 2013, 30).

The shift of market power to customers creates a challenge for companies. They constantly search for the new way to differentiate, and for the last decades, the most efficient path to the sustainable business has been innovations. Many studies explained industrial innovation (Chesbrough 2003; Chesbrough et al. 2006; Chesbrough 2010), which enhances tangible features (mainly, functionality) of a product. Particularly, general understanding of innovation refers to the process of transforming ideas into unique products or services through the exploration and utilization of opportunities (Baregheh et al. 2009, 1334; Johansson 2007, 22-25).

Innovation has become a key guiding line of sustainable business. The research of different innovation theories followed the chronology of business practices. Initial focus on product and company innovation implied approaches of industrial innovation. The current development of innovation application is toward intangible attributes shaping a service or a product, although the value co-creation remains the core technique of innovation. Moreover, companies discovered the new source of competitive advantage, which is a compelling experience (Pine & Gilmore 1998, 1999; Prahalad & Ramaswamy 2004; Meyer & Schwager 2007).

Experience economy has shifted the core point of innovation from the new technology usage to co-creating meaning and value for customers. Innovation is a way to create changes and opportunities rather than react and adapt to market uncertainty. Thus, implementation of new ideas opens the paths for further growth and development. (Abbing & Van Gessel 2009, 131-134.) Moreover, experience innovation switches the focus toward customers, humans and networks (Prahalad & Ramaswamy 2003, 13-15). However, innovation of experience gained little attention in academic research, and this study aims to explain how a company can innovate consumer experience by the means of design thinking.

Experience innovation similarly to open innovation (Chesbrough 2003; Chesbrough et al. 2006; Chesbrough 2010) implies communication with customers and value co-creation (Prahalad & Ramaswamy 2003, 16-18). Although there is a variety of innovation management approaches, academic research omits clear conceptualization of experience innovation. The limited analysis of experience innovation creates the need to explain the phenomenon and describe the innovation process, merging knowledge of existing studies into one framework.

Besides the broad discussion about innovations, many researchers (Chesbrough et al. 2006; Johansson 2007; Chesbrough 2010) highlighted the importance of cross-disciplinary approaches in the innovation process. The current problems and advanced needs of human society have led to the holistic change in business philosophy; specifically, the merge of design, analysis and planning into design thinking.

Design thinking approach has become a universal tool to innovate offerings and business models in different industries. Business often suppresses new ideas by time-consuming planning, forecasting and risk-averse attitude, while design is initially aimed at turning emerging problems into opportunities. The latter is more effective in uncertain and ambiguous market conditions than obsolete analysis, which is unable to predict future and foresee some unexpected fluctuations. (Liedtka & Ogilvie 2011, 14; Fraser 2009, 58.) Design thinking mind-set encourages new value (co)creation through innovations that have appreciable positive social impact. Moreover, design thinking is a customer-centric concept (Liedtka & Ogilvie 2011, 39-81), and customer experience management focuses on a customer. Thus, this mutual approach refers to applicability of design thinking in experience innovation.

Design of experience has a limited explanation in research. Existing studies (Beltagui et al. 2012, 113) highlight functional and pleasing components of experience. Therefore, experience design considers creation and delivery of these components and their thoughtful combination in an offering. Particularly, emotional design (Norman 2004, 63-89) elaborates experience creation across multiple levels.

Therefore, the focal study explains the concept of consumer experience and discovers how companies can tackle experience innovations by the means of design thinking framework. The following subchapter describes the research purpose and its structure in detail.

1.2 Purpose and structure of the research

The main purpose of this research is the creation of the stage-process framework. The framework parts are the key concepts of the study, namely, design thinking, innovation and experience. I am going to define each of them and explain the interconnections between them that will provides a solid ground for the seamless integration.

The main objective of this study is the creation of design thinking framework of consumer experience innovation. Therefore, the sub-objectives include:

1. Conceptualization of consumer experience through customer value.
2. Creation of experience innovation framework by the means of design thinking.

Figure 1 depicts the upward structure of the research, from customer value and experience to the innovation framework of consumer experience. The sequence of the construct analysis is based on the logic sequence of the parts of the integrated system. Moreover, the analysis and the elaboration of the constructs obviously should precede the construction of the innovation framework per se.

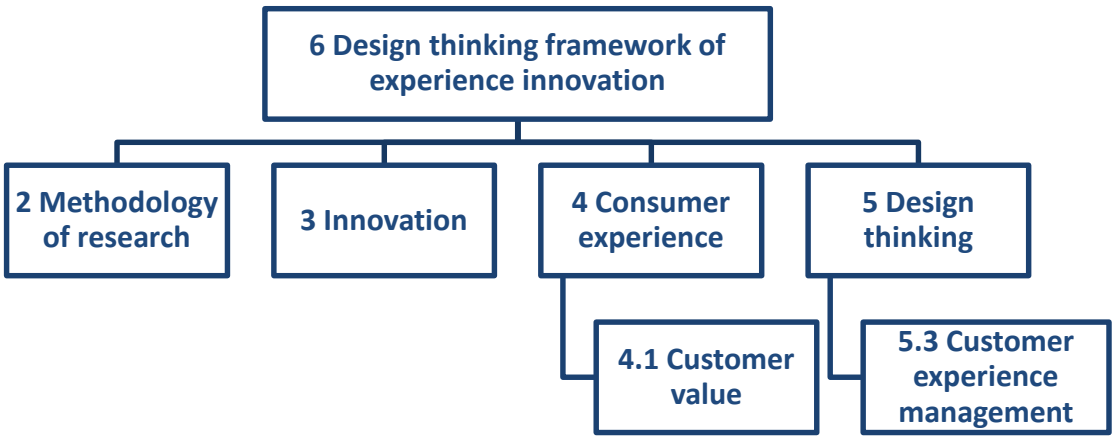

Figure 1 The structure of the focal study

The purpose of the study requires utilization of conceptual research methods for building the stage-process framework of experience innovation. Thus, Chapter 2 explains chosen research methods applied in this study, such as meta-framework and the process of its development (Figure 1). Following chapters provide the analysis of the main framework components.

Chapter 3 present the context of this study and describes the contemporary view on innovation and innovation design relevant for the further discussion (Figure 1). Specifically, open innovation approach corresponds with the concepts of consumer experience, design thinking and experience design. This chapter provides synthesized definition of innovation and general agenda of innovation development.

Chapter 4 is dedicated to merging customer value and customer experience and explaining the overlaps between them (Figure 1). Companies consider customer value as the means to differentiate in the markets. The current trends in economics (international sourcing and networking) and society (social media effects on information distribution) made traditional differentiation strategies, for example, based on price and quality, inefficient. Many companies can easily offer a low costs functional value with high usability and compatibility. The Internet provides all necessary information to the customers, so they can choose between substitutes. When the features of a variety of offerings are similar, a customer rely on own intuition, feelings and emotions about an offering or a brand. A customer expect to get an extra value – desirability and delight. Hence, the companies should be able to create an exceptional emotional appeal in addition to the basic features of an offering. Moreover, the companies aim at maintaining the long-term relations with the customers, and such loyalty is derived from the enjoyable experiences and memories. Therefore, further discussion follows from the established interconnections between customer experience and value presented in Figure 2.

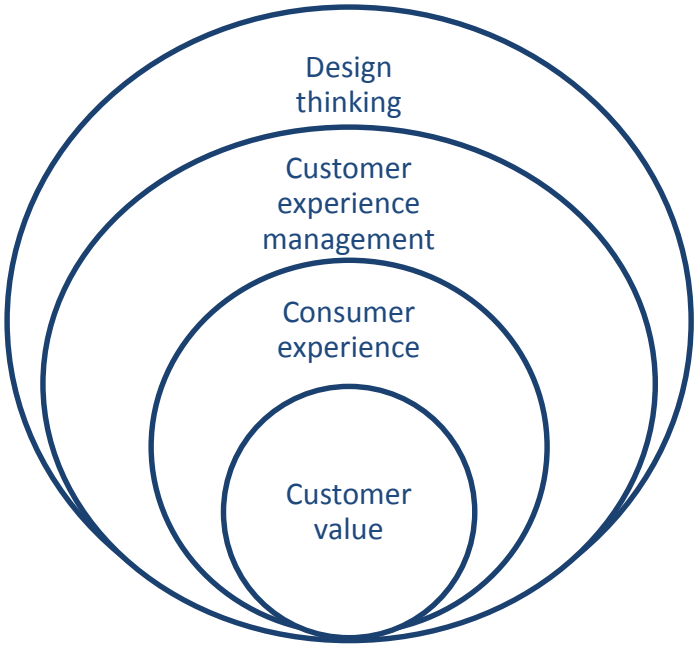

Figure 2 Interdependences between the key research concepts

Chapter 5 reveals the design thinking approach and the stages of innovation process. Customer experience management utilizes the methods of design thinking and elaborates

the improvement of customer experience for the strategic purposes of a company. Therefore, customer experience management belongs to design thinking philosophy as presented in Figure 1 and Figure 2. The choice of design thinking as an innovation approach is based on its focal principle, specifically, human or customer centricity that is directly implies customer experience. Moreover, design thinking implies iterative learning and continuous innovation process, which is easily applicable to designing intangible issues, such as experiences and perceptions. Design thinking and customer experience management emphasise the importance of the respective guiding lines for differentiating in the market and maintaining sustainable business. Thus, I believe that design thinking is the most appropriate methodology to customer experience innovation.

Customer experience management (CEM) bring to the light the customer experience as a term different from customer value. Design thinking focuses more on the customer value, than experience, while CEM's key concept is the customer experience. In addition, design thinking and CEM have almost identical innovation frameworks, though the recent studies have not explained CEM as a part of design thinking. Some researchers describe CEM as the separate theory shaped on the same principles as the design thinking. Figure 2 illustrates the interconnections of the key concepts of the research.

Chapter 6 explores in details the innovation of customer experience by the means of the integrated framework. In other words, the research proceeds to elaborating each stage of experience design in the innovation process. The integrated framework of consumer innovation comprises the elements of CEM and important analysis findings about consumer experience as illustrated in Figure 1 and Figure 2.

2 METHODOLOGY OF RESEARCH

2.1 Theory building through conceptual methods

Conceptualization is a research approach to description and explanation of an event, object or process. Descriptive and explanatory methods create theories with a significant managerial relevance. (Meredith 1992, 4.) The focal study aims to build a theory explaining the process of experience innovation by the means of existing knowledge about the chosen topics. Theory establishes and explains relations between concepts within taken assumptions. Theory has descriptive, explanatory and predictive meaning. (Bacharach 1989, 496-497; Wacker 2008, 7.)

The key parts of a theory development are factors or definitions (what), interconnections or relationships (how), their justification (why) and predictions. Factors or concepts and relations between them constitute the theory subject, while the reasoning and explanation of a built model delivers theoretical and practical value and develops existing knowledge on a specific topic. (Whetten 1989, 490-491; Wacker 2008, 7.)

Theory quality suggests several important requirements to theory building. Definitions should be clearly explained in a short form and distinguish from each other, avoiding repetitions. In other words, theory should contain conservative, unique and parsimonious definitions towards measurable concepts. (Wacker 2008, 9-10.)

Generalizability influences the quality of a theory. Abstract theories have low boundaries. On the other hand, detailed theories lack the basis for cumulative research. (Bacharach 1989, 500.) Moreover, explanatory power, such as internal consistency, also defines the theory quality and it depends on the nature of the relations between variables (Bacharach 1989, 508; Wacker 2008, 11).

Newness of phenomena explanation should provide advancement of current theories and predictive power of a new theory should provide suggestions for the future research (Wacker 2008, 10-11). Similarly to the aforementioned criteria of a high-quality theory, Dubin (1969) states that a theory should expand understanding of a phenomenon, provide non-trivial insights, contain constructs and interrelations between them, non-composite variables and it is bounded by a certain criteria.

Particularly, the purpose of the focal study is to build the theoretical framework, establishing and explaining the interrelations between the constructs and variables by the means of propositions and hypotheses. Propositions establish the connections between constructs, and variables relate to each other through the hypothesis as presented in the Figure 3. A construct is “broad mental configuration of a given phenomenon” and a variable is “an operational configuration derived from a construct” (Bacharach 1989, 496-500).

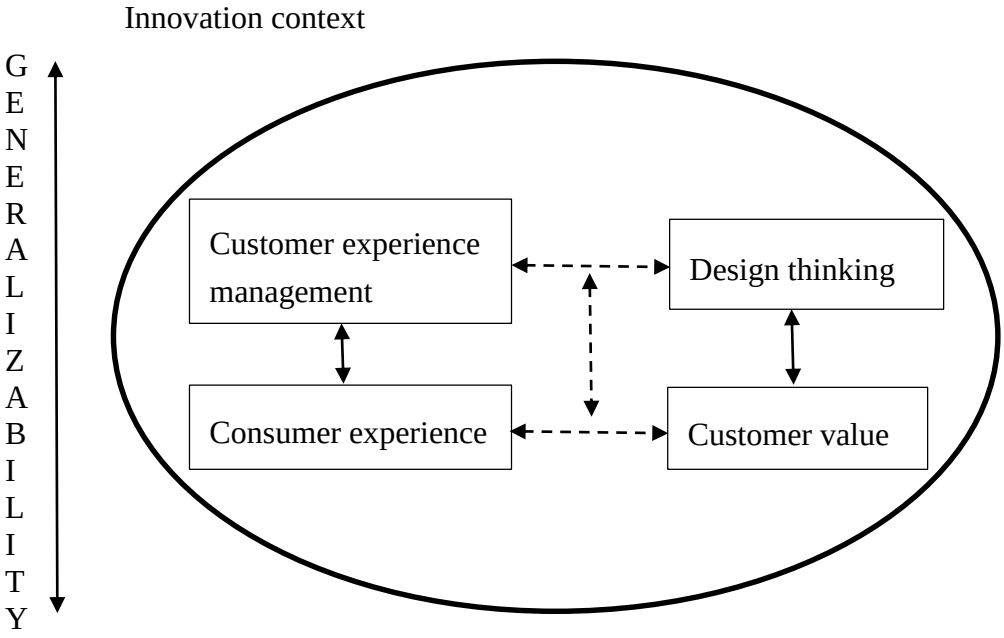

Figure 3 Components of the theory (adapted from Bacharach 1989, 499)

This study focuses on the constructs of design thinking and customer experience management and operates variables of consumer experience and customer value in the context of innovation development as presented in Figure 3. The construct of design thinking includes customer experience management due to the similar stages of innovation process and common methods. However, recent studies omit the similarities between these concepts, and it creates duplication of theoretical conceptualization. Thus, the dotted arrow connecting design thinking and customer experience management refers to established interrelation. I analyse customer value and merge it with consumer experience by the use of recent studies on these topics. I consider the merge of customer value and consumer experience important because otherwise explanation of consumer experience innovation would be incomplete. Figure 3 depicts this merge with the dotted arrow. The central dotted arrow in Figure 3 illustrates the interconnections between the constructs and variables of this study integrated into design thinking framework of consumer experience innovation.

Furthermore, recent studies of design thinking operate mainly with customer value; they ambiguously explain consumer experience in the innovation context. Thus, customer value and design thinking is connected by the solid arrow. Similarly, the concept of consumer experience has a broad discussion within customer experience management as the solid arrow in Figure 3 illustrates.

2.2 Systematic literature review

Comprehensive review of the studies concerning the topic of a qualitative study provides the solid ground for further discussion and theory building. Moreover, parsimony of the sources frames the research topic and affect research outcomes and contributions. (Merriam 2001, 53.)

Theoretical research aims to elaborate, integrate or advance existing knowledge, thus the literature becomes an essential source to initiate a study. A literature review maps the research topic and provides the direction of the research discussion. (Creswell 2003, 30-32.) Therefore, the scope of the qualitative research depends on the relevance, range and variety of the sources used for building a theoretical framework. Particularly, the focal study integrates existing knowledge of different subjects as illustrated in Figure 4.

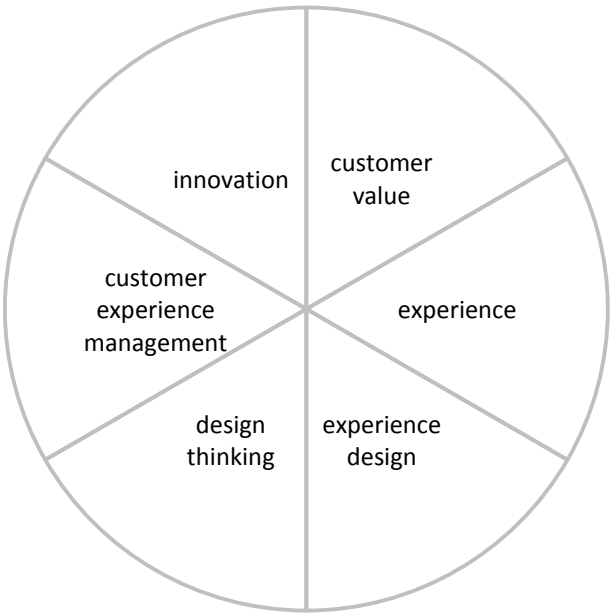

Figure 4 Mapping of the sources for the focal study

Figure 4 depicts the key research topics used for this study, such as customer value and experience (which are the variables in Figure 3), design thinking and customer experience management (which are the constructs in Figure 3). Moreover, experience design bridges consumer experience and design thinking, though recent studies have not provided elaborated explanation of this interconnection. Innovation component refers to the specific context of the focal study.

The creation of a comprehensive and well-structured theory requires a critical literature review. It refers to taking into account studies supporting and challenging the key idea of a research. Moreover, coherent literature review discusses and critically evaluates works of the chosen area experts and provides reasoned ground for a theory building out

of the number of the studies. (Saunders, Lewis & Thornhill 2003, 47; Saunders & Lewis 2012, 31)

The quality of the sources affects the quality of the study findings, or the theoretical framework. Thus, the studies chosen for theory building should be relevant, reliable and sufficient. Relevance or suitability depends on the date of publication, research context, and arguments supporting or challenging the research idea and corresponding to research questions. Sufficiency relates to the chosen boundaries or limitations of research, though a comprehensive literature review should consider the studies of main experts of a chosen topic. Reliability of the sources depends on the author expertise and peer-reviews. (Saunders, Lewis and Thornhill 2003, 71; Saunders and Lewis 2012, 45)

The main types of literature used for this study were textbooks, peer-reviewed academic journal articles, non-refereed academic journal articles and newspaper articles. The key words of this research originate from brainstorming, initial reading and mind mapping during the specification of the research topic and research questions. Therefore, the generated key words were: “design thinking”, “customer experience”, “customer value”, “innovation”. Search tools used in this study are search engines (Google) and online databases (Google Scholar, Business Source Complete, Emerald, JSTOR, Wiley Online).

The focal study aims to create the framework of customer experience innovation, thus literature analysis synthesizes design thinking agenda and findings of this research towards customer experience. Table 1 describes the main studies and topics analyzed for this research.

Table 1 The main sources selected for the study

Author and year of publication	Publication Title	Relevant concepts considered
Innovation		
Johannessen et al. (2001)	Innovation as newness: what is new, how new, and new to whom?	Success of innovation implies its adoption in the market.
Chesbrough (2003)	The Era of Open Innovation	Industrial open innovation leverages internal and external knowledge.
Prahalad & Ramaswamy (2003)	The new frontier of experience innovation	Insights on experience innovation.
Chesbrough et al. (2006)	Open Innovation : Researching a New Paradigm	Industrial open innovation requires strategic and managerial alignment and expansion of knowledge networks.
Johansson (2007)	Finding innovation at the intersection	Intersectional approach engages multiple disciplines and fosters innovation.
Baregheh et al. (2009)	Towards a multidisciplinary definition of innovation	Process view on innovation.
Abbing & Van Gessel (2009)	Brand-driven innovation	Layers of experience innovation integrated with brand design
Best (2009)	Branding and design innovation leadership: what's next?	General view on the stages of innovation process
Chesbrough (2010)	Open Services Innovation: Rethinking Your Business to Grow and Compete in a New Era	Service open innovation is an interactive process of co-creation.
Customer value		

Sheth et al. (1991)	Why we buy what we buy: a theory of consumption values	Types of consumption values.
Holbrook (1996)	Customer Value - A Framework for Analysis and Research	Value is personal experience of interaction.
Woodruff (1997)	Customer value: the next source for competitive advantage	Role of customer perception in value delivery.
Khalifa (2004)	Customer value: a review of recent literature and an integrative configuration	Value buildup model.
Vargo & Lusch (2004)	Evolving to a new dominant logic for marketing	Value co-creation.
Grönroos (2007)	Service management and marketing: customer management in service competition	Role of perception and interaction with a customer in value delivery.
Newbery & Farnham (2013)	Experience Design: A Framework for Integrating Brand, Experience, and Value	Distinction of perceived value from offered value.
Consumer experience		
Hirschman & Holbrook (1986)	Expanding the ontology and methodology of research on the consumption experience	Emotions and interactions are the parts of consumption experience.
Webster's Third New International Dictionary (1987)	Article about experience	Dual nature of experience means a process and knowledge.
Pine & Gilmore (1998)	Welcome to the experience economy	Experience is a lasting process, resulting in memories.
Schmitt (2000)	Experiential marketing: How to get customers to sense, feel, think, act, relate	Experience provides a set of values.

Carù & Cova 2003	Revisiting consumption experience a more humble but complete view of the concept.	Emotions and affections drive experience.
Shaw 2007	The DNA of customer experience: how emotions drive value.	Experience is a mix of consciousness and sub consciousness perceptions.
Gentile et al. (2007)	How to Sustain the Customer Experience: An Overview of Experience Components that Co-create Value With the Customer	Components of customer experience.
Verhoef et al. 2009	Customer experience creation: Determinants, dynamics and management strategies.	Influence of customer brand perceptions on consumer experience.
Shaw et al. (2010)	Customer Experience: Future trends and insights.	Experience implies company's performance that meets customer expectations and evokes emotions.
Schmitt & Zarantonello (2013)	Consumer experience and experiential marketing: A critical review.	Distinction between customer and consumer experience.
Design thinking		
Simon (1969)	The Science of the Artifical.	Design is a cross-disciplinary tool for creation of satisfying solutions.
Rittel (1972)	On the Planning Crisis: Systems Analysis of the First and Second Generations.	Specific nature of wicked problems, which solves design thinking.
Buchanan (1992)	Wicked problems in design thinking.	Design evolves to the universal tool in different fields and engages several sciences for finding a solution.
Brown (2008)	Design Thinking	The first mention of design as the main driver of innovation.
Fraser (2009)	Designing business: New models for success	Methods and mechanisms of design thinking.

Martin (2009)	The design of business: Why design thinking is the next competitive advantage	Knowledge funnel is a tool of design thinking, which refines information and leverages uncertainty.
Hassi & Laakso (2011)	Design thinking in the management discourse: Defining the elements of the concept	Design thinking three-dimensional structure.
Liedtka & Ogilvie (2011)	Designing for growth: A design thinking tool kit for managers	Stage-process framework of design thinking, including main tools and methods.
Stickdorn & Schneider (2012)	This is service design thinking: Basics, tools, cases	Practical tools of design thinking.
Customer experience management		
Meyer and Schwager (2007)	Understanding customer experience	Conceptual elaboration of customer experience management.
Schmitt (2010)	Customer experience management: A revolutionary Approach to Connecting with Your Customers	Stages and characteristics of brand experience, its interconnection with customer experience
Experience design		
Norman (2004)	Emotional design: Why we love (or hate) everyday things	Three levels of experience design.
Redström (2006)	Towards user design? On the shift from object to user as the subject of design	Design should leave the space for personal interpretation of an offering.
Zomerdijk and Voss (2011)	NSD processes and practices in experiential services	Perceived experience depends on the personal context of offering usage and a company cannot control it.
Beltagui et al. (2012)	Design in the Experience Economy: Using Emotional Design for Service In-novation	A company can organize prerequisites for creating experience, but eventually a customer perceives experience, which is different from the offered experience.

Table 1 describes the key research topics and recent studies utilized for the focal study. The analysis begins from defining innovation, which is one of the central terms of this study. The research analyzes innovation of an offering, specifically, experience. Baregheh et al. (2009) highlights the process view on innovations that matches the perspective of the focal study. The study of Johansson (2007) and open innovation models of Chesbrough (2003, 2010) note the interactive nature of innovation process. Similarly, experience innovation implies co-creation with the customers according to Prahalad and Ramaswamy (2003).

The elaboration of customer value and its merge with customer experience constitutes one of the main contributions of this study. The basis of discussion on customer value and experience consists of classifications of Sheth et al. (1991) and Gentile et al. (2007). The study of Khalifa (2004) explains the overlap between customer value and customer experience, and the research utilizes these findings for developing the ground for the innovation framework. Moreover, Pine & Gilmore (1998) advances the term of experience to the separate offering that provides a specific perspective to this study. The explanation of experience through the concept of customer value advances the understanding of experience and elaborates the innovation framework that is the main objective of the study.

The next block of studies chosen for the focal research discovers design thinking framework as presented in Table 1. The notion of design as a cross-disciplinary approach to solving complex problems, originated from the studies of Simon (1969), Rittel (1972) and Buchanan (1992). Brown (2008) has begun the development of the design thinking concept, suggesting it as the main driver of innovations. However, he has mainly focused on the practical and entrepreneurial aspect, rather than theoretical ground. Moreover, academic research has generally omitted the topic of design thinking, thus this study uses several semi-academic books for elaborating innovation process further. Particularly, the frameworks of Liedtka & Ogilvie (2011), Fraser (2009), Hassi and Laakso (2011) serve the basis for the study.

The block of customer experience management explains the interconnection of brand and overall customer experience as described in Table 1. The study of Schmitt (2010) explores the design process of brand experience, which is utilized for the focal study. The following subject included into the analysis is experience design. The connection of design thinking and consumer experience originates from Norman´s (2004) experience design model. The studies of Redström (2006), Zomerdijk and Voss (2011), Beltagui et al. (2012) provides insights about the contradictions and gaps of experience design as explained in Table 1.

2.3 Building a meta-framework

Frameworks are analytical schemes built to simplify and clarify a phenomenon by establishing relations between selected variables (Fisher 2010, 141). Meta-framework is one of the conceptual research methods, which bind overlapping concepts into a coherent system of a phenomenon explanation. Therefore, meta-frameworks have an integrative nature; they combine existing knowledge in order to produce a new theory. (Meredith 1992, 7, 10.)

The development of a theory contains several steps. Firstly, all concepts and terms constituting the domain of the study should have comprehensive explanations and definitions. Rational usage of existing knowledge allows identifying the gaps in the academic research. Description of the chosen concepts and the core topic of the research clarify the structure of the study. Second step implies establishing connections between the concepts and elaboration of relations between them. Theorizing process creates a clearly structured system out of the theoretical constructs. This stage creates the core conceptual basis of the study. At the third step, developed framework should present contributions to the existing theories, which explain chosen concepts and terms. (Fisher 2010, 134.)

Conceptualization of customer experience innovation begins from the identification of the key research concepts, which are innovation, customer experience and design thinking framework. Consequently, identification of overlaps helps to establish relationships between the constructs for the purpose of integrated framework. Finally, the framework derived from design thinking approach depicts the innovation process of customer experience. Elaboration of the key research constructs and linking them together provide the basis for the integration into the process framework.

3 INNOVATION AND INNOVATION DESIGN

The focal study aims to build innovation process framework, which illustrates the sequence of experience transformation stages. This conceptual framework generalizes innovative development of experience by the means of design thinking approach.

Hence, the context of new theory building in this study is innovation. Innovation is essentially important for sustainable and successful business, because it is a source of competitive advantage in the market. Innovation is not a conventional change or a copy of something existing, but a unique transformation, which competitors can hardly imitate. However, the success of an innovation means the extent of its adoption in the market, rather than its radical advances per se. (Johannessen et al. 2001, 27-28.)

"Innovation is the multi-stage process whereby organizations transform ideas into new or improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace" (Baregheh et al. 2009, 1334). This definition provides the broad view on innovations, emphasizing the continuousness of advancing offerings or business models. (Baregheh et al. 2009, 1334.)

The source of innovations is diversity and multiplicity of the environment. The overlaps and intersections of different disciplines and expertise produce fruitful ground for discovering new opportunities and generating innovative ideas. Intersectional thinking embraces talents of different disciplines and encourages creativity. (Johansson 2007, 22-25.)

Diversity emerges from the boundless environment, where knowledge flows between the companies. Open innovation models supports this idea and suggests co-creation and collaboration to be an approach to innovation (Chesbrough 2003; Chesbrough et al. 2006; Chesbrough 2010). Open innovation model "embraces external ideas and knowledge in conjunction with internal R&D" (Chesbrough 2003, 41). Industrial perspective on open innovation provides insights about the usage of external and internal knowledge in R&D activities, alignment of business model for the successful commercialization of an innovation, and important role of intellectual property management. Moreover, industrial open innovation refers to the horizontal integration within knowledge networks for the purpose of value creation. (Chesbrough et al. 2006, 8-11, 220-225.)

Similarly, open innovation of services operates co-creation, though, instead of potential competitors, the main partners are customers (Chesbrough 2010, 53-67). Interactive nature of innovation implies the dialog with customers. They can give the clues about new ideas, if a company searches for the unique feedback rather than the common trend. (Pine & Gilmore 1998, 82-83, 201.)

Experience innovation analogically to open innovation focuses on value co-creation, but it operates in the offering environment. This kind of innovation implies individual-centric approach to transforming experiences. Moreover, technological capabilities serve

the facilitation of experience innovations, as well as the improvements of product functions. Experience innovations are personalized offerings, which meet contextual demand of customers. (Prahalad & Ramaswamy 2003, 16-18.)

Methodology of the focal study establishes the main methods of theory building. Moreover, this research requires explanation of innovation concept adjusted to the research purpose. *Therefore, synthesis of innovation definitions discussed above provides the following definition of innovation for this research: innovation is a staged process of idea transformation into new offering, which implies integration of multiple disciplines and co-creation with customers in order to provide functional and delightful solution.*

Process of innovation creation can be integrated with brand design that facilitates interdisciplinary and comprehensive approach to customer experience. Therefore, innovation design involves several layers in accordance with the sequence of interaction with a customer. Specifically, sensorial layer shapes the offering aesthetics that encompasses colors, textures and forms. Behavioral layer influences interaction with a customer and related feelings. Functional layer establishes functional characteristics and gives performance clues to a customer. Physical layer of innovation designs the structure and content of an offering or what it is made of and how it is made. Mental layer incorporates customer feelings derived from the previously discussed layers and synthesizes the meaning of an offering or an overall experience. (Abbing & Van Gessel 2009, 136-137.)

The general innovation agenda comprises several steps. It begins by understanding of environment, which encompasses potential drivers of innovation such as customer interests, competition, unsolved problems, technologies initiating new trends in the market and networks of a company. The next step is discovery of opportunities by analyzing and interconnecting fragmented knowledge about environment. Vision creation follows discovery of opportunities and advances innovation idea for its implementation. The next stage of validation with stakeholders focuses on fast prototyping and testing of innovation by the means of communication with customers or users. The last step of innovation process is its launch and commercialization, where innovation is commercialized. (Best 2009, 145-151.)

4 CONNECTING CONSUMER EXPERIENCE AND CUSTOMER VALUE

This chapter provides literature review on the key concepts of this study, consumer experience and customer value. In addition, I analyse connections, similarities and overlaps between them in order to answer the first research question, which is to explain and define consumer experience though customer value.

4.1 Customer value

Customer value can be defined as "a customer's perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations" (Woodruff 1997, 142). This definition reflects the determining role of customer perception.

Similarly, human perception plays the significant role in recognising and receiving value by the customers: "value is perceived by customers in their everyday activities and processes and in interactions with suppliers or service providers when consuming or making use of services, goods, information, personal contacts, recovery and other elements of ongoing relationships" (Grönroos 2007, 155). Similarly to Woodruff's (1997, 142-143) concept, Grönroos (2007, 4, 27, 155) focused on the perception and interaction, highlighting relationships and value-creating processes during a service or a product usage. However, Woodruff (1997) did not take into consideration the importance of interaction and communication with customer.

Value creation is the underlying reason for a company to be in the market. Design is a universal tool of value creation. A company delivers created value by the means of an offering and communication with customers. Customers acquire perceived value through personal cognition. Therefore, there is a clear distinction between offered and perceived value. Perceived value depends on the context of usage and customer expectations, which can increase or diminish perceived value. Moreover, the complexity of a product or a service also affects perceived value. Namely, cognitive overhead is "the effort of understanding the purpose and implication" of an offering. Thus, high cognitive overhead lessen perceived value. (Newbery & Farnham 2013, 40, 45-46.)

The theory of consumption values explains following types of the customer value: functional, conditional, social, emotional and epistemic value. Functional value means perceived physical utility, but conditional value completes it by comparing substitutes depending on the situational context. Social value constitutes the association to a social group with a certain image. Emotional value delivers feelings associated with an offering,

while epistemic value rises from novelty and causes customer's interest to experience it. According to the theory, this classification explains the customer decision-making based on alternatives comparison. These consumption values appears independently and affect the choice, and intensification of all of them is not always useful for a customer, because a specific offering feature can be the most important for a corresponding need. (Sheth et al. 1991, 160-163.)

Another view on the customer value refers to the accumulation processes. Value buildup model (Figure 5) describes accumulation of customer value in relation to the customer needs, tangibility of an offering and relationship with a customer. When customer needs evolve from the utility to psychic level, expected benefit of an offering advance from tangible to intangible. Relationships comprise the factor influencing value delivery and vary from transaction to interaction. Transaction serves the delivery of purely tangible benefits for satisfying utility needs. When a customer has psychic needs, an offering provides intangible benefits by the means of interaction with a customer. (Khalifa 2004, 657.) Therefore, interaction facilitates personalized approach to a customer, which expresses human-centricity of an offering toward a customer.

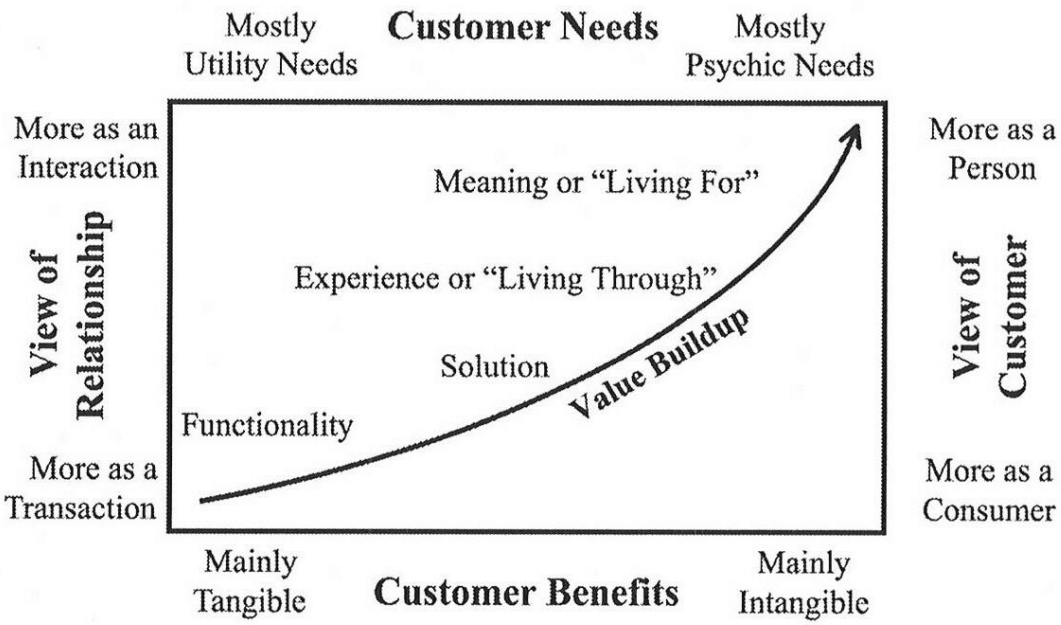

Figure 5 Customer value accumulation (Khalifa 2004, 657)

The value accumulation takes several forms in Khalifa´s (2004) model. Specifically, functionality carries tangible benefits of the product features. Solution provides extended offering, including functional and additional benefits. The experience is the "living through", in other words, the combination of tangible and intangible benefits as an engaged customer with a certain emotional appeal uses a product or a service. The highest level of value accumulation is the meaning, or the "living for". Meaning implies cohesive

consumer experience, which advances a personal or life philosophy of a customer. (Khalifa 2004, 657-658.)

Brand value draws meaning of an offering, connecting customers with a desired image emotionally. Brand creates associations to preferred self-actualization that supports and enhances individual image and style. (Kathman 2009, 107-108.) Therefore, brand value influences the process of value accumulation and advances solution to experience (or "living through") and meaning (or "living for") in accordance with Khalifa's (2004) model.

The theory of service-dominant logic suggests essential process of value co-creation in relationships with customers. Value proposition is delivered to customers by the means of tangible attributes or products. Customers perceive value by the use of an offering that defines value in use. Therefore, customers are co-creators of value and active participators in knowledge exchange processes. Thus, communication with customers implies ongoing relationships rather than series of transactions. Service-dominant logic is customer-oriented approach of value creation. (Vargo & Lusch 2004; 2008.)

Summarizing the discourse on customer value, there are several models that divide customer value on different levels, ranging from function to meaning. However, all of the models stress the role of human perception in delivering customer value. Moreover, relationships with customer can advance the offering value to a higher level, which can result in experience. Therefore, customer value and experience are interconnected, and the following subchapter aims to explain this interconnection.

4.2 Consumer experience

Commonly, experience defines two categories. The first one is the process, "direct observation of or participation in events: an encountering, undergoing, or living through things in general as they take place in the course of time" (Webster's Third New International Dictionary, 437). The second category is the process outcome, "knowledge, skill, or practice derived from direct observation of or participation in events: practical wisdom resulting from what one has encountered, undergone or lived" (Webster's Third New International Dictionary, 437).

Experiential approach to consumption suggests that customer behaviour depends on the rational thoughts as well as personal emotions. Therefore, pleasure as well as functionality derived from an offering influences consumer experience. Moreover, individual perceptions and emotions are the inimitable factors determining consumer experience through the interaction with a company. Interaction with an offering has a high emotional

significance. Thus, besides satisfaction, emotional associations related to an offering constitute consumer experience. (Hirschman & Holbrook 1982, 139; Hirschman & Holbrook 1986, 220-251; Carù & Cova 2003, 270-272; Shaw 2007.)

The broad management definition of experience states that it is the process of personal transformation by the means of cognitive aspect, which evokes emotions and senses (Carù & Cova 2003, 273). Similarly, Carbone and Haeckel (1994, 1) described the consumer experience as "the take-away impression" generated by the personal perceptions and feelings of a customer about product or service clues.

The process of shopping or using a service evokes certain emotions and subconscious signals about liking or disliking the attributes of an offering. During and after the direct interaction with a company, a customer automatically tends to analyse the experienced situation and the perceived information. However, all conscious thinking goes along with subconscious thinking, and the mix of a rational analysis, subjective perceptions and emotions constitute the overall consumer experience. (Shaw 2007; Shaw et al. 2010.)

Several marketing studies suggest that an offering should offer extraordinary and unforgettable experience in order to entertain customers. For example, experiences can "…provide sensory, emotional, cognitive, behavioural and relational values that replace functional values" (Schmitt 2000, 26). Experience is a lasting anticipated process, where a customer is involved in an extraordinary activity, which triggers memories (Pine & Gilmore 1998, 98-99, 102-104). However, human perception and affections remain important factors in defining experience. (Carù & Cova 2003, 281.)

The concept of experience has another kind of duality than the "process-knowledge". The company's view considers a customer experience as an offered to a customer or an intended experience. The customer interpretation refers to a consumer experience, which relates a purchase with the individual expectations and needs. Thus, a company's target is to create the best experiences for the customers, while the term of consumer experience includes the description of perceived benefits, feeling and emotions related to an offering. (Schmitt & Zarantonello 2013, 30.) *Further discussion operates the term of consumer experience, because it provides comprehensive view including the important issues of customer perceptions. Moreover, this study incorporates multiple concepts and approaches, where consideration of customer perceptions has a high importance. Thus, the choice of consumer experience concept maintains the logic of coherent discussion in this study.*

The holistic approach to understanding consumer experience implies consideration of factors, which a company has control over and those, which are out of its control. Specifically, consumer experience comprises "cognitive, affective, emotional, social and physical responses" to an offering or a brand (Verhoef et al. 2009, 32). The aspects controlled by a company, such as service interface, offering characteristics and general atmosphere

directly influence costumer responses. On the other hand, the reason of shopping, social environment and personal context is out of a company's control, though it also shapes consumer experience. Moreover, an important issue within company's competences is brand, which influences consumer experience as well. Specifically, customer brand perceptions effect consumer experience and this impact can grow over time. Furthermore, the connection between brand perceptions and consumer experience is bi-directional, because consumer experience influences brand perception. (Verhoef et al. 2009, 32-37.)

Consumer experience is a multidimensional domain and it includes following components: sensorial, emotional, cognitive, pragmatic, lifestyle and relational. The sensorial component evokes pleasure or dissatisfaction by influencing all human senses. The emotional component generates mood, which shapes emotional experience. The cognitive aspect of customer experience includes the analytic process aimed at problem solving. The pragmatic component, derived from the usability, refers to the involvement into ongoing process of using a product or a service. The lifestyle component creates the match or the connection between the customer life values and the brand values. Finally, the relational element plays a networking role, if an offering invites to share the experience with other people for a certain social identity. (Gentile et al. 2007, 397-398.)

Although Gentile et al. (2007) describe the aforementioned components of consumer experience, they do not find enough empirical evidence to create the connections between them, and it makes the understanding of experience incomplete. It is meaningful for this research to relate all of the components within a system, because a customer does not divide own perceptions into the different groups. The interrelations between the components compose complex experience, which shapes the attitude and loyalty. (Gentile et al. 2007, 402.) Figure 6 illustrates the interconnections between experience components.

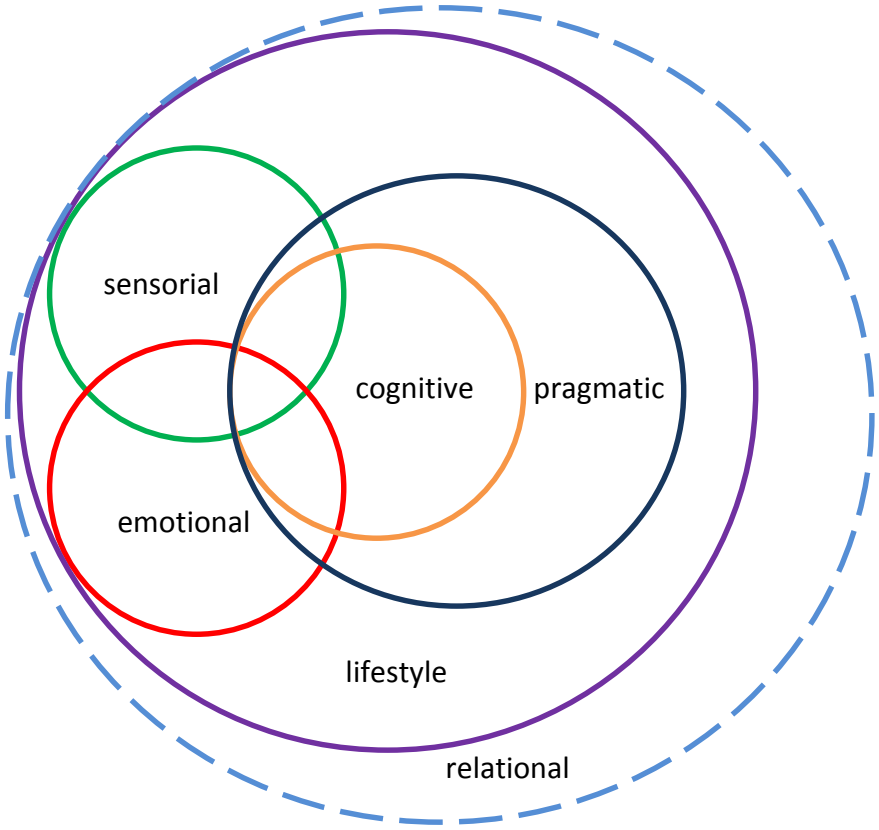

Figure 6 Interconnections and overlaps of the experience types (based on Gentile et al. 2007)

Figure 6 shows that sensorial and emotional experiences reasonably overlap, because the physical (tangible) attributes of an offering arose the descriptive image, and consequently the emotional perceptions of the attributes. In other words, a customer sees, touches, smells, hears and, according to own sensorial perceptions, feels and recognises what is delightful and what is frustrating. When a customer has the impression about the tangible attributes and the context, his or her attention shifts to the key reason of using an offering – solving a problem or fulfilling own needs. The cognitive component means that an individual already knows what is an offering (the attributes and the context together) and he or she analyses whether the offering can provide the expected benefits or values. The cognitive component is on the overlap of sensorial and emotional components, because human senses and impressions shape the perceived benefits, values and advantages of an offering.

The pragmatic component of consumer experience emerges from the direct interaction and the usage of the offering attributes. This component expresses the actual process of solving a problem or fulfilling the needs and that is the reason why it is an extension of cognitive component, including the combination of sensorial and emotional experiences. When a product, service or a solution does not simply fulfil the needs, but also bonds with

personal life values, pragmatic component evolves into lifestyle component. The latter influences the individual's lifestyle. Practically it means the adhesion to the values, included into or surrounding an offering (Gentile et al. 2007).

The highest level of customer experience is the relational component. Gentile et al. (2007) note that not all offerings can provide such experience, so the integrated scheme presents it with a dotted line. Individuals tend to build own identity in accordance with whom or what they want to be. The relational component helps to make a desired identity and places an individual into the desired social environment. This component contains all types of experience discussed above, because customers feel affection toward an offering (lifestyle component), an offering fulfils their needs and corresponds with their desires and expectations (pragmatic and cognitive components). Furthermore, co-existence of several mentioned components defines complex experience and different product and services benefit from different experience components (Gentile et al. 2007, 404).

Lifestyle and relational components correspond to brand experience because brand experience comprises product experience, visual and sensorial identity of a brand and communication. Therefore, unique brand identity shapes lifestyle and relational components of experience by the means of communication, which demonstrates positioning, overall execution theme of an offering and context relevant to customers. (Schmitt 2010, 125-135.) Hence, brand value facilitates experience accumulation and its development to the relational component. Similarly, brand has important role in co-creation of "meaning" value. Thus, analogy of accumulation mechanisms of customer value and experience implies similarities and interconnections between these concepts, which are explained in the following subchapter.

4.3 Consumer experience and customer value

The discussion about interrelations between customer value and consumer experience has not significantly evolved in the literature, although some studies have tried to explain the connection between customer value and customer experience. For example, Khalifa (2004) defined experience as one of the forms of value accumulation resulted from advancing benefits of a product or a service and relationships with customer. Thus, experience is an advanced form of the customer value, and interaction with a company and extra benefits develop tangible and intangible values to the higher level.

Customer-oriented view highlights the significance of relationships with a customer as the means of co-creation. In particular, customers are the co-creators of value during the interaction with an offering, because they perceive value designed by a company (Vargo & Lusch 2004; 2008). Similarly, consumer experience concept belongs the customer-centric approach. A company creates an experience environment, which facilitates

the communication with customers and where customers get personalized experience (Prahalad & Ramaswamy 2003; 2004). Therefore, customer experience refers to the interaction with tangible and intangible attributes of an offering, resulting in emotional delight or disappointment.

Customer value by Holbrook (1996, 138) is "an interactive relativistic preference experience". This interpretation highlights that the channel of value delivery is interaction. Moreover, human perception defines personalised meaning and depends on the context of use, attitude and judgement, and experience per se is the consequence of the value acquisition. (Holbrook 1996, 139.) Therefore, this approach refers to the sequence of value and experience delivery, though it does not clarify the interrelations between experience and customer value.

The similarities of a customer experience and customer value classifications imply the close interconnections between these two concepts. Previously discussed dimensions of customer experience of Gentile et al. (2007) are similar to Khalifa's (2004) forms of value accumulation. Specifically, lifestyle component is analogical to "living through" or experience, and relational component is comparable to "living for" or meaning. Sensorial, emotional and cognitive customer experiences depend on the physical features (values) of an offering, so the compatibility and usability create the cognitive experience and pragmatic customer experience is the perceived functionality, which consists of the set of tangible and intangible values. Therefore, besides the determining role of perceptions and cognition processes, emotions have significant influence on customer value and consumer experience.

Offerings consist of the set of values attached to different touch-points. Thus, customers receive offering value during and after the shopping or usage. Consumer experience can evolve before the actual purchase and usage through perceived brand value and overall reputation (for example, word-of-mouth). Hence, consumer experience encompasses more factors than customer value. Moreover, perceived customer value per se does not instantly transform into attitude or memories. Due to the different nature of the customer value types (for instance functional value depends also on the product features, while emotional depends on the context of use), each of them separately can not be an experience of product or service. Some attributes might delight the customer, while others disappoint.

The definitions of customer value (Woodruff 1997, 142; Khalifa 2004, 657; Grönroos 2007, 155; Shaw et al. 2010, 24) note that it is an outcome of perception processes, related to functional aspects of an offering. Consumer experience involves the processes of living through and getting impressions, attitude and memories related to an offering or a brand before, during and after the interaction. Experiential view defines that the result of consumption is delight and pleasure (Holbrook & Hirschman 1982, 138). *The key difference*

between customer value and experience is that customer value is a one-time benefit, while experience is an ongoing process of value acquisition and perception in a specific context. Therefore, an offering creates experience by the means of values, and perception of these values in a certain context causes emerge of knowledge in the form of attitude and memories.

I conclude that a customer value is a part of overall consumer experience, supporting Khalifa´s (2004) view about the accumulation of values. However, the definition of consumer experience remains incomplete due to omission of the process aspect. Therefore, in this study I define consumer experience as the process of perceiving and living through the set of interconnected values of a product, service or a brand, arising from the interaction with a product, service or brand, and resulting in accumulation of knowledge, attitude and loyalty.

Generally, people tend to have some subjective expectations towards anticipated issues, even when there is no knowledge available beforehand about those particular things. These expectations affect the perception of interaction (or purchase and usage). A customer distinguishes the main features of the offering, and in accordance to them, judges offered values in relation to own expectations, needs and preferences. However, value in-use (perceived customer value) is a one-time taken benefit rather than a continuous process. Hence, a customer utilizes a value and then consciously and subconsciously analyses the used offering in compliance with personal expectations, feeling, needs, goals and the context of the situation, and this analysis shapes judgement and experience. Moreover, customer expectations and series of interactions constitute shopping process, which is a way to socialize rather than only making purchases (Carù & Cova 2003, 272). Consequently, shopping process shapes attitude and loyalty. The sequence of customer perceptions and analysis constitute experience process spiral as presented in Figure 7.

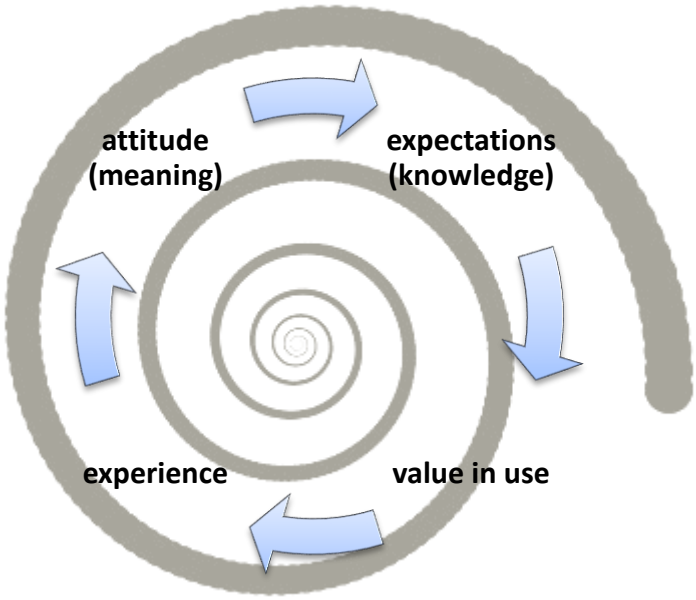

Figure 7 Experience process spiral

The experience process spiral presented above (Figure 7), illustrates the evolving cycle of the pre-interaction (pre-purchase), interaction (usage) and post-interaction (post-usage). Each coil of the spiral is the cycle of conversion of perceptions (experience as a process) into knowledge (experience as an outcome). The spiral principle refers to the accumulation of knowledge during the process of interactions with a company, product or service. The eventual outcome of the accumulation is a personal attitude and meaning of an offering for a customer. (Arnould et al. 2002; Schmitt & Zarantonello 2013, 39; Shaw 2007, 33-41; Shaw et al. 2010, 18-28.) Summarizing, consumer experience comprises customer responses toward an offering resulting in attitude and loyalty. Thus, the creation of consumer experience is a multidisciplinary, complex, multi-step, context-depending process, engaging customers into interaction.

Summarizing the discussion on the experience components, consumer experience comprises the synthesis of the pragmatic and the lifestyle components (Gentile et al. 2007, 397-398). This definition refers to the most common business practice, namely, the fulfilment of customer needs and the more advanced one, experience innovation. Hence, innovation of consumer experience serves the role of anchoring system, which arranges the set of values.

I consider meaning (Figure 7) to be an additional advanced component of the consumer experience, the mental embodiment of relational component. The spiral of customer experience (Figure 7) conceptualizes innovation of pragmatic and lifestyle component and

its improvement toward relational experience. *Therefore, taking into consideration the definition of innovation (see Chapter 2.3) this study defines that experience innovation means evolvement to the relational component or building the strong adhesion to an offering in order to create the desirable personal image in the society. Regardless the broad academic discussion about costumer and consumer experience, experience innovation do not have a coherent explanation in the literature. Merely several studies (Pine & Gilmore 1998; Prahalad & Ramaswamy 2003) provided insights on experience and innovation. The distinction of experience innovation in the academic research assigns the dominant role of experience creation to innovation approaches and emphasises the importance of customer-centricity.* I describe in detail innovation of consumer experience in Chapter 6 after the explanation of design thinking framework in Chapter 5.

5 DESIGN THINKING AS AN APPROACH TO INNOVATIONS

This chapter analyses the approaches to manage innovation and customer experience. Firstly, I explain the core ideas of design thinking. Then, I analyse customer experience management as a part design thinking. The last subchapter describes innovation framework of design thinking.

5.1 The core principles of design and design thinking

Nowadays design leads innovation process and gives unrestricted opportunities to merge functionality and pleasure into the meaningful experiences. Design is an essential process of value creation and innovation development as well as the approach to manage them (Brown 2008, 8; Hatchuel 2001). Along with the development of design and its application in business, the companies shifted the focus of their activity from the offering to the customer (Vargo & Lusch 2004; 2008). Due to the different aims of business activity and individuals' life, the same issues have very different meaning for a company and for customers. This discrepancy of understanding causes the need of market research resulting in segmentation. However, analytical tools of market analysis fail to answer a question: "why there is a need?", they describe "what kind of a need?" and mainly it means some evident need. Design thinking enables the deep understanding of customers, revealing the factors affecting their needs and interests.

Design thinking originated from industrial design, which served creation of tangible products. The first mention of design concept belongs to Simon (1969), who emphasized the role of design in any activity. He defined design as a core of education and practical knowledge needed for different specialists and disciplines. Design approach facilitates the communication across disciplines in order to provide satisfying solutions. (Simon 1969, 56-83.)

The original purpose of design in industrial production evolved into the universal application of design thinking in management, marketing processes and strategic planning. The "liberal art" of design enables the engagement of several sciences for solving the problems of human society. Experimentations provide reconsiderations of the problems and solutions. (Buchanan 1992, 8-11.)

Therefore, design is a tool to create innovations, communicate with customers and inspire them to participate, while such innovations provide essential functionality and meet customer needs. Particularly, designed solution and its customer interpretation overlap or match when a customer becomes a user. (Liedtka & Ogilvie 2011; Stickdorn & Schneider 2012.)

Design thinking implies adaptability and flexibility, risk tolerance, energy and emotion commitment that are the characteristics of design thinking mind-set. Design thinking is "the search for a magical balance between business and art, structure and chaos, intuition and logic, concept and execution, playfulness and formality, and control and empowerment" (Mootee 2013, 32). This approach provides a well-calibrated balance between analytical and intuitive thinking to pursue innovative path. Design thinking employs abductive logic, which combines analytical and intuitive thinking. Abduction discovers hypothesis by the data interpretation and defines consequences, which should be empirically testable. The purpose of this logic is to imagine what could be true, rather than proving hypothesis to be false or true. Intuition promotes and extends the scope of ideas, while analysis maintains consistency and validity of advances. (Burks 1946; Martin 2009, 64-68; Martin 2010.)

Design thinking solves wicked problems that have no specific subject or field of application. Wicked problems emerge on the intersections of different disciplines; so many actors are interested in solutions of these problems. Moreover, due to the complex interdependences underlining these problems, information about wicked problems is messy, thus the outcomes or solutions are unknown. (Rittel 1972, 392-393; Buchanan 1992, 16.)

Wicked problems have several distinguishing characteristics: unspecified formulation, which corresponds with the solution of a problem and indefinite time of the solution search. The indeterminacy is the absence of any defined conditions and limits of a wicked problem. Moreover, the way of solving a wicked problem is not predetermined neither, the eventual solution depends on the explanation of problem origin, and there is no measure to check the solution adequacy unambiguously. Wicked problems are unique, so known and tested strategies do not provide ready answers, and the solutions of wicked problems can cause unpredictable consequences in unlimited-long terms. (Rittel 1972, 392-393; Riel 2009, 94-95)

Design thinking is a three-dimensional concept, which comprises a specific mindset, cognitive approaches and human-centred practices. Specifically, design thinking mindset is optimistic and tolerant toward risks and ambiguity. Cognitive approaches refer to integrative thinking, broad vision, problem reframing and abductive reasoning for discovering new opportunities. Human centred practices leverage visual approaches, operating multiple alternatives and learning by doing (fast prototyping). (Hassi & Laakso 2011, 6-9; Fraser 2009.)

Summarising all discourses explained above, *design thinking is a new human-centric mind-set empowering creativity and innovations in a company by extensive use of visualization as an assisting tool throughout value chain, having following characteristics:*

- *open model or extensive networking with customers, suppliers and society in whole;*
- *risk and failure tolerance;*

- *anchoring different disciplines for the innovation purposes (multidisciplinarity);*
- *creation of social value by the means of iterative learning.*

Brown (2008, 2) in addition to designer´s intuitive thinking emphasizes "technologically feasible" and commercially viable way of idea implementation that is similar to characteristics of any innovation. Application of design expands the boundaries of personal cognition and maintains ongoing circulation of knowledge within a company (Kimbell 2009, 8-9).

Experience design in the contrast to the product design is process-oriented, though both of them are customer-centred. Design appeals to human emotional perceptions, their feelings and interests. Thus, a well-designed solution, fulfilling needs of customers, creates a new dimension of experience and provides long-term customer loyalty. (Liedtka & Ogilvie 2011, 15-16.) When the market is full of similar offerings-substitutes, the customers more often make decisions intuitively, relying on own emotions and feelings, or they rise own expectations towards intangible unique value.

5.2 The innovation framework of design thinking

The subchapter 4.1 explained design thinking as an integrative concept, which can be embedded into existing company's practices in order to boost creativity and encourage new opportunities exploration and innovation development. Design thinking drives a company through the knowledge funnel, which is a tool refining information and turning external uncertainty into company's competitive advantage. Knowledge funnel begins from discovering opportunity that aims to tackle external complexity. The next stage is development of heuristics or guiding methods (for example the customer-centric approach in this study), which designs an offering for the market. The last stage of knowledge funnel is the systematization of implementation processes enabling efficient performance in the market. Moreover, this tool simplifies market complexity and provides clear understanding of market opportunities. Knowledge funnel operates exploration and exploitation of information. Exploration belongs to intuitive thinking and pulls the knowledge though the stages of knowledge funnel. Exploitation refers to analytical thinking and enables operations within each stage of knowledge funnel. (Martin 2009, 5-20; Martin 2010.) Therefore, knowledge exploration facilitates innovation creation, while exploitation managers the process of innovation development and adoption in the market.

The main pillars of design thinking include ethnographic research, iterative learning and fast prototyping; they construct main mechanisms of innovation. In addition, design thinking is an approach containing multi-disciplinary iterated processes, which construct

its stages. (Fraser 2009; Hassi & Laakso 2011; Liedtka & Ogilvie 2011; Stickdorn & Schneider 2012.) Figure 8 depicts the main tools and stages of design thinking.

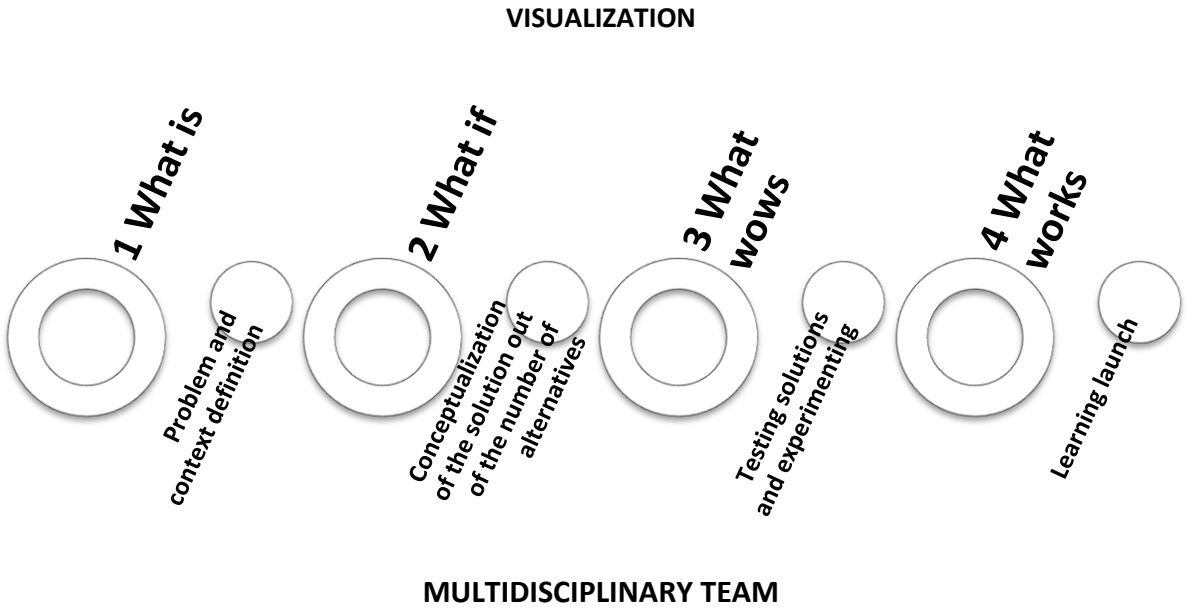

Figure 8 Design thinking framework for innovation development (based on Liedtka & Ogilvie 2011, 22)

Figure 8 illustrates that visualisation is a universal method of data representation at all design thinking stages, it plays a constructor role in defining factor interrelations and giving a big picture without omitting important details. Particularly, multidisciplinary project teams often face the problem of misunderstanding during ideation, because text can be interpreted depending on personal mental patterns. Eventually, visualisation is a risk mediator, because it facilitates clarification of ideas and enhances efficiency of knowledge-sharing. Effectiveness of visualisation is explained by the way human brain works: people think in images (pictures), not in text, so drawing ideas is a precise presentation of imagination. The function of visualisation, as well as most of tools described below, is to find out new patterns of customer behaviour and build hypotheses for testing instead of recommendations for actions. (Liedtka & Ogilvie 2011, 49-52; Segelström & Holmlid 2009, 6-7; Hassi & Laakso 2011, 6-7; Fraser 2009, 60-61.)

Problem identification ("what is") is the first stage of design thinking framework as presented in Figure 8. There are three main tools for the problem identification. Firstly, ethnographic research, in particular, journey mapping, shows current customers experiences in relation to existing problems, if they take place. Journey maps show what they go through and how do they fill about it, in what context they make decisions. The key point of this stage is to look at existing problem from new angle, taking into consideration

big picture and all aspects of environment related to the problem. A company tracks customer experience in a particular situational context that it chooses for defining unmet needs. Actually, journey mapping explores customer experience towards product, service or solution use and feelings, emotions and rational judgements about its functionality etc. At the same time, it is important to develop deep understanding of the problem origins and define the criteria for the change. (Liedtka & Ogilvie 2011, 61-71; Stickdorn & Schneider 2012, 102-108, 151-152.) Ethnography reflects human-centricity of design thinking practices and broadens the scope of opportunities, reframing the context of innovation (Hassi & Laakso 2011, 6-7; Fraser 2009, 58-60).

The second tool of problem identification is the value chain analysis, which encompasses company's capabilities and helps to recognise the weak spots of organisation and business model. Value chain analysis reduces risk related to innovations by spotting internal capabilities of a company or partners joint capabilities. The analysis can identify market "dominant logic", thus the next stage "what if" shows the ways to challenge the logic and exploit growth opportunities. The value chain analysis is analogical to journey mapping, it detects value for the business, while journey mapping describes values for the customers. (Liedtka & Ogilvie 2011, 75-80.)

The third tool of the first stage is mind mapping. It constructs "a tree" of patterns and relate unobvious issues, aiming at big picture and paying attention to details. The main purpose of the tool is to find the hidden tendencies from the large amount of data that should become design criterion for the next stage. Any innovation requires ideas based on the knowledge about customers, and this technique provides these ideas and choses the promising ones. (Liedtka & Ogilvie 2011, 81-90.) Mind mapping utilizes reflective reframing, which allows seeing a problem from the new angle and discovering hidden reasons behind it (Hassi & Laakso 2011, 6-7).

The next stage of solution conceptualization ("what if") stresses the importance of brainstorm in order to produce simplistic ideas and then turn them into well-developed concepts for evaluation and prototyping. The aim of this stage is to imagine future possibilities that are supposed to establish connections between seemingly unrelated things and explaining the set of new relations. Brainstorming helps to avoid conventional thinking and inspire to follow innovative path. Moreover, conceptualization per se means concept development, which filters brainstorm ideas and assesses them against design criteria. In addition, it supplements promising ideas with rational logic. (Liedtka & Ogilvie 2011, 103-111, 114-117; Stickdorn & Schneider 2012, 174.) Solution conceptualization leverages abductive reasoning or "what could be" thinking style, which helps to challenge traditional patterns and go beyond conventional explanations. Abductive logic enables imagination for discovering a radical solution (Fraser 2009, 64). Moreover, combination

of divergent and convergent approaches expands the scope of possible alternative solutions and offers multiple ways toward a solution (Hassi & Laakso 2011, 6-7).

Testing solutions or fast prototyping stage ("what wows") aims to match the chosen innovation concept with following conditions: customers' desires, feasibility in the market and conformity with the business objectives. Successful prototyping requires close interaction with customers for the identification of flaws and delights. Assumptions testing identifies the weaknesses in inconsistencies of an innovation concept before launching it to the market. Fast prototyping means to illustrate a solution in a tangible way in order to communicate and co-create value with customers and partners efficiently. This stage is "testing the future in the present", so designers should be ready to make considerable adjustments and step back to find alternative solutions. (Liedtka & Ogilvie 2011, 127-128, 132, 141-142; Stickdorn & Schneider 2012, 124-125.) Fast prototyping refers to thinking by doing that facilitates assessment of various possible solutions. Furthermore, experimental and explorative mentality implies high risk-tolerance and ability to overcome constraints of obsolete viewpoints that fosters experimentations and learning by doing. (Hassi & Laakso 2011, 6-7.)

The final stage of design thinking approach is launching ("what works"), which implies value co-creation with customers by testing several prototypes and learning launch. The customer-centric approach, such as design thinking, suggests co-creation with customers to be a precondition for risks minimization. An offering is not an innovation per se before this stage, because only actual launch delivers customer value and turns intention into economic value. Learning launch aims to keep innovation adaptive and to get rapid feedback from the customers. Obviously, it is not the final stage of development, and iterative learning and experiments continue co-creation with customers. (Liedtka & Ogilvie 2011, 157, 160, 167-175; Stickdorn & Schneider 2012, 194-195.) Collaborative work and communication with customers is an essential practice of design thinking. Interdisciplinary teams apply knowledge of multiple disciplines in innovation development process. (Hassi & Laakso 2011, 6-7.)

The stages of design thinking discussed above follow the general agenda of innovation development (Best 2009, 145-151). However, design thinking framework provides elaborated view on methods to discover opportunities and implement new ideas. Thus, it supports the applicability of design thinking to innovation development. Moreover, the framework of design thinking advances the layers of innovation development such as sensorial, behavioral, functional, physical and mental (Abbing & Van Gessel 2009, 136-137). The development of these layers evolves simultaneously. Specifically, problem and context definition reframes customer problems and expectations from different angles. Solution conceptualization also encompasses all layers, excepting physical one, because

this stage utilizes conceptual picturing of a problem solution. Solution testing and launching enable all layers of innovation in order to create value and design experience for customers.

Design thinking framework discussed above does not have explicit connection with consumer experience, though design thinking has broad application in innovation of any offering, including experience. Recent studies discover an approach to manage experience, which suggests techniques analogical to design thinking tools. Following subchapter explains customer experience management (CEM) and clarifies its belonging to design thinking.

5.3 Customer experience management and design thinking

Nowadays the strategic focus on profits and market share (or number of transactions or purchases) has become obsolete, and several recent studies highlight the role of the long-term relations, engagement and co-creation of value with customers. The significance of customer experience and shift to experience economy create the need to define the new method to tackle the challenge of differentiation. Hence experience is the fourth distinct "economic offering", but in contrast to a product, it is an ongoing process, a company needs a comprehensive method to manage this process in order to make it memorable. The central term of different innovation concepts remains value, while the marketing approaches shifted from customer relationship management (CRM) to customer experience management (CEM), or in other words, from maintaining customer satisfaction to experience co-creation. (Schmitt 2010, 32-42; Pine & Gilmore 1988; Prahalad & Ramaswamy 2003; 2004.)

Customer experience management (CEM) is the process-oriented approach, which provides the set of tools and methods, assisting innovative idea creation, innovation trial and launch. CEM originates from the systematic approach of experience engineering formulated by Carbone and Haeckel (1994), which analyses information about customers and designs service clues accordingly to customer responses. CEM focuses on strengthening relationships with customers for experience co-creation. Firstly, this customer-focused concept also serves the stage of idea creation by the means of comprehensive observation of the customer life. Later, on the trial and launch stage CEM facilitates the delivery of designed value and experience and builds relationship with customers. Consumption combines following experiential components: sensorial, emotional, analytical, behavioural and relational. (Schmitt 2010.) These components are analogical to study of Gentle et al. (2007). CEM operates these experiential components and advances customer experience in the following steps (Schmitt 2010; Arussy 2010):

1. Exploration of customer living context.
2. Development of strategic platform supporting experience environment.
3. Creation of exceptional brand experience.
4. Interface of offering enables active communication with customers.
5. Continuous innovation for the society well-being.

Therefore, there are key several differences between CEM and CRM. For instance, CEM aims at better understanding of needs and revealing latent factors behind them in order to improve customer´s loyalty, whereas CRM's target is the sales growth. Moreover, CEM helps to identify gaps between customer expectations and existing offerings and facilitates creation of unique experience. Understanding of these differences is important for designing customer experience innovation, because the obsolete patterns of CRM barely can facilitate experience innovation. (Meyer & Schwager 2007.)

Customer experience management considers the process of experience personalization, which reflects the way customer interacts with experience environment. Thus, customer becomes an experience innovator, perceiving an experience offering designed by the company. (Prahalad & Ramaswamy 2004, 10.) Another perspective on experience management is experiential marketing paradigm, which refers to building customer commitment by creating unique and delightful experience. Holistic consumer experience management combines brand management and interaction with customers. This approach aims to set brand value, enhance the meaning of an offering for the customers and make daily routines of customers more enjoyable. Moreover, comprehensive experience contains positive memories related to a brand offering, that prolongs relationships with customers. Holistic experience should correspond with customer desires on cognitive, emotional and social levels. Holistic experience management exploits synergy of cooperation between strategic planning, offering development, market positioning and communication with customers. (Tsai 2005.)

Information about customers has a high significance for understanding their expectations and preferences. There are three patterns of customer experience information: past, present and potential. Past patterns describe recent experience, like the number of transactions, reaction to company's initiatives and possible substitutes. Present patterns capture relationship with customers as a continuous process, and they should not be attached to transactions, rather be conducted in certain intervals of time. Potential patterns of customer experience are often caused by experimentations and trials of innovations or incremental changes made by companies. Potential patterns assist in defining customer reaction to a particular change. (Meyer and Schwager 2007, 7-8.)

Therefore, the first stage of CEM framework, which is exploration of customer living context, operates with the past and present patterns of experience. These patterns show lifestyle, habits and personal preferences of customers. The next stage of CEM, develop-

ment of strategic platform means offering development and consequently, experience design. Together with brand design, it operates with the past and present patterns of experience likewise the first stage. Development of interface and continuous experience innovation leverages potential patterns of experience, derived from interaction with customers within development process of experience innovation.

The concept of experience co-creation suggests the creation of experience environment, which enables unique consumer experience. Analogically to CEM, it is a costumer-centered approach, which main purpose is to facilitate interaction with customers. Communication between customers and a company is the locus of value and experience creation. A company arranges experience environment, which is the focus of innovation in this study. Management of experience environment requires efficient interaction with customers. There are several important aspects of relationships with customers. First, direct dialog as an essential part of experience co-creation. Second, access to information and transparency of operations support dialog and ensures trustful relations between a company and its customers. Finally, risk-benefits related to an offering affect customer decisions. (Prahalad & Ramaswamy 2003, 2004.)

Analysis of recent studies about CEM (Schmitt 2000; 2010; Meyer and Schwager 2007) provides a solid evidence that CEM is a part of design thinking approach as illustrated in Figure 9. Firstly, both methods are process-oriented and customer-centric. Secondly, they consist of iterative learning (stages) and the customer feedback defines necessary adjustments of an offering. Hence, they implement innovations by the close collaboration with customers.

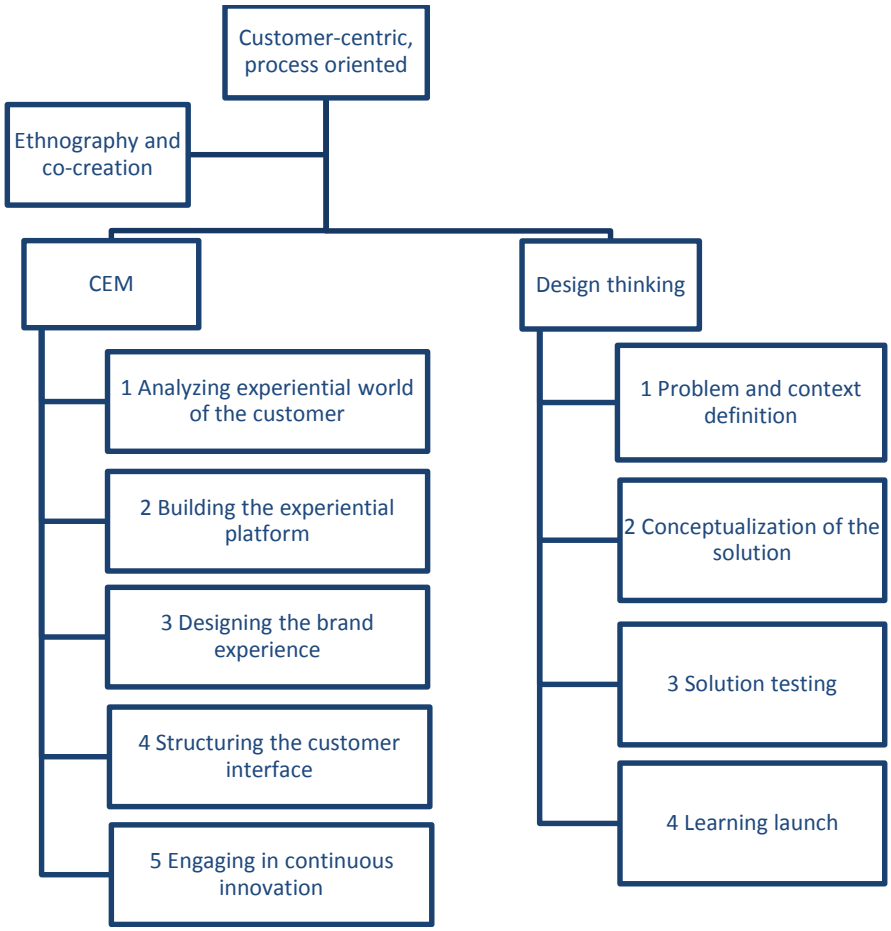

Figure 9 Comparison of CEM and design thinking

Moreover, CEM and design thinking use the same techniques for understanding the problem that is an ethnographic research or observational studies about customer's life as presented in Figure 9. In addition, the nature of customer experience resulted from interaction with different service attributes, refers to multidisciplinary characteristic, which is essential for design thinking and help to solve wicked problems. The core process of design thinking is fast prototyping, and in the case of service innovation, intangibility allows broad experimentation, as far as there is no production cycle and most of changes require re-allocation of resources. Thus, design thinking is broadly applicable to experience innovation process. Therefore, in order to avoid duplications of innovation frameworks, I conclude that CEM is a variation of design-thinking framework for innovating specifically experiences (Figure 9). Chapter 6 explains design thinking framework with the elements of CEM and applies the integrated framework to experience innovation.

6 DESIGN THINKING FRAMEWORK OF EXPERIENCE INNOVATION

This chapter aims to describe innovation process of consumer experience by the means of design thinking. First, I discuss important issues of experience design. Then, I analyse the gaps and contradictions of experience design. Finally, I explain design thinking framework proceeds the innovation of consumer experience.

6.1 Design of consumer experience

Experience consists of functional interaction (utilization) and emotional interaction (delight) with the product or service attributes (Beltagui et al. 2012, 113). Thus, solely functional design is unable to create compelling experience, and emotional delight can significantly advance the product or service meaning for a customer.

Participatory design facilitates identification of emotional experience characteristics and explanation of the sensual side of experience. Moreover, this design engages customer to co-creation, employing their innate creativity for experience design. Participatory design is an approach to explore customer expectations and desires and express core meanings and aspirations of experience. (Rockwell 2009, 227.)

Similarly, emotional design enables connection between functionality and emotional appeal of a product or service, and builds upon their combination compelling experience. It is important to notice, that functionality is the prerequisite for further experience augmentation. (Beltagui et al. 2012, 112-113.) However, convenience and functionality serves creation of sustainable or incremental innovation. Hence, it does not provide competitive advantage to differentiate in the market. Therefore, the purpose of design is to advance suitability to meaningful memorable experience. (Rockwell 2009, 241.)

Emotional design belongs to the human-centred approaches and it has three main levels: behavioural design, visceral design and reflective design. Behavioural design focuses on the functionality, clarity of functioning and usage, usability and tangible delight or tactile feelings. Visceral design appeals to common aesthetics and evokes customer emotions through visual, audial and tactile attributes. Reflective design plays the role of interface, creating connection with the customer and shaping the meaning of a product or a service to the customer. This design creates prestige and elitism and affects the general perception of a product. (Norman 2004, 63-89.)

Emotional design levels correspond to the layers of innovation design sensorial, behavioral, functional, physical and mental (Abbing & Van Gessel 2009, 136-137). For instance, behavioral design encompasses functional and physical layers. Visceral design is

analogical to sensorial layer, while reflective design operates behavioral and mental layers of innovation design.

Emotional design and its components are applicable to products and services. Although services are intangible offerings, they function by the means of tangible objects, interaction with them and personnel of a company. The levels of emotional design corresponds with the value build-up model (Khalifa 2004, 657), namely, reflective design creates advanced values, or "living for" (meanings). At the same time, reflective design contributes to the relational component (Gentile's et al. 2007, 397-398) of consumer experience. Moreover, reflective design refers to the brand experience (Newbery & Farnham 2013) and brand image, which affects the personal customer image.

Emotional design (Norman 2004, 63-89) creates a certain set of values and experiences at the different levels as illustrated in Figure 10. The sequence of the chart elements follows from the definition of costumer experience as the accumulation of perceived values. Therefore, behavioural design provides functional and conditional value (Sheth et al. 1991, 160-163).

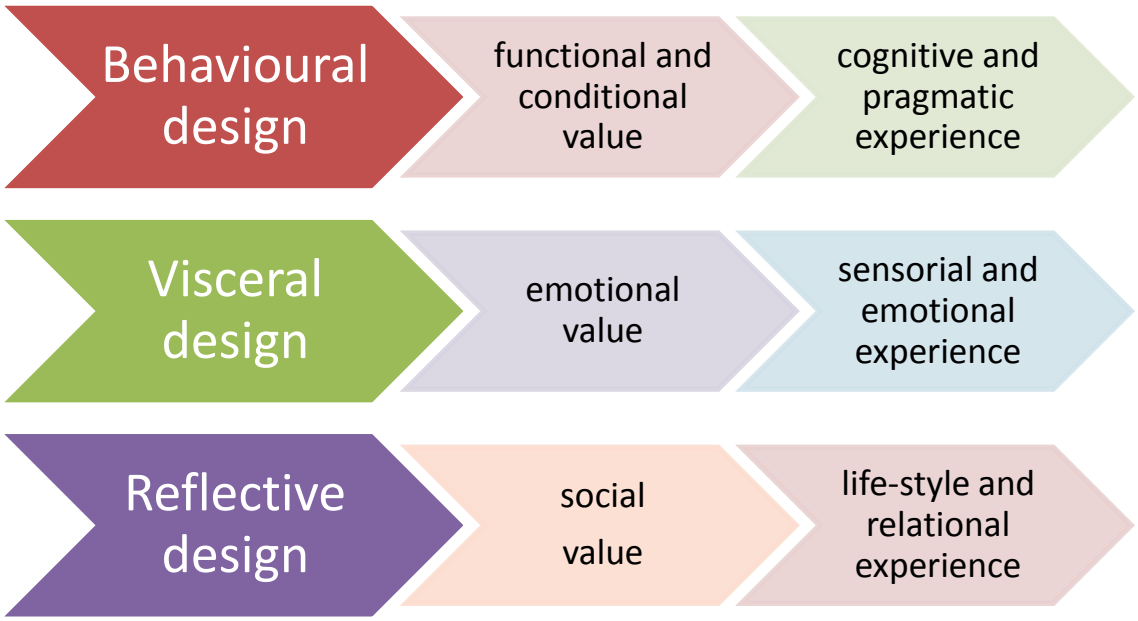

Figure 10 The extended framework of emotional design: values and experiences

Figure 10 illustrates that visceral design serves emotional value, while reflective design creates social and epistemic value from the classification of Sheth et al. (1991, 160-163). Consequently, functional and conditional value evolves into cognitive and pragmatic experience by the means of behavioural design. Similarly, emotional value advances to sensorial and emotional experience through visceral design.

Reflective design creates life-style and relational experience, which implies the meaning of an offering to customers. From the customer point of view, consumption has become a way of self-expression rather than satisfaction of own needs. A customer utilizes

brand value for maintaining personal identity and own image. (Lemley 2009, 243-247.) Therefore, social value is interconnected with brand value and relational experience implies brand experience.

Gentile et al. (2007) omits innovative type of customer experience, which should relate epistemic value of a new service. Nevertheless, emotional design (Norman 2004, 63-89) can create epistemic value (Sheth et al. 1991, 162) at any level and then turns it into new experience. Moreover, the experience design works simultaneously at the visceral and behavioural levels due to the inseparability of functionality and emotional delight within the offering artefacts and processes (for example, communication).

Therefore, the integration of customer value, experience and emotional design frameworks provide a solid ground for further discussion on experience design and creation of innovation framework of consumer experience. The extended view of emotional design elaborates the development of consumer experience. Following subchapter discovers the gaps and contradictions of experience innovation.

6.2 Gaps and contradictions of experience design

The main problem of design is the fit between designed product or service and the end-user perception of it. There is a difference between what an offering was intended for and what it actually means to a customer. (Redström 2006, 133-137.) Human perception alters the experience initially designed by a company. Hence, the absolute match between offered (costumer) and perceived (consumer) experience hardly exists. This specificity has effect on innovation design in a way that there is always a space for the personal interpretation. The delivery of intended experience and values appears to be necessary for the mutual benefits of a customer and a company.

However, the tight fit between intended and perceived design eliminates the space for imagination and the personalization of a solution. Customer-centric innovation creates the intended user of a product or a service, while the costumer should have freedom to interpret it for the actual use. Over-determination narrows the variety of possible experiences and diminishes emotionally meaningful experiences. Instead of constructing a certain experience, a company should co-create it with the customers, so they will also become "designers". Alternatively, a company should even provoke the questions instead of giving complete answers to customers' questions (or customer needs). Hence, designers should leave the space for alternative interpretations for the customers. Otherwise, attempts to reach the perfect fit between customer needs and the offering functions lead to the limited customer experience. (Redström 2006, 133-137.)

This view undermines the role of experience design, because it implies the design of individual perceptions, which only an actual customer may have. However, innovation development requires a certain direction and a leading light. Therefore, a potential customer, his or her needs and expectations provides the precise knowledge as a guiding line.

Moreover, consumer experience ultimately depends on a context or a situation, thus a company is not able to control how a customer perceives offered experience. Still a company creates and arranges tangible and intangible attributes of an offering, and they help to form intended or offered experience. (Zomerdijk and Voss 2011, 65.)

Ethnographic research reveals the social context of the offering usage, as well the context of potential customer life that provides understanding of a customer at emotional level. (Zomerdijk and Voss 2011, 66, 77.) Thus, design thinking includes ethnographic observations at the first stage of the innovation development (Liedtka & Ogilvie 2011, 61-71), and it significantly decreases discrepancies between company´s knowledge about customer and customer realities.

Furthermore, a company can arrange or "stage the prerequisites of an experience, rather than the experience itself". For example, design is applicable to the service elements, particularly, tangible and intangible parts, communication with personnel and other enablers of interaction as presented in Figure 11. (Beltagui et al. 2012, 129-130.)

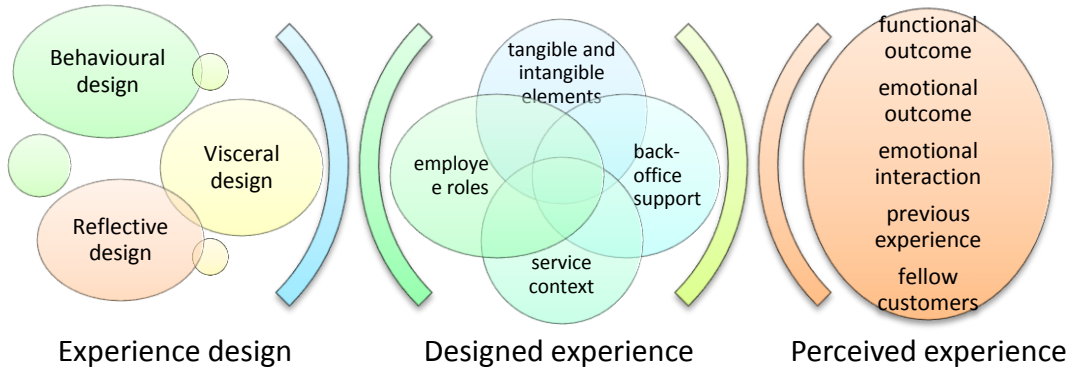

Figure 11 The Gap Between Staged and Perceived Experience (based on Beltagui et al. 2011)

However, personal, emotional and situational context is mostly out of the design thinking control. Therefore, there is the gap between a designed (customer experience) and perceived experience (consumer experience) as illustrated in Figure 11.

Recent studies also describe another type of contradictions concerning the impacts of the functional and emotional terms of experience. For instance, emotional delight can neutralize negative impression about functionality (Beltagui et al. 2012, 117). Moreover,

spontaneous incidents can lead to amusement, whereas the delivery of a pragmatic component requires consistency and predictability. Particularly, Pine & Gilmore (1999, 96-100) argue that an offering should surprise customers, so it involves them more into the interaction and increases their positive experience.

Concluding, the emerged contradictions of experience design provides the specific view on the experience innovation development. *Specifically, the designed experience cannot be equal to the perceived or personal experience. Moreover, there is no need to create the perfect match between them, because a customer interprets designed experience in relation to own emotions and context. This is the key point of co-creation of consumer experience. The interactive nature of consumer experience, which mainly consists of functional and emotional rationales, can cause the overestimating or underestimating feedback from the customers. Therefore, emotional delight and communication should have equal to functionality importance.*

6.3 Design thinking framework of experience innovation

I integrate the initial design thinking agenda with the framework of customer experience management. The latter underlines the importance of the interaction and the usage of a proper customer interface. The framework consists of the following stages: analysis of "the experiential world of the customer", creation of "the experiential platform", designing the brand experience, revisiting the customer interface or the communication tools, and finally continuous innovation development as presented in Figure 9. Moreover, the framework of customer experience management refers to integrative approach to communication with customers that means the holistic nature of customer experience creation. In other words, the customer receives one-piece impressions instead of fragmented feelings, and interaction with a company, product or a service engages him emotionally. (Schmitt 2010.)

I noted in Chapter 5.3 that the frameworks of design thinking and customer experience management are almost identical. However, design thinking aims at providing solution with experience, while CEM focuses on brand and experience. Still existing frameworks do not explain in detail the process of values and experience innovation at the each stage of the development.

Previous discussion about customer values and consumer experience and their interdependencies (Chapter 4) provides insightful elaborations for the existing design thinking framework (based on Liedtka & Ogilvie 2011, 22). Particularly, I note that the innovation of consumer experience is its transformation into the relational component that is analogical to the evolvement of value accumulation into meaning (Chapter 4.3).

The gaps and contradictions explained previously (Chapter 6.2) have a certain impact on the new framework. *Thus, customer innovation framework aims at creating customer experience (or experience staging) in order to offer it to a customer. Perceived experience or consumer experience is the outcome of the interaction between a company or brand and a customer, and it belongs to a customer.* However, consumer experience is the result of the innovation process as Table 2 explains.

Table 2 Consumer experience innovation framework

Design thinking stage	Main method used		Key process	Customer value	Experience	Experience origin
1.Understanding the context, problem determination	Visualization and multidisciplinary team	ethnographic research	alter and add tangible attributes	define the purpose of value-in-use (functional)	find gaps and flaws in current experience (sensorial, cognitive)	customer experience
2.Solution conceptualization		brainstorming	alter and add intangible attributes	balance the values (emotional delight and functionality)	connect pragmatic and emotional experience	
3.Testing and establishing the interface		fast-prototyping	customer perception and feedback	check fit with the customers' needs (meaning)	check fit with the customers' expectations (lifestyle)	
4.Launch and ongoing innovation		iterative learning and interface communication	experience co-creation	align brand to the core vale or support the quality	align brand to experience, support interaction and nurture affection (relational)	consumer experience

Table 2 describes the innovation framework of consumer experience. Each stage of innovation development starts from the value component improvement because it is the basis of the experience creation. Then customer experience is an object of analysis and transformation. *I define consumer experience as the process of perceiving the set of interconnected values of a product, service or a brand, arising from the interaction with a product, service or brand, and resulting in accumulation of knowledge and attitude* (Chapter 4.3). Therefore, a customer value is a primary term, and a customer experience is the secondary one in the sequence of delivery.

Visualisation is the main method at the each stage of the development, because it helps to obtain quite accurate description and explanation of ideas within a multidisciplinary team. Emotional design levels (Norman 2004, 63-89) enable development of consumer experience across the stages of design thinking agenda. *Experience design evolves at the visceral and behavioural levels simultaneously due to the seamless combination of functionality and emotional delight that I noted in Chapter 6.1. However, behavioural design is more important at the beginning, while visceral design complements usability at the second stage.* Reflective design facilitates interaction with customers at the solution testing stage. Figure 12 depicts the role of emotional design (Norman 2004, 63-89) in the experience innovation framework. Moreover, the framework suggests iterative learning as an essential method of design thinking, which is illustrated by circle arrows in Figure 12.

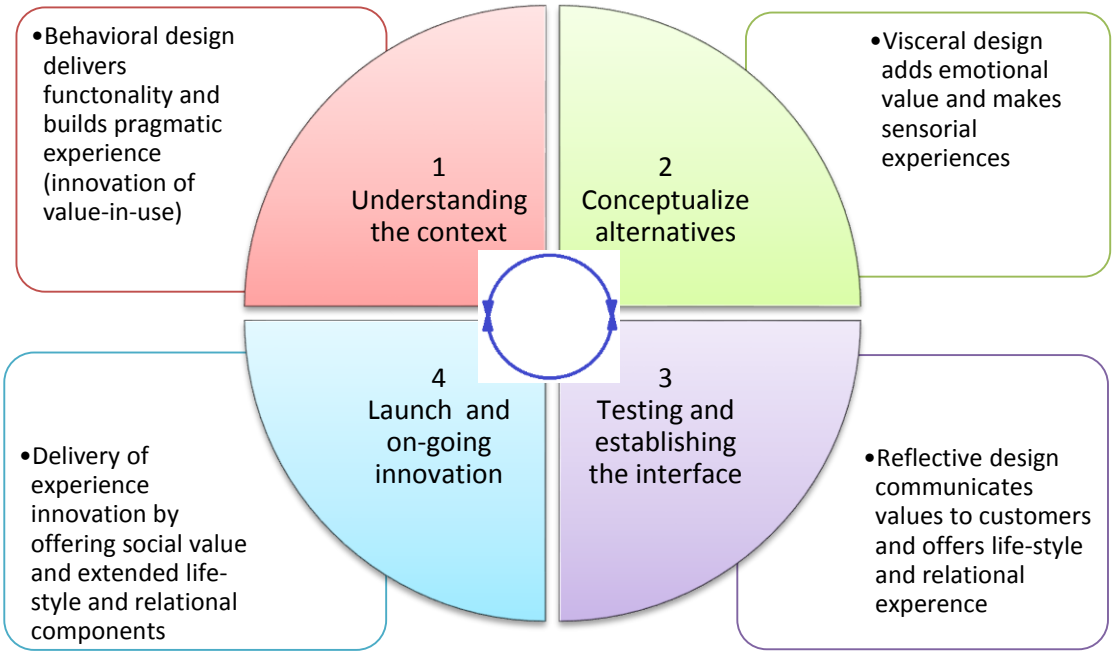

Figure 12 The role of emotional design in experience innovation

Consumer experience innovation begins from the deep understanding of a customer, user and a context of an offering. Schmitt (2010, 54) argues that observation and analysis

of sociocultural context of the customers' lives reveals their real needs related to the habits and lifestyles. Design thinking as well as customer experience management suggest ethnography for this purpose, for example, customer journey can clearly show flaws and gaps (Liedtka & Ogilvie 2011, 61-71; Hassi & Laakso 2011, 6-7; Fraser 2009, 58-60). This initial stage of the design considers the tangible attributes and functional values, because they are the prerequisites of costumer experience creation. Functionality is a primary feature of a product or a service. Therefore, functional features should provide the core value accurately. Company should review a value-in-use and match it with the customer needs. Tangible attributes also define sensorial and cognitive components of customer experience (Gentile et al. 2007, 397-398). Therefore, behavioural design creates pragmatic experience of an offering through the functional values (Table 2, Figure 12).

The next stage of the innovation development is the conceptualization of a solution out of many alternatives. Brainstorming facilitates creation of multiple radical solutions by the means of abductive logic, convergent and divergent approaches (Fraser 2009, 64; Hassi & Laakso 2011, 6-7). Moreover, rational logic filters promising ideas for further conceptualization and evaluates them in accordance with established criteria (Liedtka & Ogilvie 2011, 103-117). A solution should have the specific set of values, including functionality and delight. Design of customer value requires a proper detailed representation of its components in order to determine customer experience (Schmitt 2010, 26-27). Every chosen option requires the balanced set of values, and a company should utilize the artefacts for creating experience components by the means of visceral design: sensorial and emotional appeal of an offering. Hence, conceptualization stage utilizes visceral design for combining emotional and functional values that constitute the basis of cognitive, pragmatic, sensorial and emotional experience (Figure 12). Therefore, offered experience should unite emotional and pragmatic components (Table 2).

Then a company tests created solutions and establishes the interaction with the customers. Although they participated passively at the previous stages, testing entails their active involvement. Close communication with customer ensures the iterative nature of all processes related to the innovation development. Practically it means continuous learning by doing (Stickdorn and Schneider 2012, 124-125), in other words, experimentation and fast prototyping for adjusting a solution in accordance with customer feedback (Liedtka & Ogilvie 2011, 127-142; Hassi & Laakso 2011, 6-7). Solution testing contributes to advancing customer value to the meaning and customer experience to lifestyle component by dynamic communication with the customers and capture their perception and feedback (Table 2). Reflective design enables communication with customers and provides compelling experience (Figure 12).

The final stage of consumer experience innovation harmonizes brand with customer values and customer experience. This stage is the co-creation of relational level of consumer experience. Brand facilitates relational experience accumulation because brand experience comprises functional perception of an offering, visual and sensorial perceptions of brand, which merge into one inseparable impression for customers. Thus, relational component of consumer experience depends on brand identity, which builds desirable context for customers. (Schmitt 2010, 125-135.) Therefore, a customer is a co-creator of experience, because an individual perceives experience tailored by a company, and this perception may be very different from the promised experience. Customer brand perception is consistent with the personal customer image and positioning in social environment that constitute social value (Lemley 2009, 243-247). Brand value supports the delivery of functional quality, enhances emotional engagement and increases customer loyalty toward an offering. On-going innovation means iterative learning, tracing and re-designing of consumer experience, by the use of the tools discussed above, in order to maintain the high level of customer loyalty (Table 2) (Liedtka & Ogilvie 2011, 157-175; Stickdorn & Schneider 2012, 194-195; Hassi & Laakso 2011, 6-7). Reflective design enhances consumer experience by providing customer-centred interface, which delivers social value. (Figure 12).

The outcome of the company's design is an offering, which comprises customer experience. However, the ultimate result of the innovation process is the individual perceived experience (consumer experience) as explained in Table 2. The actual launch of an offering does not mean the end of the development. Series of innovations instead of the only one maintains high customer loyalty and long-term leading position in the market (Schmitt 2010, 166). Series of innovation processes imply iterations of development, as illustrated by circle arrows in Figure 12. This process-oriented approach is applicable to any activity of a company rather than only offering development.

Concluding, the innovation framework of consumer experience encompasses iterative staged processes, which are focused on a customer and individual perceptions of an offering. *Problem definition, solution conceptualization and testing aim to create customer (offered) experience. The final stage (launch and ongoing innovation) results in consumer (perceived) experience. Therefore, customer has an important role of co-creator in the process of experience innovation.* Companies aiming to create memorable experiences should mind the gap between intended and perceived experience, and employ ongoing innovation methods for the strategic goals.

7 CONCLUSIONS

7.1 Theoretical implications

The focal study builds a theory by combining related concepts and elaborating overlaps and interconnections between them. The theory building implied the connection of existing research areas and generation of new knowledge that eliminates the gaps in existing studies. The outcomes of this study reveal and explain the interconnections between customer value and experience, which contributes to the theoretical discourse of these concepts. Moreover, the study provides new integrated explanation of experience innovation and contributes to understanding of design thinking framework.

Existing literature provides broad discussion about innovation as one of the main factors of sustainable and successful business. Moreover, recent research focus shifted from product to service, or product-oriented to customer-centered innovation. However, these approaches offer fragmented knowledge about innovative design. Industrial design focuses on the product features, and service design often overestimates the brand power. Specifically, both types of design omit experience concept, which is essential for customers. Therefore, this study focuses on defining consumer experience and describing the process of experience innovation.

The first sub-objective explores the concept of consumer experience. Based on the studies about customer value and experience, this research connects these concepts and defines consumer experience as well as experience innovation for the further building of innovation framework (Chapter 4). Specifically, customer value is a perceived benefit of an offering, while consumer experience is a continuous process of value perception in a certain situational context. Moreover, consumer experience involves attitude and memories concerning an offering or a brand. *Therefore, this study defines consumer experience as the process of perceiving the set of interrelated values of an offering triggered by the interaction with it and creating attitude and loyalty*. (Chapter 4.3)

Furthermore, this study completes the research of Gentile et al. (2007) and establishes interconnections between experience components, explaining the overlaps and providing the basis for further discussion (Chapter 4.2). Academic research omits elaborated explanation of experience innovation. *Thus, this study provides following definition of experience innovation: advancing to the relational component or creating the strong affection toward an offering, which should create a desirable personal image of a customer in the society.*

Moreover, classifications of customer value and experience draw up the basis for experience design levels (Chapter 6.1). Particularly, the integration of the theory of consumption values (Sheth et al. 1991) and the system of experience components (Gentile et al. 2007) facilitates the elaboration of emotional design (Norman 2004).

The second research sub-objective is the creation of the innovation framework of consumer experience, which comprises multiple types and levels of design in relation to value and experience creation. The incorporation of customer experience management into design thinking framework enables explanation of experience innovation throughout the stages of the agenda. *Specifically, customer experience management and design thinking have identical approaches and stages, such as customer centricity, ethnographic research, multidisciplinary thinking, co-creation with customers and fast-prototyping.* (Chapter 5.3) *Hence, the merge of design thinking and customer experience management eliminates duplication in understanding experience innovation processes.*

Moreover, the focal study elaborates the emotional design agenda (Norman 2004) by extending it with the types of consumption values (Sheth et al. 1991) and experience components (Gentile et al. 2007) in Chapter 6.1. *The extended framework of emotional design contributes to understanding of experience design and explains how customer value and experience evolve across the design levels.*

Finally, the design thinking framework of consumer experience combines all of the findings of this study in Chapter 6.3 (Table 2, Figure 12). *Therefore, the general innovation framework (Table 2) provides the insights about the methods of experience innovation, while Figure 12 presents the detailed view on the innovation design and transformation of the experience components. The framework explains the development of experience components across the stages of innovation process by the means of emotional design.*

The integrated innovation framework of consumer experience (Table 2, Figure 12) is the main theoretical contribution of the focal study. *The distinctive approach of design thinking focuses on the innovation development within a multidisciplinary team and the utilization of visualization for the efficient brainstorming. Although the proposed framework comprises the specific stages, they are iterative and the agenda is adaptive to different circumstances. Moreover, identification of design levels throughout the stages provides the extended view of the framework. Both interpretations of the framework together explain the comprehensive system of experience innovation design.* The study utilizes design-thinking method of innovations and apply it to the concept of consumer experience. The combination of these theoretical models creates a highly-efficient technique to innovate experience, thus improve relationships with customers and increase their loyalty.

7.2 Entrepreneurial and managerial implications

Although the focal study develops conceptual propositions systemized in the framework, there are numerous implications for the entrepreneurs. The findings integrated into the innovation framework suggest comprehensive insights about experience creation and transformation. The main outcome of the present research is the stage process framework describing the innovation of consumer experience. This framework is a detailed agenda applicable in a wide range of fields. It suggests the certain steps and methods of innovation with a specific design approaches. Moreover, the framework is designed to be clear and easy-to-use for different specialists, for example, from strategic planning to marketing. Every company aiming at providing compelling experience can use the framework as a guideline of innovation process.

The study analyzes and synthesizes theories and concepts concerning the key elements of the framework. Therefore, the conceptual discussion produces value by resolving controversies and duplications of theories. This essential simplification provides the universal set of tools for managing consumer experience, focusing efforts of a company on the teamwork and communication with customers.

The innovation framework of consumer experience provides high flexibility and repeatability of the processes. Such nature of innovation development can be a challenge for the formal organizational processes (Zomerdijk and Voss 2011, 78). In particular, the large companies tend to have rigid mechanisms and obsolete approaches to the customers. However, multi-disciplinary teams (including designers and engineers) can avoid the problem of conventional improvements.

Particularly, the framework offers continuous approach to innovations, which requires certain capabilities of a company. This process- and customer-oriented method implies the great scope of experimentation and learning by doing. Therefore, a team implementing innovations should be creative and courageous in decision-making.

However, this conceptual research builds a theoretical framework, which has a high level of generalizability. It can complicate the practical application of experience innovation framework. Generalized agenda does not suggest managerial considerations, which differ from industry to industry and depends on a company's size. Moreover, entrepreneurs and managers, utilizing this framework, should modify it in accordance with the innovation focus, company's capabilities and market conditions. For example, innovation of a product, service or solution in different industries benefits from different experience components (Gentile et al. 2007, 404). Thus, the importance and duration of some design levels, consequently, the stages of innovation framework vary for different offerings and industries.

Concluding, the focal study highlights the importance of experience innovations for maintaining successful business and especially draws attention to consumer experience as the way to deliver value to customers and improve their loyalty. The suggested framework integrates several design concepts and describes innovation process from the new angle. Entrepreneurs and managers can use it as a roadmap to co-create experience with the customers.

7.3 Evaluation of the study

This study provides the synthesised knowledge based on connection of several theories. It has the only contextual limitation of innovation; therefore, the results of the study have a broad applicability in further studies and empirical research (Bacharach 1989, 500). The research utilizes literature review in the elaboration of theoretical discussion. High quality sources of information enable coherent and logic integration and combination of existing knowledge in order to cover gaps and give the answers to the present research questions. The study produces new theory by the means of conceptual methods. Systematic literature review comprises research findings utilized for the focal study. In particular, this study uses 61 main sources of information out of 72 in total. Semi-academic studies such as books are 18, so researches from scientific journals and conferences constitute the major part of the sources (43). Supplementary sources (methodological considerations and evaluation) include 11 studies and books. The research topic of the present study has not yet broad discussion in academic studies. Therefore, the books are sufficient source of information for developing the conceptual framework in this study.

The methodology of this study is the creation of meta-framework that implies several steps of conceptualization. Firstly, I define and explain all concepts and theories chosen for the study. Secondly, I establish and clarify connections and overlaps between them. Thirdly, I build the framework based on defined interconnections and describe how the staged processes work. Aforementioned steps create the components of the innovation framework within following domains: consumer experience, design thinking, experience design in the context of innovation.

The quality of a theory comprises several factors, such as novelty, explanation, connections between its components and a certain limitation (Dubin 1969). The theoretical framework of experience innovation expands the understanding of innovation methods and processes. This study offers the new angle of understanding and implementing innovation development. Recent studies have not explained yet consumer experience in the context of innovation. Furthermore, design thinking method is a novel concept in academic research and needs more elaboration and conceptualization. The study clearly defines all constructs of the framework, such as consumer experience, experience design

and design thinking. The main research limitation is the innovation context. Concluding, the focal study matches Dubin's (1969) requirements of a good theory.

Conceptual study should deliver novel findings through the scope and degree (Whetten 1989, 494). Thus, the focal research implies a certain newness degree, which is the choice of the object (consumer experience) of innovation development. The newness scope reflects the level of generalization, which is relatively high in this study. Therefore, the findings are applicable in different fields, and the newness of the focal study can evoke further discussions and studies in related research areas.

Newness of a good conceptual study means the change of existing knowledge in a certain research field. (Whetten 1989, 494) Newness of this research provides challenging arguments for the existing theories. Specifically, the integrated framework connects multiple concepts and represents the new systematic view on innovations. Moreover, the new field of application of innovative development is consumer experience, which is one of the key concepts of this study. Therefore, the new angle of innovation and experience understanding and elaboration of related design processes offer the way to alter existing research practices.

Conceptual study is based on the thorough reasoning and logic arguments (Whetten 1989, 494). The focal study employs the coherent reasoning in developing arguments. Progressively the research explains and connects different constructs, building the foundation for the new framework of experience innovation.

Finally, the conceptual paper should comprise a clear content for a reader and be of interest to scholars a certain field (Whetten 1989, 494-495). This study follows explicit structure and highlights the key concepts of the research that simplify understanding of the research reasoning and argumentation. Moreover, the focal research provides findings that are relevant to contemporary topics in the related study fields. Specifically, design thinking remains under-researched concept, thus it needs further explanation and elaboration. Furthermore, connection of design thinking and consumer experience can stimulate further discussion about innovation design and intangible offerings. Finally, this research offers new perspectives on innovation development in relation to consumer experience. This study is interesting to a broad audience: from the design-thinkers to marketing researchers.

Trustworthiness of the focal study can be evaluated by several criteria such as sources credibility, thorough utilization of theory building methods, evidence validity, consistent and logical argumentation, reliability of the study findings, applicability for empirical testing, and commitment to the chosen topic (Lincoln & Guba 1985, 290-305). Credibility of the sources is defined by the scope of studies chosen by the relevance to the topic and peer-viewed search. This research is conducted by the means of theory framing and con-

cept integration that ensures creation of well-structured theory. Reliable sources and comprehensive scope of studies chosen for the analysis provide a valid evidence of the well-explained and connected constructs of the design thinking framework of experience innovation. Convincing and reasonable arguments enable coherent discussion and ensure reliable findings of this study. The findings are applicable for further empirical research, which can test its fitting into market realities. Interest and enthusiasm for the study topic signifies the commitment to conduct the study.

7.4 Limitations and suggestions for the further research

The focal study develops comprehensive discussion on experience, design and innovation. The only limitation of the study is related to innovation context. The findings of the study create the fruitful grounds for the further research. This conceptual work operates solely theoretical constructs, thus it omits empirical arguments. The findings of the study require empirical testing. Therefore, empirical study can verify the framework or modify it in accordance with the results of testing. Moreover, further empirical studies can reveal industry- or product-specific differences related to the design thinking framework of experience innovation, its stages and design levels. New findings related to the experience innovation framework can simplify its application for practitioners as far as the agenda can be specified for different cases. Moreover, empirical testing can challenge the importance of experience innovation for different industries and offerings.

Due to the low contextual limitations, empirical research can focus on various topics. For example, further studies can focus on experience in business-to-customer sector (experience of the digital products, web-sites or mobile applications) or on experience in business-to-business sector (for instance, in knowledge-intensive business services). Therefore, the developed framework can be adjusted to different fields depending on the context of experience delivery.

Another suggestion for further research is finding out the difference between the process of creating new experience and transformation of existing experience. Moreover, further studies can analyze personalization of experience in the context of universal products and services.

The focal study develops conceptual framework within a certain domain of research, omitting guidelines of performance such as human resources management and assessment of implementation outcomes, for example internal effects within a company and external responses of the market. Further studies can elaborate the adjustments of business model for commercially viable implementation of the experience innovation agenda.

8 SUMMARY

Contemporary studies elaborate the concept of innovation as the basis of successful and sustainable business. Moreover, there is abundance of approaches to create and adapt innovations, such as open innovation, intersectional thinking and co-creation. These methods have commonalities and design thinking unites them into one systemized framework.

Technological advances of global society, such as digitalization, caused the change of costumer behavior (for example, sales shifted to on-line environment). Therefore, intangible values, information and interaction between customers and companies gained more importance, rather than solely functional benefits of offerings. The balanced combination of functionality, emotional appeal and pleasing communication interface constitute compelling experience.

The present study develops and explains the stage process framework of consumer experience innovation. This study elaborates the conceptual discussion, connecting customer value, consumer experience, design thinking and customer experience management into one coherent system. The study utilizes conceptual research methods in order to analyze recent literature and connect explored concepts in order to build a new theory. Qualitative methods refer to the theory building by the means of meta-framework creation. Their application in the study is discussed in Chapter 2. The contextual limitation of the focal study is innovation, which is discussed and explained in Chapter 3. Various perspectives on innovation presented in the literature confuse the understanding of this concept. Thus, this study takes the process-based perspective on innovation for the further argumentation of interconnections between the framework elements.

Chapter 4 explains the concept of consumer experience through advancing the concept of customer value. Specifically, consumer experience is accumulation of perceived values, acquired during the process of interaction between a customer and a company. Moreover, Chapter 4 concludes that experience innovation refers to advancing experience by enhancing the relational component. Chapter 5 analyses design thinking framework and highlights the main tools (visualization, iterative learning and multi-discipline teamwork) for the further merge with experience design. Finally, Chapter 6 incorporates the findings of the study in the comprehensive stage process framework of experience innovation. Conclusions (Chapter 7) elaborated theoretical contributions of the present research and managerial implications. The study develops the understanding of experience innovation and proposes the systemized method for creating experience. Evaluation of the study specifies the thoroughness of the analysis and combination of the chosen concepts. The developed process framework has a broad application in different fields due to the low limitations of the study.

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