Transdisciplinary Engineering: Crossing Boundaries
M. Borsato et al. (Eds.)

doi:10.3233/978-1-61499-703-0-381

How to Enhance Customer Experience in Retail: Investigations Through a Case Study

Luca GIRALDI, Maura MENGONI[1] and Maurizio BEVILACQUA
Polytechnic University of Marche

Abstract. In the last years Customer Experience (CX) has become a novel approach to obtain a competitive advantage for numerous companies. The complexity of interactions among the customer, the physical environment, the company's employees, the product and/or related services requires transdisciplinary methods and tools from marketing, engineering, human resources and culture, technology, organization, management and phycology. The present papers aims to provide an overview of what Customer Experience is, how it can be used to design the meaningful touchpoints between the customer and the company and propose a CX-oriented strategy to design them in stores. Some interesting insights are discussed thanks to experiments performed in a real test case.

Keywords. Customer experience, Touchpoints, Retail channels, Journey Mapping

Introduction

In the recent years, the creation of an enjoyable shopping experience has become one of the factors to effectively help enterprises in competing in the arena of retail. Several authors carried out researches to demonstrate that consumers who enjoy the shopping experience buy more goods than those who do not, are more satisfied and reveal a repeat-purchase behaviour (loyalty).

Customer experience (CX) plays an important role in customer satisfaction and loyalty attitude. They are linked to the fun provided in the store by adding attractive areas such as bars, gyms and games, to the emotions created by the enjoyable elements at the point of sale and to the benefits achieved by customers. The identification of which strategies are more successful for a specific retail passes through the understanding of the customer journey and hence of his/her expectations. There are a variety of techniques for analysing the journey as video ethnography, mapping process, touch point analysis and the understanding of all activities and constraints. As well as there are a variety of techniques to design proper CX elements to change the journey and hence the customer behvaiour.

In this context the present research proposes a structured approach to map the journey and design CX. It is then illustrated by a case study in fashion retail where an

[1] Corresponding author, E-Mail: m.mengoni@univpm.it

enjoyable experience on the touchpoint after payment is designed and prototyped to make the shopping activity more attractive and funny.

Customer journey mapping allowed the research to identify who are the main target customers, to depict a set of representative personas, to understand their expectations and wishes, to formulate a problem and find proper strategies to improve their experience at the final touch point. For instance, the analysis actually highlighted that after the payment process clients generally take the way out without any happiness and the last record is only the payment activities. The actual approach has been changed by giving a "GLUE" (Giving little unexpected extra). It consists of a game that makes the contest funny and recordable. It is a really out of context object positioned on the desk after the cash register area.

The effectiveness of the game prototype and the success of the adopted approach are proved thanks to the collection of customer answers. Interviews were submitted to more than 1000 customers with a fidelity card in order to verify the success of the adopted approach. A report elaborating the collected results was created to share the customer experience approach across the company departments. Most customers found the game funny; it generated an increased income of cross selling and about 30% of persons decide to ask for a fidelity card to play with it.

1. Customer Experience and the role of touchpoints along the Journey

Retail is a market where an extensive range of products and commodities are made available to customers. It has been demonstrated that one of the meaningful levers of customers' decision-making to purchase, involvement and motivation is the quality of the marketing experience and its ability to stimulate the emotional and experiential parts [1]. This phenomenon finds out maximum fertility in retail (e.g. fashion, furniture and household products) where creativity, style, individuality, and more generally the personality of each user influence customers' decision-making [2]. In the last years what is happening in retail is a focus shift from product and service design to "customer shopping experience" design and to the definition of all clues that people detect in their shopping process and that make it satisfactory [3]. This does not mean a lack in product/product-related-service performance and perceived quality but an increasing orientation to enhance the experience they provide in the physical and/or digital shopping environment.

The Customer Shopping Experience aim is actually to give to the consumer an opportunity, an emotion or a special memory of the shopping in order to build loyalty, improve motivation of purchuase and manage the relationships with the customer [4]. That leads to consider retail not only as a market where products and fashion collections are shown to be bought but mainly a space where events happen. The possibile events are for instance the opportunity to have a personal shopper to reivent the customer's image, to enjoy happy hours and shows, to attend to the presentation of a new book by its author. The shop can become a DJ set. In all cases, the goal is to ensure that consumers realize a special experience in the store that has to leave an emotional moment and memory [5].

The design of experiential services and hence of elements stimulating customer emotions, creating a dinstinctive experience and fun at shops, is an emergent scientific area and a challenge for many organizations [6].

CX is the internal and subjective response that customers have to any direct or indirect contact with a company. Direct contact generally occurs in the course of puchase, use and service while indirect contact often involves unplanned encounters with representatives of a company's products, service or brands and takes the form of word-of-mouth recommendations or advertising [7]. In addition, CX's construct is holistic in nature and involves the customers' cognitive, affective, emotional, social and physical responses to the retailer [1].

CX is co-created through the multiple customer interactions with the several shopping experience elements or clues set along his/her journey [3]. These elements are the context within which an experience takes place and, are generally called touchpoints. Their identification is not a trivial task because they depend on the specific business that has different overviews and prospective interactions with the customer [8], are in pre- and post-purchase [9] and occur through different retail channels [10]. However, if the company is able to detect the touchpoints and design the clues to improve CX, it will be able to introduce the right journey's elements to influence the customer to choose/repurchuase the products and/or service it offers.

Customer experience studies exploit the journey mapping technique to identify all touchpoint episodes encountered during the service delivery process [11] and subsequently analyse the customer response to the introduced elements in terms of satisfaction, fun, boredom and frustration. The customer journey means the customer's transition from never-a-customer to always-a-customer as defined by Christopher et all. [7]. It is a visual draw of the CX that describes where the customer could be in contact with company directly or indirectly showing the different touchpoints characterizing this interaction. The customer journey maps can be used to represent the mental user models (ie. empathy map), the flow of interactions and all possible touchpoints between the company and the customer. Their analyis are very useful for companies to set strategies to take the customer from awareness to loyalty.

If we would make an example customer journey could be compared to a bus trip from the central bus station to city center. We could have many busses that leave the central bus station and any person choose is own trip considering the travel he/she wants to make. During this trip you have different views and many stops where you can get off but the aim of any company is to bring you to the city center and let you enjoy the trip in order to consider to do it again and/or suggest it to somebodyelse.

Numerous studies confirm that satisfaying customer responses can be achieved on using cues, stimuli and service encounters [12-15] at the touchpoints of the his/her subjective journey [6; 16]. Different techniques, both qualitative and quantitative, are proposed in literature to draw customer journey maps [17] and measure the quality of CX as follows: direct interviews, surveys based on data collected from web resources, role-playing, ethnographic research and analysis, etc. [18]. However most researches in this field stops at the definition of the emotional curve superimposed to the detected map. They do not usually propose a structured method to support designers and marketing analysts in the identification of use scenarios, interactions at touchpoints, customer satisfaction evaluation and design of touchpoints to improve CX.

Literature overview points out some critical issues to be faced in CX field as follows: 1) a scarcity of systematic research on CX Management and calls for a theory-based conceptual framework; 2) a lack of CX-oriented methodologies to coherenty introduce CX in product design, service offerings, company's organization, 3) the necessity to move beyond the elements under the retailer's control (e.g. store atmosphere, music, lightings, price and assortments) to a broader undestanding of the

multiple factors affecting CX; and finally 4) an inadeguacy of reports of real experiences in retail.

2. How to improve CX: the proposed approach

The proposed approach to tangibly improve CX in retail consists of five steps. Each step supports the designer respectively in analyzing the customer journey, identifying the main drawbacks and opportunities/strategies to improve the experience, designing successufull touchpoints, prototyping solutions to make the shopping activity more funny and test sample customers' responses. The approach is defined for the retail sector and in particolar to improve the shopping experience. For that reason, it does not consider any other direct or indirect contacts between the company and the customer except for those occurring in stores. They are as follows:

STEP 1: Analysis of customers in retail stores through the direct observation of people interacting with products and personnels in a specific atmosphere and enjoying the shop services (e.g. Wi-fi connection, dressmakers, personal shopper). The ethonographic analyis is also supported by Video Interaction Analysis technique (VIA).

STEP 2: Representation of the Customer Journey Map to identify the main digital and physical touchpoints in the store. It is in the form of a curve in a 2D cartesian space where the x-axis reports the episodes of the journey and the y-axis the achieved level of loyalty. IDEF 0 and 3 techniques can be used to better define and then decompose the interactions, input/output flows, main actors and process constraints [19].

STEP 3: Identification of critical events by creating an emotional curve to represent the level of customers' satisfaction and to recognize which touchpoints need to be redesigned. Two tools can be used to carry out this step: structured or semi-structured (e.g. conversational approach) interviews and the application of the ZMET technique according to Zaltman [20]. At this stage, the designer has to list all possible strategies for improving customer satisfaction such as gamification [21], and select the best one to overcome main limitations. The result of STEP 3 is the definition of the touchpoint requirements to apply the CX strategy.

STEP 4: Design of touchpoints and prototyping of solutions implementing the identified strategy. The design can regard some elements of CX, specific clues and product-related services to improve the contact.

STEP 5: Experimentation of the prototyped solution in real retail stores and measurement of customers' satisfaction by 1) ethnographic research (e.g. direct observation by experts) and/or 2) submission of structured or semi-structured interviews and/or 3) the application of the ZMET technique. The experimentation is followed by the elaboration of collected data by representing the feedbacks in a new emotional curve and by the definition of guidelines to improve CX.

3. The case study in fashion retail: an investigation

3.1. The applicative context

The proposed CX-oriented approach had been preliminary applied in fashion retail. The industrial partner of this research is an Italian large-sized company, producing shoes, bags, clothes, fashion accessories, etc. for three three major brands with almost 500

stores Worldwide. It produces goods both for male and female, children and adult. It is positioned in the low-cost market sector. Its main competitors are brands such as H&M, Zara, Bershka and Uniqlo. The company brand where the experiment took place is the one oriented to youngers and it proposes cheaper fashion goods than others.

3.2. The map of the customer journey in retail

The map of the customer journey is the result of two parallel studies: one conducted in collaboration with the industrial partner and one based on the ethnographic analysis of real customers into the retail stores.

A set of interviews was submitted to the company's marketing, design and sales departments. The elaboration of the collected answers led to the definition of the solutions in terms of ways to be in contact with the customer adopted by the company to achieve the maximum level of loyalty. Results are represented in the graph of Fig.1 that correlates possible phisical and digital touchpoints with the achieved confidence level in the current company / customer relationship. The graph shows that the highest level of loyalty, demonstrated by the ownership of the fidelity card and to the availability of customer personal data such as telephone number and email, is reached at the stage of purchasing both in the website and in stores. This result pushes the analysis to focus on the shopping experience in stores.

The second study took place in eight sample stores, located four in the centre, two in the north and two in the south of Italy. All have more than 1000 square meters of surface. Their layout is arranged into three sections as follows: Men, Women and Kids. They provide a free wifi service. Moreover inside the store there is a radio system with dancing music and an ambient profume. In all stores the observation of customers' behaviour was repeated thrice within a day's time: in the morning (from 10:00 to 11:00), at lunch break (from 13:00 to 14:30) and finally in the late afternoon when there is the maximum crowd (from 18:00 to 19:00). Videos were recorded and then elaborated to create an IDEF0 model of the purchasing process till the 2nd level of activities' decomposition. It allows the analysts to identify the main episodes of the customer journey in the shops (reported in the columns in Figure 1).

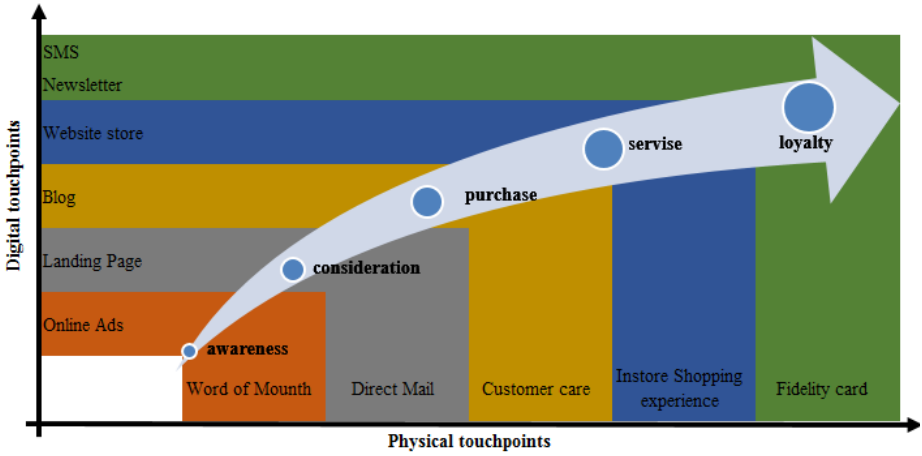

Figure 1. Correlation between physical and digital touchpoints and the measured loyalty curve.

20 customers for each store were selected and conversational interviews were submitted to investigate the degree of satisfaction at the different physical touchpoints. In addition two experts observed customers to uncover the deeper motives of customers, the emotional peak and end moments within the Customer Journey. At this stage the ZMET technique was not applied becaouse the study was only preliminary. This analysis lead to the creation of the emotional curve reported in Figure 2. In it evident that the final touchpoint is the most critical episode in terms of customer satisfaction. Most interviewed persons actually declared to be annoyed. The last experience they had is actually payment. However, it leaves a footprint and a memory of the shopping experience crucial for the loyalty. Therefore this experience must be changed by introducing a disruptive initiative that completely modify the customer emotional state.

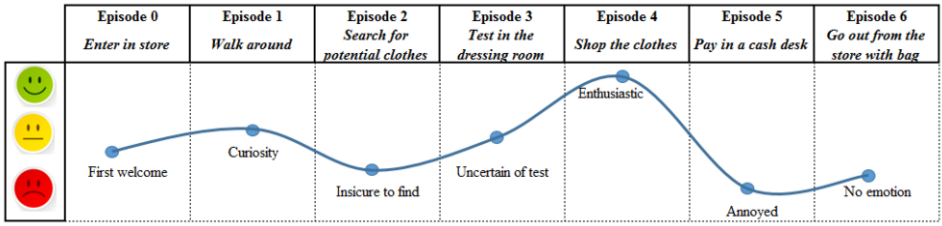

Figure 2. The emotional curve mapped in the customer journey in fashion stores.

The result of STEPs 1-3 is a list of requirements as a roadmap for CX element design as follows:

- to introduce a disruptive and impressive CX element at the final touchpoint and to create an extremely positive emotion in order to drive loyalty;
- to create a novelty effect;
- to leave a memory of the shopping experience and give something to remember it in order to motivate to come back again, to recommend the brand to friends, to defocus the attention from payment;
- to engage the customer by adding a gamified system at payment;
- to stimulte positive perceptions by involving multiple sensory channels;
- to use funny colors and taking up an area comparable to the cash dimension;
- to make use of familiar images and playful objects.

3.3. The design and prototyping of the final touchpoint

The above-mentioned requirements were framed in the following design problem: Creation of an attraction (what?) at the final touchpoint (where?) by proposing a challenging game (how?) to engage loyal customers (to whom?) in order to create a memory inducing repurchasing and spreading the word to friends (why?).

The solving design concept regarded to create a game at the final touchpoint that allowed customers to play and in case of reward to receive a gift. This strategy implemented the three main parts of gamification that are the motivational affordance, the resulting psychological outcome and the further behavioural outcome as reported in [22]. Figure 3 sums up how the customer journey was reconfigured by breaking the payment experience. Actually, after the payment the customer equipped with the fidelity card could fish one ball and get the prize associated with the extracted colour. Two of the four prizes allowed the customer to achieve an extra online bonus that gives the way of the cross selling and bring him/her to an “omnichannel” experience.

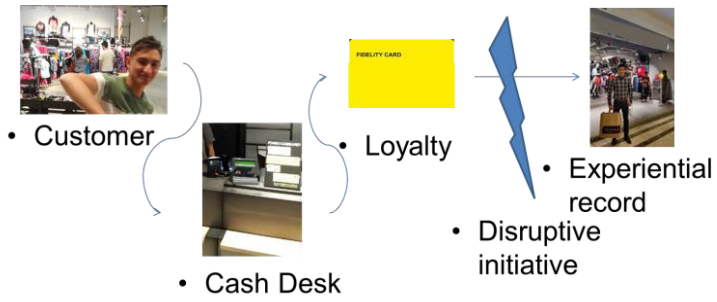

Figure 3. The model of the introduced customer journey at the final touchpoint.

The concept was then embodied into a sort of "fishing box" that represents a challenge in the current stores of the brand (Figure 3). The box was made of a printed plastic coated cardboard material containing 16-18 coloured balls. It was shaped as a section of pyramid that remembers a pop-corn box like that in movie theatre. It was closed by a cover with a hole in the center whose diameter was large enough to allow a hand to enter and move in the box. The selected colors were yellow, blue and fuchsia, chosen because they are strong, impressive and funny. The box was 40 cm high and positioned on the desk. Position and dimensions were chosen to avoid customers to look inside the box while fishing the balls. The total cost for one box was of 40 Euro.

Figure 4. The fishing box prototype.

The dynamic of the game is as follows: once the loyal customer has paid at the checkout he/she is invited to fish in the box, called "POP BOX", where there are 16-18 balls with 4 different colors. A different scenario is linked to each color (i.e. Green ⇒ Lollipop; Yellow ⇒ online discount; Blue ⇒ online discount; Red ⇒ you did not win). Before playing, the customer is informed about the game and the procedure to follow by the shop assistant. While playing, he/she can watch all possible prizes in a display with a music that creates suspence.

3.4. Investigation of the solution success by interviews

Semi-structured interviews are coupled with ethnographic research conducted by two experts in Human Studies and Marketing to explore the (unconscious) needs, wishes, associations and motives of customers in case of playing with the Pop-Box.

The Pop-Box prototype was installed into two stores. Investigations were carried out in two different periods both lasted 1 month: one of great turn-out and one with a lower number of visitors. Each period lasted two weeks. In Period 1, the Box is fulfilled with 9 red balls(you did not win), 3 green balls (online discount), 3 blue balls (online discount), 3 yellow balls (lollipop). In Period 2 the Box is fulfilled with 1 POPBOX with balls: 3 red balls(you did not win), 3 green balls (online discount), 3 blue balls (online discount), 3 yellow balls (lollipop). Differences of balls' colors in the two periods depend on the fact that the analysts would test if the re-purchuase percentage was linked to the chance of failure. The probability to failure is higher in period 1 that in period 2. So, the analysts expected that customers would come back to the shop and play again till they would win. This not happened.

The Box was positioned at the end of the cash desk and a shop assistant informed customers about the aim and the procedure of the game and she/she invited him/her to fish a ball. Moreover, the assistant specified that the game was dedicated only to customers with a fidelity card.

Respectivelty for each period, Table 1 and 2 report the number of customers that played the game, the number of new fidelity cards that were subscribed to enjoy the game and the registered emotional state.

Table 1. Results from Store 1.

	Tickets	**Tickets made with loyalty card**	**loyal customers fishing balls**	**N. of enrolled customers thanks to the game**	**% satisfied people** 	**% indifferent people** 	**% disappointed people** 
Period 1	3379	654	251	25	76	12	12
Period 2	2052	258	227	13	72	20	8
Tot	5431	912	478	261	74% *(Average)*	16% *(Average)*	10% *(Average)*

Table 2. Results from Store 2.

Store 2	**Tickets**	**Tickets made with loyalty card**	**loyal customers fishing balls**	**N. of enrolled customers thanks to the game**	**% satisfied people** 	**% indifferent people** 	**% disappointed people** 
Period 1	1987	932	257	17	82	11	7
Period 2	1491	628	66	11	72	25	3
Tot	3478	1560	323	38	77 % *(Average)*	18% *(Average)*	5% *(Average)*

The emotional sensation is the result of the elaboration of experimental data retrieved from the answers to direct interviews submitted to customers by the shop assistant, the pictures of customers' face expression taken after the game (Fig. 4) and

finally the registered number of people that enrolled to the loyalty program to play the game. Pictures were useful to experts to elicit the unconscius feedback to the game.

The scope of this investigation is to understand the emotion of the client in the last touchpoint and how much the client is engaged in the gamification to remember his/her experience in the store. The introduction of the Pop-Box increases the number of the episodes characterizing the last part of the Customer Journey in the stores. Figure 5 reports the emotional curve deriving from the elaboration of the submitted interviews to loyal customers and the analyis of pictures taken by experts after playing the game (Figure 5). It reveals an increase of positive sensations such as curiosity and happiness connected respectively to the possibility to game and to win a prize.

Figure 5. The fishing box prototype positioned near the cash.

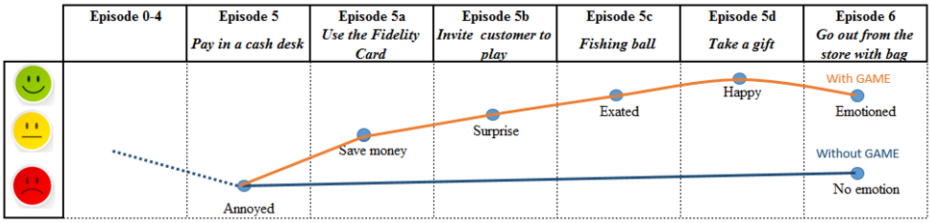

Figure 6. The emotional curve after the introduction of the Pop-Box.

From the analyis of the interviews, pictures and number of new fidelity cards it is worth to notice that 1) the game is very suitable for kids and less for mature people; 2) children are involved with the game and its colorful graphics to the extend to push their parents to subscribe a fidelity cards and to play with them the game; 3) customers appreciate more the gift in store and less the traditional online coupons; 4) the last episode of the journey transform the emotional state from “annoyed” to “happy”.

4. Conclusion

The research describes a structured method to design the touchpoints in stores based on a Customer Experience-oriented approach. It allows the customer journey to be mapped and strategies to realize an enjoyable experience to be applied. The final aim of the method application is to make the customer more loyal, create a positive memory of the experience and push the customer to repeat the purchase. Although the investigations are only preliminary and they give just some insights about the success of the approach application, it contributes to the current state-of-art in design methods as it introduces a customer experience point of view to traditional participatory design. It merges two

disciplines that are marketing and design. Moreover the experiemtnal results can be useful for retailers who wants to improve the CX in their stores.

Future research will focus on the application of the ZMET techniques to better elicit unconscious customer sensations and on the collection of more case studies in this field to validate the proposed approach.

References

[1] J.B. Pine and J.B. Gilmore, *The Experience Economy*, Harvard Business School Press, Boston, 1999.
[2] C.Varey and D.Kahneman, Experiences extended across time: Evaluation of moments and episodes. *Journal of Behavioral Decision Making*, Vol. 5, 1992, pp. 169–185.
[3] L.L. Berry, L.P. Carbone and S.H. Haeckel, Managing the Total Customer Experience, *Sloan Management Review*, Vol. 43, 2002, pp 85–89.
[4] M. Badgett, M.S. Boyce and H. Kleinberger, *Turning Shoppers into Advocates*, IBM Institute for Business Value, 2007.
[5] P.C. Verhoef, K.N. Lemon, A. Parasuraman, A. Roggeveen, M. Tsiros and L. Schlesinger, Customer experience creation: determinants, dynamics and management strategies, *Journal of Retail*, Vol. 85 (1), 2009, pp. 31–41.
[6] L.G. Zomerdijk and C.A. Voss, Service design for experience centric services, *Journal of Service Research*, Vol.13 (1), 2010, pp. 67–82
[7] C. Meyer and A. Schwager, Understanding Customer Experience, *Harvard Business Review*, Vol. 85(2), 2007, pp. 117–126
[8] U. Jüttner, D. Schaffner, K. Windler and S. Maklan, Customer service experiences: developing and applying a sequential incident laddering technique, *European Journal of Marketing,* Vol. 47 (5/6), 2013, pp. 738–769.
[9] C. Tynan and S. McKechnie, Experience marketing: a review and reassessment, *Journal of Marketing Management,* Vol. 25 (5–6), 2009, pp. 501–517.
[10] J. Martin, G. Mortimer and L. Andrews, Re-examining online customer experience to include purchase frequency and perceived risk, *Journal of Retail and Consumer Service,* Vol. 25, 2015, pp. 81–95.
[11] P. Frow and A. Payne, Towards the 'perfect' custom er experience, *Journal of Brand Management*, Vol.15 (2), 2007, pp. 89–101.
[12] J. Baker, A.Parasuraman, D. Grewal and G.B. Voss, The influence of multiple store environment cues on perceived merchandise value and patronage intentions, *Journal of Marketing*, Vol. 66 (2), 2002, pp. 120–141
[13] M.J. Bitner, Servicescapes: The impact of physical surroundings on customers and employees, *Journal of Marketing,* Vol. 56 (2), 1992, pp. 57–71.
[14] M.K. Brady and J. Cronin, Customer orientation: effects on customer service perceptions and outcome behaviors, *Journal of Service Research*, Vol. 3 (3), 2001, pp. 241–251.
[15] D. Brocato, C.M. Voorhees and J. Baker, Understanding the influence of cues from other customers in the service experience:a scale development and validation, *J. of Retail*, Vol.88 (3), 2012, pp. 384–398.
[16] F. Lemke, M. Clark and H.Wilson, Customer experience quality: an exploration in business and consumer contexts using repertory grid technique, *Journal of Academic Marketing Science*, Vol. 39 (6), 2011, pp. 846–869.
[17] B. Stauss and B. Weinlich, Process-oriented measurement of service quality by applying the sequential incident method, *Proceedings of the 5th Workshop on Quality Management in Service*, May 11- 12, Tilburg, The Netherlands, 1995.
[18] P. C. Verhoefa, K. N. Lemonb, A. Parasuramanc, A. Roggeveend, M. Tsirosc and L.A. Schlesingerd, Customer Experience Creation: Determinants, Dynamics and Management Strategies, *Journal of Retailing,* Vol. 85 (1), 2009, pp. 31–41.
[19] M.M. Tseng, M., Qinhai, C.J. Su, Mapping Customers' Service experience for operations improvement, *Journal of Business Process Management*, Vol. 5(1), 1999, pp. 50-64.
[20] G. Zaltman, *How customers think. Essential insights into the mind of the market*, Harvard Business School Publishing, 2003.
[21] J. Hamari, J. Koivisto, and H. Sarsa, Does Gamification Work? – A Literature Review of Empirical Studies on gamification, *Proceedings of the 47th Hawaii International Conference on System Sciences*, Hawaii, USA, January 6-9, IEEE Computer Society, Washington, 2014, pp. 3025-3034.
[22] P. Zhang, Motivational affordances: reasons for ICT design and use, *Communications of the ACM*, Vol. 51(11), 2008, pp. 145-147