

# Customer Experience: the impact of ICT in measuring instruments of experience in the Customer Journey

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**Abstract.** The need to overcome the borders of Customer Satisfaction in order to analyze the areas related to the consumer's individuality, require the company to adopt instruments able to identify and measure the individual's personal and experiential factor. The transition from Customer Satisfaction to Customer Experience becomes a key element to maintain the company competitive advantage. The company must know all the steps that make up the Customer Journey and be able to assign a value to each of them in order to compose an overall assessment of Customer Experience. It's important to apply different methods of analysis, such as "Personas", "Experiential Maps", "Critical Incident", "Wow Experience" up to tools of "Web Monitoring" to recognize experiential aspects about the relationship between consumer and company.

Purpose of this paper is to identify the necessary elements in order to create a system of centralized and integrated data management of Customer Experience; it becomes of main importance an activity aimed to define characteristics of a digital platform able to collect, contain and manage all the information which can identify Customer Experience.

**Keywords:** Customer Experience, Platform, Technology

## Customer Experience as a source of differentiation

The competitive environment characterized by market saturation, strong technological innovation and the centrality of the consumer's role, force the company to manage delivered quality as a source of competitive advantage.

The delivered quality must adapt and overcome market standards with the aim to bridge the gap with the quality perceived by the customer as much as possible. It is very important to manage the relationship with the customer and, above all, to manage his experience in connection with the company. The company's aim is to engage the customer, build an emotional bond and enrich the experience through the solicitation of personal and emotional aspects.

Harley Manning and Kerry Bodine [1] define Customer Experience "how your customer perceive their interaction with your company". This means that the compa-

ny understands that it can manage business with an “outside in” perspective, bringing the customer inside the process. Customers have, therefore, more power than ever. With online reviews, social networks, and mobile web access, it is easy for customer knowing even more than sellers about products, services, competitors and pricing. Organization definitely wants to deliver an improved customer experience, but available information do not allow to obtain a complete framework of the situation by means of back office, business partners, incentive programs, and all possible business activities aiming to this effort.

A new paradigm is born, replacing and highlighting the quality-satisfaction-loyalty: the Experience becomes the new competitive and distinctive frontier that emphasizes the concept of quality. The engagement becomes a significant ingredient for the company that is willing to capture and put emphasis on the multisensorial dimension. In this way, the satisfaction becomes a complementary part to engagement then eventually advocacy takes the position of loyalty.

In range of the consumer’s behavior studies, Hirschman and Holbrook [2] have first introduced a perspective of analysis based on the “experiential view of consumer’s behavior” as opposed to the “information processing view” which was enacting the “process of buying” only as a result of a user’s rational problem-solving [3].

The authors have highlighted that the research of functional benefits, can just partially explain the complexity of a process in which emotional and hedonistic motivations also play an important role. They have accentuated some aspects of the “use of product” experience linked to the perception of senses, to the imagination and to the emotions, which they define as "hedonic consumption". In this prospect "products are seen not as objective entities, but rather as subjective symbols".

In the viewpoint of the studies over consumer behavior, an experience is especially "a personal lived that comes from the continuous interaction of the individual with the incentives represented by goods and services made available in the system of consumption"[4].

In literature has [5] been proved that in the processes of purchase and consumption, often the rational/ functional and the emotional / hedonic components are both present in consumer choice, both influencing the level of satisfaction, "emotions and cognitions can’t be distinct" [6].

With the arrival of the post-modern thinking, the customer’s rational and functional side is left out while more emphasis is given to the experiential aspect emphasizing the subjectivity of the consumption’s process. Customer experiences are utilized as strategic component of the offer and is the internal and subjective response customers have to any direct or indirect contact with a company [7].

The entertainment component is fundamental in the transition from economy of services to the economy of experience [3], however Pine and Gilmore underline how "staging experiences doesn’t mean to entertain customers, but to engage them."

A new vision of experiential consumption was born at the beginning of the 80s, and introduces some aspects until then overlooked: "the role of emotions in behavior, the fact that consumers, as well as endowed with senses, are beings able to think and act, the importance of symbols in consumption, the need of fun and pleasure for the

consumer and the role of them, beyond the act of purchasing, in using the products" [8].

These aspects became even more important at the end of the 90s thanks to the contribution of Pine and Gilmore (1998) that argued over the thing that, in the contemporary economy, experiences take on the role of a fourth form of economic offer, which is distinguished from the services as well as the services are distinguished from products and products from commodities [9].

A new perspective emerges: the organization needs to be able to create a unique and positive experience for the customer in every moment of interaction, using channels and contexts that may enable the creation (co-creation) of experience.

Handling the experience means to establish a contact with the consumers through the interactions in different channels, implementing tools that enable to understand their behavior and provide them a memorable experience.

Pine & Gilmore define the experience as "any memorable event that engages the consumer on a personal level in the action of consumption [10]. There is a new need to manage the customer's experience in a structured way, in order to create processes that use the technology improving the analysis of the customer's experience.

It is important that the processes of Customer Experience Management (CEM) are not just based on a data collection, but also consider the perception and the consumer's feedback. An efficient CEM system needs to be able to clearly express what customers say about their experience.

The company needs to introduce tools in order to manage the Experience.

There are three levels of action:

staff training and individual skills of the customer relationship; these are important elements of courtesy, efficiency, ability to handle objections, etc.;

the technological tools that can facilitate the creation of a relationship of trust through communication with the client but also between departments and in-depth knowledge of the consumer;

business organization that supports the staff in any business relationship with the customer.

The second and the third level of action are important because they affect the use of resources devoted to change management. Referring to the second level, information systems and business communication facilitate the work of personal contact and make the consumer experience more satisfying, streamlined and effective.

The organization must be able to create stable relationships with clients without obstructing them and through the collaboration of all business components. Information systems and business communication can facilitate the task of the contact personnel, allowing to make a more streamlined, efficient and satisfactory customer experience.

The implementation of a CEM process, which anticipates the tracking of customer's perceptions on the contact points, must have the following characteristics [11]:

integration: the inputs over customers experience, their perceptions, their service activities, buying behaviors need to be integrated in a central database, to be easily analyzed and linked together;

Completeness: inputs must include all contact points in customer's life cycle, including various channels they come across in their relationship with the company, such as call center, email, website, as well as a visit to the store, pre-sales and purchases;

Connection to loyalty: it is necessary to understand which transactions are most important to increase the loyalty, both with the goal to manage priorities and prove how a good or a bad experience can affect customer's loyalty, even if just temporarily;

Performance measurement: pondering the frequency of surveys over customer's contacts.

According to authors Meyer and Schwager [7], a distinction between touch points assumes main importance as soon as each one of these has a different value. Service interactions matter more when the core offering is a service. Touch points are of main importance because they represent the source of information that lead to a consequent decision of purchase. Companies need to map the path of touch points and check for possible criticalities in advance. Per each touch point, the gap between customer expectations and experience evidences the difference between customer delight and customer disappointment. This aspect points out the differences between the traditional approach to CRM and CEM method. Schmitt [12] describes the difference between the approaches; in CRM the problem is focused on information that are considered important for the company and occasionally help to define customer's behaviour through the so called "operant conditioning", which means the consequences of customers' spending patterns, but rarely establishes an emotional bond with the customer. CEM is a method that is focused not only on functional products features and functional transactions but also on each other element that provides value during decision making, purchase and usage. It allows managers creating products and services that constantly delight customers and provide profit for the company.

## **Methods of Experience detection**

Customer Experience inspects the perception of the customer over his interaction with the company through all the channels of contact that he has with it, every single phase of interaction is critical to create a memorable and emotional experience.

The company must identify the various moments of interaction and adopt methods and techniques that can fully represent all the aspects of the experience. There are several methodologies, including:

1. Critical Incident Technique: technique introduced by Flanagan [13] and Miller. This is a qualitative methodology that works "in depth" as well as in exploratory logics through a work of microanalysis of critical phenomena that can undermine customer's satisfaction, the loyalty, the word of mouth, the efficiency of the service and the entire life's cycle of the client and the service. The method is called CIT, critical incident technique, and is based on the fundamental theorem that the catastrophic event is always generated by a multifactorial critical context: at the

origin of an accident there are always more and more determinants, one determinant is not sufficient because too easy to be predicted and to put a remedy to the bottom of it. The use of this technique allows the organization to identify the elements that cause satisfaction or dissatisfaction in order to point out the issues that are related to the internal process by means of which the analyzed service is provided;

2. Laddering Analysis: is a technique of interaction with the customer that is usually applied in the Focus Group field and in personal interviews, to deeply understand in which way the consumers perceive the product and which personal meaning they give to it. This technique allows to describe the connections that respondents make between the attributes of the product and the more detached consequences and values (Whitlark and Reynolds, 1995). It facilitates the reflection by the side of consumers over their personal reasons of purchasing, and allows to build the means-end chain that, starting from the physical attributes of the product (the means), identifies different benefits that move to the consumers selection and, in the end, the values researched in the purchase and consumption of that particular brand (the ends) [4]. This technique can be applied by the organization together with the Critical Incident Technique in order to facilitate the understanding of the cause-effect relationship of the investigated issue;
3. Personas: term coined by Alan Cooper in 1983: "They are hypothetical archetypes of real users. They represent real people during the design process. " They have the quality of personifying users, giving them names, a character and often also a picture. Even though they are fictional characters, they are based on the knowledge of real users and reflect key behavior models. Personas is created basing on the primary researches of real clients. Personas identifies and outlines detailed profiles of key users; it represents design tools, fictitious profiles created to identify particularly relevant and popular types of customers within a particular demographic field. This tool allows to represent type clients that have to be satisfied in order to further customize the user experience and adapt it to their specific needs and expectations. They are often visually represented in the Customer Journey. The data collected to design Personas are detected by purely qualitative research that allows to identify personal profiles of personas. According to Pruitt and Adlin [14], the use of characters offers several advantages for the development of the product. Thinking about the needs of a fictitious character allows the designers to deduce what a real person might need. Another use may be aimed to highlight any existing problems in the process of service delivery;
4. Experiential Maps: represent the set of interactions that the customer has with the company at every point of contact. Each stage is characterized by experiential elements, emotional reactions and reactions that delineate the relationship between the user and the system. The Customer Experience quite emerges from these interactions that consent to obtain useful information in order of making critical decisions over improvements needed and also allow you to analyze every point of contact from the customer's point of view [15]. The experiential map is organized starting from the collection of customer information so, listening to the customer's voice is possible to analyze and classify the feelings and emotions that the product / service

arouse him and eventually cross-check the information collected for each touch point to understand how the customer experiences the interaction with the company. The information that emerges is critical to identify the elements that characterize the process in question in a client's prospective to improve his level of satisfaction. The technique is very useful to measure the gap between the perceived quality by the customer and the quality provided by the company;

5. Wow Experience: is a technique that points out the memorable experiences that lead the client to increase his loyalty. Through the "Wow Experiences" you can deeply explore all the causes that take the client to consolidate an experience with the goal to identify the most important aspects [16]. You can use a "top-down" method through which he is asked to tell his generic memorable experiences till he gets to tell an experience in the use of a particular product, service or brand. In this way, we try to understand which are the features of products or services that can take the client to a "wow effect" and, as a result, to identify the elements that contribute to the development of a positive emotional evaluation that can lead to an increase of loyalty towards that specific brand. the use of This technique can also allow the company to identify interesting items of satisfaction and dissatisfaction that can be inserted in a quantitative survey in order to assign a weight to each of them and obtain more structured information;
6. Web Monitoring: When customers consider a new product or service that you offer, the Web is most frequently their first touch point with your company. When a computer network connects people or organizations, it is a social network. The study of such computer-supported social networks has not received as much attention as studies of human-computer interaction, online person-to-person interaction, and computer-supported communication within small groups. It's very important in this contest to study a basic concepts of social network analysis, describe how to collect and analyze social network data, and demonstrate where social network data can be, and have been, used to study computer-mediated communication [17]. This technique allows the company to obtain information that the customer spontaneously gives about product or service and can be used in order to realize a continuous improvement.

The benefits the customer gets from using and experiencing the service includes how they perceive they have „profited“ or gained from the service provided and their experience of it, i.e. how well their requirements and needs have been met . Another outcome of the service from a customer's point of view will be their conscious or unconscious assessment of the service provided [18], the perceived value of the service received [19] [20] and their overall satisfaction or dissatisfaction (an emotion) [21].

These judgments, good, bad or indifferent, will be explained as customer intentions to repurchase, to recommend the product to others, to make complaints.

The outcomes outlined above are from a customer perspective. There are also important outcomes from the organizations perspective.

Organizational outcomes will be concerned with meeting operational and strategic objectives and financial targets for example [22].

Incidentally, the quality of the service (service quality) can also be defined from these two perspectives; operational service quality and customer perceived quality.

Operational service quality is the operation's assessment of how well the service was delivered to its specification (as defined in operational procedures, training manuals etc., see Pinto and Johnston 2004)[23]. Customer perceived quality represents the customer's judgment of service quality, of his experience and of perceived benefits (compared to needs and expectations).

Operational service quality and perceived service quality can be evaluated in terms of quality factors and of quality of service (attributes and variables), such as reliability, empathy, responsiveness, etc., (Parasuraman et al. 1985)[24].

## **Technology**

New digital technologies, the increasing of mobile connectivity systems and the widespread use of Social Networks, play a fundamental role in the transformation of the interactions between company and consumer [25].

The company needs to develop solutions aiming to allow the efficient management of multiple contact channels, assuring better productivity and value for the customer in order to create direct, immediate and time long lasting relationships with the final customer..

It needs to be provided by research and monitoring systems of customer satisfaction, pointing the attention on concrete and hidden needs, crucial elements for structuring a competitive offer on the market.

The quantity of information the company has at its disposal may be very consistent and, therefore, the difficulty in collecting and managing data is a problem to be faced; it frequently happens that the existence of data connected to the single project or individual do not allow the real sharing of information and the complete use of collected data that may be replicated in different environments and result redundant inside information systems [26].

An adequate structuring and controlled management of information become a main point of interest in order to efficiently exploit all potentialities coming from collected data by means of gathering techniques of the information deriving from Customer Experience.

Using different methods and extraction techniques of experiential data is to be considered a strength point for the company only if correctly managed; the presence of redundant and non-synchronized data collection may, on the other hand, result an inefficiency because may lead to the separation of data from meta data with significant consequences on the activity of data recovery and management.

Another functional element of CEM is the implementation of a shared tool of data storing and recovery, aiming to allow a wide participation to the activities of data gathering of the whole working group.

The creation of a unified data bank, connected to a strong common protocol of modify and updating of information, is the ideal answer to these needs.

The goal has to be creating a system of centralized heap which users may access to in a controlled way, having visibility only to the information they are interested to.

This system has to assure the correctness and updating of data on time and needs to provide information concerning the use of data by all users.

The creation of an integrated platform allows the simplification of the activities of data management and consents the centralization of data files and of their information content (metadata) in a unique repository.

An environment characterized by a high level of cooperation allows to convert knowledge from implicit to explicit managing information in a standard way and facilitating knowledge control.

This way, the phase of projecting the platform has to be oriented to the definition of different kinds of user activities:

1. business intelligence: allowing to analyse data and information granting the access to data and to research and report tools;
2. cooperation: giving users a virtual working space in order to consent to different categories of workers (technicians, researchers, visitors and service responsible) to exchange information and create documents in a cooperative way;
3. secure access to information: granting a personalized access depending on role and profile;
4. content management activity: allows managing, organizing and searching information, structured or destructured, such as site descriptions, registration file, etc.;
5. learning activities: portal has to consent the creation of an environment in which users may work and learn at the same time, thanks to the use of manuals and technical cards.

Purpose of this paper is to provide a detailed analysis of the features considered necessary for gathering and managing of experiential data, both under organization and IT point of view; this is intended to be the base for the development of next phase concerning the concrete implementation of a CEM platform.

In order to achieve what shown above and proceed to an operative phase, it is considered necessary providing to main vendors on the market a questionnaire aiming to point out problems (in terms of costs and benefits) connected to the development of this kind of product and, moreover, evidencing threats and opportunities that characterize supply on this kind of market.

## **Conclusions**

Value creation through profitable growth may come from the introduction of innovation inside production system. The convergence of industries and the active role of consumers in an increasingly networked society have challenged the basic conception of “value” and of the process that leads to its creation. Organizations are discovering that neither value nor innovation can any longer be successfully generated without considering the customer as the focus of their business.

A new point of view is required, allowing single customers to actively build their own consumption experiences by means of personal interaction, aiming to the creation of value.

This paper offers an overview on the new frontiers of business by means of it is possible creating a relationship of loyalty with the customer; above all it evidences the importance of an IT infrastructure for an organization that has to face important changes of strategy and adapt to the continuous renewal of market needs.

The introduction of an integrated platform creates a virtual place of gathering and management of data in order to implement a strategy oriented to point out those experiential elements that characterize the relationship company-customer. Sharing of knowledge and creation of cooperative environments among different company areas become crucial elements for the organization in order to achieve a competitive advantage position in the middle-long term. Next step will be the one of the concrete realization of a CEM platform and of the evaluation of its impact on customers and on organization.

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