

Service Innovation for Customer Experience at the Bottom of the Pyramid

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Abstract: *This study explores the relationship between service innovation and customer experience in the context of a major Egyptian telecommunications company. It highlights the importance of customer-centric innovations in enhancing customer experience, especially in base-of-the-pyramid markets. The findings suggest that successful service innovations are those that address specific customer needs and provide value-for-money, convenience, and high service quality.*

Keywords: Customer experience, Service innovation, Base-of-the-pyramid, Telecommunications

1. Introduction

Service innovation is recognised as a key source for sustaining and leveraging competitive advantage [1] [2]. The generation of positive customer experiences constitutes a differentiating element for service organisations and their brands [3] and has been linked to customer satisfaction [4], brand equity [5], customer retention [6], loyalty and word-of-mouth [7]. Customers increasingly and continuously look for different and unique experiences and no longer accept a “one-size-fits-all” offer [8]. To face such market dynamics, service organisations must continuously innovate [9]. In particular, service organisations operating at the base-of-the-pyramid need to customise service innovations that addresses this market segment’s customer needs and domestic consumption [2].

Using a single case study approach based on a major international communication company in Egypt, this paper expands the perspectives on the relationship between service innovation and customer experience at the base of the pyramid market [2]. Our aim is to enhance theoretical and managerial understanding of this relationship by showcasing a set of service innovations that leverage the customer experience at a base of the pyramid market. We contribute to the service research and customer experience literature in two ways. First, we investigate in-depth the how to enhance the customer experience through service innovation. This issue is rated as the third most important subtopic of the eighty service research topics identified by [2]. Further, understanding what leverages customer experience in different cultural contexts is a crucial research gap [10] [3]. Second, this study brings insights from a non-Western context, namely the Egyptian telecommunications industry. Investigating service innovation at the base of the pyramid is identified as the one that the service research field knows a little about among all topics [10] [11] [12]. By investigating service innovation at the base of the pyramid, this study addresses a critical gap in the service research literature shedding light on service management and practices in different contexts and settings [11] [12] [13].

2. Literature Review

2.1 Service Innovation at BOP

Organisation innovativeness is a central concept in academic research and managerial practice [14]. Organisational innovation is defined as “the adoption of an idea or behaviour that is new to the organisation, where the innovation can be “a new product, a new service, a new technology, or a new administrative practice” [15]. This study attempts to focus on service innovation that enhances the customer experience at the base of the pyramid market segment.

Service innovation is recognised as a key source for competitive differentiation and growth [1] [2], and the body of scholarly research has grown significantly in the past decade [16]. Service innovation is identified as one of the three strategic priorities of for service research [17] [2]. Service innovation is defined as the creation of new service offerings, service delivery processes, and service business models [2] [16]. From a service-dominant logic, service innovations are viewed in terms of what they do, in other words, as a process of integrating resources in novel ways to provide new ways of value creation [18].

Most of previous service innovation research focuses on medium-to-high income (industrialised) countries [19]. Research from developing countries (BOP) remain scarce [19] [2]. Hence, further research in service innovation at the base of the pyramid is crucial because established service theories derived from researches in developed countries are not necessarily applicable to base of the pyramid markets [19] [2]. There is a need to advance understanding of service innovation beyond the Western context [10] [11][12].

A growing body of evidence on innovation by organisations at the base of the pyramid reveals that the strategies they pursue differ from those in Westernised developed markets [10] [11]. Innovation at the base of the pyramid is built on inadequate resources, low purchasing power, and infrastructure limitations [12] [13]. Innovation at the base

of the pyramid is based on imitation of developed countries' products and services, and development of "good enough" products that meet customers' needs at low prices [10] [11]. Organisations at BOP markets attempt to offer affordable products/services that fit well with the domestic consumption context [10] [11] [20] [21].

2.1.1. Service Innovation and Customer Experience

Customers seek to engage with service organisations that provide superior customer experience [22] [3]. Service companies increasingly face challenging environments due to market force, such as intense competition and increasing customer power and expectations [8]. These dynamics made customer experience a top priority for executives and a prominent management objective [3]. The generation of positive customer experiences constitute a differentiating element for service organisations [3].

Customer experience is holistic in nature, incorporating the customer's cognitive, emotional, sensory, social, and spiritual responses to all interactions with an organization [24] [7] [25]. Researches have mainly focused on the conceptualisation and measurement of customer experience [6] [25] [26] [27]. Three research perspectives emerged: (1) process, behaviour and resulting value; (2) process outcomes; and (3) customer-centricity regarding internal organizational aspects of customer experience [3]. Following in particular the latter research stream, this study looks in-depth at the relationship between service innovation and customer experience at a BOP market, particularly, Egypt. We investigate a variety of incremental and radical service innovations that leveraged the customer experience within the Egyptian Telecommunications market.

The relationship between innovation and organisational performance has been studied by several researchers. It is found that innovation plays a key role in driving superior organisational performance [27] [28] [30]. Existing literature divides organisational performance measures into financial performance measures, such as revenues and profits; and non-financial performance measures, including reputation, loyalty, or customer satisfaction [31]. Service providers can enhance the customer experience through service innovations [32]. Despite this crucial relationship, there are few studies investigating the relationship between service innovation and customer experience [33] [2] [34].

3. Research Methodology

This study adopts a qualitative research method using a single case study approach to investigate in-depth the relationship between service innovation and customer experience in the Egyptian telecommunications sector. The selected organization is the market leader (including the largest number of active subscribers) in the telecommunications industry in Egypt and the Middle East [35]. The company continuously innovates by introducing service innovations and aspires to leverage the customer experience.

We used multiple data sources including the company's senior management employees, and secondary data [36]. Data entails in-depth interviews, company documents and

archival records. Based on purposive sampling, we interviewed thirty-five employees across different functional departments in the organization (e.g., consumer marketing, enterprise marketing, strategy and innovation, customer experience). This amplitude of interviewees allowed integrating a broad range of perspectives from different roles/departments and to reach theoretical saturation [37]. The interview guide entailed a flexible structure of questions covering detailed description of service innovations that enhanced the customer experience. Interviews typically lasted between 60-120 minutes, were digitally recorded and transcribed verbatim. We gathered secondary data to support and complement the interviews' data. This would ensure convergence in findings across data sets and reduce potential biases that may be present in the interviews. We took into consideration the content of company documents to capture different innovation's launches and their success in terms of customer experience. The data from all sources was analyzed inductively during and after the data collection process. The analysis followed various steps Miles and Huberman (1994)[38]. NVivo software was used for data analysis to enhance the validity of the research and strengthen the rigour of the study [39].

4. Analysis & Results

This section addresses the most successful innovations in terms of customer experience introduced by the organisation under study. Successful innovations in this study are defined as innovations that achieved high net promoter scores, generated revenue streams, new to the market, and adopted by customers, thus ultimately leveraging the customer experience.

One of the most successful innovations is the Balance Transfer services platform that was created to serve customers who run out of credit. This platform allows the customer to borrow credit from the organisation, pursue a call even when the credit runs out, send template messages to others to call back when the credit runs out, or transfer the balance to other customers. Ten employees posited that this platform is one of the organisation's top innovations that was successful in the market. Twenty-nine employees mentioned that this service innovation yielded a significant positive customer experience. The Retail Director mentioned that the balance transfer services innovation witnessed three million transactions per day. The underlying rationale behind this success is that this service innovation addressed an existing customer need when they run out of balance, thus adding value to customers. Fifteen employees mentioned that this innovation increased the net promoter score. This was evident in quotes such as: "it made huge customer satisfaction and positive customer experience, it is of a very relative need to the customer and leads to great customer experience. The whole portfolio is great and made huge revenues, which proves its success in terms of customer experience". Reviewing company documents and archival records, 89% of customers' comments were positive and reported great customer experiences with the Balance Transfer services portfolio innovation, while 11% of customers reported a negative experience. Nearly 70% of customers' comments indicated a positive experience in the

variety of services offered in this portfolio and user-friendliness.

The organisation introduced for the first time in the Egyptian market and the world an idea of micro-recharge cards. This service innovation for the pre-paid customers came in the shape of Micro-Recharge cards of small cash value. The idea was based on the insight that is common practice in Egypt, that at kiosks or stores, the shop owners offer customers products of little value to them instead of the remaining change. The Micro-Recharge card innovation came in four denominations. The first three launched were a 50 piasters card which gives 5 extra minutes; the EGP 1 card gives 30 minutes, and the EGP 1.5 card gives two hours calls. Due to the enormous success of the product, a fourth EGP 3 denomination was launched a few months later, which gives the customer an extra 12 hours. According to the Commercial Operations Unit Officer, the Micro-Recharge cards exceeded the original target by 50%. It has increased the average revenue per user (ARPU) by 7% and there has been a steady 10% increase in the distribution of cards across the country. Further interview results indicated that the micro-recharge card received a patent, generated revenues, and boosted the customer experience: “the micro-recharge card received a patent and it is the first in the world. This is very much used by our customers”. In addition to the patent received, the Micro-Recharge card innovation has won 13 international awards including an Audience Award for most contagious idea in London, and a Grand Prix at the Dubai Lynx (J. Walter Thompson Company, 2013). Reviewing secondary data, 95% of customers indicated positive customer experience of the Micro-Recharge cards service innovation. Customers indicated that this innovation offered them value-for-money and solved the problem of availability of small value change in Egyptian stores.

Interview results indicated that the Money Transfer application is another radical service innovation provided by the organisation. The application is basically an online wallet that allows the customer to pay at any store through their mobiles rather than using credit cards or cash, as well as transfer and receive money from anywhere in Egypt. Twenty-six employees stated that this is one of the organisation’s top innovations that aims to change Egyptian customers’ behaviours. The Product Manager of this service innovation mentioned that “this app is new to Egypt and we are trying to change customers’ behaviours and make it a habit to pay through mobile applications.” Interview results revealed that the application offered customers convenience, accessibility and differentiation in several dimensions. First, Egyptian customers usually make their money transfers through banks who operate for only a few hours a day and are not available in all cities, especially rural areas. In contrast, the application provided by the organisation enables customers to transfer at any time of day through simply pressing a button. . Also, there are 10 million bank accounts in Egypt versus 100 million mobile users, 41 million of which are customers of the organisation under study. Further, banks in Egypt require a minimum amount to have a bank account, while there is no minimum amount to be deposited to open an account to use the organisation’s money transfer application. Therefore, the Money Transfer

application has facilitated money transfers for Egyptian customers. The number of customers who adopted this service has exceeded one million in one year. This service innovation emerged from a gap in the banking industry in Egypt, thus enabling the organisation under study to differentiate its offerings in the market and enhance the customer experience.

Ten employees from the call centre department spoke about the educational interactive voice innovation. Their comments revealed that the organisation has created educational and promotional interactive voice responses (IVRs) and videos for illiterate customers. The rationale for launching this service innovation is the high illiteracy rate in Egypt and the organisation has more than 40 million customers. Educational IVRs enable customers who are illiterate and unable to read the organisation’s messages or browse the web site to know more about the organisation’s services, products and promotions. A company document obtained from the Customer Experience unit revealed that, 80% of customers had a positive experience of the interactive voice responses. According to the Egyptian National Telecommunications Regulatory Authority (2018) report, the organisation scored high levels of customer experience at the organisation’s call centres.

5. Discussion

Telecommunications operators around the globe are faced with a number of threats affecting or threatening their revenues and growth [40]. The increase in demand from customers is placing telecommunications operators under unprecedented pressure. This increase in demand has forced telecom operators to invest significantly to upgrade network capacity and connectivity, thus lowering their profit margins [40]. If telecommunications operators are to meet the changing customer needs and head the competition, they should innovate. The current study investigated four top innovations of a major telecommunications operator in Egypt. Consistent with the literature, the current study findings reveal that service providers can enhance the customer experience through service innovation [32][33]. Results reveal that the organisations’ service innovations leveraged the customer experience because they addressed current market gaps and customer needs in the Egyptian market.

Congruent with the literature, the current study results show that service innovation at the base of the pyramid is based on developing services/products that meet the customers’ needs at low prices [21] [2]. Findings reveal that the organisation thinks from a customer perspective when innovating services rather than from a technical perspective. The organisation offered service innovations that are affordable and fit well with the domestic consumption [20]. For instance, the Balance Transfer services innovation fulfilled an existing market gap and enhanced the customer experience by providing value-added benefits, variety of choices, value for money and differentiated services. The innovation achieved high net promoter scores and generated massive revenue streams for the organisation. Similarly, the Micro-Recharge cards is a radical innovation that was new to the world and the Egyptian telecommunications market.

This product innovation provides customers with value-added benefits, fulfils an existing customer need in the Egyptian market and offers a variety of choices. Findings show that the Micro-Recharge cards is a significant innovation that turned a market need or problem into an opportunity, thus driving the customer experience. Another significant mobile value-added service innovation introduced by the organisation under study is the Mobile Transfer application. It is a radical service innovation that was first introduced in the Egyptian market. This innovation leveraged the organisation's positioning in the market and enhanced the customer experience. Findings posit that the Money Transfer application serves the customers' utilitarian needs, thus enhancing the customer experience. The application provides customers with convenience, value-for-money and time, accessibility and high service quality in call centres and retail outlets, as well as caring processes and procedures. The number of customers expanded tremendously in one year because of the superior customer experience. Findings are congruent with previous research results indicating that offering differentiated mobile value-added service innovations is crucial for superior customer experience [41]. . Further, the success of the Money Transfer application is in line with previous research findings indicating that service innovation at the BOP nations should fill market gaps and address domestic consumption context [42] [20]. It is a service innovation developed to meet the domestic context characterised by the poor financial infrastructure and low-income consumer power of the majority of the population, which are not typically issues in the West [20].

6. Conclusion

This study shows that service innovation is highly related to customer experience. Further, it is important for the organisation to innovate services that meet the local customers' needs and fit the domestic context. Hence, service organisations operating at BOP markets need to think from a customer perspective more than a technological one when offering new products and services to enhance the customer experience. This study reveals that successful innovations that enhance the customer experience provide customers with benefits, such value-for-money, value-for-time, convenient processes, user-friendliness, variety of choices, accessibility, and high service quality. Moreover, organisations should realise the needs and wants for each market segment and innovate accordingly. It is important for marketing managers to spot the market gaps in BOP markets to introduce service innovations that embellish the customer experience. This study points out that customer centric innovations enhance the customer experience. Marketing and innovation managers should place customer experience at the heart of the innovation strategy.

7. Limitations and Future Research

This study sheds light on the relationship between service innovation and customer experience and provides a basis for future empirical research opportunities. Using quantitative methods, future research could empirically explore and test the relationship between service innovation and customer experience in more contexts, including different service

sectors, as well as different countries. Future research could also tackle the issue of causality by developing causal models that establish the direction of the relationship between service innovation and customer experience in BOP contexts. Further, this research proposed important customer of experience dimensions in BOP context, however, further research could identify new significant dimensions of customer experience in BOP market segments.

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