THE STRATEGIC USE OF INFORMATION AND COMMUNICATION TECHNOLOGY ON THE GAPS MODEL OF SERVICE QUALITY IN BANKING INDUSTRY

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ABSTRACT: The impact of ICT on customer service has risen considerably in recent years. This can be seen by the number of papers published and in particular by financial- and banking-related journal. To establish the field further, the purpose of this paper is has twofold. First, it offers a literature review on 186 papers published from 2009 to 2015 into account and qualitative case study was based on primary data collected on 32 bank managers from 3 banks. Second, it offers a conceptual framework to summarize the research in this field comprising four parts. The authors illustrate the classification of ICT impact on Customer Service in four parts: Listening Gap, Service Design and Standard Gap, Service Performance Gap and Service Communication Gap.

KEYWORDS: *Information and Communication Technology (ICT); Gaps Model of Service Quality (GAPS Model); Banking Industry; Service Quality*

1.0 INTRODUCTION

The information and communication technology has had innovative impact on all aspect of services [1]. Nowadays almost all of the service industries are able to meet the needs and demands of their customers in more effective and efficient manner. Banking industry is one of the beneficiaries among these [2-4]. Technological advanced has led to many opportunities in how the bank reaches and builds relationships

with their customers [5]. In the banking industry, for example, technologies such as ATMs, Debit Cards, Internet Banking and Mobile Banking, are aimed at improving services (i.e. customer convenience) and reducing transaction costs [5-6]. As of now, the information and communication technology (ICT) is considered as the key contribution for the success of banks and as their core competencies [4].

The Gaps Model of Service Quality has provided a strategic foundation for banks that wish to deliver service excellence to their customers. The Gaps Model of Service Quality was first introduced in 1985 by Parasuraman et al. [7]. For nearly third years, it has been used across industries and worldwide to help service organizations formulate strategies to deliver service quality, to integrate customer focus across service organizations, and to provide a strong foundation for service excellence as a competitive strategy [8]. This paper is based on Gaps Model of Service Quality and was motivated by a desire to demonstrate from a service-orientation perspective how ICT impact on customer service to yield gain in performance. Specifically, we address the following question: How does ICT impact on customer service and service process innovation?

2.0 LITERATURE REVIEW

2.1 Gaps Model of Service Quality

The Gaps Model of Service Quality provides an integrated framework for managing service quality and customer-driven service innovation. A hallmark of the model is that it captures the cross-functionality inherent in service management. Another hallmark of the model is its anchoring on the customers and integration of the customers throughout all gaps within the model. Every strategy used to close the gaps in the model retains a focus on the customers at its core. A service organization's primary goal is to meet or exceed customers' expectations, and strategies used to achieve that objective are ultimately anchored on the customers.

According to Parasuraman et al. [7], perceived service quality can be defined as the difference between customers' expectations and perceptions which eventually depends on the size and direction of the

four gaps concerning the delivery of service quality on the service organization's side. Thus, Customer Gap = f (Gap 1, Gap 2, Gap 3, and Gap 4) of the Service Provider Gap.

The centrepiece of the model is the Customer Gap – the gap between customer expectations and perceptions of the service as it is actually deliver [10]. The ultimate goal is to close this gap by meeting or exceeding customer expectations. The other four gaps in the model are known as the "Service Provider Gap" and each represents a potential cause behind a service organization's failure to meet customer expectations:

1. Gap 1, Listening Gap- is the difference between what customers expect and those expectations that service organizations perceive.
2. Gap 2, Service Design and Standards Gap- is the difference between management perceptions of customer expectations and development of service designs and standards.
3. Gap 3, Service Performance Gap- is the difference between service specifications and the actual delivery of the service.
4. Gap 4, Communication Gap- is the difference between the service delivery and the information put out to the customers about what to expect [10-11].

3.0 RESEARCH METHODS

This study is an exploratory qualitative study, based on in-depth interviews. In this article, extensive preliminary work needs to be done to gain familiarity with the phenomena in the situation. The interview sessions were undertaken between october 2013 and January 2014. The total number of selected respondents was 30, from 3 leading banks in Malaysia (namely Bank A, Bank B, and Bank C) . All these three banks rank among the largest and strongly profitable banks in Malaysia. The actual names of the banks have been changed in the study, for the purpose of confidentiality. The interviews lasted from 30 min to 2 hours and 30 minutes. With the interviewees' permission, all the interviews were audio-recorded and then transcribed carefully in order to provide a basis for reliable data analysis. The respondents consisted of professionals who work in position levels ranging from executive up to manager of the banks in

Malaysia. In addition, respondents were selected for this study according to the following criteria: They were currently working in a manager or executive position. They were viewed as making significant contributions to their banks and to the field. To ensure the quality of the interview data, the respondents' experience had to include at least three years working in the banking industry. Participation was voluntary, with the managers and executives offering selections and suggestions.

4.0 RESULTS AND DISCUSSION

4.1 The Impact of Technology on Listening Gap

Service Provider Gap 1, the Listening Gap, is the differences between customer expectations of service and company understanding those expectations [10]. The age of information has resulted in greater expectations from customers. Customers want better service, options, price and delivery of products or services from banks. Technologies give such customers the opportunity to search information, compare products and engage on social media.

The primary way technology has influenced Gap 1 is in allowing banks to know their customers in new ways. One of the most intriguing technological innovations is Internet and online customer survey, replacing traditional comment cards and intrusive telephone calls for customer. Manager 2 and Manager3 indicated that internet and online surveys provide convenience in several ways where customers can answer online survey at a convenience time.

Second, building relationships by understanding and meeting customer needs over time is also facilitated by technology-based service [10-12]. Technology-based services have a huge influence on the way the customer relationships are managed [11-12]. The CRM system is an innovative technology designed to manage customer relationships [13]. This system has been widely used by banks to collect, integrate, and analyses customer information. Manager 9, Manager 12, Manager 16 agreed that electronic CRM brings advantages for bank such as customized the services at individual level, increased collaboration between the banks and customers, bank

ability to track and store customer information optimally. Manager 9, Manager 12, Manager 16 addressed that the use of CRM systems is likely to affect the quality of customer information, increase the timeliness of customer information, and to enhance the usefulness of customer information.

4.2 The Impact of Technology on Service Design and Standard Gap

Service Provider Gap 2, The Service Design and Standards Gap, this gap focus on translating expectations into actual service designs and developing standards to measure service operations against customers' expectations [10]. The focus of the Service Design and Standard gap has primarily been on designing interpersonal services and real time operational processes to meet customer expectations and needs. Customer expectations can be met through technology-enabled and highly standardized services provided on the web.

ICT has also influenced the actual process of service innovation. Now technology can be used to develop visual prototypes and virtual experiences for testing service concepts. Service and new service offering have been democratized by empowering customers to get actively involved in co-creation activities [14-15]. Customer's direct involvement into on-going operation through their provision of input to the service creation process leads to more variability in the service provision [15]. The co-creation process moves away from a firm-centric view of customer orientation while emphasizing customer interaction .The contact between the customer and the firm is managed in such a way as to encourage firms to co-create value with customers while addressing customer-specific idiosyncratic needs .The involvement of customer during the co-creation is largely related to the sharing of consumption experiences, which provides a source of information for the firms to "recognize its current portfolio of products and services" [16-17].

Manager 13, Manager 20 and Manager 11 explained that the two famous innovation examples Mobile banking and Internet Banking had changed customers' roles. Its introduction of Mobile Banking and Internet Banking entailed more than a process or service improvement, in that it changed the way the customers perform their

necessary functions. "I guess over time the number of branches would reduce because lot of customers would embrace technology and would be using handheld devices to complete transaction with us," claimed by Manager 21. In addition, Manager 23 and Manager 19 said that it is critical for banks to consider new digital channels as part of an integrated strategy, and switching digital from a supporting role to the primary sales and communication channel for banks. The great use of information and communication technology (ICT) within banking operations as the main the significant measurement s of bank being green and as a part of their corporate sustainability activities [25]. It is noted that Bank Negara Malaysia's strong push for Malaysians to move towards electronic payments will aid the rise of Digital banking. Under its Financial Service Blueprint 2011-2020, the central bank is targeting to increase the number of e-payment transactions per capita to 200 by 2020 [24].

Lastly, measuring service operations based on customer expectations is also much more efficient today due to technology. Tracking customer feedback and measuring internal operations can be done more easily and frequently through the use of web-based feedback systems and internal database. Manager 3, Manager 10, Manager 9, Manager 13 provided example that bank use social media to collect customer feedback and engaged online dialogues with their followers. "Customers can provide feedbacks through technology channels (email, internet, and telephone)," claimed by Manager 4.

4.3 The Impact of Technology on Service Performance Gap

Service Provider Gap 3, Service Performance gap was primarily on the role that employees and customers play in the delivery of services and the interpersonal interaction required [9]. The influx of technology has enabled employees in a myriad of new ways and has created opportunities for customers to become more involved in co-creating and even adding value to their service experience [15, 24].

ICT advances have allowed employees to become more efficient and effective in serving customers. Manager 15 commented that "for example, banks are now providing customer service and related support online, mostly through "live chat". In addition, ICT allows quantitative data to be better exploited, more easily transmitted, and

more core to decision making. In the back office, ICT has spurred decision-making based on hard quantifiable information about bank customers, which is particularly important in transaction banking. ICT has provided access to integrated data across the entire bank. IT software and infrastructure are combined to link bank products and services to customers, back office functions, and business units. "We revisited our back end system to support regionalization and digitization. We actually looked at some of our weak spots in middleware, backend systems and thereafter either upgraded them or changed them to new systems or platforms. We have replaced the credit card system and ATM switch, undertaken certain core banking changes and converted our branch teller system into a web-based solution," explained by Manager 24.

"A variety of technologies been adopted by banks in attempt to more effectively deliver and manage the training process," mentioned by Manager 4 and Manager 8. The e-training initiatives are to use a variety of technologies to deliver course content and support trainee communication (e.g. videoconferencing, virtual simulations). In addition, ICT has been used to support the performance management process. "In terms of measurement, e-PM can potentially facilitate the process by using technology to track employee performance throughout the evaluation period, and record both formal and informal evaluations on an on- going basis, revealed by Manager 17.

4.4 The Impact of Technology on Service Communication Gap

Service Provider Gap 4, the Communication Gap, is the difference between service delivery and what is communicate externally to customer through advertising, pricing and other forms of tangible communications [10].

The way customers communicate with each other have been changing dramatically and the same is true for how customer gathers and exchange information about products and how they obtain and consume them. The rise of a plethora of social media has provided customers with extensive options for actively providing information on services: "The digital innovations of the last decade made it effortless, indeed second nature, for audiences to talk back and talk to

each other" [18]. With the advent of ICT, traditional word-of-mouth communication has been extended to electronic media, such as online discussion forum, electronic bulletin board systems, newsgroups, blogs, review site, Facebook and Twitter [19-20]. Manager 25, Manager 7, Manager 9 and Manager 19 revealed that all these social media represents a new trend, as it changes rules of communication with customers by allowing banks to engage in timely and directly with customer at a relatively low cost. In addition, the use of social media represents a great opportunity for bank management. It shortens the distance between bank and customers, thereby increasingly and strengthening customer involvement and engagement in the innovation process. "Through social analytics, a bank notices a trend of negative sentiment about its products, services or activities. The bank can proactively take corrective measures by engaging with customers to mitigate potential reputation damage," commented by Manager 9.

In addition, customers increasingly common to look for online product reviews when gathering pre-purchase product information and forming purchase intentions [21]. Customers can easily express and distribute their opinions to large audience, and banks are likely to find it increasingly difficult to manage the messages that customers receive about their products/services. The net effect has been to increase the power that customers have [20].

5.0 CONCLUSION

This paper showed on how key aspects of the model have changed and illustrated that the classification of ICT impact on Gaps Model of Service Quality in four categories: Listening Gap, Service Design and Standards Gap, Service Performance Gap and Service Communication. This study also suggested that the effects of ICT on bank performance can be realized mainly through customer service. In recent times, banking industry has swiftly introduced innovation banking technologies and electronic-banking services. Most of the banks have invested in expanding and improving the information technology systems and a number of new electronic-banking services have been developed.

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