Strategic alignment of technological innovations and quality service of commercial banks in Kakamega Central sub-county, Kenya

ABSTRACT

Environment in which organizations operate today are divergent and fluid for the organisation to survive. Fierce cut throat competition has compelled organizations to devise strategic approaches to counter this competition. Achieving competitive advantage and improving organizational quality service have become the key goal that business firms are struggling to attain. This study therefore sought to investigate the effects of strategic alignment on quality service of Commercial Banks in Kakamega Central Sub-County, Kenya. The study specific objective of the study was to determine the technological innovations on quality service. The study adopted descriptive survey design. The study population comprised of all the licensed commercial banks in Kakamega Central Sub-County, from which a representative sample of 10 commercial banks was drawn. Three (3) senior officers (branch manager, operation manager and customer relations manager) were further drawn from each of the sampled 10 commercial banks to make a total of 30 officers. The main study instrument was a questionnaire which comprised of Likert-type scale questions on the main variables of the study. The data was analyzed using both descriptive and inferential statistics. Hypothesis testing was done by use of regression and correlation analysis. Validity was checked during piloting to ensure all the items in the main study were functioning. Moreover, to ensure validity of instruments, content validity was established and pilot testing process used to test reliability comparing with Cronbach’s Coefficient which yielded an alpha of 0.799.

Keywords: Strategic alignment, quality service, commercial banks, technological innovations.

INTRODUCTION

The findings revealed that technological innovation, customer relationship management system and organizational structure had statistically significant influence on quality service of commercial banks in Kakamega Central Sub-County Kenya and tests for significance also showed that the influence was statistically significant. The study recommended that the management of commercial banks should invest more in technological innovations to ensure all the banking operations are informational and technologically compliant. The managers of commercial banks will use the study findings as a basis for formulation of policies on strategy changes that can enhance their quality service. The academicians and researchers will find the study useful in that it contributes to academic literature and theory by providing empirical evidence for use by educators, scholars and researchers in the survey of strategic management.

Strategic alignment in manufacturing contexts was first discussed by Skinner (1969), followed by theorists such as Wheelwright and Hayes (1985), Joshi et al. (2003), Decoene and Bruggeman (2006) and Brown et al. (2007).
In an information technology (IT) context, the subject was discussed by Tallon (2011) and Chao and Chandra (2012). Strategy alignment between organization objectives and business unit and support functions became crucial for organizations to be successful. Organizations are able to execute its strategy well to compete with its rivals if organizational strategies are linked to business units and support functions within organization (Skinner, 1969). In contrast, lack of alignment creates opposite results. For this reason, Skinner (1969) gave a warning of the lack of alignment and he noted that corporate organizations become weak to implement its strategy.

Initial argument on the importance of strategy alignment was the case in manufacturing, in which at the time corporate strategy and manufacturing policy did not have a synergy to execute the corporate strategy. This finding was from his investigation from the company where top-management and manufacturing managers tend to ignore involving and executing together any decision to support corporate goals (Skinner, 1969).

Based on this investigation, Skinner (1969) advocated that if the company wants to gain a competitive advantage top-down linkage it should be conducted by the company. Skinner (1969) thesis was further developed by Wheelwright and Hayes (1985) who offered steps to make manufacturing company more competitive. They argued that the manufacturing strategy has an important part in supporting the company’s position. They suggested that top-down alignment structures could help and ‘internally supportive’ team unit managers should understand business strategy priorities that could be used as the basis for developing unit targets (Wheelwright and Hayes, 1985). In this step, each functional unit is involved and helps the other to support and strengthen the company’s ability to compete with competitors.

In addition, top-down alignment can enhance the company’s capability to improve business performance. For example, Sun and Hong (2002) study, conducted in more than twenty countries, showed that when alignment between manufacturing strategy and business strategy occurs, business performance improvement and business objectives can be raised. This finding is similar to that of Smith and Reece (1999), who noted that alignment has significant and direct effects on a company’s performance. More recently, Chenhall (2005) found that strategic alignment of manufacturing make a considerable contribution in achieving company’s strategic outcomes.

No example of strategic alignment in the service sector, however, appears to exit. The authors believe that strategic alignment in the service sector could not be generalized to its counterpart manufacturing sector since the service sector has embedded characteristics (that is, intangibility, heterogeneity, inseparability from product and consumption and perishability) that distinguish it from the manufacturing sector (Lovelock and Gummesson, 2004; Auzair and LangSurvey-Smith, 2005). Hence, following Auzair and LangSurvey-Smith (2005: 400) suggestion of applying the role of the management control system (MCS) of manufacturing in the service sector, I am of the opinion that strategic alignment of manufacturing ‘requires a re-orientation to be effectively implemented in service organizations’.

Commercial Banks in Kenya have experienced fierce competition among themselves. Quality service has become a major concern for these banks (Munusamy et al., 2010). As the financial institutions struggle to expand their reach, customer satisfaction with services rendered by such institutions has become an issue (Kotler, 2009). According to Wilson et al. (2008), customer satisfaction is influenced by the quality of product and services offered by institutions quality. According to Gustafsson et al. (2005), customer satisfaction occurs when customer needs and expectations are met at all time and every time throughout the life of a product or service. Customer satisfaction results from either the quality of banking services, quality of service, engagement of the customer, price factors and meeting or exceeding customers’ expectations, consuming products and services (Prabhakar, 2005).

Although entrance of technology have enhanced customer satisfaction in the banking sub-sector, with impact on increased customers retention, much is still needed to make financial services firms become customer’s first preference (Waqarul and Bakhtiar, 2012). Amid an economy of innovative technologies and changing markets, poor quality of service has been blamed to contribute to customer dissatisfaction. In addition, insufficient innovations in establishing new financial products and services add salt to the injury, exacerbating further the level of customer dissatisfaction. It is against this background that the researcher sought to establish the extent to which technological innovations affects quality service of Commercial Banks in Kakamega Central Sub-County. The study also sought to test this hypothesis: There is no significant relationship between technological innovations and the quality service on Commercial Banks in Kakamega Central Sub-County.

Quality service

Currently, with an ever increasing competition, quality service has become a popular area of academic investigation and has been recognized as a key factor in keeping competitive advantage and sustaining satisfying relationships with customers (Zeithmal et al., 2000; Wang and Wang, 2007). Quality service has been defined in services marketing literature as an overall evaluation of service by the customers. Perceived quality service is believed to result from comparison between customers’ previous expectations about the service and their perceptions after actual service experience (Ganguli and
Grönroos (1982) described the total quality service as customer’s perception of difference between the expected and the perceived quality service. He also defined the concept of perceived quality service as the outcome of an evaluation process, where the consumer compares his expectations with the service he perceives or has received (Wang and Wang, 2007).

Quality service is considered as a critical success factor for modern service businesses. It has been discussed conceptually as a potential alternative to traditional skills and resources, as well as, empirically tested as a potential driver of improving business performance (Newman, 2001; Kang and James, 2004; Akroush, 2009).

Quality service is commonly noted as a critical prerequisite and determinant of competitiveness for establishing and sustaining satisfying relationships with customers. Previous studies suggest that quality service is an important indicator of customer satisfaction (Wang and Wang, 2007). Focus and adherence to quality service help organizations for their successful operations and gaining competitive advantage over others (Wang and Wang, 2007).

Empirical studies found that there is a positive and significant relationship between quality service and business performance (Kang and James, 2004; Chumpitaz and Paparoidamis, 2004; Lai et al., 2005; Akroush, 2008a, b, 2009). Studies have concluded that quality service exerts a significant positive influence on service business performance assessed based on financial and non-financial measures (Zeithaml, 2000; Duncan and Elliot, 2002; Akroush, 2008a, b, 2009).

Technological innovations and quality service of commercial banks

A study carried out by Parasuraman et al. (2005) has shown that self-service driven through technology automatically puts customers in a co-production role, changing the nature of service delivery dramatically. This shift results in customers having expectations and perceptions related to their own abilities and performance that will influence their overall assessment of service excellence beyond what the employee or service provider may do. In addition to altering how services are delivered, technology advances have resulted in new services that could not have been imagined even a decade ago. What customers expect from these new, innovative, technology-driven services does not necessarily fit the model of early models of service expectations.

Gersten and Wortzel (2007) analyzed the relationship between the usage of Internet-based innovation technologies, different types of innovation and financial performance at the firm level. Data for the empirical investigation originated from a sample of 7,302 European enterprises. The empirical results show that Internet-based innovation technologies were an important enabler of innovation in the year, 2003. It was found that all studied types of innovation, including Internet-enabled and non-Internet-enabled product or technological innovations are positively associated with turn-over and employment growth. Finally, it was found that innovative activity is most of the time associated with higher profitability.

According to Adam and Farber (2000) in the organizational context, technological innovation may be linked to performance and growth through improvements in efficiency, productivity, quality, competitive positioning and market share, among others. They also found that technological innovation is positively related with performance. During the last few decades, developing countries (DCs) have striven to be successful in the process of technology development. For technological development purposes, it is necessary to develop the four interrelated components of technology named humanware, orgaware, inforware and technoware at the same time and in parallel.

Regarding the importance of technological innovation, there are huge body of knowledge like, technological innovation which is a means of survival and growth of industrial sectors or technological innovation recognized as a major contributor of economic growth and a dominant factor of business success not only in developed countries but also in DCs (Pack and Westphal, 2006; Wilkinson, 2003). Gersten and Wortzel (2007) suggested that one of the requirements for economic and industrial development of DCs is their ability to successfully innovate. According to Tefler (2002), a company must innovate or die, while the process of innovation is fundamental to a healthy and viable organization. Those who do not innovate ultimately fail.

Hill and Utterback (2009) identified technological innovation as a major agent of development and change in societies linked to rising productivity, employment growth and a strong position in export markets, trade and improved quality of life. However, the inherent complexity of the process of technological innovation and its involvement in interaction with different environmental as well as, industry-specific factors made studies of the characteristics of technological innovation seem difficult to carry out.

Adrienne et al. (2003) while studying the relative importance of technology in enhancing customer relationships in banking suggested that e-quality service is amongst a firm’s competitive capabilities that lead to business performance. Al- Hawari and Ward (2006), who carried out a study on the automated quality service on Australian banks’ financial performance and the mediating role of customer satisfaction, marketing intelligence and planning demonstrated that quality service impacts on customer satisfaction in turn affects the financial
performance of banks. It should be noted that none of these studies focused on the technological innovations and quality service of commercial banks in Kakamega Central Sub-County.

According to Alu (2002), information technology affects financial institutions by easing enquiry, saving time and improving service delivery. In recent decades, investment in IT by commercial banks has served to streamline operations, improve competitiveness and increase the variety and quality of services provided. Studies by Agboola (2004), illustrated that the application of information and communication technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamental importance and concerns to all banks and indeed a pre-requisite for local and global competitiveness. The ICT directly affects how managers decide, how they plan and what products and services are offered in the banking industry. It has continued to change the way banks and their corporate relationships are organized worldwide and the variety of innovative devices available to enhance the speed and quality of service delivery (Agboola, 2004, 2001).

A study by Karimi et al. (2002) on the impact of information technology management practices on customer service aimed to gauge whether IT management practices differ among firms where it has a major role in transforming marketing, operations, or both, which gave the firms advantage by affecting customer service. Several research hypotheses were tested using data obtained from a survey of 213 IT-leaders in the financial services industry. The results clearly indicated that the IT leader firms had a higher level of IT management sophistication and a higher role for their IT leaders as compared to IT-enabled customer focus, IT-enabled operations focus and IT-laggard firms. The study concluded that IT management practices differed among IT leader firms, IT-enabled customer focus, IT-enabled operations focus and IT-laggard firms. This paper was silent on other aspects of IT variation in the rate of adoption of the automated devices. Aragha-Akporo (1998) wrote on the application of information technology in Nigerian banks and pointed out that IT is becoming the backbone of banks’ services regeneration in Nigeria. He cited the Diamond Integrated Banking Services (DiBS) of Diamond Bank Limited and Electronic Smart Card Account (ESCA) of All States Bank Limited as efforts is geared towards creating sophistication in the banking sector.

Wang et al. (2005) claimed that in the 1990s internet banking technology was underutilized as business organizations used it only to market their products and services. Thornton and White (2001), who examined customer orientations and usage of financial distribution channels in the Australian financial industry, found that more recently most financial institutions faced with competitive pressure after deregulation in 1983 have rethought their strategies to take full advantage of internet, cell phone and other modern methods of conducting business.

Tan and Teo (2000) observed that the challenge to expand and maintain banking market share has influenced many banks to invest more in making better use of the internet and other related technologies. The emergence of
internet and SMS banking had made many banks (17) have a rethink on their Information Technology (IT) strategies in competitive markets. Lim et al. (2004) conducted a meta-analysis study on the relationship between IT investment and organizational performance, noting that previous studies examining IT investments return have shown inconclusive results. From an analysis of 3,883 subjects obtained from prior studies, they found strong support for return on IT investments.

Singh (2004) examined internet technology in the South African banking industry and highlighted that internet market potential is significant because banks have the opportunity to target most segments in the industry both locally and internationally. The Cedar group consulting firm (2004) survey reported that the technological innovation could play a major role in transforming the workplace to enhance productivity by reducing operational cost and improving employee relationships through improved service delivery. The investigators noted that as the transformation progressed in the workplace, the level of sophisticated services also increased.

Bresenahan et al. (2002) examined the IT on the organizational workplace by analyzing 300 responses and showed that IT has the potential to affect process and hence, skill levels. This implies that the adoption of internet technology has implications for how a business organization communicates internally and with their customers and suppliers as well as, how they respond to their customers.

Cox et al. (2002), while undertaking studies on the patterns of innovation in UK-based industries found that most firms engaging in innovation were concerned with economic factors. Direct costs of innovation and the costs of finance were the strongest perceived innovation constraints. This was followed by the excessive perceived economic risk of innovation. An enterprise’s internal capabilities were regarded as less problematic. However, Khangati (2006) while undertaking studies on the patterns of innovation in Kenyan-based industries found that most firms engaging in innovation were concerned with economic and organization factors. Direct costs of innovation, costs of finance and enterprise’s internal capabilities were the strongest perceived innovation constraints. Omond (2003) carried out a study on the adoption of automatic teller machines (ATMs) by retail banks in Kenya which led him to conclude that larger banks, operating in local banking markets 30 show a higher probability of installing ATMs than smaller banks.

De Young (2001, 2005) observed that, as compared with conventional de novo banks, the Internet de novo banks are less profitable due to low business volumes (fewer deposits and lower non-interest income) and high labor expenditures. However, the author also reports that the financial performance gaps narrow quickly over time due to scale effects. Delgado et al. (2007) similarly found that European Internet banks demonstrate technology-based scale economies.

Roselyn and Ngumi (2013) conducted a study on influence of bank innovations on income of Commercial Banks in Kenya and concluded that bank innovations have a moderate influence on the income of commercial banks in Kenya. Since technological innovation is aggressively and continuously adopted in Kenya, the government should continue to provide more incentives for research and development to researchers to continue investing their time and skills in discovering more bank innovations. The 23 authors recommended that the government should pursue a strategy to provide incentives for technology transfer from more developed economies in order to promote the adoption of world class innovations. More incomes for the banks due to adoption of innovations translates to more jobs and improvement of the country’s gross domestic product and therefore contributes to the overall macro-economic goals of the government (Roselyn and Ngumi, 2013). Mwania and Muganda (2011) produced mixed results regarding the impact of innovations on bank performance while Mwania and Muganda (2011) concluded that financial innovation had significant contribution to bank performance.

Gakure and Ngumi (2013) did a study on whether bank innovations influence profitability of commercial banks in Kenya and concluded that bank innovations had a statistically significant influence on bank profitability. This means that the combined the bank innovations in this research are statistically significant in explaining the profits of commercial banks in Kenya. Banks in Kenya have achieved more than a decade of boosting their earning capability and controlling costs through adoption of innovations like the mobile banking, internet banking and recently the agency banking.

Adoption of internet technologies as a way of doing business has significant advantages. Organizations are embracing e-commerce as a means of expanding markets, improving customer service, reducing costs and enhancing productivity (Wenninger, 1999). Efficiencies are experienced in marketing and advertising; new technologies make disintermediation possible, eliminating the middleman (Turban et al., 2004). Other efficiencies include reduced inventory and round the clock access at no additional cost. Superior banking technologies enable higher customization (Choi and Whinston, 2000) allowing organizations to improve customer service. A vital benefit of an integrated banking technology is access to global markets which enables businesses to expand their reach. For instance, the internet allows for unconstrained awareness, visibility and opportunity for an organization to promote its products and services (Senn, 2000).

Conceptual framework

A conceptual framework is a theoretical structure of assumptions, principles and rules that holds together the ideas comprising a broad concept (Zikmund, 2003). The
Technological innovations
Mobile banking
ATM Services
Ticketing portals

Service quality
1. Time and timelines
2. Completeness
3. Consistency
4. Responsiveness

Figure 1: Conceptual framework

Table 1: Descriptive statistics of technological innovations.

<table>
<thead>
<tr>
<th>Items</th>
<th>SD (%)</th>
<th>D (%)</th>
<th>N (%)</th>
<th>A (%)</th>
<th>SA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMs have enabled customers to access their services</td>
<td>4(13.3)</td>
<td>3(10.0)</td>
<td>6(20.0)</td>
<td>0(0.0)</td>
<td>17(56.7)</td>
</tr>
<tr>
<td>ATM Services have enabled customers to access bank</td>
<td>1(3.3)</td>
<td>1(3.3)</td>
<td>5(16.5)</td>
<td>1(3.3)</td>
<td>22(73.3)</td>
</tr>
<tr>
<td>Portal ticketing system has helped ease congestion in</td>
<td>10(33.3)</td>
<td>7(23.3)</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>13(43.3)</td>
</tr>
</tbody>
</table>

independent variables of this study were: technological innovations while dependent variable was quality service.

METHODOLOGIES

The study was conducted in Kakamega Central Sub-County in Kenya in 10 registered banks branches (CBK Annual Supervisory Report, 2015). For the purposes of this study, the researcher employed descriptive survey design. The target population included staffs in management for the ten branches of commercial banks in Kakamega Central Sub-County. In this study, 10 branch managers, 10 operational managers and 10 Customer Relations Managers at the branches were used. The data collection instrument in this study was a questionnaire. The research instrument was conveyed to the respondents through the drop and pick technique. To establish the validity of the research instrument the researcher sought for the opinions of experts in the survey of the study especially the researcher’s supervisor. This facilitated the necessary revision and modification of the research instrument, thereby, enhancing validity. Reliability was determined using Cronbach alpha and they were found reliable with alpha value of above 0.7 (technological innovation (α=0.747), while quality service had lower α level at (α=0.712). The quantitative data was edited and coded into Statistical Package for Social Sciences (SPSS) for analysis. SPSS generated descriptive statistics such as frequencies, mean and standard deviation. The study adopted the regression model to establish the effect of strategic alignment on quality service of Commercial Banks in Kakamega Central Sub-County.

RESULTS AND DISCUSSION

Descriptive statistics for technological innovations

To determine whether the technological innovations had any effect on quality service, respondents were required to state their level of agreement with four statements relating to technological innovations and quality service in commercial banks in Kakamega Central Sub-County where; 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly agree. Table 1 shows the relevant results. From Table 1, 4(13.3%), of the respondents strongly disagreed, 3(10.0%) of the respondents disagreed, 6(20.0%) of the respondents were neutral, while 17(56.7%) of the respondents strongly agreed that ATMs have enabled customers to access their services with ease in their commercial banks (Mean=3.7667, SD=1.54659). Further, 1(3.3%) strongly disagreed, 1(3.3%) disagreed, 5(16.5%) agreed, and 22(73.3%) strongly agreed that Mobile banking services have enabled customers to access bank services at convenient places in their commercial banks (Mean=4.4000, SD=1.10172). The findings also revealed that 10(33.3%) of the respondents strongly disagreed, 7(23.3%) disagreed, and 13(43.3%) of the respondents strongly agreed that portal ticketing system has helped ease congestion in their commercial banks (Mean=2.9667,
Table 2: Regression analysis results.

<table>
<thead>
<tr>
<th>Model summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Standard error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.598&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.357</td>
<td>0.334</td>
<td>3.18901</td>
</tr>
</tbody>
</table>

<sup>a</sup>. Predictors: (Constant), Technological Innovations

ANOVA<sup>a</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>158.212</td>
<td>1</td>
<td>158.212</td>
<td>15.557</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>1 Residual</td>
<td>284.754</td>
<td>28</td>
<td>10.170</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>442.967</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>. Dependent variable: quality service
<sup>b</sup>. Predictors: (Constant), technological innovations

<table>
<thead>
<tr>
<th>Coefficients&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Standard error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>9.647</td>
<td>1.865</td>
<td></td>
<td>5.174</td>
</tr>
<tr>
<td>Technological innovations</td>
<td>.539</td>
<td>.137</td>
<td>.598</td>
<td>3.944</td>
</tr>
</tbody>
</table>

<sup>a</sup>. Dependent variable: quality service

SD=1.84733).

Effect of technological innovations on the quality service of Commercial Banks in Kakamega Central Sub-County

The study used the correlation r (beta, β) to test the research hypothesis. The test criteria was set such that there is either a positive or negative effect if the value of beta, β,≠0. The mean of technological innovations was correlated with mean of quality service of commercial banks and the results were as shown in Table 2.

Table 2 shows the correlation of the mean of technological innovations and mean of quality service had a beta term β = 0.598, P=0.01. This implies that the value of beta is positive and significant. Based on this value, it therefore implies that there exists a statistically significant positive effect of technological innovations on the quality service of commercial banks in Kakamega Central Sub-County. From the results, 35.7% of quality service of commercial banks in Kakamega Central Sub-County can be explained by technological innovations (r<sup>2</sup> = 0.357) and the relationship followed a simple regression model of the nature P= α + β<sub>1</sub>TI + ε, where P is the quality service of commercial banks, α is the constant intercept of which in our case is 9.647 and beta β<sub>1</sub>= 0.598, which at times is referred to as the slope coefficient, TI is the technological innovations and ε is the standard error term which in this case is 3.18901.

The study is in line with past studies which revealed that technology strategy played an important role in determining firm quality service in technology-driven industries such as industrial automation company (Mitchell, 2002). According to Thompson et al. (2010), accurate and timely information about daily operations is essential if managers are to gauge how well the strategy execution process is proceeding and that information systems need to cover five broad areas of customer data, operation data, employee data, supplier/partner/collaborative ally data, and the financial quality service data. Further, these results corroborate with a study conducted by Ngugi and Karina (2013), in Kenya which concluded that technological innovation strategy improved the performance of commercial banks and also service convenience to the customers.

Conclusion and Recommendation

The study concluded that there exists a statistically significant positive effect of technological innovations on the quality service of Commercial Banks in Kakamega Central Sub-County, Kenya. The study recommended that the management of commercial banks should invest more in technological innovations to ensure all the banking operations are informational technologically compliant. This is strengthened by the fact that those banks which use financial innovations have had very positive impacts on the quality service of the banks. Furthermore, for the
banks to be highly competitive, they need to intensify more use of modern technological innovations such as internet based banking services. Technology is one of the key elements that define a society or civilization.

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