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INFLUENCE OF TECHNOLOGICAL CHANGE ON THE STRATEGIC PLANNING OF COMMERCIAL BANKS IN KISII CENTRAL BUSINESS DISTRICT, KISII COUNTY, KENYA

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Abstract: The ability of firms to survive and manage change is turning out to be increasingly important in a competitive setting and globalization. This study intended to analyze technological change and their influence on strategic planning in the banking sector, case of commercial banks in Kisii Central Business District in Kisii County, Kenya. The research utilized dynamic capability theory. This study applied the descriptive research design. The target population was the 15 banks encompassing of 319 top, middle and lower-level management staff. A class-conscious random sampling technique was utilized to arrive sample 25% (79) respondents. This study employed a semi-structured questionnaire self-administered via a drop and pick later way. Data was analyzed using the mean score, frequencies, standard deviation, percentages, weighted mean scores and regression analysis. Data was presented by tables and figures. The study found that technological change influences strategic planning of commercial banks in Kisii Central Business District to a great extent. From the results, technological changes have a significant effect on the processes, products and services produced.

Keywords: Technology, Strategic Planning, Competitive Advantage

Introduction

Commercial banks function below extraordinarily aggressive enterprise throughout the world. In Europe, Dunkley (2017) notes that the banking quarter is extraordinarily aggressive because of the emergent danger from fintech companies. Roberts (2017) notes that business banks in Europe anticipated to lose as much as 22 billion euros with inside the charge enterprise because of new offerings with the aid of using era firms. In Africa, the banking enterprise is extraordinarily aggressive throughout the continent. In Ghana, Price Water House Coopers., (2017) notes declining marketplace proportion of Uni Bank Ghana Limited (UGL) one of the country's pinnacle appearing banks which became attributed to excessive competition from new entrants in its middle markets. In south Africa, (Jaadan, 2018) referred to an increasing aggressive marketplace surroundings in phrases of the marketplace proportion as indicated with the aid of using customer numbers.

Employee skills associated with new technologies are a key factor in increasing competitiveness advantage. Ng`eno (2012) points out that employees had to be trained to use them New technology and technology with expertise in applying new technology was used through the institution. Mohammud (2016) found that employees' skills were inadequate Unable to meet employee expectations due to use of new technology for her work. Mohd and Kassim (2013) have discovered the skills and abilities of their employees It has a great impact on the competitive advantage of an organization.

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Organizations have to come up with good and relevant techniques in order to remain successful. For the strategies to be relevant all the environmental elements must be considered whilst formulating the strategy (Dasgupta, Gupta and Sahay, 2011). A very quintessential thing to approach is technology. The strategic exploitation of technological know-how in its enterprise methods and the merchandise and services of an organization will translate to greater productivity, profitability and organizational success. Technology can provide new types of customer service, new distribution channels, new data based totally products or can even rearrange enterprise boundaries (Tassey, 2012). It is therefore imperative that organisation's maintain a close eye on technology and the contemporary improvements that keep science moving forward. This way, management can take advantage of the applicable technologies and include them into the method of the organization.

Bolisani and Bratinu (2017) recommended that collective organizational knowledge might also be used to complement the gap between the restricted rationality of decision-makers and the dynamic and unsure desires of the future. Organizational collaboration via technology might also facilitate the series of understanding from a couple of layers and personnel inside an employer while promotion stakeholder buy-in inside the strategic planning system (Bolisani & Bratinu, 2017). Bryson et al. (2018) cautioned that whilst modern strategic planning efforts are restricted to a particular crew or team, collaborative efforts to have interaction organizational participants are cited to enhance the strategic planning procedure through the collection of various thoughts and forecasts. In conjunction with the practical definition of strategic planning, collaborative technological know-how such as conferencing programs, social media, and crowdsourcing may additionally beautify the quantity of diverse ideas to assist forecast each the wishes and future objectives of an organization. Although the collaboration and verbal exchange of corporation thoughts may additionally facilitate the planning process, the thoughts may additionally only characterize a unique paradigm if the collaboration efforts do not encompass a diverse supply of information (Pope, 2004). Collaborative technological platforms, such as social media and crowdsourcing networks, have the workable to convey a diverse range of stakeholders to the table, facilitating a greater productive conversation, (Buehring & Eight amp; Liedtka, 2018), while promotion open strategic planning (OSP), grounded in transparency, collective inclusiveness, and data technology (Amrollahi & Samp; Rowlands, 2017).

Kisii Central District's economy is based on commerce and agriculture. Kisii town is a hive of activity, with tall commercial buildings dotting the landscape. It has healthcare and education-related businesses. There are numerous other business ventures in Kisii Central, including hotels, restaurants, and sports pubs, among other commercial activities Opano, (2013). The District hosts commercial banking and financial institutions' branches including the long-existing Kenya Commercial Bank, Absa Bank, National Bank and Co-operative Bank and newer entrants such as Equity Bank, Eco-Bank, and Sidian Bank, all doing thriving business. In some cases, these businesses are owned by investors from outside Kisii testifying to the cosmopolitan nature of the town.

Problem Statement

A report by Cytonn (2018) indicates that listed commercial banks in Kenya are currently facing major internal and external challenges of fierce competition, poor financial performance, rapid change, and variety of customer desires, renewable technology, social responsibility, and other factors. Although the report acknowledged poor financial performance, financial institution of Kenya report (2018) indicate that the banking sector registered improved performance in 2018 with profit before tax increasing by 14.6 percent to Ksh.152.7 billion in December 2018 from Ksh.133.20 billion in December 2017 consistent with Central Bank

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of Kenya, (2016) the industry has been faced with stiff competition. Some banks are forced to finally end up like chase bank and imperial bank thanks to failure to embrace effective customer management strategies which will enable them operate optimally within the volatile banking sector. Similarly, Kariuki (2020), in her study established that banks have poor financial performance and as a consequent suggested the necessity for strategic going to improve financial performance. However, the aspect of technology change management has not been explored in previous studies. Other studies that have examined the role of change management include Meja (2009) who examined the role of change management practices at Equity bank; Olivia (2014) who examined the role of leadership on strategic change management in banking company and Arupe and Nairoti (2014) who examined strategic change management at commercial bank of Kenya. These studies failed to address the impact of technological changes on the strategic planning of economic banks in Kisii County, Kenya. Therefore, this study sought to bridge the present gap within the influence of technological changes on the strategic planning of Kisii county commercial banks.

The Objective of the Study

To determine the influence of technological change on the strategic planning of Commercial banks in Kisii Central Business District, Kisii County

Literature Review

Theoretical Foundations of the Study

Dynamic Capability Theory

Dynamic Capabilities (DC) theory borrows from the foundations of the RBV theory. David Teece and Gary Pisano first introduced it in 1994 who argued that for a company to be able to sustain a competitive advantage, it must have the ability of being able to adopt and change strategy quickly and at same time conform to the changing environment. The theory expounds two main dimensions, which are the regeneration of capability by the firm and the firm's ability to renew its competencies to react quickly to change in strategy and the ability of the strategic management to apply these changes in the business environment (Gizawi, 2014).

Empirical Review of Literature

Technological Change on the Strategic Planning

The overall mechanism of discovery, advancement, and transfer of technologies or processes is referred to as technological transition. In the technical innovation period, (Beeson and Davis 2000) conducted research on the advent and achievement of organizational transformation. According to him, some firms concentrate on technology change — letting it drive other change within the organization. It is common for change management to be highly focused on technology changes. In essence, technological change is that the invention of a technology (or a process), the continual process of improving a technology (which often makes it cheaper), and its diffusion throughout industry or society. He also stated that certain innovations are closely linked, and that there is a strong link between the subject's previous experience with specific tools and their subsequent use of other applications. In their recommendations, the authors suggested that for organizations to successfully install information technology systems and utilize them effectively, they need to ensure that their employees get the required training concerning IT and its usefulness in strategic decisions, technological change is based on both better and more technology integrated into the framework of existing operational processes.

In their report on best practice and beyond, McKinsey (2006) concluded that, while IT implementation has reduced time, space, and information distances by promoting the coordination of the whole service delivery

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chain, contact workers often need the authority and autonomy to effectively work with sophisticated technical resources in their interactions with customers. Aulak and Sarker (2005) conducted research on strategic ambidexterity in foreign expansion: sector, commodity, and organizational boundaries discovery and exploitation. They said that technical progress is the result of the emergence of new information that is applied to real-world problems.

Methodology

Research Design

The research study employed the descriptive research design in the process of determining the findings concerning the effects of organizational change on strategic planning in the banking sector of commercial banks in Kisii Central Business District. According to Cooper and Schindler (2006), a descriptive study is concerned with finding out the what, where and how of a phenomenon.

The Population of the Study

The study's target population will be 15 banks. Accordingly, there are three hundred and eighteen (319) top, middle and low-level management staff currently serving in the commercial banks in Kisii Central Business District. The Top-level Staffs are Managers and Heads of Department, Middle-level Managers are Assistant HODs and supervisors, and Low-level Staff is the general staff.

Sample Size

Mugenda (2009), denotes that a sample of 10-30% of the population is suitable for a research to represent the entire population. A selection of 25% from each group would be chosen from a Target population of 319 different categories of employees in proportions that each group carries to the research population. This is because simple random sampling gives every subject of the population an equal chance of being picked. This generated a sample of 79 respondents which the study sought information from. This sample is appropriate because the population is not homogeneous and the units are not uniformly distributed. This made it easier to get adequate and accurate information necessary for the research.

Data Collection

The researchers sought authority and obtained a Research Permit from the National Council for Science, Technology and Innovation (NACOSTI) to collect data. A "drop off and pick up after" method was used to administer the questionnaire to commercial banks. The published financial statements of the commercial banks will be secondary data. Data was collected from 79 respondents using a questionnaire that was tested for reliability and validity.

Test of Validity and Reliability

A pre-test was done by administering the instrument to seven different senior cadres of employees from the commercial Banks in the neighbouring Nyamira County to fill for evaluation of the statement items for relevance, meaning and clarity. Content validation was also done by dividing the instrument into several sections. Each section was checked carefully to ensure that it conveyed the necessary message and attracted the relevant feedback, as per the tested specific themes of the research objective and hypothesis. The Cronbach's Alpha coefficient was used to measure the internal consistency of the constructs. The alpha coefficient of .700 or above was used as an acceptable measure.

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Data Analysis and Discussion

Response rate

The study targeted 79 top, middle and low-level management staffs working in of the commercial banks in Kisii Central Business District. From this population, a sample of 52 responded. The response rate achieved for the questionnaire was 82.5% this was valid and reliable representation of the targeted population hence adequate for the study analysis. According to Mugenda and Mugenda (2009) 50% response rate is adequate for analysis in descriptive study.

Table 1: Demographic Profiling

	Demographic Characteristics	Frequency	Percent
Gender	Male	32	62
	Female	20	38
Age Brackets of the	21-30 Years		
Respondents		7	13
	31-40 years	11	21
	41-50 years	20	38
	Above 50 years	15	28
Level of Education	Graduate	21	40.5
	Post graduate level	26	50.0
	Certificate/Diploma	5	9.5
Work Experience	Less than one year	8	15
	1- 5 years	18	34
	5-10 years	20	38
	Over 10 years	7	13

Source: Field Data (2022)

Accordingly, 62% of the respondents were males while 38% of them were females. The age of the respondents showed that majority 38% of the respondents indicated that their ages fell between 41 and 50 years 28.0% of the respondents aged above 50 years, 21 % of them indicated that they were aged between 31 and 40 years, while 13.0% of the respondents were between 21 to 30 years of age. The respondents were well distributed in terms of age and that they are active in technological advancements and productivity and hence can contribute.

In Level of education that is, 40.5% of the respondents had acquired a graduate degrees level of education, 50.0% of the respondents indicated that they had acquired a post graduate level of education, while 9.5% of the respondents indicated that they had acquired other levels of education such as ICPAK and Higher Diplomas. These outcomes mean that majority of the respondents had at least a graduate degree and hence understood the information sought by this study.

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From the study, 38% of the respondents unanimously indicated that they had worked with commercial banks in Kisii Central for a period of 5 - 10 years, 34% of them had been working in the banks in Kisii Central for 1-2 years, 15% of them had been working in the commercial banks in Kisii for less than one year whereas 13% of them had worked in commercial banks for a period of more than 10 years. This implies that most of the staffs participating in this study had been operating for an ample time thus they were conversant of the information that the study sought

Descriptive statistics

Descriptive Findings of technological change and its effect on strategic planning

The respondents were further required to rate their level of agreement to various statements about technological change and its effect on strategic planning of commercial banks in Kisii Central District, the respondents rated five point likert scale questions and the findings are indicated in Table 2.

Table 2: Effects of Technological Change on Strategic Planning

Statements on technological change	1	2	3	4	5	Mean	Std dev
Installation of new systems in the organizational change affects the strategic planning of the Bank	9.6	19.2	11.5	25	34.6	3.5577	1.39204
A mismatch between software tools and company needs challenges strategic planning of the Bank	25	3.8	32.7	25	13.5	2.9808	1.36469
Compatibility of the different systems in organizational change affects strategic planning of the Bank	19.2	15.4	28.8	25	11.5	2.9423	1.28968
New technologies render existing products less marketable and thus need for development of better strategic plan	9.6	25	21.2	38.5	5.8	3.0577	1.12744

Source: Field Data (2022)

Majority of the respondents reiterated that indeed installation of new systems in the organizational change affects the strategic planning of the Bank to a great extent as shown by a mean of 3.5577, while new technologies render existing products less marketable and thus need for development of better strategic plan to a moderate extent as shown by a mean of 3.0577, a mismatch between software tools and company needs challenges strategic planning of the banks to a moderate extent as shown by a mean of 2.9808 and compatibility of the different systems in organizational change affects strategic planning of the banks to a moderate extent as shown by a mean of 2.9423.

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Table 3: Results on Strategic Planning Commercial Banks Kisii County

Rating	Frequency	Percent
Very much effective	20	38.5
Much effective	20	38.5
Moderate effective	12	23.1
Total	52	100.0

Source: Field Data (2022)

According to the results depicted in Table 3, majority of the respondents (comprising 38.5% of the population studies) rated the strategic planning endeavors in the banks to be very much effective, another 38.5% of them rated the strategic planning endeavors in the banks to be much effective, while 23.1% of them rated the strategic planning endeavors in the banks to be moderate effective. These results imply that the banks' strategic planning provide opportunity to involve the various levels of management in the process and ensures that all the different units of the organizations work together towards achieving the same objectives.

The study posed a statement that 'strategic planning consists of planning processes that are undertaken in firms to develop strategies that might contribute to performance' and requested the respondents to indicate whether their banks benefited from strategic planning practices.

Inferential Statistics

Table 4: Influence of technological change on the strategic planning of Commercial banks

Model Summary							
Model	R	R Square	Square Adjusted R Square		Std. Error of the Estimate		
1	.981(a)	0.879	0.691	0.752			
Coefficient of Determination							
		Unstanda Coefficie		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta			
(Constan	nt)	2.837	.112		4.358	0.000	
Technolo	ogical change	0.797	.075	0.235	1.379	.024	

Source: Field Data (2022)

a. Predictors: (Constant), Technological change

b. Dependent Variable: Strategic planning

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Table 4 shows that the technological change have a substantial positive relationship with strategic planning of commercial banks in Kisii Central District. A Pearson correlation of 0.981 is demonstrated. The finding implies that an increase in technological change leads to significant increase in strategic planning of commercial banks in Kisii Central District. Technological change account up to 87.9 percent of the variance in strategic planning of commercial banks in Kisii Central District while other factors not studied in this research contribute 13.1% of the strategic planning of commercial banks in Kisii Central Business District, Kisii County.

Table 5: Karl Pearson's Product Moment Correlation

Variables	Correlations	Strategic planning	Technological change
Strategic planning	Pearson Correlation	1	.321
	Sig. (2-tailed)		.020
Technological change	Pearson Correlation	.321	1

Source: Field Data (2022)

From the findings, there was a positive correlation between strategic planning and technological change with a correlation figure of 0.321

Conclusion and Recommendations

Conclusion

The study deduces that technological change affects strategic planning of commercial banks in Kisii Central Business District with significant effect on the processes, products and services produced as well as technological innovations and technological knowledge/skills and system compatibility and technological (IT) systems. It is worth noting that system compatibility and technological (IT) systems have little effect on strategic planning of commercial banks in Kisii Central District. According to the results, technological change affects strategic planning of commercial banks in Kisii Central District with special attention required on new technologies render existing products less marketable and thus need for development of better strategic plan, a mismatch between software tools and company needs challenges strategic planning of the banks and compatibility of the different systems in organizational change affects strategic planning of the banks. Accordingly, technology change must be incorporated into the firm's overall systems and management structure must be created to support it.

Recommendations

The study hence recommends that the financial institutions should install technological systems that are compatible with the organizational change and strategic planning. They will enable in dealing with processes, products and services produced challenges of technological innovations and technological knowledge/skills, roadblocks to collaboration between departments which fails organizational change and strategic planning. It will also involve installation of new systems whose lack pose challenges in the organizational change and proper knowledge required for successful change practices and strategic planning. The organization should

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also carry out evaluations on organizational efficiencies; employee performance, customer satisfaction and new product/service development to enable them confirm the consequential increment of performances with the various changes undertaken.

References

- Abuor, S. N. O. (2014). Application of modified porter's five forces model in assessing attractiveness of insurance industry in Kenya. (Doctoral dissertation) University of Nairobi. Retrieved from http://hdl.handle.net/11295/95430.
- Aulak, P., & Sarker, M. (2005). Strategic ambidexterity in international expansion: exploration and exploitation of market, product and organizational boundaries. *Academy of Management Best Paper Proceedings International Management Division*, 31-36.
- Arupe, R., & Nairoti, K. (2014). Strategic Change Management Practices at the National Bank of Kenya Limited. Journal of Management Research, 2(3), 65–70.
- Amrollahi, A., & Rowlands, B. (2017). Collaborative open strategic planning: A method and case study. Information Technology & People, 30(4), 832–852. doi:10.1108/ITP-12-2015-0310.
- Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17, 99-120.
- Beeson, I., & C. Davis. (2000). Emergence and accomplishment in organizational change. *Journal of Organizational Change Management*, 13(2), 178-189.
- Bolisani, E., & Bratianu, C. (2017). Knowledge strategy planning: An integrated approach to manage uncertainty, turbulence, and dynamics. Journal of Knowledge Management, 21(2), 233–253. doi:10.1108/JKM-02-2016-0071.
- Bryson, J. M., Edwards, L. H., & Van Slyke, D. M. (2018). Getting strategic about strategic planning research. Public Management Review, 20(3), 317–339. doi:10.1080/14719037.2017.1285111
- Buehring, J. H., & Liedtka, J. (2018). Embracing systematic futures thinking at the intersection of Strategic Planning, Foresight and Design. Journal of Innovation Management, 6(3), 134–152. doi:10.24840/2183-0606_006.003_0006.
- Central Bank of Kenya, (2016). Central Bank of Kenya Bank Supervision Annual Report-2013. Retrieved from https://www.centralbank.go.ke/images/docs/CBK Annual Reports/2013annualreport.pdf.
- Cooper, R., & Schindler, P. (2006). Business Research Methods (7th edition). New York, USA: McGraw Hill Company.
- Dasgupta, M., Gupta, R. & Sahay, A. (2011). Linking Technological Innovation, Technology Strategy and Organisational Factors: A Review. Global Business Review, 12(2), 257-277.
- Dunkley, E. (2017). *Banks Face Losing Market Share To Digital Services*. Retrieved from https://www.ft.com/content/e44a49b2-611e-11e5-9846-de406ccb37f2
- Pope, A. R. (2004). Diversity key in strategic planning. American Water Works Association Journal, 96(4), 63–64. doi:10.1002/j.1551-8833.2004.tb10587.x

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- Tassey G. (2012). Beyond the business cycle: The need for a technology-based growth strategy. Science and Public Policy, 40(2013), 293-315.
- Kariuki A. (2020). Effects of Strategic Planning Dimensions on Performance of Commercial Banks in Kenya. Kariuki, Ann. URI: http://erepo.usiu.ac.ke.
- Meja, F. (2009). Change Management Practices at Equity Bank Limited. Journal of Economics and International Business Research, 1(2), 15–17.
- Mohamud, A. A. (2016). Automated Queuing and the Experience of Kenya Commercial Bank Retail Customers in Nairobi, Kenya. *Journal of Accounting & Economics*, 2(3), 78–85.
- Mugenda, O. M. & Mugenda, A. G. (2009). Research Methods: Quantitative and Qualitative Approaches. Nairobi: Acts Press.
- Ng'eno, J. (2012), Change Management and Organizational Performance of Kenya Commercial Bank. *International Journal of Business and Economics Research*, 8(1), 36-45.
- Olivia, K. (2014). Strategic Leadership And Change Management Practices At National Bank Of Kenya Limited. IOSR Journal of Business and Management, 2(3), 87–95.
- Price Water House Coopers. (2017). Ghana Banking Survey Risk-Based Minimum Regulatory Capital Regime: What It Means For Banks In Ghana. Retrieved from https://www.pwc.com/gh/en/assets/pdf/2017-banking-survey-report.pdf
- Roberts, D. (2017). Wells Fargo Loses Market Share In Charlotte, Despite Deposit Growth. Retrievedfromhttps://www.charlotteobserver.com/news/business/banking/article177025286.html