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Abstract

Purpose: There are different types of drivers of adoption of digitalized marketing operations tactics which include firm size, firm readiness, perceived benefits, perceived barriers, customer pressure and competitive pressure. The purpose of this study was to address the relationship between firm size and the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya. Digitalized marketing operations has transformed the retail sectors by providing access to instantaneous, inexpensive contact among sellers, buyers, investors and advertisers anywhere in the world. This has led to traditional marketing and sales strategies becoming less effective in today's markets. However, there exist a digital divide between consumers and retailers with many retailers failing to leverage the potential of or meet the digital expectations of their customers. This gap between consumers expectation and retail offerings puts at risk more than just shopping revenue that physical store could have earned online, but also poses a serious threat to overall revenue and a challenge to the way they respond to, and anticipate, customers' shopping habits in-store.

Methodology: The research study considered the positivism research philosophy and adopted a descriptive research design. The target population of the study was 180 retail chain supermarkets stores in Kenya and all the 180 retail chain supermarkets were included in the sample. The research instrument of the study was a semi-structured questionnaire administered to all the 180 chief operations managers by use of google surveys and/or drop and pick method. The quantitative information was analysed by the help of SPSS program (v.25.0) and Excel.

Findings: The findings were presented in form of averages, standard deviations, counts and percentages by use of tables. The findings revealed that firm size which include number of employees, number of branches and monthly average customer turnovers ($\beta=0.459$, $p=0.000$) have a positive and significant relationship with the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya. This implies that improvement in 1 unit of the aspects related to firm size improves the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya by 0.253 units.

Unique Contribution to Theory, Practice and Policy: From the findings, the study recommends the Small and Medium Enterprises (SMEs) in the chain supermarket industry to embrace digital marketing operations tactics and also provide additional support and resources to help them overcome the barriers to adoption. It also recommends creation of awareness among larger firms about the benefits of digital marketing operations tactics, and the potential competitive advantage they can provide. The Diffusion of Innovation theory was validated and provided valuable insights into the factors influencing the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya.

Keywords: Firm Size, Chain Supermarkets, Digitalized Marketing Operations Tactics

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INTRODUCTION

Digitalization has profoundly impacted on the society and business in particular (Darrell, Good, Hyman & Grant, (2017). Similar to other societal transformative developments, digitalization has prompted new ways of life, changed and replaced the previous ones. Consumption, consumer behavior and associated business as the single most crucial aspects of contemporary societies have been rapidly altered by the widespread digitalization transformation (Rachinger, Rauter, Müller, Vorraber & Schirgi, 2019). The retail business, owing to its role as the last mile along the consumption journey, is structured around, sourcing, breaking bulk and distribution of consumer goods. Subsequently, these businesses have particularly experienced profound transformation in almost every aspect of retailing including processes, services, products and operations. There has not only been reconfiguration in retailer-consumer interaction due to emerging consumption associated with digitalization, but retailers also participate in providing digital adapted products and services (Hagberg et al., 2017).

Kenyan retails sector has witnessed the rise of various online shopping sites like Jumia, OLX and Kilimall in the recent past. These sites have reported increased activities in their site with Jumia reporting 2,000 people visit its website daily, while OLX has approximately 2 million viewers monthly. The increase in online retail indicates a shift towards digitalization of retail operations (Republic of Kenya, 2017: RETRAK, 2017). According to Lubis (2018), the reasons contributing to online shopping popularity are the changing lifestyle especially by professionals who little time to go shopping in traditional stores. Further, about 13.5 million Kenyans have access to internet over mobile phones making them potential users of online shopping platforms.

Digitalized marketing operations has transformed the retail sectors by providing access to instantaneous, inexpensive contact among sellers, buyers, investors and advertisers anywhere in the world. This has led to traditional marketing and sales strategies becoming less effective in today's markets (PwC, 2020). However, there exist a digital divide between consumers and retailers with many retailers failing to leverage the potential of or meet the digital expectations of their customers. This gap between consumers expectation and retail offerings puts at risk more than just shopping revenue that physical store could have earned online, but also poses a serious threat to overall revenue and a challenge to the way they respond to, and anticipate, customers' shopping habits in-store. Several studies have attempted to explain the relationship between problems associated with low adoption. However, not many of them have addressed the problem of low adoption of drivers of digitization of marketing and sales operations in Kenya retail sector. For instance, Zafar and Mustafa (2017) sought to find out the contribution of SMEs in economic and socio-economic development of Pakistan while Jörling, Böhm and Paluch (2019) sought to investigate the drivers of perceived responsibility for service outcomes in the adoption of Service robots. These studies presented contextual gaps that failed to address the problem of low adoption in the retail sector in Kenya. Therefore, premised on the backdrops of the gaps presented, the current sought to specifically analyze the effects of firm size on drivers of adoption of digitization of marketing and sales operations in Kenya retail sector.

Theoretical Framework

Diffusion of Innovation Theory

The theory was developed by Everett Rogers. It focuses on how new ideas, technologies, or innovations spread and are adopted within a social system. By incorporating the Diffusion of Innovation theory, this study provided a framework to understand the factors influencing the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya. The theory guided the examination of innovation attributes, adopter categories, communication channels, and the adoption process, contributing to a comprehensive analysis of the effects of firm size on adoption patterns.

Empirical Review

Abdulkadir (2018) aimed to look at the effect of financial technology on financial performance of commercial banks in Kenya. Size of the commercial bank was used as the control variables of the study. Despite the latter, size of the firm as measured by the total assets was found to have a significant relationship with financial performance as it is suggested that large commercial banks are able to enjoy from economies of scale. They are also able to attract and retain clients easier than smaller commercial banks that have higher risks of going under. However, the focus was on commercial banks and provided little generalizability to the adoption of digitalized marketing operations by retail chain supermarkets adoption of digitalized marketing operations by retail chain supermarkets.

Araújo and Zilber (2016) sought to understand which factors lead companies to use social media to achieve results. The study used a descriptive approach by surveying 237 companies. The results show that competitiveness in terms of social media relative advantage and its observability were important factors to social media organizational adoption. The study indicated that large companies with more formalized organizational structure (OS) tend to adopt social media more than small ones with no formal OS. The companies studied showed strong organizational disposition for innovation adoption. The study however, did not specify on the lead companies that were targeted. Likewise, the study's independent variable of social media adoption was measured as the count of departments that have adopted social media as a proxy indicator for adoption. However, there is the possibility that one firm may use social media in three departments. This provides a loophole for based findings.

Zafar and Mustafa (2017) sought to find out the contribution of SMEs in economic and socio-economic development of Pakistan. The study was a desk review design based on data collected from secondary sources, that is, research articles, published thesis, and other publication. The review was done about role of SMEs in economic and socio-economic development of Pakistan and made comparison of ease of doing business among China, Iran, India, Pakistan and Afghanistan. The review indicated that, SMEs not only impacts GDP. Despite their small sized nature, they have contributed more towards the sectoral development for instance by enhancing the livelihood of people of the country and by creating more economic opportunities. Small and medium-sized enterprises (SMEs) are non-auxiliary, autonomous firms which employ less than 250 number of workers in Pakistan or having paid-up capital up to Rs.25 million and sales up to Rs.250 million per annum. However, the study presets a contextual gap since there was no

comparison of the SMEs in Kenya especially in the retail chain supermarkets. Likewise, the study did not show the adoption rate of the reviewed SMEs thus presenting a conceptual gap.

METHODOLOGY

The study applied the positivism philosophy where the current study pursued the quantitative approach because the unit under observation is quantitative in nature. The study was cross sectional in nature adopting a descriptive survey design. A combination of both qualitative and quantitative methods was employed in data collection and analysis. By blending the two methods the study aimed to harness the inherent advantages associated with each of two methods. The method enabled quantification of digitalization of market practices by retail chain supermarkets store, and subsequently analyze the relation of firm size and the established of digitalization. The target population of the study was 180 retail chain supermarkets stores in Kenya. All the 180 retail chain supermarkets were included in the sample. However, since the population is small but adequate for study, a census survey was used. The research instruments of the study constituted a semi-structured questionnaire. The questionnaire had both open-ended questions and closed questions. Before collecting data, the researcher sought the approval of the university and then sought permission from the relevant authorities, including a research permit from the National Council of Science, Technology and Innovation (NACOSTI). The study used qualitative as well as quantitative which prior to analysis, was sorted, coded and cleaned to ensure adequacy. Descriptive and inferential statistics was used to analyze the data based on the use of the descriptive and positivism approach. The quantitative information was analysed by the help of SPSS program (v.25.0) and Excel and the results were presented using tables.

RESULTS AND DISCUSSIONS

The descriptive results showed that 77% of the respondents agreed that the store has strived towards having more branches even beyond Nairobi County (mean=4.00 \approx 4, SD=0.67). The results also indicated that 60% of the respondents agreed that each branch is fully equipped with HRM, technological and financial capacity to ensure continuity of business (mean=3.66 \approx 4, SD=0.90). The results also revealed that majority of the respondents (56%) agreed that the total assets of the company are able to sustain business for the foreseeable future (mean=3.83 \approx 4, SD=1.23). The results showed that 95% of the respondents agreed that the employer- customer ratio is manageable and effective (mean=4.28 \approx 4, SD=0.56). The results revealed that 28% of the respondents agreed that the store has more than one supplier to diversify the supplies (mean=3.24 \approx 3, SD=1.17). The results revealed that majority of the respondents (72%) agreed that the turnover of the employees in the store per month is low and thus reduced cost of training new staff (mean=3.85 \approx 4, SD=1.12). The results showed that 66% of the respondents agreed that the store has more than one product lines to diversify the outlets and supply chains (mean=3.89 \approx 4, SD=0.75). The results revealed that 67% of the respondents agreed that the store has online stored as well to capture the online customers across physical borders (mean=3.79 \approx 4, SD=0.93).

In conclusion, the average mean of the responses was 3.82 when viewed on a scale of five points presenting a standard deviation of 0.92. This means that the majority of the respondents agreed that the supermarket chains have the aspects of firm size have enabled them to adopt digitalized marketing operations tactics by chain supermarkets in Kenya. The findings agree with Abdulkadir

(2018) who stated that the size of the firm as measured by the total assets has a significant relationship with financial performance as it is suggested that large commercial banks are able to enjoy from economies of scale.

Table 1: Descriptive Results for Firm Size

Indicators	1	2	3	4	5	Mean	SD
The store has strived towards having more branches even beyond Nairobi County	0%	0%	22%	55%	22%	4.00	0.67
Each branch is fully equipped with HRM, technological and financial capacity to ensure continuity of business	0%	12%	28%	43%	17%	3.66	0.90
The total assets of the company are able to sustain business for the foreseeable future	6%	6%	32%	11%	45%	3.83	1.23
The employer- customer ratio is manageable and effective	0%	0%	5%	61%	34%	4.28	0.56
The store has more than one supplier to diversify the supplies	11%	5%	56%	6%	22%	3.24	1.17
The turnover of the employees in the store per month is low and thus reduced cost of training new staff	0%	22%	6%	38%	34%	3.85	1.12
The store has more than one product lines to diversify the outlets and supply chains	0%	0%	34%	43%	23%	3.89	0.75
The store has online stored as well to capture the online customers across physical borders	0%	11%	22%	44%	23%	3.79	0.93
Average						3.82	0.92

The correlation results revealed that there is a positive and significant association between firm size and the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya ($r=0.635^{**}$, $p=0.000$). The r value of 0.635 indicates a value of greater than 0 which implies that firm size as a linear variable has a positive association with the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya. The findings agree with Abdulkadir (2018) who stated that the size of the firm as measured by the total assets has a significant relationship with financial performance as it is suggested that large commercial banks are able to enjoy from economies of scale. According to Yoga (2019) differences in the specific motives for ICT adoption between small and large firms affected adoption behavior between the two firms' category.

Table 2: Correlation Test of Firm Size

		Firm Size	Adoption of Digitalized Marketing Operations Tactics
Firm Size	Pearson Correlation	1	.635**
	Sig. (2-tailed)		0.000
Adoption of Digitalized Marketing Operations Tactics	Pearson Correlation	.635**	1
	Sig. (2-tailed)	0.000	

Regression analysis was also done in the study to identify the relationship between firm size and the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya.

Table 3: Model Fitness for Firm Size

R	R Square	Adjusted R Square	Std. Error of the Estimate
.635a	0.403	0.399	0.17

Table 3 presents the fitness of regression used in explaining the study phenomena. Firm size is essential in the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya. This is evident, as shown by the R square value which is 0.403. This implies that firm size explains 40.3% of the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya.

Table 4: ANOVA for Firm Size

	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.933	1	2.933	101.342	.000 ^b
Residual	4.341	150	0.029		
Total	7.273	151			

Table 4 showed that the model was also statistically significant implying that firm size affects the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya. This is further supported by the F statistic 101.342 where the value was greater than the critical value at 0.05 significance level, $F_{\text{statistic}} = 101.342 > F_{\text{critical}} = 3.909 (1, 150)$.

Table 5: Regression Coefficients for Firm Size

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
(Constant)	2.292	0.175		13.134	0.000
Firm Size	0.459	0.046	0.635	10.067	0.000

$$Y = 2.292 + 0.459 \text{ Firm Size}$$

Where

Y=the adoption of digitalized marketing operations tactics by chain supermarkets

Table 5 revealed that firm size and the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya have a positive and significant relationship ($\beta=0.459$, $p=0.000$). This implies that improvement in 1 unit of the aspects related to firm size improves the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya by 0.459 units.

The findings agree with Araújo and Zilber (2016) who showed that competitiveness in terms of social media relative advantage and its observability were important factors to social media organizational adoption. The study indicated that large companies with more formalized organizational structure (OS) tend to adopt social media more than small ones with no formal OS.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The findings revealed that firm size and the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya have a positive and significant relationship ($\beta=0.253$, $p=0.000$). This implies that improvement in 1 unit of the aspects related to firm size improves the adoption of digitalized marketing operations tactics by chain supermarkets in Kenya by 0.253 units. These findings were supported by the responses from the questionnaire where the majority of the respondents agreed that the supermarket chains have the aspects of firm size that have enabled them to adopt digitalized marketing operations tactics by chain supermarkets in Kenya.

From the findings, the study concludes that firm size has a significant effect on adoption of digitalized marketing operations tactics by chain supermarkets in Kenya. This is because the store has always strived towards having more branches even beyond Nairobi County; equipping the branches fully with HRM; having technological and financial capacity to ensure continuity of business; the ability of the total assets of the company to sustain business for the foreseeable future and the employer- customer ratio being manageable and effective explain why firm size influence the adoption of digitalized marketing operations tactics by chain supermarkets. Also, the turnover of the employees in the store per month being low and thus reduced cost of training new staff; the store having more than one product lines to diversify the outlets and supply chains and the store having online stored as well capturing the online customers across physical borders are factors also explained the influence of firm size the adoption of digitalized marketing operations tactics by chain supermarkets.

From the results, it is realized firm size had a positive influence on the adoption of digitalized marketing operations tactics. Therefore the study recommends the Small and Medium Enterprises (SMEs) in the chain supermarket industry to embrace digital marketing operations tactics and also provide additional support and resources to help them overcome the barriers to adoption. The study also recommends creation of awareness among larger firms about the benefits of digital marketing operations tactics, and the potential competitive advantage they can provide.

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