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DYNAMIC CAPABILITIES AND PERFORMANCE OF PHARMACEUTICAL FIRMS IN NAIROBI COUNTY

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ABSTRACT

This study determined the influence of dynamic capabilities and performance of pharmaceutical firms in Nairobi County. Descriptive research design was employed in this study. The study targeted 165 respondents from 33 pharmaceutical firms in Nairobi County registered by the Pharmacy and Poisons Board as at 1st January 2023. The sampling frame comprised of customer service representatives, operations managers, procurement managers, marketing managers and production managers. The study sample size was 117 respondents using stratified random sampling technique. Primary data was collected using a well-designed semi-questionnaire. Quantitative data was analyzed using descriptive and inferential statistics using SPSS Version 26.0. Descriptive analysis and inferential analysis were used at a significance level of 0.05. Descriptive analysis included; frequencies, Mean, standard deviation and percentage while inferential analysis involved correlation analysis and linear regression analysis. Prior to conducting multiple linear regressions, the study ensured that the assumptions of linear regression were met. The data was presented in form of tables and models. Using Pearson correlation coefficient, the findings established a direct and positive relationship between performance of pharmaceutical firms and independent variables; marketing capability, technological capability, managerial capability and resilience capability. Further inference using multiple linear regressions showed a significant proportionate contribution of dynamic capabilities towards performance of pharmaceutical firms. This study observed that marketing capability showed the greatest positive significant predictive power performance of pharmaceutical firms in Nairobi County while technological capability had least positive significant predictive power. In this regard, the study recommended that table banking groups should as well pursue viable and economical external sources of funding to boost their capital base and support the group investment activities. The study recommended that pharmaceutical firms ought to develop marketing capabilities in key functional areas. Within the firm, marketing procedures necessitate a number of unique competencies that enable the firm to carry out the actions required to move its products or services through the value chain. Further, the study recommended that the pharmaceutical companies should create a solid understanding of their opportunities by looking at the entire market based on their customer to determine the actual potential.

Key Words: Marketing, Technology, Management, Resilience, Dynamic Capabilities, Pharmaceutical Firms

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INTRODUCTION

In the world of competition and turbulent business environment, achieving operational performance in organizations is dependent on multiple factors which may be internal and external (Hermano, Martin-Cruz & Pajares, 2022). Torres, Sidorova and Jones (2018) observe that in the modern competitive business environment, organizations from one sector to another can utilize strategic resources in order to achieve short term and long term goals. Selecting a business strategy that exploits valuable resources and distinctive competencies not only promotes operational performance of firms but also influences sustainable competitiveness of firms. With unpredictable business environments, realigning strategic resources and capabilities to suit the changing business trends is viewed to be one of the drivers of organizational productivity in terms of profits, new product development, change implementation, service efficiency and effectiveness. Underutilized organizational resources and capabilities can subject an organization to hostile business environment thus inability to cope with changing technologies and consumer demands (Khalil & Belitski, 2020).

There are few studies in Kenya on strategic dynamic capabilities for example Nyangi, Wanjere and Egessa (2015) indicated that there exists a statistically significant correlation between dynamic capabilities and performance of sugar manufacturing firms in western Kenya. Dynamic capabilities adapted for the study included entrepreneurship, relationship building, product development, culture and learning. Similarly; Hassan (2020) found a strong positive relationship between strategy implementation and communication process and dynamic capabilities. The evaluation of effect of strategic capability in the corporation established that the variable supported strategy implementation in the corporation. Also, the study found that strategic flexibility supported strategy implementation at Agricultural Development Corporation. Similarly, Muhura (2018) found that dynamic capabilities gave Airtel Kenya a

competitive advantage over the other mobile companies. The study adopted the following dimensions of dynamic capabilities: human resource, physical infrastructure and the distribution network, strong brand, technology, market research, innovation and manpower development and talent nurturing. Dynamic capabilities had a partial mediating effect on the relationship between quality management practices and performance while Muganda and Fadhili, (2018) revealed there is need to build dynamic capabilities and a framework that recognizes the key drivers that underlie the development of off-shoring success in IT industry in Kenya.

Kenya's pharmaceutical business sector comprises of 3 industries, specifically producers, suppliers and dealers, who actively support Kenya's department of health and other core actors in health sector growth. Companies in the three segments are either large multinational corporations (MNCs), subsidiaries, joint ventures or locally owned corporations. The MNCs manufacture their products locally or import from designated manufacturing sites and supply the drugs to distributors who in turn supply the retail outlets, hospitals, government and non-governmental institutions (Mailu, Ntale & Ngui, 2018).

The Kenya Association of Pharmaceutical Industries (KAPI) controls the sector. In the 1960's, KAPI was founded by a group of pharmaceutical production corporations focused on R&D to foster strong technical standards. Sizeable MNCs with local partners derive their membership from the organization. The goal of KAPI is to foster a health care manufacturing sector that is sustainable, imaginative and conscientious (Asewe, 2022). The Pharmaceutical Manufacturing Firms manufacturing firms include 37 firms as obtained from Pharmacy and Poisons Board. The firms manufacture pharmaceutical products were used locally while others are exported.

Statement of the problem

Despite the opportunities presented by globalization of business, the results of pharmaceutical companies have been unsatisfactory in terms of profits generated (Mwangi, 2022). According to a report by Pharmacy and Poisons Board (2022), an approximate of 53% of the pharmaceutical companies established in Kenya not only not performing effectively due to financial constraints but also due to inappropriate strategies adopted. In this regard, the current study sought to examine the relationship between dynamic capabilities and performance of pharmaceutical companies in the Kenyan context. Owuor (2018) point out those changes in regulations, competition, high chances of failure, stagnation and closure of some pharmaceutical companies are some of the issues of concern that are attributed to underperformance of pharmaceutical companies. Like any other competitive enterprise, rethinking on dynamic capabilities were not only enable pharmaceutical companies navigate in the turbulent business environment but also sustain their competitiveness (Nyukuri & Makokha, 2022).

While many studies have been conducted on the concept of performance of pharmaceutical firms, there has been no study that has focused on the dynamic capabilities and its influence on the performance of pharmaceutical firms in Nairobi County. Few studies which have focused on dynamic capabilities and performance in other contexts have reported mixed outcome necessitating further studies. For instance, Kirugumi, Theuri and Magu (2021) indicated that dynamic capabilities have significant positive effect on performance an assertion which contradicts Nyabuti, Chepkilot and Zakayo (2016) reported that dynamic capabilities do not contributes to organization performance in public civil service in Kenya necessitating further studies to establish its influence on other organizations. Ensley, Pearce and Hmieleski (2016) also failed to establish direct effect of dynamic capabilities on performance large firms in Turkey.

It is therefore evident that there has been no study that has specifically looked at how dynamic capabilities affect performance of pharmaceutical firms. Thus, based on the existing literature, few studies on DCs and the performance of pharmaceutical firms in Nairobi County have been carried out. This study therefore, sought to close the existing gap by examining the dynamic capabilities and performance of pharmaceutical firms in Nairobi County.

Objective of the Study

The main aim of this study was to determine the influence of dynamic capabilities and performance of pharmaceutical firms in Nairobi County. The specific objectives were;

- To analyse the effect of marketing capability on the performance of pharmaceutical firms in Nairobi County.
- To establish the effect of technological capability on the performance of pharmaceutical firms in Nairobi County
- To examine the effect of managerial capability on performance of pharmaceutical firms in Nairobi County
- To determine the effect of resilience capability on the performance of pharmaceutical firms in Nairobi County

The study was guided by the following research questions

- What is the influence of marketing capability on performance of pharmaceutical firms in Nairobi County?
- How does technological capability influence performance of pharmaceutical firms in Nairobi County?
- How does managerial capability influence performance of pharmaceutical firms in Nairobi County?
- What is the influence of resilience capability on performance of pharmaceutical firms in Nairobi County?

LITERATURE REVIEW

Theoretical Review of Literature

The Dynamic Capability Theory

Teece and Pisano (1994) developed the dynamic capability theory as a response to the Resource Based View (RBV) of the firm's failure to comprehend the production and re-development of resources and capabilities to address continually changing environments. The purpose of this theory is to clarify how companies use dynamic capabilities to establish and sustain superior functioning over other organizations by responding to changes and making the right adjustments.

The theory has improved RBV by emphasizing how an organization's capabilities change in response to contextual changes and by recognizing certain organizational competences (Kirugumi, Theuri & Magu, 2021). These competencies include those used to recognize changes, grasp opportunities, and restructure the business to survive in unstable settings in the future (Schoemaker et al., 2018), which describes this study's variables, organizational performance, managerial, technological, marketing, and resilience capabilities.

In the context of this study, seizing opportunities is essential if firms are to perform better and adapt to environmental changes. This demands that the sector have capabilities that are resilient, persistent, and dynamic as well as continual innovation. This will affect the company's ability to recognize and seize opportunities at the specific alliance level. Subsequently have a positive effect on the company's innovative performance and results.

Resource Based View Theory

The effects of marketing capability resources on market performance are examined using the resource-based view theory (RBV), which was created by Penrose (1959) to explain disparities in growth among competitive enterprises. RBV is founded on the idea that businesses have a range of resources, including different types, quantities, and qualities. It can be difficult or impossible for other

businesses to copy a competitor's approach since some of these resources are hard or impossible to replace. The competitor with the greatest amount of resources should have the greatest advantage in terms of product production and delivery. Power comes from having access to and control over resources, which is essential for an organization to succeed. Because resources are frequently controlled by organizations that are not controlled by the organization that requires them, strategies must be carefully considered in order to maintain open access to resources (Chuang et al., 2018).

Markets are dynamic, though; therefore, businesses who can swiftly adapt how they organize their resources to take advantage of shifting market conditions will do well. The biggest competitive advantage will come from changing market demands (Teece et al., 2018). Taking into account that resources are the core of the business and the biggest expense in high technology enterprises. The resource-based view (RBV) of the firm is a well-known idea that explains how assets can be utilized to implement strategic transformation for competitive advantage and improved performance. Given this, the resource-based view theory (RBV) of the firm is a well-known theory that explains how assets can be used in strategic change to obtain a competitive advantage and boost performance in a competitive context. The RBV theory broadens the resources available to business managers for determining whether or not conditions favouring performance are present (Kyengo, Muathe & Kinyua, 2019).

Technology resources are needed to design, manufacture, or offer a good or service. Machines, energy, data, tools, and, of course, people without whom none of the aforementioned would be possible are just a few examples of the diverse items that fall under the category of technological resources. Advanced technology could be utilized to tackle some of the aforementioned challenges. The strategic link produced by combining technology and business processes helps to increase efficiency in the

creation of exceedingly complex products (Olumide, Zigan, John, & Satya, 2019). Thus, this theory describes technological capability of a firm.

Knowledge Based View Theory

According to the Knowledge Based Theory of the Firm, knowledge is the company's most crucial strategic asset. This viewpoint builds upon and broadens Penrose's (1959) resource-based view of the company (RBV), which was later broadened by others and has its roots in the literature on strategic management (Wernerfelt 1984, Barney 1991, Conner 1991). The firm's tangible input resources are often knowledge-based resources, entrepreneurship and innovation need the gathering, combining, and application of this knowledge. Knowledge-based resources are frequently hard to replicate, socially complicated, and important factors in superior company performance to recognize and take advantage of environmental changes (Miaomiao & Afshar, 2018). For dynamic competence development processes, learning activities provide information (Cyfertm, Kubala, Szumowski & Miskiewicz, 2021). In fact, acquiring new knowledge is the company's new competitive advantage, ensuring productivity and improved performance (Murgor, 2018).

The manager's fundamental knowledge-based goal is to continuously discover new knowledge or new solutions that emerge from distinctive combinations of existing knowledge in order to sustain the company's above-average performance. To be successful, this must be focused on relevant knowledge, skills, and abilities (Jenkins et al., 2021). De facto, the development of dynamic capacities results from collective learning inside an organization and well-established modes of collective action, which enable an organization to produce and modify its operational behaviour in a systematic manner for the purpose of enhancing performance. By coordinating, aggregating, and integrating the specialized knowledge created by each of its individual employees, a firm can increase its performance and maintain knowledge-based

competence (Majuri and Halonen, 2019). Specialized knowledge can be coordinated using rules and guidelines, routines, sequencing, and group problem solving and decision-making.

In the event of unanticipated market shifts, businesses must devise a customer-focused strategy, including both internal and external marketing initiatives, and adapting resources and capabilities to external changes in order to overcome risks (Zebal et al., 2019). These actions must be flexible and observant to respond to unforeseen market demands, such as the emergence of novel technology or emerging trends that are hard to predict but call for a quicker adoption of organizational and process improvements. Furthermore, Firms with strong competitiveness can take advantage of their current skills and look for new prospects (Rumanti, Sunaryo, Wiratmadja & Irianto, 2020). Consequently, this has an impact on the firm's resilience as well.

Relational Coordination Theory (RCT)

In the middle of the 1990s, Jody Hoffer Gittel created the Relational Coordination theory. According to the theory, stakeholders may successfully coordinate their work across boundaries when there are common goals, shared knowledge, and mutual respect. These factors also promote frequent, prompt, accurate problem-solving and communication. This notion is well supported by research and has been connected to a number of good outcomes. Quality, effectiveness, client satisfaction, staff well-being, and engagement are all affected by performance outcomes (Connely, Battaglia & Gilmarting, 2020). The fundamental tenet of the theory, relational coordination, is defined as a link for task integration and a mutually beneficial communication mechanism (Rendelle, Caroline, & Jody, 2021).

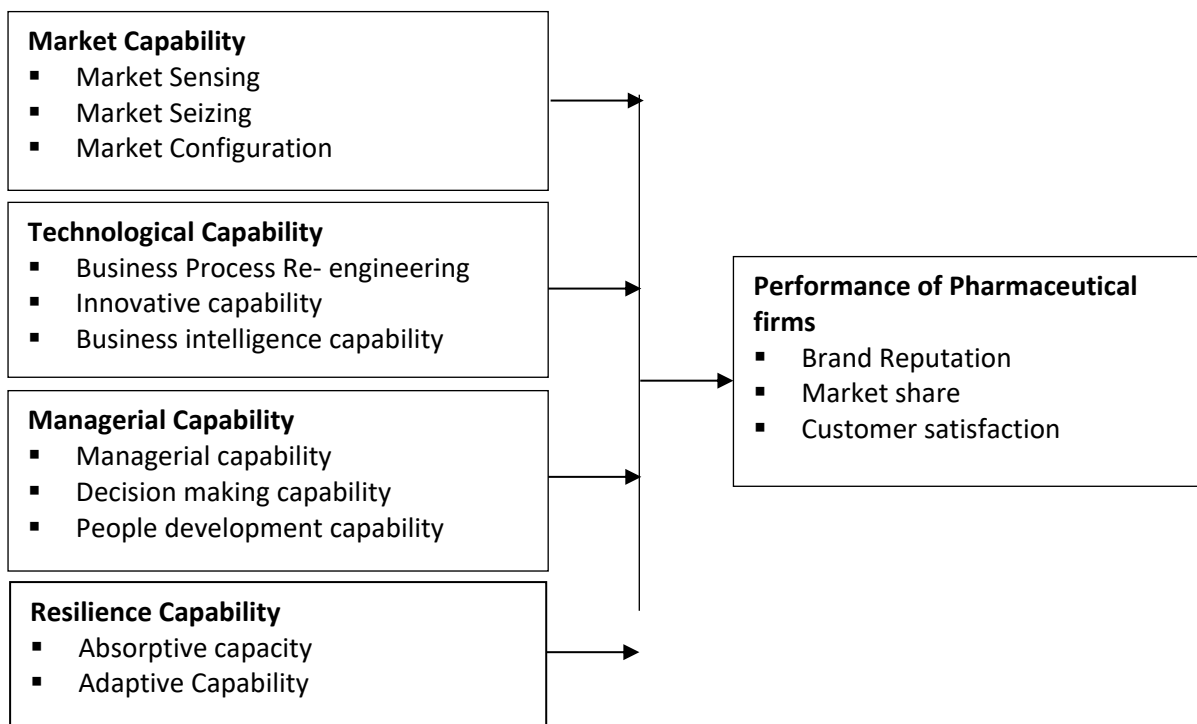
RCT encourages management and resiliency abilities. Organizational resilience, according to Ochola and Wamalwa (2022), effectively reflects leaders' beliefs, morals, and actions. As a result, resilience is boosted prior to a crisis by leaders'

efforts that enable quicker identification and resolution of potential disturbances. Transformational leaders' actions embodied the ideals of influence, inspirational motivation, intellectual stimulation, and individual consideration, possibly laying the groundwork for organizational resilience. Relational coordination skills enable leaders to be proactive and set a good example for their team members (Yang, Dai, Yiming, Carbonell, Russ, 2019).

Therefore, relational coordination aids a business in anticipating, adjusting to, and responding to

adversity as well as creating legacies that foster higher resilience, preventing triggering events and the requirement for crisis management (Ochola & Wamalwa, 2022). A theoretical perspective on dynamic capability is particularly helpful in understanding how companies achieve evolutionary fitness with their external environment and subsequently adjust to environmental changes (Teece, 2018). This is also necessary for companies to adapt to changes in a dynamic business environment (Hamali et al., 2020).

Conceptual Framework



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework

Empirical Review

Marketing capability and performance

Morgan, Vorhies, and Mason (2019) conducted a study to examine the effect of marketing capabilities on firm Performance. The study collected primary data using questionnaires administered via a mail survey on 748 U.S firms. Marketing capability was operationalized in terms of product development,

pricing, channel management, marketing communications, selling, market planning, and marketing implementation, while performance was operationalized in terms of profitability and market share. The study used structural equation modelling (SEM) technique to analyze the data. The findings indicated that market orientation and marketing capabilities are complementary assets that directly

contribute to firm performance. The main limitation of the study was that study used data collected from the USA, a cultural setting which the researchers argued led to a more robust market orientation-firm performance relationship.

A study by Morgan, Slotegraaf, and Vorhies (2019) set out to examine how market capabilities are linked to a firm's profit growth. The survey was conducted on publicly traded, U.S. companies in seven industries: computer hardware, computer software, electronic equipment, specialty retail, pharmaceuticals, consumer packaged goods, and business services. Primary data was collected from 507 targeted CEOs using a structured questionnaire. The study operationalized marketing capabilities in terms of market sensing, customer relations management, and brand management. Profit growth was operationalized in terms of revenue growth and profit margin growth. Marketing capability was operationalized in terms of customer relations management, brand management, and market sensing. The study used the Seemingly Unrelated Regression (SUR) technique to test the hypothesis. The study found that while customer relationship management, and brand management capabilities have a direct effect on revenue growth and profit margins market sensing capabilities have no direct effect on margin growth rate. The study concludes that market capabilities drive firm performance.

Technological Capability and performance

Reichert and Zawislak (2018) researched on Technological Capability and performance of organizations. Researcher's focus was to determine the link that exists in investments in technological capacity and performance of Brazilian companies in the economy. The economic development theory and the history of country's development were used and the assumption of the researcher was positively related. The study analyzed a total of 133 companies from Brazil. Considering the economic situation of emerging economy, where most companies depend on low and medium technology, it is concluded that

technological capacity and performance of organizations are positively linked. Other elements that help organizations attain such performance also exist. Companies whose technological intensity was low recorded average performance in their economic indicators and their adverse investment was below those whose technological capacity was average. The findings do not negatively affect merits of the company and success of the country. The findings support the tradition of a nation that focuses its efforts on basic industries.

Tang, Park, Agarwal and Liu (2020) studied the impact of innovation culture, organization size and technological capability on the performance of SMEs. Three separate sets of multistage hierarchical regression analyses were employed to estimate the effects of the key explanatory variables for the dependent variable. The first set of regression models covered all 1124 firms in both the manufacturing and service industries. The study used data from 1124 SMEs in China and applied regression analysis to test hypotheses. The findings were that technological capability and organization size have a statistically positive effect on the performance of SMEs. A cross sectional survey research design that was used does not determine the cause.

Managerial Capability and performance

Kirugumi, Theuri and Magu (2021) analyse the influence of managerial capability on internationalization status of public universities in Kenya. The study was conducted in 31 Public Universities in Kenya and employed a descriptive research design. A cross-sectional survey involving both analytical and descriptive methods to address the objectives of the study was used. Regression results showed that managerial capability had a significant and positive influence on internationalization status. The study found that managerial capability had a significant and positive influence on internationalization status of public universities. This indicates that the decision making abilities of managers, creating and sharing their

strategic vision with the rest as well as the capacity to think strategically, to solve problems are important managerial capabilities required in universities. However, the study focused on one aspect of performance, internationalization which was based on university ranking. Further, despite the fact the study used mixed methodology; there was no evidence of triangulation.

Ariasih, Yasa and Shantika (2018) examined influence of managerial capabilities and market orientation in mediating intrapreneurial orientation with business performance on coffee processing firms in Pupuan. The data of this research were collected through questionnaire method by using samples of 52 owners and managers in 26 units of coffee processing firms in Pupuan. Partial Least Square statistical analysis tool is used in this study and then tests the mediation effect. The result of this research concludes that managerial capabilities have a positive and significant influence and act as partial mediator between intrapreneurial orientation and business performance. Even though the study focused on the managerial capabilities, it was salient on how managerial capabilities were measured and it failed to establish direct effect of managerial capabilities on business performance. Besides, there were contextual gaps since the study was conducted outside Kenya and focused on processing firms in Pupuan.

Resilience Capability and performance

Eshima and Anderson (2017) studied the relationship between firm growth, resilience capability, and Performance. Data was collected from a sample of 600 respondents randomly drawn from a population of 11,248 senior executives of Korean SMEs and another sample of 134 respondents drawn from a population of 6000 firms in the United Kingdom. The data were analyzed using structural equation modelling. The study showed that increased resilience capability leads to the expansion of entrepreneurial activity. It further showed that during its growth, a firm acquires new resources and new knowledge on how to configure those

resources, which in turn leads to the development of resilience capability that enable it to uncover new opportunities for increasing performance. The study demonstrated that resilience capability influence entrepreneurial action, which in turn influences firm performance. The main limitation of the study was that although it used data from two similar locations, it cannot be ruled that different results could have been obtained if the study involved other geographical locations.

Another study by Kaehler, Busatto, Grace, Hansen, and Santos (2018) examined the relationship between strategic orientation and resilience capability and as drivers for firm Performance. The data was collected using a structured questionnaire administered on 106 randomly selected employees drawn from a maritime company in Brazil. The results of multiple regression analyses showed that the strategic orientation of entrepreneurs influence the effect of resilience capability on firm performance. The study provided a new understanding of how resilience capability drives performance. The main limitation of the study was that it was done on only one case company and may, therefore, suffer the inability to be generalized among other companies operating in different industries.

METHODOLOGY

Descriptive research design was employed in this study. The target population was categorized into organizational population and respondent population. Organizational population consisted of all the 33 pharmaceutical firms in Nairobi County registered by the Pharmacy and Poisons Board as at 1st January 2023 (https://products.pharmacyboardkenya.org/ppb_admin/pages/manufacturers.php). The sample size of this study was 117 respondents. This study used stratified random sampling technique to collect data from the respondents; because stratification ensures homogeneity within pharmaceutical firms and heterogeneity across pharmaceutical firms. This study used primary data. Primary data was collected

using a well-designed semi-questionnaire. Pilot study was conducted to establish reliability and validity of research questionnaire. Quantitative data was analyzed using descriptive and inferential statistics using SPSS Version 26.0

FINDINGS AND DISCUSSIONS

Marketing capability

The first objective of this study was to analyze the effect of marketing capability on the performance of

pharmaceutical firms in Nairobi County. To achieve this, the researcher queried the respondents about the marketing capability in respect to performance of pharmaceutical firms in Nairobi County. The responses are as shown in Table 1. in which percentage are presented inside brackets while frequency outside brackets.

Table 1: Marketing Capability

Marketing capability	5	4	3	2	1	M	SD
The firm effectively gathers information about the changing needs and preferences of our target customers.	27 (24)	47.2 (42)	13.5 (12)	9 (8)	3.4 (3)	3.85	1.03
The firm quickly to identify emerging trends and opportunities in the pharmaceutical industry.	32.6 (29)	52.8 (47)	1.1 (1)	10.1 (9)	3.4 (3)	4.01	1.03
The firm actively monitor and analyze the marketing activities of our competitors.	19.1 (17)	55.1 (49)	15.7 (14)	3.4 (3)	6.7 (6)	3.76	1.02
The firm has a strong understanding of the key drivers of demand for its products.	19.1 (17)	51.7 (46)	13.5 (12)	14.6 (13)	1.1 (1)	3.73	0.97
The firm frequently conduct market research to inform our product development and marketing strategies.	18 (16)	60.7 (54)	7.9 (7)	10.1 (9)	3.4 (3)	3.80	0.97
The firm has a track record of successfully launching new products or entering new markets.	9 (8)	67.4 (60)	18 (16)	2.2 (2)	3.4 (3)	3.76	0.78
The firm has a clear and coherent marketing strategy that is aligned with its overall business strategy.	31.5 (28)	47.2 (42)	13.5 (12)	6.7 (6)	1.1 (1)	4.01	0.91
The marketing team has the necessary skills and expertise to implement its marketing strategy.	13.5 (12)	59.6 (53)	11.2 (10)	12.4 (11)	3.4 (3)	3.67	0.974
Mean Score						3.82	

N=89; KEY: 1= Strongly Disagree; 2= Disagree; 3=Neutral; 4= Agree; 5=Strongly Agree; M=Mean; SD= Standard Deviation.

According to the results in table 1. above, 27% (24) of the respondents strongly agreed that the firm effectively gathers information about the changing needs and preferences of our target customers and a further 47.2% (42) agreed on the same statement. 13.5% (12) of the respondents were neutral, 9% (8) disagreed and 3.4%(3) strongly disagreed that the firm effectively gathers information about the changing needs and preferences of our target customers. With a mean of 3.85 and a significant standard deviation of 1.03, the

respondents agreed that the firm effectively gathers information about the changing needs and preferences of our target customers.

On the statement that the firm quickly to identify emerging trends and opportunities in the pharmaceutical industry, 32.6% (29) of the respondent strongly agreed while 52.8% (47) agreed. On the other hand, 1.1% (1) of the respondents were neutral, 10.1% (9) disagreed while 3.4% (3) strongly disagreed on the statement that the firm quickly to

identify emerging trends and opportunities in the pharmaceutical industry. With a mean of 4.01 and a significant standard deviation of 1.03, the respondents agreed that the firm quickly to identify emerging trends and opportunities in the pharmaceutical industry.

In regards to the firm actively monitor and analyze the marketing activities of our competitors, 19.1% (17) of the respondents strongly agreed and 55.1% (49) agreed. Moreover, 15.7% (14) of the respondents were neutral, 3.4% (3) disagreed while 6.7% (6) strongly disagreed that the firm actively monitor and analyze the marketing activities of our competitors. With a mean of 3.76 and a significant standard deviation of 1.02, the respondents agreed that the firm actively monitor and analyze the marketing activities of our competitors.

However, the results revealed that 19.1% (17) and 51.7% (46) of the respondents strongly agreed and agreed respectively that the firm has a strong understanding of the key drivers of demand for its products. Also, 13.5% (12) of the respondents were neutral, 14.6% (13) disagreed while 1.1% (1) strongly disagreed that the firm has a strong understanding of the key drivers of demand for its products. With a mean of 3.73 and a significant standard deviation of 0.97, the respondents agreed that the firm has a strong understanding of the key drivers of demand for its products.

According to the results of the findings, 18%(16) of the respondents strongly agreed while 60.7% (54) agreed that the firm frequently conduct market research to inform our product development and marketing strategies. Moreover, 7.9% (7) of the respondents were neutral, 10.1% (9) disagreed while 3.4% (3) strongly disagreed that the firm frequently conduct market research to inform our product development and marketing strategies. With a mean of 3.80 and a significant standard deviation of 0.97, the respondents agree that the firm frequently conduct market research to inform our product development and marketing strategies.

Moreover, 9% (8) of the respondents strongly agreed while 67.4% (60) agreed that the firm has a track record of successfully launching new products or entering new markets. On the other hand, 18% (16) were neutral, 2.2% (2) disagreed, 3.4% (3) strongly disagreed that the firm has a track record of successfully launching new products or entering new markets. With a mean of 3.76 and an insignificant standard deviation of 0.78 the respondents agreed that the firm has a track record of successfully launching new products or entering new markets.

In regards to the firm has a clear and coherent marketing strategy that is aligned with its overall business strategy, 31.5% (28) of the respondents strongly agreed and a further 47.2 (42) agreed on the same statement. And on the other hand, 13.5% (12) of the respondents were neutral, 6.7% (6) disagreed while 1.1% (1) strongly disagreed that the firm has a clear and coherent marketing strategy that is aligned with its overall business strategy. With a mean of 4.01 and a significant standard deviation of 0.91, the respondents agreed that the firm has a clear and coherent marketing strategy that is aligned with its overall business strategy.

Lastly, 13.5% (12) of the respondents strongly agreed and a further 59.6% (53) agreed that the marketing team has the necessary skills and expertise to implement its marketing strategy. Moreover, 11.2% (10) of the respondents were neutral, 12.4% (10) disagreed while 3.4% (3) strongly disagreed that the marketing team has the necessary skills and expertise to implement its marketing strategy. With a mean of 3.67 and a significant standard deviation of 0.974, the respondents agreed that the marketing team has the necessary skills and expertise to implement its marketing strategy.

This finding is in concurrence with Ogohi (2018) study that assessed how marketing strategies affects performance in Nigerian firms and study findings documented positive and significant effect promotional strategies and organization performance. The is in collaboration with Ogunmokun and Tang (2012) study that investigated

how Singapore based small and medium enterprises' organization performance was impacted by market planning behaviour and study findings documented significant effect of market planning behaviour on organization performance. The findings also collaborate with the findings of a study by Adewale, Adesola and Oyewale (2013) that investigated effects of marketing strategy and small and medium enterprises performance in Nigeria.

Technological capability

The second objective of this study was to establish the effect of technological capability on the performance of pharmaceutical firms in Nairobi County. So as to achieve this objective, the study sought to establish the degree to which technological capability affected performance of pharmaceutical firms in Nairobi County. The findings are as shown in table 2. in which percentages are presented inside brackets while frequency outside brackets.

Table 2: Technological Capability

Technological capability	5	4	3	2	1	M	SD
The firm has a strong intellectual property portfolio that includes patents, trademarks, and copyrights.	44.9 (40)	40.4 (36)	12.4 (11)	1.1 (1)	1.1 (1)	4.27	0.81
The firm has a track record of successfully launching innovative products or processes in the food processing sector.	24.7 (22)	61.8 (55)	10.1 (9)	2.2 (2)	1.1 (1)	4.07	0.74
The firm has a culture that fosters creativity and encourages experimentation.	40.4 (36)	46.1 (41)	7.9 (7)	3.4 (3)	2.2 (2)	4.19	0.89
The firm has a process for identifying and prioritizing R&D projects.	33.7 (30)	51.7 (46)	9 (8)	4.5 (4)	1.1 (1)	4.12	0.84
The firm actively invests in research and development to create new products and processes.	43.8 (39)	44.9 (40)	6.7 (6)	2.2 (2)	2.2 (2)	4.26	0.86
The firm regularly evaluates and improves its business processes to enhance efficiency and productivity.	20.2 (18)	46.1 (41)	29.2 (26)	2.2 (2)	2.2 (2)	3.80	0.87
The firm has a structured approach to identify and eliminate non-value-added activities in its operations.	29.2 (26)	46.1 (41)	15.7 (14)	4.5 (4)	4.5 (4)	3.91	1.02
The firm use technology to automate and streamline its business processes wherever possible	24.7 (22)	55.1 (49)	12.4 (11)	4.5 (4)	3.4 (3)	3.93	0.927
Mean Score						4.07	

N=89; KEY: 1= Strongly Disagree; 2= Disagree; 3=Neutral; 4= Agree; 5=Strongly Agree; M=Mean; SD= Standard Deviation.

According to the results in table 2. above, 44.9% (40) of the respondents strongly agreed that the firm has a strong intellectual property portfolio that includes patents, trademarks, and copyrights and a further 40.4% (36) agreed on the same statement. Also, 12.4% (11) of the respondents were neutral, 1.1% (1) disagreed and 1.1%(1) strongly disagreed that the firm has a strong intellectual property portfolio that

includes patents, trademarks, and copyrights. With a mean of 4.27 and an insignificant standard deviation of 0.83, the respondents agreed that the firm has a strong intellectual property portfolio that includes patents, trademarks, and copyrights.

On the statement that the firm has a track record of successfully launching innovative products or processes in the food processing sector, 24.7% (22)

of the respondent strongly agreed while 61.8% (55) agreed. On the other hand, 10.1% (9) of the respondents were neutral, 2.2% (2) disagreed while 1.1% (1) strongly disagreed on the statement that the firm has a track record of successfully launching innovative products or processes in the food processing sector. With a mean of 4.07 and an insignificant standard deviation of 0.74, the respondents agreed that the firm has a track record of successfully launching innovative products or processes in the food processing sector.

In regards to the firm has a culture that fosters creativity and encourages experimentation, 40.4% (36) of the respondents strongly agreed and 46.1% (41) agreed. Moreover, 7.9% (7) of the respondents were neutral, 3.4% (3) disagreed while 2.2% (2) strongly disagreed that the firm has a culture that fosters creativity and encourages experimentation. With a mean of 4.19 and an insignificant standard deviation of 0.89, the respondents agreed that the firm has a culture that fosters creativity and encourages experimentation.

However, the results revealed that 33.7% (30) and 51.7% (46) of the respondents strongly agreed and agreed respectively that the firm has a process for identifying and prioritizing R&D projects. Also, 9% (8) of the respondents were neutral, 4.5% (4) disagreed while 1.1% (1) strongly disagreed that the firm has a process for identifying and prioritizing R&D projects. With a mean of 4.12 and an insignificant standard deviation of 0.84, the respondents agreed that the firm has a process for identifying and prioritizing R&D projects.

According to the results of the findings, 43.8% (39) of the respondents strongly agreed while 44.9% (40) agreed that the firm actively invests in research and development to create new products and processes. Moreover, 6.7% (6) of the respondents were neutral, 2.2% (2) disagreed while 2.2% (2) strongly disagreed that the firm actively invests in research and development to create new products and processes. With a mean of 4.26 and an insignificant standard deviation of 0.86, the respondents agreed that the

firm actively invests in research and development to create new products and processes.

Moreover, 20.2% (18) of the respondents strongly agreed while 46.1% (41) agreed that the firm regularly evaluates and improves its business processes to enhance efficiency and productivity. On the other hand, 29.2% (26) were neutral, 2.2% (2) disagreed, 2.2% (2) strongly disagreed that the firm regularly evaluates and improves its business processes to enhance efficiency and productivity. With a mean of 3.80 and an insignificant standard deviation of 0.87 the respondents agreed that the firm regularly evaluates and improves its business processes to enhance efficiency and productivity.

In regards to the firm has a structured approach to identify and eliminate non-value-added activities in its operations, 29.2% (26) of the respondents strongly agreed and a further 46.1 (41) agreed on the same statement. And on the other hand, 15.7% (14) of the respondents were neutral, 4.5% (4) disagreed while 4.5% (4) strongly disagreed that the firm has a structured approach to identify and eliminate non-value-added activities in its operations. With a mean of 3.91 and a significant standard deviation of 1.02, the respondents agreed that the firm has a structured approach to identify and eliminate non-value-added activities in its operations.

Lastly, 24.7% (22) of the respondents strongly agreed and a further 55.1% (49) agreed that the firm use technology to automate and streamline its business processes wherever possible. Moreover, 12.4% (11) of the respondents were neutral, 4.5% (4) disagreed while 3.4% (3) strongly disagreed that the firm use technology to automate and streamline its business processes wherever possible. With a mean of 3.93 and a significant standard deviation of 0.927, the respondents agreed that the firm use technology to automate and streamline its business processes wherever possible.

The finding agrees with a study carried out by Rehman, Nor, Taha and Saad (2018) that investigated how small and medium enterprises

performance in Pakistan were impacted by information technology capabilities and it was found that information technology capabilities have significant effect on how small and medium enterprises performed. The results are in agreement to the study by Cemal, Busra, Bulent and Ali (2010) that evaluated how National oil and multinational companies in Turkey were impacted by information technology investments and IT usage had positive and significant impact on firm performance. The results are in support by Nada, Rusinah, Ibrahim and Mahmoud (2015) study that examined how innovation performance in private universities in Iraq is impacted by information technology and study findings documented positive and significant impact of information technology on innovation in public universities in Iraq.

This contradicts the findings of a study by Bakran and Zumrut (2017) that examined firm performance and the types of information technology capabilities and study findings documented that IT human resources, IT relationship resources, IT business experience and IT infrastructure positively and significantly influenced firm performance.

Managerial capability

The third objective of this study was to examine the effect of managerial capability on performance of pharmaceutical firms in Nairobi County. To achieve this, the researcher probed the respondents about the managerial capability. The findings are in table 3. in which percentage are presented inside brackets while frequency outside the brackets.

Table 3: Managerial Capability

Managerial capability	5	4	3	2	1	M	SD
The firm has a clear and compelling vision that is communicated effectively to all employees	55.1 (49)	36 (32)	4.5 (4)	2.2 (2)	2.2 (2)	4.39	0.86
The top management team has the necessary skills and expertise to lead the firm successfully	21.3 (19)	57.3 (51)	18 (16)	1.1 (1)	2.2 (2)	3.94	0.80
The firm has a structured approach to decision making that involves gathering and analyzing data, considering multiple options, and assessing risks	42.7 (38)	46.1 (41)	6.7 (6)	2.2 (2)	2.2 (2)	4.25	0.86
The decision-making process is transparent and involves input from relevant stakeholders.	30.3 (27)	51.7 (46)	12.4 (11)	3.4 (3)	2.2 (2)	4.04	0.88
The firm invests in the training and development of its employees to enhance their skills and knowledge.	25.8 (23)	47.2 (42)	23.6 (21)	1.1 (1)	2.2 (2)	3.93	0.86
The decisions are aligned with the firm's overall strategy and vision.	18 (16)	38.2 (34)	36 (32)	4.5 (4)	3.4 (3)	3.63	0.95
Performance management process includes regular feedback and coaching to help employees improve.	22.5 (20)	44.9 (40)	23.6 (21)	5.6 (5)	3.4 (3)	3.78	0.97
Decisions are made in a timely manner, and the firm are able to adapt quickly to changing circumstances.	28.1 (25)	46.1 (41)	18 (16)	4.5 (4)	3.4 (3)	3.91	0.97
Mean Score						3.98	

N=89; KEY: 1= Strongly Disagree; 2= Disagree; 3=Neutral; 4= Agree; 5=Strongly Agree; M=Mean; SD= Standard Deviation.

According to the results in table 3. above, 55.1% (49) of the respondents strongly agreed that the firm

has a clear and compelling vision that is communicated effectively to all employees and a

further 36% (32) agreed on the same statement. Also, 4.5% (4) of the respondents were neutral, 2.2% (2) disagreed and 2.2% (2) strongly disagreed that the firm has a clear and compelling vision that is communicated effectively to all employees. With a mean of 4.39 and an insignificant standard deviation of 0.86, the respondents agreed that the firm has a clear and compelling vision that is communicated effectively to all employees.

On the statement that the top management team has the necessary skills and expertise to lead the firm successfully, 21.3% (19) of the respondent strongly agreed while 57.3% (51) agreed. On the other hand, 18% (16) of the respondents were neutral, 1.1% (1) disagreed while 2.2% (2) strongly disagreed on the statement that the top management team has the necessary skills and expertise to lead the firm successfully. With a mean of 3.94 and an insignificant standard deviation of 0.80, the respondents agreed that the top management team has the necessary skills and expertise to lead the firm successfully.

In regards to the firm has a structured approach to decision making that involves gathering and analyzing data, considering multiple options, and assessing risks, 42.7% (38) of the respondents strongly agreed and 46.1% (41) agreed. Moreover, 6.7% (6) of the respondents were neutral, 2.2% (2) disagreed while 2.2% (2) strongly disagreed that the firm has a structured approach to decision making that involves gathering and analyzing data, considering multiple options, and assessing risks. With a mean of 4.25 and an insignificant standard deviation of 0.86, the respondents agreed that the firm has a structured approach to decision making that involves gathering and analyzing data, considering multiple options, and assessing risks.

However, the results revealed that 30.3% (27) and 51.7% (46) of the respondents strongly agreed and agreed respectively that the decision-making process is transparent and involves input from relevant stakeholders. Also, 12.4% (11) of the respondents were neutral, 3.4% (3) disagreed while

2.2% (2) strongly disagreed that the decision-making process is transparent and involves input from relevant stakeholders. With a mean of 4.04 and an insignificant standard deviation of 0.88, the respondents agreed that the decision-making process is transparent and involves input from relevant stakeholders.

According to the results of the findings, 25.8% (23) of the respondents strongly agreed while 47.2% (42) agreed that the firm invests in the training and development of its employees to enhance their skills and knowledge. Moreover, 23.6% (21) of the respondents were neutral, 1.1% (1) disagreed while 2.2% (2) strongly disagreed that the firm invests in the training and development of its employees to enhance their skills and knowledge. With a mean of 3.93 and an insignificant standard deviation of 0.86, the respondents agreed that the firm invests in the training and development of its employees to enhance their skills and knowledge.

Moreover, 18% (16) of the respondents strongly agreed while 38.2% (34) agreed that the decisions are aligned with the firm's overall strategy and vision. On the other hand, 36% (32) were neutral, 4.5% (4) disagreed, 3.4% (3) strongly disagreed that the decisions are aligned with the firm's overall strategy and vision. With a mean of 3.63 and an insignificant standard deviation of 0.95 the respondents agreed that the decisions are aligned with the firm's overall strategy and vision.

In regards to performance management process includes regular feedback and coaching to help employees improve, 22.5% (20) of the respondents strongly agreed and a further 44.9 (40) agreed on the same statement. And on the other hand, 23.6% (21) of the respondents were neutral, 5.6% (5) disagreed while 3.4% (3) strongly disagreed that performance management process includes regular feedback and coaching to help employees improve. With a mean of 3.78 and a significant standard deviation of 0.97, the respondents agreed that performance management process includes regular feedback and coaching to help employees improve.

Lastly, 28.1% (25) of the respondents strongly agreed and a further 46.1% (41) agreed that decisions are made in a timely manner, and the firm are able to adapt quickly to changing circumstances. Moreover, 18% (16) of the respondents were neutral, 4.5% (4) disagreed while 3.4% (3) strongly disagreed that decisions are made in a timely manner, and the firm are able to adapt quickly to changing circumstances. With a mean of 3.91 and a significant standard deviation of 0.97, the respondents agreed that decisions are made in a timely manner, and the firm are able to adapt quickly to changing circumstances.

The results consistently agree with study by Yamoah (2014) that investigated the relationship between job performance and human resources capacity building and Past empirical studies supported the need for human capacity building since it created employee satisfaction. The result is supported by Akgari and Amirnezhad (2015) study that investigated how performance of Khuzestan's social security organization was impacted by organization learning capabilities and human resources measures

and the documentation was that Khuzestan's social security organization performance was significantly and positively impacted by human resources measures, organization learning capabilities. This is consistent with Fakhar, Rana, Ayesha and Lalarukh (2012) study that investigated how organization performance in Pakistan was influenced by organization culture and it was evidenced that those organizations in which employees were motivation their level of commitment was higher it impacted performance positively.

Resilience capability

The fourth objective of this study was to determine the effect of resilience capability on the performance of pharmaceutical firms in Nairobi County. So as to achieve this objective, the researcher sought to find out how resilience capability affects the performance of pharmaceutical firms in Nairobi County. The results are presented in Table 4. in which percentage are presented inside brackets while frequency outside brackets.

Table 4: Resilience Capability

Resilience capability	5	4	3	2	1	M	SD
The firm is able to effectively absorb new knowledge and information from external sources.	56.2 (50)	18 (16)	9 (8)	12.4 (11)	4.5 (4)	4.09	1.25
The firm actively seeks out opportunities to collaborate with external partners to expand our knowledge base.	24.7 (22)	47.2 (42)	7.9 (7)	16.9 (15)	3.4 (3)	3.73	1.12
The firm actively seeks out opportunities to collaborate with external partners to expand our knowledge base.	24.7 (22)	42.7 (38)	10.1 (9)	16.9 (15)	5.6 (5)	3.64	1.19
Employees are encouraged to share their knowledge and expertise with others in the firm.	27 (24)	50.6 (45)	11.2 (10)	10.1 (9)	1.1 (1)	3.92	0.94
The firm is able to quickly and effectively respond to unexpected challenges and disruptions.	29.2 (26)	42.7 (38)	15.7 (14)	7.9 (7)	4.5 (4)	3.84	1.08
The firm has a culture that values agility and flexibility.	28.1 (25)	50.6 (45)	9 (8)	6.7 (6)	5.6 (5)	3.89	1.07
There a process for identifying and managing risks in the organization.	33.7 (30)	44.9 (40)	11.2 (10)	4.5 (4)	5.6 (5)	3.97	1.07
There is plan in place for business continuity in the event of a major disruption.	31.5 (28)	50.6 (45)	4.5 (4)	5.6 (5)	7.9 (7)	3.92	1.140
Mean Score						3.88	

N=89; KEY: 1= Strongly Disagree; 2= Disagree; 3=Neutral; 4= Agree; 5=Strongly Agree; M=Mean; SD= Standard Deviation.

According to the results in table 4. above, 56.2% (50) of the respondents strongly agreed that the firm is able to effectively absorb new knowledge and information from external sources and a further 18% (16) agreed on the same statement. Also, 9% (8) of the respondents were neutral, 12.4% (11) disagreed and 4.5% (4) strongly disagreed that the firm is able to effectively absorb new knowledge and information from external sources. With a mean of 4.09 and a significant standard deviation of 1.25, the respondents agreed that the firm is able to effectively absorb new knowledge and information from external sources.

On the statement that the firm actively seeks out opportunities to collaborate with external partners to expand our knowledge base, 24.7% (22) of the respondent strongly agreed while 47.2% (42) agreed. On the other hand, 7.9% (7) of the respondents were neutral, 16.9% (15) disagreed while 3.4% (3) strongly disagreed on the statement that the firm actively seeks out opportunities to collaborate with external partners to expand our knowledge base. With a mean of 3.73 and a significant standard deviation of 1.12, the respondents agreed that the firm actively seeks out opportunities to collaborate with external partners to expand our knowledge base.

In regards to the firm actively seeks out opportunities to collaborate with external partners to expand our knowledge base, 24.7% (22) of the respondents strongly agreed and 42.7% (38) agreed. Moreover, 10.1% (9) of the respondents were neutral, 16.9% (15) disagreed while 5.6% (5) strongly disagreed that the firm actively seeks out opportunities to collaborate with external partners to expand our knowledge base. With a mean of 3.64 and a significant standard deviation of 1.19, the respondents agreed that the firm actively seeks out opportunities to collaborate with external partners to expand our knowledge base.

However, the results revealed that 27% (24) and 50.6% (45) of the respondents strongly agreed and agreed respectively that employees are encouraged

to share their knowledge and expertise with others in the firm. Also, 11.2% (10) of the respondents were neutral, 10.1% (9) disagreed while 1.1% (1) strongly disagreed that employees are encouraged to share their knowledge and expertise with others in the firm. With a mean of 3.92 and a significant standard deviation of 0.94, the respondents agreed that employees are encouraged to share their knowledge and expertise with others in the firm.

According to the results of the findings, 29.2% (26) of the respondents strongly agreed while 42.7% (38) agreed that the firm is able to quickly and effectively respond to unexpected challenges and disruptions. Moreover, 15.7% (14) of the respondents were neutral, 7.9% (1) disagreed while 4.5% (4) strongly disagreed that the firm is able to quickly and effectively respond to unexpected challenges and disruptions. With a mean of 3.84 and a significant standard deviation of 1.08, the respondents agreed that the firm is able to quickly and effectively respond to unexpected challenges and disruptions.

Moreover, 28.1% (25) of the respondents strongly agreed while 50.6% (45) agreed that the firm has a culture that values agility and flexibility. On the other hand, 9% (8) were neutral, 6.7% (6) disagreed, 5.6% (5) strongly disagreed that the firm has a culture that values agility and flexibility. With a mean of 3.89 and a significant standard deviation of 1.07 the respondents agreed that the firm has a culture that values agility and flexibility.

In regards to there a process for identifying and managing risks in the organization, 33.7% (30) of the respondents strongly agreed and a further 44.9 (40) agreed on the same statement. And on the other hand, 11.2% (10) of the respondents were neutral, 4.5% (4) disagreed while 5.6% (5) strongly disagreed that there a process for identifying and managing risks in the organization. With a mean of 3.97 and a significant standard deviation of 1.07, the respondents agreed that there a process for identifying and managing risks in the organization.

Lastly, 31.5% (28) of the respondents strongly agreed and a further 50.6% (45) agreed that there is plan in place for business continuity in the event of a major disruption. Moreover, 4.5% (4) of the respondents were neutral, 5.6% (5) disagreed while 7.9% (7) strongly disagreed that there is plan in place for business continuity in the event of a major disruption. With a mean of 3.92 and a significant standard deviation of 1.14, the respondents agreed that there is plan in place for business continuity in the event of a major disruption.

Eshima and Anderson (2017) showed that increased resilience capability leads to the expansion of entrepreneurial activity. It further showed that during its growth, a firm acquires new resources and new knowledge on how to configure those resources, which in turn leads to the development of

resilience capability that enable it to uncover new opportunities for increasing performance. The results of the analysis supported the notion that Resilience Capability mediates the influence of competitive strategy on performance outcomes supporting the view held by (Danneels, 2012). The study also showed that resilience capability moderates the relationship between competitive strategy and firm performance.

Performance of pharmaceutical firms in Nairobi County

The general objective of the study was to determine the influence of dynamic capabilities and performance of pharmaceutical firms in Nairobi County. The results are presented in Table 5. in which percentage are presented inside brackets while frequency outside brackets.

Table 5: Performance of pharmaceutical firms in Nairobi County

Performance of the Pharmaceutical firms	5	4	3	2	1	M	SD
The firm has a unique value proposition that sets us apart from competitors.	27 (24)	43.8 (39)	25.8 (23)	1.1 (1)	2.2 (2)	3.92	0.88
The firm is able to quickly respond to changes in the market and adapt its product development strategy accordingly	24.7 (22)	52.8 (47)	14.6 (13)	6.7 (6)	1.1 (1)	3.93	0.88
The firm has a significant market share in the industry.	51.7 (46)	31.5 (28)	5.6 (5)	6.7 (6)	4.5 (4)	4.19	1.11
The firm has a strong brand reputation resulting to advantage in the market.	42.7 (38)	42.7 (38)	5.6 (5)	5.6 (5)	3.4 (3)	4.16	1.00
The firm's products consistently meet or exceed its customer expectations.	43.8 (39)	44.9 (40)	4.5 (4)	1.1 (1)	5.6 (5)	4.20	1.00
The firm is able to effectively market its products to target customers.	36 (32)	33.7 (30)	18 (16)	6.7 (6)	5.6 (5)	3.88	1.15
The firm has a mechanism in place to track customer satisfaction and loyalty.	39.3 (35)	43.8 (39)	5.6 (5)	5.6 (5)	5.6 (5)	4.06	1.09
The firm is able to gain new customers and retain existing ones.	37.1 (33)	50.6 (45)	3.4 (3)	4.5 (4)	4.5 (4)	4.11	0.99
Mean Score						4.06	

N=89; KEY: 1= Strongly Disagree; 2= Disagree; 3=Neutral; 4= Agree; 5=Strongly Agree; M=Mean; SD= Standard Deviation.

According to the results in table 5. above, 27% (24) of the respondents strongly agreed that the firm has

a unique value proposition that sets us apart from competitors and a further 43.8% (39) agreed on the

same statement. Also, 25.8% (23) of the respondents were neutral, 1.1% (1) disagreed and 2.2% (2) strongly disagreed that the firm has a unique value proposition that sets us apart from competitors. With a mean of 3.92 and an insignificant standard deviation of 0.88, the respondents agreed that the firm has a unique value proposition that sets us apart from competitors.

On the statement that the firm is able to quickly respond to changes in the market and adapt its product development strategy accordingly, 24.7% (22) of the respondent strongly agreed while 52.8% (47) agreed. On the other hand, 14.6% (13) of the respondents were neutral, 6.7% (6) disagreed while 1.1% (1) strongly disagreed on the statement that the firm is able to quickly respond to changes in the market and adapt its product development strategy accordingly. With a mean of 3.93 and an insignificant standard deviation of 0.88, the respondents agreed that the firm is able to quickly respond to changes in the market and adapt its product development strategy accordingly.

In regards to the firm has a significant market share in the industry, 51.7% (46) of the respondents strongly agreed and 31.5% (28) agreed. Moreover, 5.6% (5) of the respondents were neutral, 6.7% (6) disagreed while 4.5% (4) strongly disagreed that the firm has a significant market share in the industry. With a mean of 4.19 and a significant standard deviation of 1.11, the respondents agreed that the firm has a significant market share in the industry.

However, the results revealed that 42.7% (38) and 42.7% (38) of the respondents strongly agreed and agreed respectively that the firm has a strong brand reputation resulting to advantage in the market. Also, 5.6% (5) of the respondents were neutral, 5.6% (5) disagreed while 3.4% (3) strongly disagreed that the firm has a strong brand reputation resulting to advantage in the market. With a mean of 4.16 and a significant standard deviation of 1.00, the respondents agreed that the firm has a strong brand reputation resulting to advantage in the market.

According to the results of the findings, 43.8% (39) of the respondents strongly agreed while 44.9% (40) agreed that the firm's products consistently meet or exceed its customer expectations. Moreover, 4.5% (4) of the respondents were neutral, 1.1% (1) disagreed while 5.6% (5) strongly disagreed that the firm's products consistently meet or exceed its customer expectations. With a mean of 4.20 and a significant standard deviation of 1.00, the respondents agreed that the firm's products consistently meet or exceed its customer expectations.

Moreover, 36% (32) of the respondents strongly agreed while 33.7% (30) agreed that the firm is able to effectively market its products to target customers. On the other hand, 18% (16) were neutral, 6.7% (6) disagreed, 5.6% (5) strongly disagreed that the firm is able to effectively market its products to target customers. With a mean of 3.88 and a significant standard deviation of 1.15 the respondents agreed that the firm is able to effectively market its products to target customers.

In regards to the firm has a mechanism in place to track customer satisfaction and loyalty, 39.3% (35) of the respondents strongly agreed and a further 43.8 (39) agreed on the same statement. And on the other hand, 5.6% (5) of the respondents were neutral, 5.6% (5) disagreed while 5.6% (5) strongly disagreed that the firm has a mechanism in place to track customer satisfaction and loyalty. With a mean of 4.06 and a significant standard deviation of 1.09, the respondents agreed that the firm has a mechanism in place to track customer satisfaction and loyalty.

Lastly, 37.1% (28) of the respondents strongly agreed and a further 50.6% (45) agreed that the firm is able to gain new customers and retain existing ones. Moreover, 3.4% (3) of the respondents were neutral, 4.5% (4) disagreed while 4.5% (4) strongly disagreed that the firm is able to gain new customers and retain existing ones. With a mean of 4.11 and a significant

standard deviation of 0.99, the respondents agreed that the firm is able to gain new customers and retain existing ones.

Inferential Statistics Analysis

The study conducted inferential statistics which included Pearson Correlation analysis and Multiple regression analysis.

Correlation Analysis

The researcher undertook correlation analysis to establish the nature and strength of the relationships

between the independent and the dependent variables of the study. Linearity was also tested by use of Pearson Correlation analysis which computes both the linear and nonlinear components of a pair of variables. Linear regression analysis assumes there is linear relationship between independent and dependent variables. The linearity is as a result of significance level being less than 0.05 which was evident for all study variables. All linear relationships were significant at 0.01 (99.0% confidence level). The results are as shown in Table 6.

Table 6: Pearson Correlation Analysis

		Marketing capability	Technological capability	Managerial capability	Resilience capability
Marketing capability	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	89			
Technological capability	Pearson Correlation	.514**	1		
	Sig. (2-tailed)	.000			
	N	89	89		
Managerial capability	Pearson Correlation	.104	.219*	1	
	Sig. (2-tailed)	.340	.042		
	N	89	89	89	
Resilience capability	Pearson Correlation	.292**	.213*	.421**	1
	Sig. (2-tailed)	.006	.048	.000	
	N	89	89	89	89
Performance of pharmaceutical firms in Nairobi County	Pearson Correlation	.624**	.707**	.412**	.584**
	Sig. (2-tailed)	.000	.000	.003	.000
	N	89	89	89	89

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The results indicate that marketing capability has a positive Pearson correlation ($r=0.642$, $p=0.000$) effect on performance of pharmaceutical firms in Nairobi County. The results also indicated that there is a positive relationship between technological capability and performance of pharmaceutical firms in Nairobi County (Pearson correlation coefficient= 0.707 , $P=0.000$). The analysis in table 6. show that managerial capability has a positive Pearson correlation coefficient ($r= 0.412$ $P=0.003$) effect on

performance of pharmaceutical firms in Nairobi County.

The results showed that there is positive relationship between resilience capability and performance of pharmaceutical firms in Nairobi County (Pearson correlation coefficient, $r= 0.584$, $P=0.000$). This implies that resilience capability is very necessary in performance of pharmaceutical firms in Nairobi County. The findings were heavily supported by Wei and Lau (2019) who showed that firm-level resilience capability partially mediates the relationship

between HR-fit and innovation and fully mediates the relationship between HR-fit and ROA. Cabral (2020) showed that the effect of resilience capability Performance is mediated by innovation strategy. Kaehler, Busatto, Grace, Hansen, and Santos (2018) showed that the strategic orientation of entrepreneurs influence the effect of resilience capability on firm performance. Ali, Sun, and Ali (2020) showed that resilience capability mediates the relationship between managerial capability and firm performance. This study concluded that

resilience capability improves the performance of SMEs.

Multiple Regression Analysis

The study sought to determine the model summary findings in order to determine the overall percentage change in the performance of pharmaceutical firms in Nairobi County that was explained by all the metric of the dynamic capabilities by use of R². The results in Table 7. present R, R², Adj R², F ratio and Sig. value.

Table 7.: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.840 ^a	.706	.692	.22557	.706	49.233	4	84	.000

a. Predictors: (Constant), Resilience capability, Marketing capability, Managerial capability, Technological capability

b. Dependent Variable: Performance of pharmaceutical firms in Nairobi County

The results from the model summary in Table 7 gave us information on the overall summary of the model. It can be deduced that dynamic capabilities account for 70.6% significant variance in performance of pharmaceutical firms in Nairobi County (R square =.706, P=0.000) implying that 29.4% of the variance

in performance of pharmaceutical firms in Nairobi County is accounted for by other variables not captured in this model. The next Table 8. is ANOVA which is also known as model of fit (goodness of fit; F Ratio, Sig Value).

Table 8: Model of Fit (ANOVA Table)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	10.020	4	2.505	49.233	.000 ^b
Residual	4.172	84	.051		
Total	14.193	88			

a. Predictors: (Constant), Resilience capability, Marketing capability, Managerial capability, Technological capability

b. Dependent Variable: Performance of pharmaceutical firms in Nairobi County

According to the data, the F value is more than one, as demonstrated by a value of 49.233, which indicates that the enhancement obtained as a consequence of model fitting is significantly greater than the model errors/inaccuracies that were not included in the model (F (4,88) = 49.233, P=0.000) The big F value is very unlikely to have occurred by coincidence (95.0 percent), meaning that the final

research model has significantly improved in its capacity to forecast performance of pharmaceutical firms in Nairobi County as a result of the dynamic capabilities techniques examined.

CONCLUSIONS AND RECOMMENDATIONS

Going by the outcome of the study, there emerged a very strong, positive and statistically significant

correlation between marketing capability and performance of pharmaceutical firms in Nairobi County indicating that the marketing capability techniques affects performance. It is evident that pharmaceutical firms quickly to identified emerging trends and opportunities in the pharmaceutical industry. Similarly, the pharmaceutical firms have a clear and coherent marketing strategy that is aligned with their overall business strategy.

The study concluded that technological capability has significant effect on the performance of pharmaceutical firms in Nairobi County. This postulated that technological capability plays major role in enhancing performance of pharmaceutical firms in Nairobi County. The study established that the firms have a strong intellectual property portfolio that includes patents, trademarks, and copyrights. Further, the firms have actively invested in research and development to create new products and processes.

The study concluded that managerial capability has significant effect on the performance of pharmaceutical firms in Nairobi County. This suggested that managerial capability plays significant role in enhancing performance of pharmaceutical firms in Nairobi County. It was evident that the firms have a clear and compelling vision that is communicated effectively to all employees. Also, the firm have a structured approach to decision making that involves gathering and analyzing data, considering multiple options, and assessing risks.

The study concluded that resilience capability has significant positive effect on the performance of pharmaceutical firms in Nairobi County. This suggested that resilience capability does play significant role in enhancing performance of pharmaceutical firms in Nairobi County. This was in regards to the firms been able to effectively absorb new knowledge and information from external sources. Further, the firms have a process for identifying and managing risks in the organization.

The study made the following research recommendations;

First and foremost, pharmaceutical firms ought to develop marketing capabilities in key functional areas. Within the firm, marketing procedures necessitate a number of unique competencies that enable the firm to carry out the actions required to move its products or services through the value chain. Further, pharmaceutical firms should act based on their market knowledge, and market knowledge dissemination is strongly linked to the firm's ability to exploit new market possibilities in particular, as well as its overall innovation performance. The study recommends that the pharmaceutical companies should create a solid understanding of their opportunities by looking at the entire market based on their customer to determine the actual potential.

The study recommends that the management should pay keen attention to importance of new technology, create an environment for technology innovation and constantly evaluate the maintenance strategies for efficient and effective operation of the pharmaceutical firms. The ICT managers in these pharmaceutical firms should exploit this capability and embrace digitalization of their processes in order for them to gain competitive superiority that will lead to better performance.

There is need for management to invest in the strengthening of managerial capabilities of the entire top management teams before looking for top managers from outside the pharmaceutical firm. Management should encourage creativity and innovativeness among their employees. The study recommends that the management should exercise discipline by making sure that they meet the deadlines of the given tasks, conducting meetings in the stipulated time frame. They should welcome criticism by keeping an open mind to welcome critical feedback from those working under them. The management should develop situational awareness by predicting potential issues that might

happen in the near future and providing suggestions to alleviate them.

In regards to resilience capability, management should identify valuable capability elements to connect and combine them in new ways, change their strategic strategies, implement new kinds of management methods that are more responsive within their business processes, transform existing resources into new capabilities and integrated new externally sourced capabilities and combine them with existing capabilities in order to achieve superior performance. Further, manufacturing firms ought to build adaptive capabilities to enable increase a firm's capacity for horizon scanning, change management and resilience. Moreover, create an environment for employees to offer solutions besides traditional strategies to enhance responsiveness to market disruptions.

Areas for Further Research

This study determined the influence of dynamic capabilities and performance of pharmaceutical firms in Kenya. Four specific objectives were considered that is the role of marketing capability,

technological capability, managerial capability and resilience capability. To begin with, the scope of the study was only limited to pharmaceutical firms Nairobi County and therefore the findings may not necessarily reflect other manufacturing firms in Kenya, thus there is a need for similar study considering all counties and all manufacturing firms in Kenya.

Secondly, the study focused on four dynamic capabilities which did not fully determined performance of pharmaceutical firms in Nairobi County, Kenya. This implies there may be other independent variables such as human resource capability which further studies ought to consider.

Similarly, the study did not factor moderating, mediating or intervening variables which may affect performance of pharmaceutical firms in Nairobi County. Therefore, further studies should focus on government regulations and policies and other macro-economic factors which may affect performance of pharmaceutical firms in Kenya either directly or indirectly.

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