

Strategic Learning and Performance of Small and Medium Sized Dairy Processing Firms in Kenya

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Abstract

The dairy sector plays a key role in the economic growth and development of Kenya, yet many firms in the sector, especially the small and medium sized, continue to face performance challenges such as the unregulated informal milk market, accessing markets, high industry barriers and strategic leadership competency deficiencies that fail to create environments of learning among others. Strategic learning is important in the sustainability of firms and though the subject has received attention both in practice and scholarly, its effect on the performance of small and medium sized dairy processing firms remains uncertain. This study sought to determine the effect of strategic learning on the performance of small and medium sized dairy processing firms in Kenya. The study was anchored on the Path-Goal Leadership Theory. Descriptive and explanatory research designs were used. A census survey was conducted and primary data was collected. A semi-structured questionnaire was distributed to 92 respondents consisting of chief executive officer, finance manager, marketing manager and production managers. In total, 84 questionnaires were filled and returned thus a 91.3% response rate was achieved. Descriptive statistics such as mean and standard deviation were used to explain data characteristics, while multiple regression was used to test the effect of the study variables on firm performance. The results showed that strategic learning has a positive significant effect on performance of small and medium sized dairy processing firms in Kenya, therefore it is perceived that firms that practice strategic learning have better performance. The study contributes to the body of knowledge of strategic management by filling contextual, empirical, and conceptual gaps identified earlier in literature and establishing a nexus of strategic learning and performance of small and medium sized dairy processing firms in Kenya. The study recommends that the small and medium sized dairy processing firms in Kenya should ensure that strategic learning is practiced in their firms by creating a learning culture in their firms, encourage innovations and team learning.

Keywords: Strategic Learning, Firm Performance, Small and Medium Sized Dairy Processing Firms.

1. INTRODUCTION

Strategic leaders are the central point for strategic learning for their firms. They develop a culture of inquiry and analysis from firm experiences, (Schoemaker *et al.*, 2013). Strategic leaders

possess competences that enable them to think strategically, connect and synthesize ideas and identify opportunities, (Norzailan *et al.*, 2016). To enhance the performance of their firms, the strategic leaders should have cognition skills such as talent development, influence and persuasion competencies, and motivate followers to adapt. They develop talent that leads to development of future leaders. Strategic learning is a strategic level process that renews firms' strategies and thus enables firms to stay ahead of their competitors. Strategic learning involves creation of commitment by members of the firm to the strategic direction of the firm, (Hughes *et al.*, 2014). According to Lissier and Achua (2015), the strategic leader that creates an environment and culture for strategic learning and mutual exchange between teams, leads their firms to perform better than others. They understand their environment hence identify emerging trends, analyse and predict environmental changes and needs of their customers and respond appropriately. They review a firm's structure and delegate, hence develop learning cultures in their firms (Adair, 2010). The strategic leaders also encourage innovation and creativity, while incorporating moments of reflection so that learners can assess their weaknesses and seek opportunities for improvement, (Adair, 2010; Hughes *et al.*, 2014). Strategic learning occurs where strategic leaders provide learning scenarios through increasing levels of difficulties in the learning experiences. They become mentors by encouraging their proteges reflect on their experience and help them intellectualize their difficulties, (Norzailan *et al.*, 2016). Strategic learning is dependent on the development of knowledge sharing and team learning, developing a learning culture in the firm and using the knowledge to outdo their competitors.

Small and medium sized dairy processing firms need strategic leaders who scan both their internal and external environments, understand the systems that are likely to affect their future operations and thus focus their energies towards achievement of goals while consecutively taking lessons from past experiences to forecast the future. Pietersen (2010) notes that firms ought to examine their actions, re-scan their environments and modify their strategies accordingly. As such, the firms need strategic leaders who can detect and exploit opportunities as they arise and critically evaluate such opportunities based on previously acquired knowledge and experiences. Strategic learning enables firms to analyse, modify their strategies, norms, procedures and objectives, (Schoemaker *et al.*, 2013). Leaders of small and medium sized firms experience challenges in managing the firms to survive external challenges with limited resources, and thus they need to improve their management focus to strategic development by enhanced management of their human resources (Bolden & Terry, 2000). Sharing knowledge throughout the firm, creating a suitable teaming culture and speeding up the learning processes for learning and utilizing the new knowledge faster than competitors enhances performance, (Pietersen, 2010). Strategic learning enables the members of a firm to be accustomed to changes and how to respond to them which helps individuals and teams to not only learn but also translate this knowledge into actions that have positive effects on performance, (Davis & Davis, 2010).

The changing demands in the global dairy industry requires strategic leaders of dairy processing firms to take advantage of their competences in product development and ensure the production structures of their firms are superior to maintain the changing tastes and wants of an empowered consumer and improve their performance, (Deloitte, 2016). According to Ohlan (2016), global trends indicate that India is the world's largest producer of milk. The Indian dairy market was deregularised in 1991 and this led to an influx of private owned dairy processing firms. However, despite this influx, the marketing of milk is largely by the informal milk marketers, which affects the performance of the milk processors, (Deshmukh, 2014). India, estimates that only 15 percent of the milk produced is formally marketed while the remaining 85 percent is sold informally, (Hemme *et al.*, 2003). Similarly, deregulation of the Australian dairy industry led to mergers and acquisitions of dairy processing firms which led to dominance of few large processors and numerous smaller processors, (Doucouliagos & Hone, 2000). De-regularisation of the milk industry in the European Union in 2015 for example, introduced the abolishment of the quota system which protected the small and medium sized dairy processing firms from the large firms and global price, (Borawski *et al.*, 2020).

In Africa, the performance of the dairy processing industry is affected by imports and low milk consumption, especially in Western and Central Africa, (Ndambi *et al.*, 2017). To improve performance of the dairy processors in the Western and Central African region, marketing strategies and policies should be enhanced alongside increasing milk production and reducing milk product imports. Senegal for instance imports 60 percent of its milk consumed, thus creating competition from imports, especially of powdered milk, (Magnani *et al.*, 2015). Kubkomawa (2019) notes that the West African region faces poor dairy processing technologies; therefore, raw milk supersedes processed milk sales, which affects the performance of dairy processors. Similarly, Val *et al.*, (2021), observe that, larger dairy firms in are organized in a better manner than the small ones which helps them to be resilient in times of difficulties such as the global health crisis brought about by Covid-19 pandemic. According to Bingi and Tondel (2015), the Eastern Africa region accounts for the largest milk production with Ethiopia being the largest producer ahead of Kenya and Tanzania.

The dairy industry in Kenya is one of the best industries in Africa, with thirty milk processors with a range of products and contributing four percent Kenya's Gross Domestic Product, (KDB, 2018). The sector in Kenya has metamorphosed from a monopolistic market owned by the Kenya Government through Kenya Co-operative Creameries (KCC). The cooperative system significantly led to the development and growth of KCC which monopolised the market until 1992, when the industry was liberalised, (Wambugu, *et al.*, 2011). This led to an influx of privately-owned dairy processing firms, many being small-scale processors. The sector is vastly dominated by four very large dairy processors, which are, Brookside Dairy, New KCC, Sameer Agriculture & Livestock and Githunguri Dairies that process above 150,000 litres per day, (ROK, 2013). The four dairy processors also have a combined market share of 64%, with Brookside dairy having a bigger chunk at 23%, (Omore & Baker, 2011). The other three large dairy processors that process above 40,000 litres but below the 150,000 litres have a market share of 17%. The medium level dairies processing firms have a market share of 23%, (ROK, 2013). For instance, Food Business Africa, (2020) reports that Brookside dairy that processes 750,000 litres of milk daily, has organically grown from a small dairy in 1993 and acquired other processors such as Delamere Dairy, Ilara Dairy, Buzeki Dairy and Spin Knit Dairy. This dominance and predation have made it difficult for small processors to thrive through the competition to become large companies. Additionally, the predation has led to an increase in processors owning milk sources from farms to factories, acquiring, distributing and get into retail spaces in the major outlets. As such, the industry is increasingly becoming a heavy investment industry, with the smaller players being pushed out of business by the large processors who have access to internal and external sources of funds. This means that the industry is gradually erecting barriers of entry that younger firms will be unable to crack, and more medium processors being bought, (Murage, 2011).

Further, according to Wambugu *et al.*, (2011) dominant milk products produced in Kenya is fresh white liquid milk contributing 70% of the total milk production, which is majorly sold by milk hawkers who are form the unregulated informal milk market. The informal milk market arises from preference for raw milk by consumers due to its favourable prices over processed milk, and marketing inefficiencies in the formal sector, (Kariuki *et al.*, 2015). In addition, there are market challenges such as unstable supply of milk that is affected by cycles of scarcity and abundance, poor quality of milk and high costs of processing milk, (Rademaker *et al.*, 2016; Kiambi *et al.*, 2020). Although the market for processed milk has increased exponentially since the liberalization of the industry, the informal milk marketers in Kenya continue to sell approximately 56% of the 70% of the country's marketed milk, (Alonso *et al.*, 2018). The remaining 14% is sold by registered milk processing firms, out of which 85% is processed by five large processing firms' processing more than 100,000 liters daily, leaving only 15% for the SME dairy processing firms in spite of their numbers, (Kariuki *et al.*, 2015).

The performance of the small and medium sized dairy processing firms in Kenya is also affected by capital constraints, competition from tax free imports and deficiencies in strategic leadership competences, that fail to create environments of learning, (ROK, 2013; Turner & Endres, 2017). According to Bolden and Terry (2000), strategic leaders of small and medium firm tend to

concentrate on external challenges with limited resources, thus fail to focus within the firm from where solutions must be obtained through enhancement of team involvement which would free up the strategic leaders to focus on strategic development, which ultimately affect their performance.

Empirical literature on strategic learning reveal that several studies have been carried out on the subject. However, the studies reviewed have some gaps that the current study intends to fill. For example, some studies have differing research methodologies (Siren, 2014; Gupta & Bose, 2019), contexts, (Siren & Kohtamaki, 2016), and with different conceptualization of strategic learning, (Gupta & Bose, 2019; Namada, 2013; Li *et al.*, 2014). Therefore, despite the extensive theoretical and empirical attention strategic learning has received, its effect on SME performance in the dairy sector remains uncertain, thus necessitating this study. This study seeks to fill this gap by answering the question; what is the effect of strategic learning on the performance of small and medium sized dairy processing firms in Kenya?

The findings of the study contribute to body of knowledge on strategic learning by suggesting strategic learning factors that contribute to firm performance. The findings also suggest additional areas to be developed as theory related to Goal-Path Leadership theory, and specifically in relation to strategic learning. Finally, the study findings offer a number of recommendations for practice and policy in the enhancement of strategic learning application, assessment and development.

2. LITERATURE REVIEW

2.1 Theoretical Review

The study is anchored on Path-Goal Leadership Theory. The Path-Goal theory of leadership advanced by House (1971), and improved further by House and Mitchell, (1975) contends that following a specific path or behaviour will lead to a particular result, therefore a leader determines the path that employees follow towards achievement of goals leading to superior firm performance, (Antonakis & House, 2013). The Path-Goal theory is behavioural in nature; meaning it seeks to find leadership behaviours that suit both the subordinates and work environment by enhancing the worker's commitment to efficiency and productivity in the firm, (Northhouse, 2015). The theory endeavours to link task and behaviour of the leader with the commitment and performance of the firm. The theory identifies the effectiveness of different behaviours of leaders in different conditions. An effective leader's positive motivation to employees increases their capability for superior performance through clarification of the expected behaviours for attainment of firm goals, (Ivancevich *et al.*, 2002; Kreitner & Kinicki, 2009). House (1996), postulates that for leaders to be effective, their behaviours complement their employee's surroundings and capabilities in ways which compensate for deficits which are key to employee motivation towards their work and firm performance. As noted by Famakin and Abisuga (2016), flexible leadership behaviours enhance employee commitment, whose actions are critical drivers for ensuring the attainment of firm objectives. Unlike other leadership approaches, the path-goal theory strong point is that it specifies four distinct leadership behaviours: directive, participative, supportive and achievement-oriented leadership; which link employee and environment depending on the situation therefore enhancing firm efficiency.

The theory produces greater employee satisfaction and greater performance because of the clarification of paths for them to achieve goals and removes obscurity, (McShane & Glinow, 2015). The theory is helpful to strategic leaders to learn and envision the way their leadership behaviours could encourage commitment of employees and enhance effectiveness and firm performance, set goals, determine the path of attaining the goals and provide guidance in case of difficulties in goal accomplishment, (Cote, 2017). Further, the Path-Goal theory identifies the relevance of a leader in offering cognitive guidance motivation and encouragement to subordinates thus influencing their performance. In addition, the theory guides strategic leaders on the modes of communicating strategic decisions for implementation and which leadership behaviours will enhance their uptake. Farhan (2017), posits that learning leaders tend to inspire

strategic learning in their firms and also understand their subordinates' motivations to learn, hence they adopt appropriate leadership behaviours which influence the subordinates to learn, consequently creating a firm wide learning culture.

On the flip side, Malik *et al.*, (2014) points out that the path-goal theory has weaknesses are due to the complexity of incorporating different aspects of leadership which leads to confusion in interpreting it. Further, the theory has only obtained partial backing from the numerous empirical studies carried out to test its validity, especially in support of all the four dimensions of leadership behaviour in totality. Additionally, the different behaviours exhibited by the leaders do not necessarily increase workers performance, since other factors such as task characteristics, firm culture such as formal lines of authority, benefits and financial incentives influence performance.

Despite the weaknesses, this study found the applicability of the theory relevant to support strategic learning which is the independent variable and firm performance which is the dependent variable. This is because the theory identifies the relevance of a leader in offering cognitive guidance motivation and encouragement to subordinates thus influencing their performance. The theory also acknowledges the existence of several types of leadership behaviours which are applicable at certain circumstances in the firm and partly explain why organisations experience different levels of performance. Finally, the theory appreciates that subordinates have a significant role to play in directing firm performance, hence play a part in the creation of firm culture and also participate in dyadic learning between themselves and their leaders, enhancing firm performance through strategic learning, (Kreitner & Kinicki, 2009).

2.2 Hypotheses Development

Various authors have discussed strategic learning in relation to the performance of a firm. Li *et al.*, (2014) investigated how entrepreneurs in new ventures, from a social capital perspective, use managerial ties with other firms and the government to seize opportunities. The study also explored the moderating role of organizational learning. The study found that managerial ties between firms and the government have a strong positive effect on the opportunities captured. The study further noted that managerial ties and opportunity capture is moderated by organisational learning. The study used organisation learning as a moderator while in the current study strategic learning will be a predictor variable. Additionally, the research was carried out among new ventures only but this current study shall be carried out in existent SME dairy processing firms.

Siren (2014) carried out a study to establish the role of strategic learning in firm success and how it influences competitive advantage. The sample frame comprised of SME software firms in Finland. Primary data was gathered from the firm's managing directors through emailed surveys and secondary data was gathered from articles of the companies that were in operation in 2009 when the software industry in Finland experienced volatilities. The study found that the firms that control strategic learning capabilities result in better performance. The study has some gaps in that the response rate on the primary data was 18% which creates a non-response bias which would cause skewed outcomes and analyses.

In a study to analyse the benefits of an interaction of the processes of strategic planning and strategic learning; and if strategic learning positively moderates firm performance and strategic planning, Siren and Kohtamaki (2016), found that strategic planning and firm performance is moderated positively by strategic learning, but the moderation effect is not linear. However, the study used strategic learning as a moderator therefore presents a conceptualisation gap. The current study uses strategic learning as an independent variable. Similarly, Namada (2013), sought to find out determinants of firm performance of Export Processing Zone firms in Kenya based on systems of strategic planning, organisational learning and strategy implementation. The study used organisation learning a mediating variable and found that organisational learning influences firm performance. The conclusions of the research are applicable to the current study; however, this study presents a methodological gap because it used organisational learning as a

mediating variable but is it is the independent variable in the current study, and was carried out in a different industry thus presenting a contextual gap.

Gupta and Bose (2019), carried out a study with the aim of examining processes of strategic learning for discovery driven transformation. The study aimed to gather opinions on strategic learning processes on capabilities and business models aimed at digital transformations of the firms. The study used a case study and qualitative data was collected through interviewing method. Findings of the study were that an interaction between strategic learning and the operational environment exists. The study is however based on a case study thus cannot be generalized therefore poses a methodological gap. Additionally, the context of the study was in a crowd funding industry in India, therefore cannot be generalized to other industries and countries thus presenting a contextual gap. Also, the interviewing data collection method can introduce interviewer bias.

The literature reviewed revealed that literature on strategic learning both globally and in the local context was limited. Most studies conducted on organisation learning and not strategic learning. The study also found that previous studies had considered organisation learning as either moderating variable (Li *et al.*, 2014), mediating variable, (Gupta & Bose, 2019), or regressed variable (Siren & Kohtamaki, 2016). The study further establishes that most of the studies conducted have other industries and few on SMEs. For these reasons this study identifies that a gap exists in both theoretical and empirical literature. The study sought to fill these gaps by seeking to find out the effect of strategic learning on performance of small and medium sized dairy processing firms in Kenya.

Grounded on the preceding theoretical and empirical literature review, the study developed the conceptual framework as illustrated in Figure 1, which shows the interaction between strategic learning and firm performance.

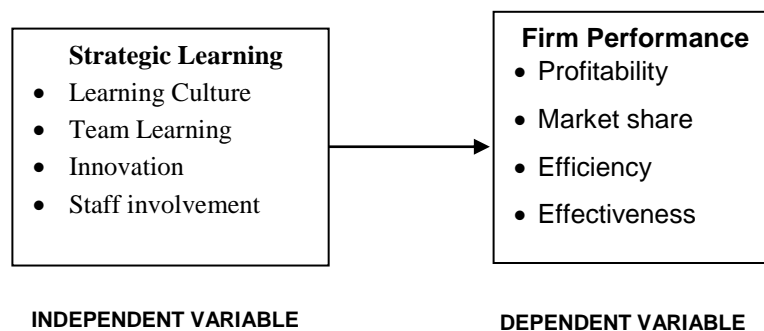


FIGURE 1: Conceptual Framework.

Figure 1 shows the conceptual framework developed from reviewed literature. Strategic learning is the independent variable measured by learning culture, team learning, innovation and staff involvement, while firm performance, measured through profitability, market share, efficiency, and effectiveness.

This study therefore pursues to establish the effect of strategic learning on the performance of small and medium sized dairy processing firms in Kenya. The research hypothesis that guided this study was:

H₁: Strategic learning has no significant effect on performance of small and medium sized dairy processing firms in Kenya.

3. RESEARCH METHODOLOGY

The study used both cross-sectional survey and explanatory research designs, (Saunders *et al.*, 2009). Cross-sectional survey design is used for descriptive research and allows the collection of large amounts of data economically from a sizeable population through questionnaires at a time. Additionally, according to Kothari (2004), cross-sectional survey is concerned with hypothesis construction and testing and can be used in a census survey, which is used in the current study. Explanatory research design is used in assessing the effect of precise changes on prevailing processes and focuses on analysis of a situation or problem to explain relationship patterns between variables, (Sekaran & Bougie, 2010). It is used in the assessment of the consequence of certain variations of a norm or process while focusing on the analyses of a situation or problems to illustrate the linkages in variables and establishes causal relationships between variables, (Saunders, 2011). Based on these reasons, the explanatory research design was found suitable in identifying the degree and feature of cause-and-effect relationship present between strategic learning and performance of small and medium sized dairy processing firms in Kenya.

This study used primary data, collected by use of self-administered semi-structured questionnaires. The questionnaire had closed and open-ended questions. The closed questions were used since they let respondents respond from few stated options. The closed questions were of a five-point Likert scale format. To encourage respondents to give deeper responses, open-ended questions were used to get any information not highlighted in the closed questions. Open-ended or unstructured questions permit respondents to give thoughtful responses, (Saunders, 2011).

Pilot test data from the sample of 10 employees in selected dairy processing firms was used in testing reliability of the questionnaire. The purpose of the pilot test was to establish face and content validity of the questionnaire in conjunction with the opinions sought from professionals and experts in the field of investigation. Component Factor Analysis (CFA) was used to test how well the variables of strategic learning represent the number of constructs. It was found that the Item content Validity Index for strategic learning was 0.957. According to Polit and Beck (2006), a content validity index of above 0.80 is considered acceptable and a content validity index equal 1.00 is considered excellent. Overall, the content validity index for the variables was 0.957 which is greater than the threshold of 0.80 indicating that the research instrument was valid.

To ensure the questionnaire measured what it was intended to measure, a test of reliability was done. The reliability of the questionnaire was measured using Cronbach Alpha with alpha values ranging from zero and one; where a coefficient of greater than 0.7 was accepted as reliable. The results were as shown in Table 1.

TABLE 1: Reliability Coefficients.

Variable	Cronbach's Alpha	
	Cronbach Alpha Coefficients	Remarks
Strategic Learning	0.769	Reliable
Firm Performance	0.934	Reliable
Overall	0.820	Reliable

From these results in Table 1, all the variables had a Cronbach's alpha coefficient greater than 0.7. According to Mugenda (2008), a coefficient of 0.7 is a suitable threshold indicating acceptable reliability. Therefore, basing on these recommendations, the research instrument was found to be reliable.

The targeted population was all the 23 small and medium sized dairy processing firms in Kenya as registered by the Kenya Dairy Board of Kenya as of December 31, 2018. A census survey of all the 23 small and medium sized dairy processing firms registered by the Kenya Dairy Board

was used. The respondents were the managers of the SME dairy processing firms. Four functional areas from each of the small and medium sized dairy processing firms were identified consisting of the Chief Executive Officer, finance manager, marketing manager and production manager, who are leaders of their firms and also custodians of their strategic and operational approaches. The total sample size was therefore 92 respondents.

Questionnaires were administered using the drop-and-pick-later method in order to give adequate time for responses. Research assistants booked appointments with respondent's firm's prior to meeting the respondents for questionnaire administration. The research assistants administered the questionnaires to respondents to establish rapport, clarify the reason for the research and make any other clarifications that may have been necessary (Mugenda, 2008). The research assistants were trained on creation of rapport with the respondents and how to convince the respondents to give relevant data and how to seek clarifications where needed.

Analyses of data was done using both descriptive and inferential statistics. All analyses was aided by the Package for the Social Sciences (SPSS). Descriptive statistics was used to summarise the survey data and included means and standard deviations, while inferential statistics involved regression analysis and was used for testing the hypothesis and drawing conclusions. Inferential data analysis was conducted using Pearson correlation coefficient and multiple regression analysis. Multiple regression analysis was done and interpreted through adjusted R^2 values and p-values at $P < 0.05$ significance level, that is, the results were at 95% confidence level, since it is the level generally used in business and social research, (Mugenda & Mugenda, 2003).

4. RESEARCH FINDINGS

4.1 Descriptive Statistics

Descriptive statistics was used to summarise the major characteristics of the study.

The respondents answered several questions to establish the extent to which strategic learning affects the performance their firms. The respondents were required to indicate their opinions on a five-point Likert scale. The scales were as follows: 1 (No extent), 2 (Little extent), 3 (Moderate extent), 4 (large extent) and 5 (Very large extent). Based on their responses, the descriptive statistics were analyzed using means and standard deviations whose results per question are presented in Table 2.

TABLE 2: Descriptive statistics of Strategic Learning and Firm Performance.

	Mean	Standard Deviation
The management of the firm hold consultative meetings with the employees before key decisions or changes are made	4.25	0.726
The firm adopts new technology with ease	4.21	0.713
Employees in the firm have capacity to generate new ideas	4.20	0.617
The firm has a method of mentoring younger staff into their careers	4.10	0.770
It is easy for the firm to adapt to new processes	3.74	0.981
Employees in the firm are able understand new ideas and concepts and processes	3.71	0.989
Employees in the firm are able to transform information and ideas into new product, processes and systems	3.50	0.977
The firm conducts trainings aligned to firm goals on employees	3.48	0.857
The management encourage learning of new strategies and processes in the firm.	3.39	0.908
The firms hierarchical structure hinders employee involvement in decision making	3.14	0.932
In the firm, employee's initiative and ingenuity is encouraged	2.92	0.943

In the firm, active participation in the management process is encouraged at all staff levels	2.82	0.984
In the firm, delegation of duties by management to subordinates is common	2.61	0.906
The firm's progress is based on team learning	2.15	.938
Aggregate mean score and standard deviation	3.44	0.874

The results in Table 2 indicate that the respondents agreed to a large extent that the management of the SME dairy processing firms hold consultative meetings with the employees before key decisions or changes are made, that the dairy firms adopt new technology with ease and employees in the firms have capacity to generate new ideas. The respondents also agree to a large extent that the SME dairy processing firms have a method of mentoring younger staff into their careers, it is easy for the firm to adapt to new processes, employees are able understand new ideas, concepts and processes as well as employees in the firm are able to transform information and ideas into new products, processes and systems. This is as indicated by mean scores of 4.25, 4.21, 4.20, 4.10, 3.74, 3.71 and 3.50 respectively. The respondents had varied opinions on these aspects as indicated by standard deviations of 0.726, 0.713, 0.617, 0.770, and 0.989. High standard deviations of 0.911 and 0.977 however, indicate that the respondents differed in their opinions concerning the ease of firms in adapting to new processes and firm employees' ability to transform information and ideas into new product, processes and systems.

The study further established that the employees agreed to a moderate extent on the following aspects of strategic learning: firms conduct trainings aligned to firm goals on employees, management encourage learning of new strategies and processes in the firm, hierarchical structure hinder employee involvement in decision making as indicated by mean scores of 3.48, 3.39 and 3.14. Standard deviations of 0.857, 0.908 and 0.932 show varied opinions on these statements. However, the respondents agreed to a little extent that employee initiative and ingenuity is encouraged, active participation in the management process is encouraged at all staff levels, delegation of duties by management to subordinates is common and progress is based on team learning as indicated by means of 2.92, 2.82, 2.61 and 2.15 in that order. Standard deviations of 0.943, 0.984, 0.906 and 0.938 show that the opinions on these statements were varied. The overall mean score was 3.44 and a standard deviation of 0.874. This indicates that responds agreed to a moderate extent that strategic learning is practiced in SME dairy processing firms albeit with varied opinions as indicated by the standard deviation.

4.2 Inferential Statistics

The study sought to determine the effect of strategic Learning on performance of small and medium sized dairy processing firms in Kenya. The corresponding hypothesis stated that strategic Learning has no significant effect on the performance of small and medium sized dairy processing firms in Kenya. To test this hypothesis, multiple regression analysis was done and interpreted through adjusted probability values (p-values) at $P < 0.05$ significance level. A 0.05 significance level is a conventionally accepted threshold to distinguish significant from non-significant outcomes and the smaller the calculated p-value, the more improbable the null hypothesis will be and vice-versa, as advised by Di Leo and Sardanelli (2020). The study used an empirical model to test the statistical significance of the relationship between strategic learning and performance of small and medium sized dairy processing firms in Kenya. Multiple regression model was used to analyze the effect of the independent variables on the dependent variable. Multiple regression models establish the line of best fit and is an accurate model for describing the relationship between the independent and dependent variables, (Field, 2013). The model was found appropriate since the dependent variable is a continuous variable. The direct relationship between strategic learning and firm performance was done using the regression model below:

$$PDPF = \beta_0 + B_1SL + \varepsilon$$

Where: -

PDPF = Performance of small and medium sized dairy processing firms in Kenya
 β_0 = constant
 β_1 = Beta Coefficient
SL = Strategic Learning
 ϵ =Error Term

The results are shown in Table 3.

TABLE 3: Coefficients^a for Multiple Regression.

	B	Standard Error	Beta		
	Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.
(Constant)	.056	.086		.655	.514
Strategic Learning	.447	.036	.420	12.518	.000

a. Dependent Variable: Performance.

The results in Table 3 show that the adjusted coefficient of multiple determination, $\beta = 0.56$. This means that if all other factors are held constant, the performance of small and medium sized dairy processing firms would be 0.56. The coefficient of strategic learning is 0.447 meaning that if all other factors are held constant and strategic learning is increased by a unit, there would be a 0.447 increase in the performance of small and medium sized dairy processing firms in Kenya. Strategic learning has a p-value of $0.000 < 0.05$ level of significance. Based on the P-value, the study rejects the null hypothesis and concludes that strategic learning has a positive significant effect on performance of small and medium sized dairy processing firms in Kenya.

The findings of this variable are consistent with that of Siren (2014), that firms that control strategic learning capabilities result in better performance of their firms. Further, the findings of Siren and Kohtamaki (2016), that strategic learning is a key ingredient to firm performance. The results are also in agreement with the postulations of the Path-goal theory of leadership by House (1971), which provides that a leader determines the path that employees follow towards the achievement of goals leading to superior firm performance. The theory further postulates that flexible leadership behaviours enhance employee commitment whose actions are critical drivers for ensuring the attainment of firm objectives, (Famakin & Abisuga, 2016; Farhan, 2018). The path-goal theory specifies leadership that links employee and environment depending on the situation therefore contributing to a firm's efficiency.

5. DISCUSSION AND CONCLUSIONS

The study sought to determine the effects of strategic learning on performance of small and medium sized dairy processing firms in Kenya and used both cross-sectional survey and explanatory research designs. Data was collected by use of a semi-structured questionnaire that had both closed and open-ended question. Data was analysed by use of descriptive and inferential analyses. The findings established that strategic learning has a positive significant effect on performance of small and medium sized dairy processing firms in Kenya, thus there is a relationship between strategic learning and performance of SME dairy processing firms in Kenya. The findings of this study are in tandem with postulations by Schoemaker *et al.*, (2013) that strategic learning is essential in shared learning and bolder innovation. Additionally, the findings are in line with findings by Siren (2014), who observed that firms that control strategic learning capabilities result in better performance. Congruently, Siren and Kohtamaki (2016), also observe that strategic learning has a positive effect of firm performance, even if the study looked at strategic learning as a moderator.

Correspondingly, the study recommends that SME dairy processing firms should invest in strategic learning by creating learning culture in their firms by communicating results of goal attainment. Where goals were not met, an examination of the cause should be encouraged and

corrective measures taken. Strategic leaders should also encourage innovation by rewarding and lauding personnel of such innovations, even if set targets were not attained in entirety. Failed team goals should be evaluated and a culture of innovation and learning be embraced in the firms by encouraging learning opportunities from such failures. Considering the SME dairy processing firms in Kenya are often faced with larger barriers on capital and labour markets than larger dairy processing firms, their strategic leaders should encourage staff participation to enable employees develop capacities to generate new ideas, adopt new technology and new processes with ease based on their available resources.

Moreover, to further enhance performance of small and medium sized processing firms, strategic leaders of the firms should hold consultative meetings with employees before making key decisions or changes. It is recommended that the managers of the firms should have methods of mentoring staff into their careers and encourage learning of new strategies and processes in the firm, which can be emphasised by their personnel managers. Further, the strategic leaders ought to continuously engage in personal trainings and other learning avenues to better their leadership skills and overall knowledge in their respective areas of expertise, thereby becoming learning leaders who inspire their subordinates to learn.

The study had some limitations in obtaining sensitive information of their firms, particularly, obtaining financial data on profitability of the small and medium sized dairy processing because the firms are not public listed companies; therefore, financial profit and loss statements are not open to the public. To counteract this limitation, the research formulated the questionnaire to encourage truthful answers through non-threatening questions and also assured the respondents of confidentiality of the information given. The study used a cross sectional design; thus, the findings may not be reliable to make long-term inferences about the performance of small and medium sized dairy processing firms in Kenya. As such longitudinal studies would be important to enable long term observation of the effect of strategic learning in the firms.

Future research should be conducted in the large dairy processing firms in Kenya to establish whether similar results will be obtained. Mediating and moderating variables, such as environmental factors, leader-member relationships and motivation could be used to show the effect on the relationship between strategic learning and firm performance. The study was also grounded in goal-path leadership theory; therefore, alternative theoretical frameworks may be utilized that may contribute differently to the research question and thus contribute further to development of theory and strategic management in general.

6. REFERENCES

Adair, J. (2010). How to Grow Leaders: The Seven Key Principles of Effective Leadership Development. *Human Resource Management International Digest*, Vol. 18 Issue: 5, <https://doi.org/10.1108/hrmid.2010.04418eae.002>.

Alonso, S., Muunda, E., Ahlberg, S., Blaxkmore, E., & Grace, D. (2018), Beyond food safety: Socio-economic effects of training informal dairy vendors in Kenya. *Global Food Security*, Volume 18, <https://doi.org/10.1016/j.gfs.2018.08.006>.

Antonakis, J., & House, R. J. (2013). The full-range leadership theory: The way forward. In Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition (pp. 3-33). *Emerald Group Publishing Limited*. Bingley, pp. 3-33. <https://doi.org/10.1108/S1479-357120130000005006>.

Bingi, S., & Tondel, F. (2015). Recent Developments in the Dairy Sector in Eastern Africa: Towards a Regional Policy Framework for Value Chain Development. European Centre for Development Policy Management. Briefing Note No. 78 - September 2015.

Bolden, R. and Terry, R. (2000). Leadership Development in Small and Medium Sized Enterprises. Phase 1 Report. *Centre for Leadership Studies*.

Borawski, P., Guth, M., Truskowski, W., Zuzek, D., Beldycka-Borawska, A., Mickiewicz B., et al (2020). Milk price changes in Poland in the context of the Common Agricultural Policy. *Czech Academy of Agricultural Economics*. 2020;66(1):19–26. <https://doi.org/10.17221/178/2019-AGRICECON>.

Cote, R. (2017). A Comparison of Leadership Theories in an Organizational Environment. *International Journal of Business Administration* Vol. 8, No. 5; 2017. doi:10.5430/ijba.v8n5p28.

Davies, B., & Davies, B. J. (2010). The Nature and Dimensions of Strategic Leadership. *International Studies in Educational Administration*. Volume 38, Number 1.

Deloitte, (2016). Global Dairy Sector – Trends and opportunities. Deloitte, The Netherlands. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/ConsumerBusiness/ie_Dairy_Industry_Trends_and_Opportunities.pdf.

Deshmukh, M. S. (2014). Growth and Performance of Dairy Sector in India. *Voice of Research*. Volume 3 Issue 2.

Di Leo, G., & Sardanelli, F. (2020). Statistical significance: p value, 0.05 threshold, and applications to radiomics—reasons for a conservative approach. *European Radiology Experimental*. doi.org/10.1186/s41747-020-0145-y.

Doucouliaagos, H., & Hone, P. (2000). The Efficiency of the Australian Dairy Processing Industry. *The Australian Journal of Agricultural and Resource Economics*. v.44 no.3 pp. 423-438. doi: 10.1111/1467-8489.00118.

Famakin, I. O., & Abisuga, A. O. (2016) Effect of path-goal leadership styles on the commitment of employees on construction projects. *International Journal of Construction Management*, 16:1, 67-76, DOI: 10.1080/15623599.2015.1130601.

Farhan, B. Y. (2017). Application Of Path-Goal Leadership Theory and Learning Theory In A Learning Organization. *Journal of Applied Business Research (JABR)*, 34(1), 13-22. <https://doi.org/10.19030/jabr.v34i1.10088>.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.

Food Business Africa, (2020, Feb 01). *The dairy industry in Kenya: production capabilities, investments, innovations and trends*. Retrieved from <https://www.foodbusinessafrica.com/the-dairy-industry-in-kenya-production-capabilities-investments-innovations-and-trends/> May, 2020.

Gupta, G., & Bose, I. (2019). Strategic learning for market pioneering: Examining the transformation of Wishberry's crowdfunding model. *Technological Forecasting and Social Change*. Volume 146, September, Pages 865-876. doi.org/10.1016/j.techfore.2018.06.020.

Hemme, T., Garcia O., & Saha, A. (2003). A Review of Milk Production in India with Particular Emphasis on Small-scale Producers. PPLPI Working Paper No. 2. <http://www.fao.org/ag/againfo/projects/en/pplpi/publication.html> (last accessed 13/05/2009).

House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative science quarterly*, 321-339. doi:10.2307/2391905.

House, R. J., & Mitchell, T. R. (1975). Path-goal theory of leadership (No. TR-75-67). Washington University dept of psychology.

House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The Leadership Quarterly*. 7 (3), 323-352. [https://doi.org/10.1016/S1048-9843\(96\)90024-7](https://doi.org/10.1016/S1048-9843(96)90024-7).

Hughes, R.L., Beatty, K. C., & Dinwoodie, D. L. (2014). *Becoming a strategic leader: Your role in your organisations success*. 2 Edn. John Wiley & Sons.

Ivancevich, J. M., & Matteson, M. T. (2002). *Organizational Behavior and Management*. McGraw-Hill.

Kariuki, A. N., Iravo, M.A., & Kihoro, J. M., (2015). Access to Resources for Product Diversification and Performance of Informal Dairy Enterprises in Kenya. *International Journal of Business and Commerce* Vol. 4, No.08 [17-33].

Kenya Dairy Board (KDB), (2018). *The Dairy Industry Regulations* (2018).

Kiambi, S., Onono, J.O., Kang'ethe, E., Abogea G.O, Murungi, M. K. , Muinde, P., et al. (2020). Investigation of the governance structure of the Nairobi dairy value chain and its influence on food safety. *Preventive Veterinary Medicine* 179: 105009. DOI: 10.1016/j.prevetmed.2020.105009.

Kothari, C.R. (2004). *Research Methodology: Methods and Techniques*. 2nd Edition, New Age International Publishers, New Delhi.

Kreitner, R., & Kinicki, A. (2009). *Organizational Behavior* 9th Edn. McGraw-Hill-Irwin.

Kubkomawa, H. (2019). Milk Processing and Utilization in West African Sub-Region. *Journal of Dairy & Veterinary Sciences*. DOI:10.19080/JDVS.2019.09.555753.

Li, Y., Chen, H., Liu, Y., & Peng, M. W. (2014). Managerial ties, organizational learning, and opportunity capture: A social capital perspective. *Asia Pacific Journal of Management*, 31(1), 271-291.

Lussier, R. N., & Achua, C. F. (2015). *Leadership: Theory, application, & skill development*. Nelson Education.

Magnani, S., Ancey, V., & Hubert, B. (2015). "Dairy policy in Senegal, subject to technological and political challenges". Conference: World Food Policy Conference, 17-18 December 2015 "Futures Faces of Food And Farmings: Regional Insights" At: Bangkok.

Malik, S. H., Aziz, S., & Hassan, H. (2014). Leadership behavior and acceptance of leaders by subordinates: Application of path goal theory in telecom sector. *International Journal of Trade, Economics and Finance*, 5(2), 170. DOI: 10.7763/IJTEF.2014.V5.364.

McShane, S., & Glinow, M.A., (2015). *Organizational Behavior* 7th Edn. McGraw Hill.

Mugenda, A.G. (2008) *Social Science Research: Theory and Principles*. Acts Press, Nairobi.

Mugenda, O.M. and Mugenda, A.G. (2003) *Research Methods, Quantitative and Qualitative Approaches*. ACT, Nairobi.

Murage, A. W. (2011). Factors that determine use of breeding services by smallholder dairy farmers in Central Kenya. *Tropical Animal Health and Production* 43(1):199-207 . doi: 10.1007/s11250-010-9674-3.

Namada, J. M. (2013). *Strategic planning systems, organizational learning, strategy implementation and performance of firms in export processing zones in Kenya*. [Unpublished Doctoral Thesis]. University of Nairobi.

Ndambi A., Zijlstra, J., Ngigi, M., Van der Lee, J., & Kilelu, C. (2017): Calculating on-farm cost of milk production in Kenya Assessing the suitability of five methods being used in Kenya . 3R Kenya project Practice brief 001. Wageningen Livestock Research, Wageningen University & Research, Wageningen.

Northouse, P. G. (2015). *Leadership: Theory and practice*. Sage publications.

Norzailan, Z., Othman, R. B., & Ishizaki, H. (2016). Strategic leadership competencies: What is it and how to develop it? *Industrial and Commercial Training*, 48(8), 394–399. <http://dx.doi.org/10.1108/ICT-04-2016-0020>.

Ohlan, R. (2016). Dairy Economy of India: Structural Changes in Consumption and Production. *South Asia Research*. Vol. 36(2): 241–260. DOI: 10.1177/0262728016638731.

Omore, A. & Baker, D. (2011). Integrating informal actors into the formal dairy industry in Kenya through training and certification. In: International Livestock Research Institute. Towards priority actions for market development for African farmers. Proceedings of an international conference, Nairobi, Kenya, 13-15 May 2009. Nairobi: AGRA and ILRI: 281-291. <https://hdl.handle.net/10568/16492>.

Pietersen, W., (2010). Strategic learning: How to be smarter than your competition and turn key insights to competitive advantage. John Wiley and Sons, New Jersey.

Polit, D & Beck, C (2006). The Content Validity Index: Are you sure you know what's being reported? Critique and recommendations. *Research in nursing & health*. 29. 489-97. 10.1002/nur.20147.

Rademaker, C.J., Bebe, B.O., Van der Lee, J., Kilelu, C. W., & Tonui, C., (2016). Sustainable growth of the Kenyan dairy sector A quick scan of robustness, reliability and resilience. Wageningen University.

Republic of Kenya (ROK) (2013). The National Dairy Development Policy: Towards A competitive and sustainable dairy industry for economic growth in the 21st century and beyond. Ministry of Agriculture, Livestock and Fisheries. State department of Livestock, sessional Paper No. 5 of 2013.

Saunders, M. N. (2011). Research methods for business students, 5th Edn. Pearson Education India.

Saunders, M., Lewis, P. & Thornhill, A. (2009) Research Methods for Business Students. Pearson, New York.

Schoemaker, P. J. H., Krupp, S., & Howland, S. (2013). Strategic leadership: The essential skills. *Harvard Business Review*, January-February 2013.

Sekaran, U., & Bougie, R. (2010). Research Methods for Business: A skill building approach, 5th Edn, Wiley India (Pvt) Ltd, New Delhi.

Siren, C. (2014). Strategic Learning: A Route to Competitive Advantage? [Published Doctoral Thesis]. University of Vaasa, Finland.

Sirén, C., & Kohtamäki, M. (2016). Stretching strategic learning to the limit: The interaction between strategic planning and learning. *Journal of Business Research*, 69(2), 653-663.

Turner, S., & Endres, A. (2017). Strategies for Enhancing Small-Business Owners' Success Rates. *International Journal of Applied Management and Technology*, Volume 16, Issue 1, Pages 34–49 DOI:10.5590/IJAMT.2017.16.1.03.

Wambugu, S., Kirimi, L. & Opiyo, J. (2011). Productivity Trends and Performance of Dairy Farming in Kenya. Tegemeo Institute of Agricultural Policy and Development.