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EFFECT OF PRODUCT INNOVATION ON PERFORMANCE OF PRINTING SMES IN KAMPALA CENTRAL DISTRICT

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Strategy

EFFECT OF PRODUCT INNOVATION ON PERFORMANCE OF PRINTING SMES IN KAMPALA CENTRAL DISTRICT

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Abstract

Purpose: The purpose of this study was to establish the effect of product innovation on performance of printing SMEs in Kampala Central District

Methodology: The study used the explanatory design. The study conducted a census on a target population of 125printing SMEs operating in Kampala Central district. Data were collected using semi-structured questionnaires that were self- administered to managers of printing SMEs. Data analysis was conducted using SPSS software program v 25.0 where both descriptive and inferential statistical analyses were done. In particular, frequencies, percentages, mean scores, standard deviation and correlation analyses were used and the resultant presentation was done using figures and tables.

Results: The study established that product innovation positively affected performance of printing SMEs. The study also revealed that use of graphic designs, digital printing and polymer sheets were among the major product innovations that were used which was represented by mean scores of 4.17, 3.95 and 3.81 respectively.

Unique contribution to theory, practice and policy: The study recommends that printing firms should constantly endeavor to invest in different new product designs and improve on the existing products so as to attain a competitive advantage against competitors. For example, holographic and scratch off foils are some of the new products that firms can take advantage of. Holographic foil adds a thrilling effect that provides a high-tech look while scratch-off foil covers things that can be revealed by just a scratch creating an interactive print. Such products can bring more traffic and sales to the business as they are attractive and are perceived to have higher value. Additionally, the new products should be designed in a way that meets customer needs in the dynamic market environment.

Key words: *Product Innovation, Performance, Printing SMEs, Kampala Central District*

1.0 INTRODUCTION

Product innovation focuses on increasing efficiency or reducing costs so as to attract customers to buy these products (Al-Sa'di et al., 2017). Notably, product innovation also increases a firm's ability to survive with shorter product life cycles, demand instability, and rapid technological changes (Rajapathirana & Hui, 2018; Mamun, 2018). In Russia, Hisrich, et al. (2019) determined the influence of product innovation and firm performance using a multi-stage estimation approach. The multistage model facilitated examining the innovative ventures of firms through multi-interrelated factors while controlling for simultaneity and causality. Findings indicated that product innovation has a positive influence on firm performance. However, the sort of product innovations in Russia may differ from those in Uganda's printing sector hence the compulsion to explore the situation in Uganda.

In Japan, Tajeddini (2016) studied financial orientation, product innovation and firm performance of Japanese SMEs. Data generated from 189 Japanese businesses were analyzed using multiple regression. The study denoted that product innovation positively impacts the performance of SMEs in Japan. However, the current study focused specifically on different strategic innovations in the printing industry.

In Turkey, Aydin (2020) focused on manufacturing firms to ascertain the effect of product innovation on performance. The research data were obtained from 186 senior and mid-level managers of 627 manufacturing firms that are widely considered to be innovative, and that were ranked among Turkey's largest 1,000 manufacturing firms. The data were analyzed using partial least squares structural equation modeling and results denoted that product innovation positively impacts performance of manufacturing firms. However, the study was centered on Turkish firms, a relatively developed country and innovation types may differ from those in Ugandan firms.

Castillo-Vergara and García-Pérez-de-Lema (2020) investigated the association between product innovation and performance in 139 Chilean industrial SMEs. Data were collected using a structured questionnaire and analyzed using the Partial Least Square (PLS) method. Results revealed a positive influence of product innovation on the performance of SMEs, a crucial issue in their competitiveness.

To establish the effect of innovation on the performance of SMEs in Oman, Alyahya'ei, Husin and Supian (2020) conducted a study using correlational research methodology. A quantitative approach was utilized to gather data from 268 respondents using self-administered questionnaires. Data were analyzed using descriptive analysis and drawn conclusions showed a positive significant relationship between product innovation and business performance of SMEs in Oman.

In Bali, Sukartini, Kencanawati and Lasmini (2019) investigated market orientation and its influence on product innovation and marketing performance of SMEs. Data were collected using questionnaires, interviews, observations, and literature studies and analyzed using the structural equation model and analyzed with smartPLS-3 software. The study found a positive significant influence of product innovation on marketing performance. Suggestions to improve marketing performance of SMEs included; making a variety of product variations, increasing product quality and production with reference to market demands.

Rosli and Sidek (2013) investigated the effect of innovation on the performance of manufacturing SMEs in Malaysia. Data was collected from 284 respondents in the food and beverage, textiles and clothing and, wood-based sub-industries throughout Malaysia. Using hierarchical regression analysis, results confirmed the hypotheses that product and process innovations significantly affected firm performance, with the effect of the former stronger than the latter. Similarly, the printing SMEs need to match with changing innovations, and hence compulsion to conduct a study centered on printing SMEs in Uganda presenting contextual gap.

Al-Battaineh (2018) investigated the impact of innovation strategies on the functional performance of SME firms in Hassan Industrial City, India. A structured questionnaire was utilized to collect data. The results showed that; product innovation, process innovation and, management innovation have a significant positive influence on increasing performance, while marketing management has no significant positive influence. This study isolated SMEs to specifically focus on printing firms with aim of understanding how innovation impacts their performance.

Oduro (2019) conducted a study on the effect of types of innovation on performance of SMEs in the Cape Coast Metropolis of Ghana. The study was built on the dynamic capabilities theory and employed a quantitative research approach via a survey questionnaire. Simple random and convenience sampling techniques were employed to choose 307 respondents for the analysis. Structural Equation Model Partial Least Square was employed to test the developed hypotheses. Results demonstrated that; product, process, organization and, marketing positively impact SMEs' performance, but organizational innovation has the most considerable effect size. More specifically, findings revealed that product innovation positively relates to performance in reference to customer satisfaction, market share, sales and, competitiveness.

Mensah and Acquah (2017) investigated the influence of types of innovation on SME performance in the Sekondi-Takoradi Metropolis, Ghana. A quantitative research approach was adopted. The postulated hypotheses were tested using the Partial least squares (PLS) structural equation modeling (SEM). Although results suggested that innovation accounted for over 51% of the variation in organizational performance, the association between product innovation and organizational performance was found to be positive but not significant. The current study utilized correlation analysis to ascertain the association between product innovation and performance of printing SMEs in Uganda.

Onikoyi (2017) investigated the effect of product innovation on organizational performance of Nestle Nigeria Plc and 340 questionnaires were completed. Using regression and correlation analysis, product innovation was observed to enhance increased market share and profitability of the company. It was also established that a significant relationship existed between product innovation and level of competitiveness.

Elsewhere, Njagi (2016) utilized a descriptive research design to assess the influence of product innovation on the profitability of private manufacturing firms in Nairobi County, Kenya. Data from 32 respondents were analyzed using regression and correlation analyzes and results concluded that product innovation positively affects financial performance. The current study

also assessed the influence of other forms of innovation like process, market and, service innovations on the performance of printing SMEs in Uganda.

Basing on a longitudinal study design, Machuki & Wasike (2018) conducted a case study on Haco Tiger Brands in Kenya to ascertain the impact of product innovation on performance. Secondary data was gathered from annual financial sales reports from 2009 to 2014. Time series and linear regression analyses were adopted to analyze data and results revealed that product innovation was relevant to the firm as it contributed significantly to their sales growth and helped to accelerate the total company sales revenue. Product innovation thus influenced the performance of Haco Tiger Brands positively.

Elsewhere, Abdilahi, Hassan and Muhumed (2017) conducted a study on the effect of innovation on SME performance basing on empirical evidence from Hargeisa, Somaliland. The study utilized descriptive and regression analyses to establish the effect of innovation. Regression results drawn from 378 SMEs revealed that innovation significantly impacts SME performance in Hargeisa. The study further showed a significant impact of product innovation, marketing innovation and, organizational innovation on the performance of these SMEs.

In Kenya, Nduati (2020) used a literature-based critical review to assess the effect of strategic innovation on the performance of manufacturing firms. Product, process, market and, technology innovation strategies had a significantly positive impact on performance among manufacturing firms. It was exhibited that key firm performance areas had considerably and positively grown improved, attributed to a considerable extent to the adoption of market and product innovation strategies. However, the study was based on desktop literature reviews, making it difficult to quantify the influence of strategic innovation on firm performance in Kenya presenting a methodological gap. A quantitative approach is used to examine the association between strategic innovations and performance of Uganda's printing SMEs.

Further, Kiilu and Kithae (2020) employed a descriptive research design to study entrepreneurial innovation processes and SME performance. Regression analysis results showed that product innovation, process innovation and, market innovation have a positive significant relationship with the performance of entrepreneurship businesses in Nairobi. The current study isolated SMEs to specifically focus on printing SMEs to understand how innovation impacts their performance.

In the Ugandan perspective, Isiagi (2019) utilized descriptive statistics to examine the adoption of innovation strategy amongst SMEs in Nakawa division in Kampala. Self-administered structured questionnaires were used and data was gathered from 86 respondents. Findings revealed a significant association between innovation strategy and performance. It was also established that new product innovation is very crucial for firms to keep pace with their competitors. It indicated that SMEs that enhanced their innovative abilities through new product development and modification of existing products will improve their performance.

Diffusion of Innovation theory

Diffusion of Innovation (DOI) theory was developed by Rogers in 1962 as cited by Mehmood and Al Mamun (2018). Rogers (2003) defined diffusion of innovation as the process through

which an innovation is communicated through certain channels over time among the members of a social system. The stages taken by an entrepreneur/enterprise to adopt an innovation, and to accomplish diffusion include; awareness of the need for innovation, decision to adopt (or reject) the innovation, initial use of the innovation to test it, and continued use of the innovation (Tariq, Pangil & Shahzad, 2017). As such, acquisition of a new idea, behavior or practice occurs sequentially as some proactive entrepreneurs are more likely to adopt the innovation than others.

Entrepreneurs who embrace an innovation early have different features from those who do so later (Toushan & Masri, 2020). Moreover, when fostering an innovation, different strategies appeal to different adopter categories. Features of the target population that may facilitate or impede the acquisition of the innovation are further elaborated through five established adopter categories namely; innovators, early adopters, early majority, late majority and, laggards.

Innovators are entrepreneurs who want to be the first to attempt an innovation. They are so inclined to taking risks and are often the first to develop new ideas. Very little, if anything, needs to be done to interest this population. Early Adopters are entrepreneurs who represent opinion leaders who take pride in their leadership roles and welcome change opportunities. They are already acquainted with the need to change and are therefore very comfortable adopting new ideas. Strategies that are relevant to this population include how-to manuals and information sheets on implementation (Senarathna, Wilkin, Warren, Yeoh & Salzman, 2018). Consequently, information is not required to convince them to change.

Early majority are entrepreneurs who are seldom leaders, but are likely to adopt new ideas before the common person. Notably, they typically need to see evidence that the innovation works before they are willing to adopt it. Strategies that are applicable to this population include success stories and evidence of the innovation's effectiveness (Zitkiene *et al.*, 2015). Late majority are entrepreneurs who are doubtful of change and will only adopt an innovation after the majority have tried it. Strategies to appeal to this group include obtaining information on how many other people have previously implemented the innovation successfully.

Laggards are very conservative entrepreneurs who are confined by tradition. They are very skeptical of change and are the hardest group to pick interest in the innovation. Strategies utilized to engage this group include statistics, fear appeals, and pressure from people in the other adopter groups (Tariq, Pangil & Shahzad, 2017).

Other studies such as Al Mamun (2018) used the theory to examine attributes of innovation adoption and its impact on performance of Malaysian manufacturing SMEs, (Tariq, Pangil & Shahzad, 2017) adopted the theory to investigate the importance of implementing human resource information system (HRIS) in the organization to achieve the competitive advantage, Stieninger and Nedbal (2014) applied the theory to assess the association between diffusion and acceptance of cloud computing in SMEs while Njogu (2014) applied the theory to demonstrate the effect of innovation on the financial performance of SMEs in Nairobi County, Kenya. These studies demonstrated that the DOI theory is useful in exploring the acquisition of different innovations amongst printing SMEs to enhance their performance.

1.1 Statement of the Problem

Uganda's printing business has been quite competitive, growing continually since the liberalization of the country's economy in the 1990s, which facilitated the entry of private printing enterprises alongside the public printing enterprises into the industry (Veitch, 2018). However, in the recent past printing firms in Kampala have been facing turbulent times characterized by declining performance and growth threatening their sustainability (Mwanguzi, 2019). Printing businesses have over the years performed poorly in regard of revenue generation leading to collapse and shut down owing to their inability to sustain operations. According to Ntende (2020), most printing businesses remain stagnant and unable to grow into large and profitable printing firms with over 3,897 (54.33%) of printing businesses dying annually in Uganda.

Innovation and creativity are vital for the advancement of printing businesses. However, despite the benefits potential associated with adopting innovations, the degree to which strategic innovations are being applied by printing businesses in Uganda remains empirically unknown. It is against this argument that the study aimed at assessing the extent to which printing SMEs apply strategic innovations and how this affects their performance. This study focused on printing SMEs in Kampala Central District, Uganda.

2.0 METHODOLOGY

The study used the explanatory design. The study conducted a census on a target population of 125 printing SMEs operating in Kampala Central district. Data were collected using semi-structured questionnaires that were self-administered to managers of printing SMEs. Data analysis was conducted using SPSS software program v 25.0 where both descriptive and inferential statistical analyses were done. In particular, frequencies, percentages, mean scores, standard deviation and correlation analyses were used and the resultant presentation was done using figures and tables.

3.0 RESULTS

3.1 General Information of the respondents

The general information of respondents included age of firm, ownership registration and monthly revenue.

3.3.1 Age of firm

As part of the general information, respondents were requested to specify the age of the firm they work in. The results are indicated in Table 1

Table 1: Age of the firm

	Age	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 5years	18	17.8	18.2	18.2
	6 to 10years	39	38.6	39.4	57.6
	11 to 15years	20	19.8	20.2	77.8
	Over 15years	22	21.8	22.2	100.0
	Total	99	98.0	100.0	
Missing	555	2	2.0		
Total		101	100.0		

Source: Research data

Findings revealed that most of the firms had been in operation for 6 to 10 years as shown by 39.4%. Additionally, 22.2% of the firms had been in operation for over 15 years. It can be deduced that majority of printing firms in Kampala had existed long enough to have been involved in some strategy innovation process to better their performance. However, the firms that had existed for over 10 years may perform better than those below 10 years as they have the exposure and know-how of the industry.

3.1.2 Ownership Registration

This section was meant to examine ownership of the business. Findings were presented in table 2

Table 2: Ownership registration

Ownership registration	Frequency	Percent	Valid Percent	Cumulative Percent
Sole proprietorship	21	20.8	20.8	20.8
Partnership	29	28.7	28.7	49.5
Limited company	51	50.5	50.5	100.0
Total	101	100.0	100.0	

Source: Research data

All the business types were adequately represented with 50.5%, 28.7% and 20.8% of the firms registered as limited companies, partnerships and sole proprietorships respectively. Majority of printing SMEs in Kampala are limited companies and this could be because of associated professional and financial benefits like; operating as legal entities and minimizing personal liability of stakeholders, having a professional image which provides better access to credit facilities, among others. Additionally, some firms are also in partnership and this could be associated with better resource mobilization and contributions which enhance better execution of intended strategic innovations. This could also mean that they get higher revenue performance as compared to the sole proprietorship. Further, a cross tabulation was done between age of firm

and ownership registration to establish whether the two are related. Results are summarized in table 3.

Table 3: Age of firm and Ownership registration

Age	Ownership registration			Total	
	Sole proprietorship	Partnership	Limited company		
Age of the firm	Below 5years	9.1%	3.0%	6.1%	18.2%
	6 to 10years	4.0%	15.2%	20.2%	39.4%
	11 to 15years	3.0%	8.1%	9.1%	20.2%
	Over 15years	3.0%	3.0%	16.2%	22.2%
Total		19.2%	29.3%	51.5%	100.0%

Source: Research data

Findings revealed that most firms (9.1%) which are below 5 years were registered under sole proprietorship and those between 6-10 years are limited companies represented by 20.2%. Also, firms over 11 years were mainly registered as limited companies. We can deduce that firms above 6years preferred to register their businesses as limited companies because of associated benefits like operating as legal entities and minimizing personal liability of stakeholders, having a professional image which provides better access to credit facilities, among others.

3.1.3 Monthly Revenue

The researcher sought to assess the monthly revenue that the printing SMEs earn. Results were summarized in table 4below.

Table 4: Approximated monthly revenue from the printing business

Monthly revenue	Frequency	Percent	Valid Percent	Cumulative Percent
Less than UGX 10million	29	28.7	29.0	29.0
UGX 11million to 20million	25	24.8	25.0	54.0
UGX 21million to 30million	28	27.7	28.0	82.0
UGX 31million to 40million	7	6.9	7.0	89.0
UGX 41million to 50million	6	5.9	6.0	95.0
Over UGX 50million	5	5.0	5.0	100.0
Total	100	99.0	100.0	
Missing	222	1	1.0	
Total	101	100.0		

Source: Research data

Findings showed that most printing firms(29%) in Kampala earn a monthly revenue below UGX 10 million, 28% earn UGX 21 to 30 million while 25% earn a revenue of UGX 11 to 20 million. This indicated that on average, the firms earn a monthly revenue below UGX 10 million. However, it was also deduced that some firms earn a monthly revenue above UGX 21 million and this could be because they have operated for longer and understand dynamics of the business. Further, a cross tabulation was done between age of firm and monthly revenue to establish whether the two are linked. Results are summarized in table 5

Table 5: Age of firm and Approximated monthly revenue

		Approximated monthly revenue from the printing business						Total
		Less than UGX 10million	UGX 11million to 20million	UGX 21million to 30million	UGX 31million to 40million	UGX 41million to 50million	Over UGX 50million	
Age of the firm	Below 5years	11.1%	3.0%	3.0%	0.0%	0.0%	1.0%	18.2%
	6 to 10years	15.2%	9.1%	11.1%	4.0%	0.0%	0.0%	39.4%
	11 to 15years	0.0%	5.1%	8.1%	3.0%	3.0%	1.0%	20.2%
	Over 15years	3.0%	7.1%	6.1%	0.0%	3.0%	3.0%	22.2%
Total		29.3%	24.2%	28.3%	7.1%	6.1%	5.1%	100.0%

Source: Research data

Findings revealed that most firms below 5 years earn a monthly revenue of below UGX 10million represented by 11.1%. Similarly, 15.2% of firms between 6-10 years also earn a monthly revenue less than UGX 10 million. This showed that most firms which are below 10 years earn a monthly revenue which is below UGX 10 million which could imply that they have not fully utilized strategic innovations to gain higher returns.

However, 8.1% of firms between 11-15 years earn a monthly revenue of UGX 21-30 million while those that are over 15 years majority receive a revenue of UGX 11-20 million which is at 7.1%. This could be because they have existed in business for longer thus know which innovations improve their performance and that they have implemented various innovations for higher returns.

3.2 Product Innovation and performance of printing SMEs

The study sought to establish whether product innovation had an effect on performance. Respondents indicated their level of agreement or disagreement based on a 5point Likert scale. Findings were presented in table 6 below.

Table 6: Product innovation and performance of printing SMEs

Statement	N	Mean	Std. Deviation
We have invested in 3D printing services	99	3.56	1.379
We have invested in digital printing machines	99	3.95	1.232
We have invested in LED UV Litho technology for sharper and more vivid prints	100	3.41	1.334
We have biodegradable print media that are friendly to the environment	97	3.28	1.352
This printing business offers mobile print solutions	97	3.59	1.434
We use polymer sheets and quality print papers to enhance quality of prints	99	3.81	1.299
The firm uses graphic design software	99	4.17	1.262
We use wi-fi enabled printers	99	3.86	1.254
Valid N (listwise)	95		

Source: Research data

Results indicated that most firms have invested in the usage of new products such as graphic design software with a mean of 4.17, digital printing machines with a mean of 3.95 and Wi-Fi enabled printers at 3.86 to enhance performance. Comparably, Isiagi (2019) postulated that establishment of new products helps the firm to have a competitive edge against its competitors. Furthermore, the author highlighted that firms that use innovative ways to come up with new products increases their performance. Similarly, the findings also agree with the study by (Machuki & Wasike 2018) who established that product innovation significantly contributes to more sales of the company hence influencing its performance.

Further, firms have invested in LED technology (3.41) and biodegradable print media (3.28) which shows that they are environmental conscious. The findings also showed that, although firms had adopted product innovations as a strategy to improve their performance, the extent to which firms adopt a particular product innovation was different. This explains why some product innovations had a higher mean than others. Variations in the adoption of product innovations could depend on the firm's dynamic capabilities and client needs. This concurs with the study done by (Sukartini & Lasmini 2019) who noted that enterprises have a variety of product innovations to suit the market needs.

The findings above highlighted that printing firms in Kampala had embraced product innovation with graphic design and digital printing machines being the major product innovations adopted across various firms to improve their performance.

3.3 Performance of printing SMEs.

The researcher investigated if there had been changes after implementation of various printing innovations. Results were as follows.

Table 7: Performance of printing SMEs

Performance	N	Mean	Std. Deviation
Annual sales revenue has increased	101	3.51	1.238
Operational costs have reduced	101	3.32	1.288
Profits have increased	101	3.50	1.324
Product defection rate have reduced	101	3.50	1.254
Number of customers has increased	101	3.47	1.460
Valid N (listwise)	101		

Source: Research data

Results showed that strategic innovations had changed firm performance such as increment in annual sales (mean = 3.51), increase in profits and reduced defection rates (mean = 3.50), an increased number of customers (mean = 3.47) and finally, reduction of operational costs (mean = 3.32). Findings corroborate with Nduati (2020) who found that product, process, and market innovations had a significant positive impact on performance. From the findings, we can deduce that product, process, market and service innovations positively affect performance of printing SMEs in Kampala.

3.4 Inferential Analysis

3.4.1 Correlation Results

This study utilized correlation analysis to determine the direction and strength between strategic innovations and performance of printing SMEs in Kampala. A correlation lies between -1 and +1 and measures the association between two variables. A positive correlation indicates that increasing one variable will increase the other variable while a negative correlation indicates that increasing one variable, decreases the other variable. A value between + 0.50 and + 1 is a strong correlation while a value closer to +1 is a perfect correlation. Results were indicated in table 8 below.

			PROD	PERF
Spearman's rho	Product Innovation	Correlation Coefficient	1.000	.607**
		Sig. (2-tailed)	.	.000
		N	100	100
	Performance	Correlation Coefficient	.607**	1.000
		N	100	101

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

The level of significance ($p = 0.000$) was less than the critical significance value of 0.01. Therefore, the hypothesis H_{01} : *There is no significant relationship between product innovation and performance of printing SMEs in Kampala Central District* was rejected. Correlation results between product innovation and performance showed a strong positive relationship between

product innovation and performance with a coefficient of 0.607, indicating that an increase in product innovation led to a positive increase in performance. This was consistent with previous findings that concluded that there was a positive significant association between product innovation and firm performance (Onikovi, 2017; Rosli and Sidek, 2013). In contrast, results of Al-Sa'di et al. (2017) showed an insignificant impact of product innovation on operational performance.

4.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study established that product innovation positively affected performance of printing SMEs. The study also revealed that use of graphic designs, digital printing and polymer sheets were among the major product innovations that were used which was represented by mean scores of 4.17, 3.95 and 3.81 respectively.

Conclusion

The study concluded that product innovation positively affects performance of printing SMEs. The study revealed that investing in new product designs ensures that firms stay competitive and continually attract more clients leading to more sales.

Recommendations

The study recommends that printing firms should constantly endeavor to invest in different new product designs and improve on the existing products so as to attain a competitive advantage against competitors. For example, holographic and scratch off foils are some of the new products that firms can take advantage of. Holographic foil adds a thrilling effect that provides a high-tech look while scratch-off foil covers things that can be revealed by just a scratch creating an interactive print. Such products can bring more traffic and sales to the business as they are attractive and are perceived to have higher value. Additionally, the new products should be designed in a way that meets customer needs in the dynamic market environment.

REFERENCES

- Abdilahi, M. H., Hassan, A. A., & Muhumed, M. M. (2017). The impact of innovation on small and medium enterprises performance: Empirical evidence from Hargeisa, Somaliland. *International Journal of Academic Research in Business and Social Sciences*, 7(8), 14-28.
- Al-Battaineh, M. (2018). Effect of Innovation Strategies on the Functional Performance of Smes Organizations in (Hassan Industrial City). *International Journal of Business and Management Invention (IJBMI)*, ISSN (Online), 2319-8028.
- Al-Sa'di, A. F., Abdallah, A. B., & Dahiyat, S. E. (2017). The mediating role of product and process innovations on the relationship between knowledge management and operational performance in manufacturing companies in Jordan. *Business Process Management Journal*, 23(2), 349-376. doi:10.1108/BPMJ-03-2016-0047 [accessed Jul 07 2021].

- Alyahya'ei, N., Husin, N. A., & Supian, K. (2020). The Impact of Innovation on the Performance of SMEs in Oman. *International Journal of Innovation, Creativity and Change*, 13(9), 961-975.
- Aydin, H. (2020). *Market orientation and product innovation: the mediating role of technological capability*. *European Journal of Innovation Management, ahead-of-print(ahead-of-print)*. doi:10.1108/ejim-10-2019-0274
- Castillo-Vergara, M., & García-Pérez-de-Lema, D. (2020). Product innovation and performance in SME's: the role of the creative process and risk taking. *Innovation*, 1-19.
- Hisrich, R. D., Abazi-Alili, H., Dana, L. P., Panthi, L., & Abazi-Bexheti, L. (2019). Product innovation and firm performance in transition economies: A multi-stage estimation approach. *Technological Forecasting and Social Change*, 140, 271-280.
- Isiagi, E. (2019). Strategic Choices and Performance of Small and Medium Enterprises in Uganda. A case of Nakawa Division.
- Kiilu, J. M., & Kithae, P. P. (2020). Entrepreneurial innovation processes and firm performance in Kenya: A case of SMES in Nairobi County. *International Journal of Management and Leadership Studies*, 2(1), 48-58.
- [Machuki](#), V. N. & [Wasike](#), S. N. (2018) Product Innovation and Performance of a Kenyan Medium Sized Company. In Bode, Freitag (Eds.): Universities, Entrepreneurship and Enterprise Development in Africa - Conference Proceedings 2018. Sankt Augustin, Germany, 13-14 September 2018, 118-135. https://doi.org/10.18418/978-3-96043-071-1_118
- Mamun, A. (2018). Diffusion of innovation among Malaysian manufacturing SMEs. *European Journal of Innovation Management*, 21(1), 113-141
- Mensah, F., & Acquah, I. S. (2017). The effect of innovation types on the performance of small and medium-sized enterprises in the Sekondi-Takoradi Metropolis. *Archives of Business Research*, 3(3), 77-98.
- Muwanguzi, I. (2019). Future of printing and publishing in Uganda bright. Available at <https://www.independent.co.ug/future-of-printing-and-publishing-in-uganda-bright/>. Accessed on 12th Feb 2021.
- Nduati, P. M. (2020). Influence Of Strategic Innovation On Performance Of Manufacturing Firms In Kenya: A Literature Based Review. *African Journal of Emerging Issues*, 2(6), 55-66.
- Njagi, E. (2016). The Effect Of Product Innovation On The Profitability Of Private Manufacturing Firms In Nairobi County. Accessed from <https://www.semanticscholar.org/paper/The-Effect-Of-Product-Innovation-On-The-Of-Private-Njagi/ccb2feece935a6bc11a42dfe4af6f71fdfb2ac17>

- Ntende, K. (2020). The Printing Industry In Uganda. Available at <https://www.inlineprint.co.ug/the-printing-industry-in-uganda/>. Accessed on Feb 11th 2021.
- Oduro, S. (2019). Impact of Innovation Types on SMEs' Performance in the Cape Coast Metropolis of Ghana. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 5(2), 110-127.
- Onikoyi, I. A. (2017). Impact of product innovation on organizational performance (A Survey of Nestle Nigeria Plc). *Journal of Marketing and Consumer Research*. 37(1). 2422-8451.
- Rajapathirana, R. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44-55.
- Rosli, M. M., & Sidek, S. (2013). The Impact of innovation on the performance of small and medium manufacturing enterprises: Evidence from Malaysia. *Journal of Innovation Management in Small & Medium Enterprises*, 2013, 1.
- Sukartini, N. W., Kencanawati, A. A. A. M., & Lasmini, N. K. (2019, November). Market Orientation and Its Impact on Product Innovation and Marketing Performance of SMEs in Bali. In *International Conference on Social Science 2019 (ICSS 2019)* (pp. 1120-1123). Atlantis Press.
- Tajeddini, K. (2016). Financial orientation, product innovation and firm performance—An empirical study in the Japanese SMEs. *International Journal of Innovation and Technology Management*, 13(03), 1640005.
- Veitch, C. (2018). The Printing Industry in East Africa. Available at <https://www.whoownswhom.co.za/store/info/4657?segment=Communication%2C+Media+%26+Technology+%28CMT%29>. Accessed on 12th February 2021.