

Entrepreneurial Networking and Performance of Ugandan Manufacturing SMEs: The Mediating Role of Innovation Capabilities

*Rennie Bakashaba, Benjamin Musiita, Sarah Nabachwa
Mbarara University of Science and Technology, Uganda
*rbakashaba@gmail.com, musitabenjamin@gmail.com

Abstract: This study investigates the potential impact of innovation capacities on the relationship between entrepreneurial networking and the performance of small and medium-sized manufacturing enterprises (SMEs) in Mbarara City. The target population of the study was 248 SMEs, according to MoFPED (2022). 205 SMEs were obtained when the sample size was calculated using Krejcie and Morgan's (1970) tables. With 186 respondents and SMEs, the response rate was 91%. Data was collected using a cross-sectional research design. To determine the mediating link, the four stages of Baron and Kenney (1986) was completed and every direct influence of the research variables had to meet a substantial requirement. The prerequisites were met and there was a significant direct association ($\text{Beta}=0.673$; $p<.01$) between entrepreneurial networking and SMEs' performance. Furthermore, there was a direct substantial association ($\text{Beta}=0.437$; $p<.01$) between innovation capabilities and the performance of SMEs, and a significant correlation ($\text{Beta}=0.166$; $p<.01$) was found between entrepreneurial networking and innovation capabilities. The association between entrepreneurial networking and the performance of SMEs decreased from $\text{Beta}=0.673$ to $\text{Beta}=0.617$ when innovation capabilities were taken into account, although the relationship remained statistically significant. This suggests that the relationship between entrepreneurial networking and performance of SMEs is mediated by innovative capabilities. The model's indirect outcome is given by the percentage of 8.32%, indicating that 91.68% explains the direct effect. The study advises policymakers to encourage SMEs to innovate and promote entrepreneurial networking by organizing workshops/seminars where entrepreneurs can interact with each other and thus boost their innovativeness which will enhance SME performance.

Keywords: *Performance, Ugandan Manufacturing SMEs, entrepreneurial networking, innovative capabilities*

1. Introduction

Significant economic growth and development are attributed to Small and Medium-sized Enterprises (SMEs), which are integral to the global economy (Eikelenboom & De Jong, 2019; Turyahebwa et al., 2013). A company with fewer than 50 employees and a turnover of between 10 million and 50 million Ugandan Shillings is classified as an SME. This definition aligns with that of Kasekende and Opondo (2003), forming the basis of our study on a manufacturing SME.

SME operations have significantly impacted the economies of both industrialized and developing nations in recent years. Estimates from the Uganda Bureau of Statistics (2019) show that SMEs employ over 45% of the country's labor force and account for more than 20% of the GDP. SMEs are acknowledged as major forces behind regional growth (Donkor et al., 2018; Pucci et al., 2017), income distribution, resource utilization, and innovation on a worldwide scale (Maldonado - Guzmán et al., 2019). They also play a significant role in promoting socio-economic development and reducing poverty through GDP growth and employment creation. SMEs which make up 90% of the private sector, are the main drivers of Uganda's economy (Al Mamun et al., 2016). These enterprises, particularly manufacturing, trade, service, and agriculture, contribute to economic growth, transformation, and employment generation (Orobia et al., 2020). Despite their significant role, many SMEs in Uganda have struggled with poor performance and even closure. This study examines how entrepreneurial networking and innovation could enhance the performance of SMEs to address this problem.

In this instance, performance will be characterized as an SME's capacity to create plans via its networks of entrepreneurs that facilitate the accomplishment of operational objectives. Financial metrics like profitability and cash flow, as well as non-financial metrics like reputation and customer loyalty, can be used to evaluate performance (Cho et al., 2019). Since many small firms in Uganda have short lifespans (MTIC, 2015) and there is a dearth of trustworthy financial records, we will use non-financial metrics including client retention, internal procedures, and learning and growth (Sebikari, 2014) to gauge performance.

Globally, small and medium-sized firms (SMEs) performance is evaluated mostly based on entrepreneurial networking (Anwar & Ali-Shah, 2020). Small enterprises can produce resources essential to their performance through these formal and/or informal networks (Mayanja et al., 2019). According to Abu-Rumman et al. (2021), the establishment of social links between business managers and external stakeholders fosters trust within the organization. This, in turn, promotes information exchange and raises the prospect of improved firm performance. This collaboration has fostered the growth of many SMEs, making entrepreneurial networking a crucial variable in this study.

According to O'Regan and Ghobadian (2016), new products or processes that meet consumer needs more profitably and competitively than those that already exist are indicative of business innovation capabilities from the perspective of small and medium-sized enterprises. In this study, we use the word innovation capabilities to refer to the effective implementation of innovative solutions to difficulties faced by manufacturing SMEs, including applying new ideas concerning the SMEs' goods, structures, and processes.

Innovation, according to Rexhäuser and Rammer (2014), is the introduction of new or significantly enhanced organizational strategies, marketing tactics, products, and procedures that bring value to the business. Schumpeter (1942) asserted that small enterprises must be creative to adapt to the changing demands of their clientele and perform at their best. Innovation and small business performance are positively correlated (Ramadani et al., 2019). To obtain a competitive edge, a business needs to innovate. As the business climate becomes increasingly uncertain (Hanelt et al., 2021), entrepreneurs must adapt by becoming inventive (Guerrero-Villegas et al., 2018) or risk becoming outdated (Zhang et al., 2019). As a result, for businesses to remain competitive, they need to be able to identify, anticipate, and creatively satisfy customer needs.

One could argue that innovation and entrepreneurial networking improve SME performance. Regarding innovation's mediating function in the connection between entrepreneurial networking and SME performance, there isn't enough research, though. The majority of research on innovative networking and entrepreneurship has been conducted in developed economies. To investigate this mediating role, this study emphasizes the contextual and holistic elements from the standpoint of the developing economy. This will assist business owners in realizing the value of strengthening their networks of connections and unleashing their creative potential to create new and improved products and services that will be essential to raising their level of performance.

2. Literature Review

This study examines performance-enhancing tactics used by Mbarara City's manufacturing SMEs through the lens of networking theory. According to networking theory, entrepreneurial networking can help SMEs perform better (Johanson & Mattsson, 1988). The individuals and recommendations in their business networks make up these entrepreneurial networks. According to Centeno and Carmichael (2014), entrepreneurial networks are the formal or informal cooperative relationships that business owners and managers develop with their institutional, social, and business contacts to obtain resources that are essential for improving the performance of their organizations. Furthermore, they have individuals with whom they have an indirect relationship or who they know through others (Aladejebi, 2020). By using these networks, business owners can draw in and keep clients to expand their clientele (Engel et al., 2017).

According to Schumpeter (1942), to boost performance and expand their customer base, SMEs need to create new or significantly enhanced goods and services. This is accomplished through "creative destruction," where new products, markets, processes, and organizations replace their predecessors (Kraehe, 2019; Langroodi, 2021). As such, Schumpeter's ideas align with the study, which suggests that entrepreneurs must continually innovate to achieve better business performance.

According to Schumpeter's arguments in 1972, innovation in SMEs directly results from entrepreneurial networks that contribute to improved performance. Schumpeterian theory suggests that SME owners can acquire vital business opportunities, skills, and knowledge needed to unlock their innovative potential through these networks. The collaboration and social ties among business owners allow them to share ideas and thoughts and visit innovative firms to gain exposure and knowledge. They can create new plans, goods, services,

procedures, and marketing methods that support small firms in achieving high performance by using this vicarious learning. This theory is supported by Hilmersson (2021), who highlights the significance of these tactics in SMEs. According to Bakas et al. (2019), these networks aid in the expansion and growth of small firms.

When entrepreneurial networks are devoted to developing a progressive culture or offering capital for the commercialization of an idea, service, or strategy that has the potential to transform the world, they are more beneficial to firms (Zhang et al., 2019; Ha et al., 2022). According to Abu-Rumman et al. (2021), entrepreneurial networks must build ties with a variety of stakeholders over the short- and long-term. These connections help small firms understand the demands of their clients (Zheng et al., 2020) and create new or significantly enhanced goods and services that boost small business performance (Cárdenas, 2021). Thus, entrepreneurial networks improve small enterprises' performance through innovation.

While Aboelmaged (2014) asserts that innovation mediates the relationship between knowledge, management capacity, and operational success, Mayanja et al. (2019) contend that innovation is a tool its predecessors used to influence results rather than an end in and of itself. Anning-Dorson (2018) also asserts that innovation mediates the relationship between engagement capability and service company performance. Moreover, including organizational, product, and process innovation is a mediator between adaptability and success in the organization, claim Camison and Lopeç (2010).

Likewise, this research suggests that innovation's ability to comprehend the business environment in which it operates may act as a mediator in the relationship between entrepreneurial networking and SME performance. SME owners need to be more flexible in their innovation and build the right networks to attain the desired improved performance. Therefore, the study generated the hypothesis, (H1): Innovation capabilities mediate the relationship between entrepreneurial networking and SME performance in Uganda. This is due to a lack of data supporting the idea that innovation capabilities play a mediating role in the association between entrepreneurial networking and SME performance in Mbarara City's manufacturing sector.

3. Methodology

The study used a cross-sectional research design with a correlational approach and a quantitative analysis. Cross-sectional research design was chosen because it allowed us to understand the variables being studied simultaneously. The correlational research design assessed the relationships among the study variables while focusing on phenomena at a specific time. This facilitated evaluating the hypothesized relationship between entrepreneurship networking, innovation capabilities, and SMEs' performance in Mbarara City.

A total of 248 manufacturing SMEs in Mbarara City that were registered were the target population (MoFPED, 2022). Given their superior capacity for innovation in comparison to other Mbarara City businesses, manufacturing SMEs were given preference during the selection process. The study used purposive sampling to choose its sample and used Krejcie and Morgan's (1970) tables to determine sample size. Out of 248 SMEs, 205 SMEs in the sample size had responses, yielding a 91% response rate of 186 responses. Owners and managers were the unit of inquiry, and SMEs were the unit of analysis.

4. Results

Demographic characteristics of the owner/manager of SMEs

Table 1 shows the distribution of demographics among Mbarara City's SME owners and managers.

Table 1: Demographic characteristics of the owner/manager of SMEs in Mbarara City

Category	Item	Frequency	Percentage
Gender	Male	85	45.6
	Female	101	54.4
Age	20-29	87	46.8

	30-39	55	29.6
	40-49	30	16.1
	50 and above	14	7.5
Religion			
	Anglican	54	29
	Moslem	67	36
	Catholic	24	12.9
	Pentecostal	37	19.9
	Seventh-day Adventist	4	2.2
Marital Status			
	Married	52	28
	Single	34	18.2
	Cohabiting	64	34.4
	Divorce	28	15.1
	Widowed	8	4.3
Highest level of education			
	Certificate	125	67.2
	Diploma	28	15.1
	Degree	16	8.6
	Professional Qualifications	4	2.2
	Post Graduate	9	4.8
	Masters	3	1.6
	PhD	1	0.5
	Total	186	100

Source: Primary data, 2024

The gender distribution in Uganda's SME sector or the sampling procedure employed in the study may be to blame for the relatively larger percentage of women (54.4%) than males (45.6%) in the sample, according to the study's findings. Furthermore, over 75% of the respondents were in the 20–39 age group, indicating that young people made up the majority of the sample. This suggests that young entrepreneurs are the main players in the SME sector, looking for challenges and possibilities in the market.

The study also reveals that a sizable portion of the sample was made up of individuals from various religious origins, including Muslims (36%) and Anglicans (29%). This suggests that the SME sector is open to and accommodating of a wide range of faiths and beliefs. The findings show that cohabiting (34.4%) and married (28%), the two most common marital statuses among the respondents, indicate that the SME sector contains some stable and non-traditional family structures, which may affect the social and economic well-being of SME managers and their dependents.

The study also reveals that certificates (67.2%) were the most prevalent level of education among the respondents, followed by diplomas (15.1%) and degrees (8.6%). These findings suggest that a moderate level of formal education is necessary for the SME sector, although a high academic qualification is not always required. Lastly, the data show that the sample's proportion of postgraduate, professional, master's, and PhD holders was low, indicating that highly educated people might not find the SME sector to be particularly appealing in terms of chances or incentives.

Demographic characteristics of SMEs

The distribution of SME owners' demographics in Mbarara City is shown in Table 2.

Table 2: Demographic characteristics of SMEs in Mbarara City.

Category	Item	Frequency	Percentage
Ownership structure			
	Sole Trader	9	4.8
	Partnership	42	22.6
	Limited Company	135	72.6
Trading period of business			
	Less than 1 year	96	51.6
	1-2 years	37	19.9
	3-5 years	12	6.5
	6-10 years	27	14.5
	More than 10years	14	7.5
Number of Employees			
	Less than 10	129	69.4
	10-19	45	24.2
	20-29	12	6.4
	Total	186	100

Source: Primary data, 2024

This table presents insightful information on the demographic characteristics of SMEs in Mbarara City. The data indicates that Limited Companies comprise the majority of SMEs in the city, accounting for 72.6% of the total sample. However, there are also Sole Traders (4.8%) and Partnership structures (22.6%), implying that potential business owners should consider various ownership options.

Notably, over half of the SMEs in Mbarara City have been in operation for less than a year (51.6%), indicating a need for support programs, mentorship, and resources to help new businesses succeed. Additionally, only a small percentage of businesses have managed to operate for over a decade (7.5%), highlighting the challenges of sustaining a business in the current economic climate. Furthermore, most SMEs in Mbarara City have fewer than ten employees (69.4%). This underscores the importance of policies and programs to create jobs and promote entrepreneurship to impact the local economy significantly.

Table 3: Tests of mediation to determine how innovation capabilities influence the relationship between entrepreneurial networking and SMEs' performance

Steps	Regressions	B	SE	Beta
IV&DV	EN—PCS	0.589	0.048	0.673
IV&MV	EN—IC	0.178	0.078	0.166
MV&DV	IC---PCS	0.358	0.054	0.437
IV, MV&DV	EN & IC—PCS	EN=0.540	EN=0.043	EN=0.617
		IC=0.274	IC=0.041	IC=0.334
	Part correlations	EN=0.609		
		IC=0.330		
	R Square		0.562	
	N		186	

EN= Entrepreneurial Networking, IC= Innovation Capabilities, PCS= Performance of SMEs

Both entrepreneurial networking and the performance of SMEs were significantly impacted directly (beta=.673; $p < .01$). This shows that for every unit increase in entrepreneurial networking, the performance of SMEs increased by 0.673 units while keeping other variables constant. This effect is statistically significant at

the 1% level. The influence on entrepreneurial networking and innovation capabilities was significant (Beta=.166; $p < .01$). Furthermore, a noteworthy and direct impact was noted on SMEs' performance concerning their innovation capabilities (Beta=.437; $p < .01$).

The direct correlation between entrepreneurial networking and SME performance dropped from Beta=.673 to Beta=.617 when innovation capabilities were taken into account, but it was still statistically significant. This shows that the association between entrepreneurial networking and the performance of SMEs decreased but remained statistically significant even after accounting for innovation capabilities. This shows a partial mediation in the relationship between SMEs' performance and entrepreneurial networking through innovation capabilities. This indirect effect (partial mediation) makes up 8.32% ($0.056/0.673 \times 100$) of the model; meaning 91.68% of the model that explains the direct effect is attributed to other factors. This could imply that SMEs with strong innovation capabilities are more likely to benefit from their entrepreneurial networking activities and perform better than those with weak innovation capabilities. As a result, we agree with the study's hypothesis, which holds that innovation capacities play a mediating role in the relationship between entrepreneurial networking and SMEs' performance in Uganda. In addition, the results were shown on the path diagram, as may be seen below.

Figure 1: Using a med-graph to examine how Innovation Capabilities mediate the relationship between SMEs' performance and entrepreneurial networking

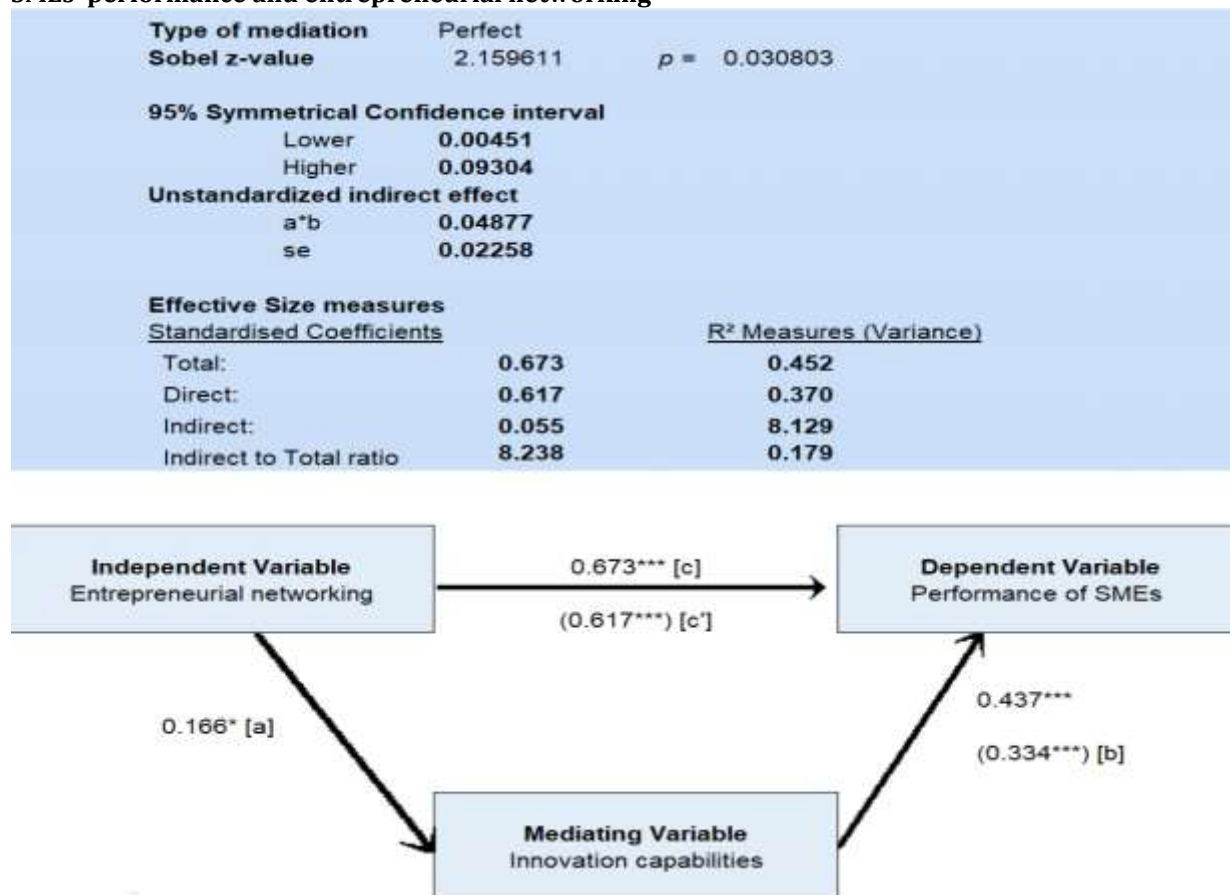


Figure 1 suggests that the relationship between the performance of SMEs and entrepreneurial networking is mediated by innovation capabilities. The med-graph indicates a positive correlation between entrepreneurial networking and the performance of SMEs, implying that improved networking can enhance a firm's success. The existence of innovation capabilities strengthens this relationship even further.

The presence of innovation capabilities helps SMEs to develop and apply new ideas, products, and services that

can differentiate them from competitors. This augments performance and creates a competitive advantage. Innovation capabilities also help SMEs to effectively utilize the resources acquired through entrepreneurial networking, further strengthening the positive relationship between networking and performance. Therefore, it can be concluded that innovation capabilities are an essential factor mediating the relationship between SMEs' performance and entrepreneurial networking. SMEs with strong innovation capabilities are likely to benefit more from entrepreneurial networking and stand better chances of bettering their overall performance.

Discussion

The study identifies the significant predictors of SME performance, which are entrepreneurial networking (EN) and innovative capabilities (IC). The findings reveal that positive changes in EN and IC lead to a positive outcome in SME performance. As a result, small business owners and managers should concentrate on building trust through entrepreneurial relationships, as this will enhance staff development, internal processes, and client retention, all of which will contribute to increased business performance. The findings also show a favorable correlation between IC and SME performance in terms of new processes, products, and organizations. Therefore, SME owners need to create entrepreneurial networks that foster innovation, leading to high SME performance.

The study's theoretical framework is based on Schumpeterian Theory and Network Theory, which support the study's EN and IC variables. Both theories consistently identify EN and IC as antecedents of SME performance. As reflected in the study's findings, innovative and networking SMEs perform better than their counterparts. Thus, SMES must establish entrepreneurial networks as a basis for the development of new products/services and the improvement of processes which will ultimately lead to performance enhancement.

Furthermore, our results support earlier research on the mediating role of innovative capabilities. Camison and Lopez (2010) claim that the integration of organizational, product, and process innovations has a favorable impact on an organization's performance and adaptability. Similarly, Mpando (2015) found that innovation influences the networking-performance relationship in a discernible way. This implies that if entrepreneurial networks are to improve business success, innovation should come first. Additionally, Aboelmaged (2014) suggested that the relationship between operations performance and knowledge management competency is mediated by innovation capabilities. Anning-Dorson (2018) also demonstrated that innovation plays a mediating role in the relationship between participation capability and service businesses' performance. Thus, to promote high performance and obtain a competitive edge in the market, small and medium-sized business owners should concentrate on innovation and entrepreneurial networking.

5. Contributions, Conclusion and Recommendations

Contributions of the Study

The topic of entrepreneurial networking, innovation capabilities, and SME performance has been subject to several debates. This study aims to contribute to this ongoing conversation and add to the existing body of knowledge. Practitioners globally recognize the value of SMEs as promoters of economic development. The study aligns with the United Nations Sustainable Development Goal (SDG 8) of 2030, which promotes sustained inclusive and sustainable economic growth and full employment for all.

The findings of this study are expected to inform SME owners/managers about the importance of enhancing their entrepreneurial networking and innovation capabilities to improve their businesses' performance. Policymakers such as the government and the Ministry of ICT can also benefit from the numerous innovations that SMEs create.

From a methodological standpoint, the main target audience was SMEs. Their experiences with entrepreneurial networking and innovation capacities were the subject of unbiased and critical feedback, which produced creative insights to guide policy regarding what needed to be done to enhance SME performance. Lastly, the study presents a topic that has gotten little attention: the role of innovation capacities in mediating the relationship between entrepreneurial networking and SMEs' performance in Uganda.

Conclusion and Implications

The purpose of this study was to determine how innovation capabilities and entrepreneurial networking skills affected the performance of SMEs in Mbarara City, Uganda. It employed a questionnaire with 186 owners and managers of SMEs as respondents. The findings imply that innovation capabilities and entrepreneurial networking are important indicators of SMEs' performance. The study also demonstrates how innovation acts as a mediating factor in the relationship between entrepreneurial networking and SME performance.

This study benefits the business community, policy, and scholarly research. It adds to the body of knowledge regarding how innovative and entrepreneurial networking skills affect the performance of small and medium-sized enterprises in Mbarara City, Uganda. The study also emphasizes how crucial innovation is in mediating the link between SME performance and entrepreneurial networking. Therefore, to improve the performance of their businesses, SME owners must create both official and informal networks. This will address changing client needs, and develop new products, services, and procedures for their businesses. Further, the study advises policymakers to encourage entrepreneurial networking by organizing workshops and seminars where entrepreneurs can interact with each other and thus boost their innovativeness which will enhance SME performance.

This study has its limitations, just like any other. For example, in the link between entrepreneurial networking and SME performance, the partial mediation caused by innovation capabilities is 8.32%, implying that 91.68% of the direct effect is due to other factors. Future studies should examine other variables that affect SMEs' performance in Uganda. Nonetheless, this study presents empirical evidence on the influence of entrepreneurial networking and innovation capabilities on the performance of SMEs using data from Mbarara City, Uganda.

Future research should examine larger and more representative samples, experimental or longitudinal designs, secondary or objective data sources, and more reliable regression models. The study acknowledges the challenges and limitations related to the design, including the cross-sectional design, limited sample size, self-reported measures, and bias resulting from the omitted variable. The study suggests that future research looks at other factors that can have an impact on the performance of SMEs. Lastly, the paper proposes that a longitudinal design analyzing the factors in this study will assist in demonstrating how having more networks and, consequently, more innovations, will affect performance over time.

References

- Abbasi, T., & Weigand, H. (2017). (IDEAS). The impact of digital financial services on firm's performance: a literature review. <http://arxiv.org/pdf/1705.10294>
- Aboelmaged, M. G. (2014). Linking operations performance to knowledge management capability: The mediating role of innovation performance. *Production Planning & Control*, 25(1), 44-58.
- Abu-Rumman, A., Al Shraah, A., Al-Madi, F., and Alfalah, T. (2021), "Entrepreneurial networks, entrepreneurial orientation, and performance of small and medium enterprises: are dynamic capabilities the missing link?", *Journal of Innovation and Entrepreneurship*, 10(1), 1-16.
- Ackah, J., & Vuvor, S. (2011). Master's Thesis in Business Administration, MBA programme (Blekinge Tekniska). <https://www.diva-portal.org/smash/get/diva2:829684/>
- Adele, A., Flore-Anne, M. (2011). Assessing financial literacy in 12 countries: an OECD/INFE international pilot exercise. *Journal of Pension Economics and Finance*, 10(4), 657-665.
- Agyapong, D. (2021). Implications of the digital economy for financial institutions in Ghana: an exploratory inquiry. *Transnational Corporations Review*, 13(1), 51-61. <https://doi.org/10.1080/19186444.2020.1787304>
- Aladejebi, O., (2020). The Impact of Entrepreneurial Networks on The Performance of Small Business in Nigeria. <https://doi.org/10.14738/abr.83.8019>
- Al Mamun (2018). Effect of entrepreneurial and market orientation on consumer engagement and performance of manufacturing SMEs.
- Al-Omouh, K. S., Ribeiro-Navarrete, S., Lassala, C., and Skare, M. (2022), "Networking and knowledge creation: Social capital and collaborative innovation in responding to the COVID-19 crisis", *Journal of Innovation & Knowledge*, 7(2), 100181.

- Amoro, J. E., Donnas, K. & Bosma N. (2011). Global Entrepreneurship Monitor (2010) Global report. Global Entrepreneurship Research Association.
- Anning-Dorson, T. (2018). Customer involvement capability and service firm performance: The mediating role of innovation. *Journal of Business Research*, 86, 269–280.
- Anwar, M., and Ali Shah, S. Z. (2020). Managerial networking and business model innovation: Empirical study of new ventures in an emerging economy. *Journal of Small Business & Entrepreneurship*, 32(3), 265–286.
- Agyapong D. (2021). Implications of the digital economy for financial institutions in Ghana: an exploratory inquiry. *Transnational Corporations Review*, 13(1), 51–61. 10.1080/19186444.2020.1787304
- Agyapong, D., & Attram, A. B. (2019). Effect of owner-managers financial literacy on the performance of SMEs in the Cape Coast Metropolis in Ghana. *Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-019-0191-1> Alliance for Financial Inclusion. (2016, Sep).
- Alliance for Financial Inclusion. www.afi-global.org:https://www.afi-global.org/sites/default/files/publications/afi_smefwg_wg_guideline_note_stg2.pdf
- Andrews, K. R., Christensen, C. R., Guth, C. R., & Learned, E. P. 1965. Strategic choice in knowledge-based organizations: The case of the electronic industries in Algeria 1969. Irwin.
- Anggadwita, G., & Mustafid, Q. Y. (2014). Identification of factors influencing the performance of small and medium enterprises (SMEs). *Procedia-Social and Behavioral Sciences*, 115, 415–423. <https://doi.org/10.1016/j.sbspro.2014.02.448>
- Atakora, A. (2013). Managing the effectiveness of financial literacy programs in Ghana. *International Journal of Management and Business Research*, 135–148.
- Bakas, F. E., Duxbury, N., & Vinagre de Castro, T. (2019). Creative tourism: Catalysing artisan entrepreneur networks in rural Portugal. *International Journal of Entrepreneurial Behavior & Research*, 25(4), 731–752
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27(6), 643–650. <https://doi.org/10.1177/014920630102700602>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Camison, C., & López, A. V. (2010). An examination of the relationship between manufacturing flexibility and firm performance. *International Journal of Operations & Production Management*.
- Cárdenas, J. (2021). Networking for innovation: An analysis of research on social networks, social capital, and innovation. *International Review of Sociology*, 31(3), 392–409.
- Centeno, M., & Carmichael, D. W. (2014). Network connectivity in epilepsy: Resting state fMRI and EEG–fMRI contributions. *Frontiers in Neurology*, 5, 93.
- Cho, M. (2019). Differences in perceptions about food delivery apps between single-person and multi-person households. <https://doi.org/10.1016/j.ijhm.2018.06.019>
- Cho, M., Ibrahim, S., & Yan, Y. (2019). The use of nonfinancial performance measures in CEO bonus compensation. *Corporate Governance: An International Review*, 27(4), 301–316.
- Chong, H. G. (2008). Measuring the performance of small-and-medium-sized enterprises: the grounded theory approach. *Journal of Business and Public Affairs*, 2(1), 1–10.
- Daft, R. L. (1983). *Organization Theory and Design*. The University of Michigan: West Publishing Company.
- De Mel, S., McKenzie, D., & Woodruff, C. (2012). Business training and female enterprise start-up, growth and dynamics: Experimental evidence from Sri Lanka. *Journal of Development Economics*, No 199–210.
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35(12), 1504–1511. <https://doi.org/10.1287/mnsc.35.12.1504>
- Donkor, J., Donkor, G. & Kwarteng, C. (2018). Strategic planning and performance of SMEs in Ghana: The moderating effect of market dynamism. *Asia Pacific Journal of Innovation and Entrepreneurship*. 12. 62-76. 10.1108/APJIE-10-2017-0035.
- Eikelenboom, M., & de Jong, G. (2019). The Impact of Dynamic Capabilities on the Sustainability Performance of SMEs. *Journal of Cleaner Production*, 235, 1360–1370. <https://doi.org/10.1016/j.jclepro.2019.07.013>

- Engel, Y., Burg, E. V., Kleijn, E., & Khapova, S. N. (2017). Past Career in Future Thinking: How Career Management Practices Shape Entrepreneurial Decision Making. *Strategic Entrepreneurship Journal*, 11(2), 122–144.
- Eniola, A. A., Entebang, H., & Law, K. L. (2016). Financial literacy and SME firm performance. *International Journal of Research Studies in Management*, 5(1), 31–43. <https://doi.org/10.5861/ijrsm.2015.1304>
- Gathungu, J. M., & Sabana, B. M. (2018). Entrepreneur financial literacy, financial access, transaction costs and performance of microenterprises in Nairobi City County in Kenya. *Global Journal of Management and Business Research*. 18(6–A <https://journalofbusiness.org/index.php/GJMBR/article/view/2548>)
- GSMA. (2015). State of the industry report, mobile money.
- Henard, D. H., & McFadyen, M. (2012). Resource dedication and new product performance: A resource-based view. *Journal of Product Innovation Management*. How Does Technological and Financial Literacy? n.d. 29(2), 193–204. <https://doi.org/10.1111/j.1540-5885.2011.00889.x>
- Hernando, I., & Nieto, M. J. (2007). Is the Internet delivery channel changing banks' performance? The case of Spanish banks. *Journal of Banking & Finance*, 31(4), 1083–1099. 10.1016/j.jbankfin.2006.10.011
- Hussain J, Salia S and Karim A. (2018). Is knowledge that powerful? Financial literacy and access to finance. *JSBED*, 25(6), 985–1003. 10.1108/JSBED-01-2018-0021
- Hussain, J., Salia, S., & Karim, A. (2019). Is knowledge that powerful? Financial literacy and access to finance. *Journal of Small Business and Enterprise Development*, 25(6), 985–1003. <https://doi.org/10.1108/JSBED-01-2018-0021>
- Johanson, J. and Mattsson, L.G. (1988) Internationalization in Industrial Systems—A Network Approach. In: Hood, N. and Vahlne, J., Eds., *Strategies in Global Competition*, Croom Helm, New York.
- Kapurubandara, M., & Lawson, R. (2007). SMEs in developing countries need support to address the challenges of adopting e-commerce technologies. In *Proceedings of the Bled eConference*, (p. p. 24). 2007 (Merging and Emerging Technologies, Processes, and Institutions: Conference Proceedings.) Slovenia.
- Kasekende, L.A., & Opondo, H. (2003). Small and Medium-Scale Enterprises (SMEs): Uganda's Experience. https://www.researchgate.net/publication/237441966_Financing_Small_and_Medium-scale_Enterprise_SMEs_Uganda's_Experience_By/
- Kraehe, A. M. (2019). Entrepreneurship as creative destruction. *Art Education*, 72(5), 4–7.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>
- Kulathunga, K., Ye, J., Sharma, S., & Weerathunga, P. (2020). How does technological and financial literacy influence SME performance: Mediating role of ERM practices. *Information*, 11(6), 296. <https://doi.org/10.3390/info11060297>
- Langroodi, F. E. (2021). Schumpeter's Theory of Economic Development: A study of the creative destruction and entrepreneurship effects on economic growth. *Journal of Insurance and Financial Management*, 4(3), 17
- Lusardi, A., & Tufano, P. (2008). Debt literacy, financial experiences and over-indebtedness. *National Bureau of Economic Research*. 14(4), 332–368. <https://doi.org/10.1017/S1474747215000232>
- Maldonado - Guzmán et al., (2019). Innovation Capabilities and Performance: Are they truly linked in SMEs? <http://dx.doi.org/10.1108/IJIS-12-2017-0139>
- Marriott, N., Mellett, H., Marriott, N., & Mellett, H. (1996). Health care managers' financial skills: Measurement, analysis and implications. *Accounting Education*, 5(1), 61–74. <https://doi.org/10.1080/09639289600000006>
- Mata, J. F., Fuerst, W. L., & Barney, J. B. (1995). Information Technology and sustained competitive advantage: A resource-based (pp. 489–505). *Management Information Systems Research Center, University of Minnesota*.
- Mayanja (2020). Status of Profitability of MSMEs in a Developing Country: Uganda as a Case Study", *International Journal of Sciences: Basic and Applied Research (IJSBAR)*. 53(1), 66-79.
- Mayanja, S.S., Ntayi, J.M., Munene, J.C., Kagaari, J.R.K., Balunywa, W. and Orobia, L. (2019), "Positive deviance, ecologies of innovation and entrepreneurial networking. *World Journal of Entrepreneurship, Management and Sustainable Development*, 15(4), 308-324.
- Mpando, I., & Sandada, M. (2015). An assessment of the effect of innovation as a mediator to business networking and performance relationship: evidence from Zimbabwean SMEs. *International journal of social sciences and humanity studies*, 7(2), 1–15.
- Ministry of Trade, Industry and Cooperatives (2015). Uganda micro, small and medium enterprise (MSME) policy: Sustainable MSMEs for wealth creation and socio-economic transformation.

- Minola, T., & Cassia, L. (2012). Hyper-growth of SMEs: Toward a reconciliation of entrepreneurial orientation and strategic resources. *International Journal of Entrepreneurial Behaviour, & Research*, 18(2), 179–197. <https://doi.org/10.1108/13552551211204210>
- Myovella G, Karacuka M and Haucap J. (2020). Digitalization and economic growth: A comparative analysis of Sub-Saharan Africa and OECD economies. *Telecommunications Policy*, 44(2), 101856 [10.1016/j.telpol.2019.101856](https://doi.org/10.1016/j.telpol.2019.101856)
- National Planning Authority. (2020), |Third National Development Plan (NDP) 2020/21 – 2024/25.
- Nelson, R. R. (2009). *An evolutionary theory of economic change*. Harvard University Press.
- Okello, G. C., Mpeera, J. N., Munene, J. C., & Malinga, C. A. (2017). The relationship between access to finance and growth of SMEs in developing economies: Financial literacy as a moderator. *Review of International Business and Strategy*, 27(4), 520–538. <https://doi.org/10.1108/RIBS-04-2017-0037>
- O'Regan, N., & Ghobadian, A. (2016) https://scholar.google.com/citations?view_op=view_citation&hl=en&user=YT4UkbgAAAAJ&citation_for_view=YT4UkbgAAAAJ:Tiz5es2fbqcC
- Orobia, L., Nakibuuka, J., Juma, B. & Akisimire, R. (2020). Inventory management, managerial competence and financial performance of small businesses. *Journal of Accounting in Emerging Economies*. ahead-of-print. [10.1108/JAEE-07-2019-0147](https://doi.org/10.1108/JAEE-07-2019-0147).
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340. <https://doi.org/10.1016/j.bir.2017.12.003>
- Prahaland, C. K., & Hamel, G. (1990b). *The core competence of the corporation*. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
- Ramadani, V., et al. (2019). Product innovation and firm performance in transition economies: A multi-stage estimation approach. <https://www.sciencedirect.com/science/article/abs/pii/S0040162518311995>
- Rexhäuser, S., & Rammer, C., (2014), Environmental Innovations and Firm Profitability: Unmasking the Porter Hypothesis. <https://econpapers.repec.org/article/kapenrec/>
- Roxas, H., Ashill, N. J., & Chadee, D. (2017). Effects of entrepreneurial and environmental sustainability orientations on firm performance: A study of small businesses in the Philippines. *Journal of Small Business Management Forthcoming*, 55, 163–178. <https://doi.org/10.1111/jsbm.12259>
- Rural Enterprises Program. (2017). *Standard manual on financial management for micro and small enterprises (The International Fund for Agricultural Development)*. Frimpong et al., *Cogent Economics & Finance* (2022), 10: 2121356 <https://doi.org/10.1080/23322039.2022.2121356> Page 20 of 21
- Schumpeter, J. (1942). *Creative destruction*. *Capitalism, socialism and democracy*, 825, 82–85.
- Sebikari, K.V., (2014) <https://www.eajournals.org/wp-content/uploads/Entrepreneurial-Performance-and-Small-Business-Enterprises-in-Uganda.pdf>
- Siddik, M., Nur, S. G., Kabira, S., Shanmugan, J. and Yanjuan, C. (2016). Impacts of e-banking on the performance of banks in a developing economy: empirical evidence from Bangladesh. *Journal of Business Economics and Management*, 17(6), 1066–1080. [10.3846/16111699.2015.1068219](https://doi.org/10.3846/16111699.2015.1068219)
- Simeyo, O., Lumumba, M., Nyabwanga, R. N., Ojera, P., & Odondo, A. J. (2011). Effect of provision of microfinance on the performance of micro-enterprises: A study of youth micro-enterprises under Kenya rural enterprises program (K-REP), Kisii County. *African Journal of Business Management*, 5(20), 8290–8300. <https://doi.org/10.5897/AJBM11.1419>
- Stacey, R. D. (2011). *Strategic management and organizational dynamics: The challenge of complexity to ways of thinking about organizations*.
- Tay, S. (2019). *Financial Inclusion in Africa in an Era of Internet Shutdowns*. <https://cipesa.org/2019/11/financial-inclusion-in-africa-in-an-era-of-internet-shutdowns/>
- Pucci (2017) <http://dx.doi.org/10.1108/JSBED-09-2016-0138>
- Pearson, T. J. K., Amoako, A. A. and Amartey, E. O. (2022). Assessing the Effect of Financial Literacy Among Managers on the Performance of Small-Scale Enterprises. *Global Business Review*, 23 (5), 1200–1217. <https://doi.org/10.1177/0972150919899753>
- Uganda Business Impact Survey (2020). <https://www.unCDF.org/article/5634/uganda-business-impact-survey-2020>
- Wang, C. L., and Chung, H. F. (2020). Business networking and innovation of Asian enterprises in Western countries: The moderation of institutional distance. *Industrial Marketing Management*, 88, 152–162.
- Wernerfelt, B. (1984). A resource-based view of a firm. *Strategic Management Journal*, 5(2), 171–180. <https://doi.org/10.1002/smj.4250050207>

- Wincent, J., Anokhin, S. and €Ortqvist, D. (2013). Supporting innovation in government-sponsored networks: the role of network board composition. *International Small Business Journal*, 31(8), 997-1020.
- Zhang, D., Rong, Z., and Ji, Q. (2019). Green innovation and firm performance: Evidence from listed companies in China. *Resources. Conservation and Recycling*, 144, 48-55.
- Zheng, C., Ahsan, M., and DeNoble, A. F. (2020). Entrepreneurial networking during early stages of opportunity exploitation: Agency of novice and experienced new venture leaders. *Entrepreneurship Theory and Practice*, 44(4), 671-699.
- Zoysa, A. D., & Herath, S.K. (2007). The impact of owner/managers' mentality on the financial performance of SMEs in Japan: An empirical investigation. *Journal of Management Development*, 26(7), 652-666.