The efficacy of entrepreneurial networking and innovation in fostering the performance of small businesses: A global south perspective

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Abstract

The purpose of this study was to investigate the efficacy of entrepreneurial networking and innovation in fostering the performance of small businesses using evidence from the global south. The study was cross-sectional and correlational. Data was collected through a self-administered questionnaire survey of 368 small businesses and analyzed through correlation, hierarchical regression and mediation analysis using statistical package for social sciences (SPSS). Study findings indicate that entrepreneurial networking and innovation are significant predictors of small business performance. Results also indicate that innovation partially mediates the relationship between entrepreneurial networking and performance of small businesses. As such, this study contributes to the extant literature on the performance of small businesses as it provides initial empirical evidence on the efficacy of entrepreneurial networking and innovation in fostering the performance of small businesses, it further contributes to the recent literature on the mediation effect of innovation using evidence from the global south.

1.0 Introduction

Globally, small businesses are acknowledged as key drivers of inclusive and sustainable economic growth. They make a substantial contribution to employment opportunities, innovation, resource usage, income distribution, and generation of revenue for governments in both the developed and developing economies (Turyakira, Sendawula, Turyatunga and Kimuli, 2019). This has drawn the attention of the policymakers and academicians, who have advocated for further research on small businesses (see Adomako, Danso and Ofori Damoah, 2016; Sandada, Pooe and Dhurup, 2014). The call for further research presents the need for the small business fraternity to develop strategies that catalyze their performance (Sendawula, Bagire, Mbidde and Turyakira, 2021).

Currently, the performance of small businesses in most developing countries including Uganda is undesirable (National Planning Authority, 2020). Specifically, 65.7 per cent of the small businesses in the four main commercial districts of Uganda (Kampala, Wakiso, Mukono and Jinja) are non-profitable (Mayanja, 2020). Similarly, majority of small businesses in trading, service and hospitality are more likely to lose 20–30 per cent of their total revenue (UN Capital Development Fund, 2020). This explains why more than 50% of these business in Uganda are more likely to operate below the poverty line or closing their operation during the current volatile, uncertain, complex, and ambiguous (VUCA) economic conditions (UN Capital Development Fund, 2020). This implies that if the current trend continues, it could lead to the liquidation of several small businesses in Uganda. As such, there is an urgent need to explore feasible strategies to restore small business performance in order to promote inclusive and sustainable growth in Uganda's economy.

Existing literature presents several theories to explicate strategies that can be undertaken to foster small business performance. These include; the resource based view theory (Hart, 1995), the dynamic capability theory (Teece, Pisano and Shuen, 1997), networking theory (Johanson and Mattsson, 1988), resource dependence theory (Pfeffer and Salancik, 1978) and the Schumpeterian theory (Schumpeter, 1942). However, we adopted the networking and the Schumpeterian theories to appreciate the efficacy of entrepreneurial networking and innovation in fostering small business performance in Uganda. This is because these theories can better explain how small businesses can obtain resources, develop capabilities and innovate which are a basis for better performance of small business.

The networking theory, as developed by Johanson and Mattsson (1988), suggests that entrepreneurial networking catalyzes small business performance. Entrepreneurial networking enables small businesses to establish formal and informal associations with customers, suppliers, financial institutions, and other players to get the support necessary for business performance (Sendawula, Ngoma, Bananuka, Kimuli and Kabuye, 2021). As such, entrepreneurial networks have emerged as a vital strategy for small firms to access resources especially in the developing world where formal institutions are reluctant to deal with them (Anwar and Ali Shah, 2020). With the informality nature of most of small businesses (Struwig, Krüger and Nuwagaba, 2019), they capitalize on informal networks to acquire customers as well as transact with other stakeholders like suppliers, creditors which boost their performance (Cárdenas, 2021).
Networks not only help small businesses function better, but they also stimulate innovation, which leads to higher performance. Through networks, owners can get business opportunities, skills, and knowledge that are vital in unlocking the innovative potential of small businesses to foster their performance as postulated by the Schumpeterian theory (Schumpeter, 1942). The theory argues that attaining high performance levels among small businesses calls for innovation that will enable them to respond to changing customer needs (Schumpeter, 1942). Empirically, innovation has been positively associated to small business performance (Ramadani et al., 2019; Hanelt et al., 2021). For any business to attain superior performance, innovation is critical. As the business environment becomes more volatile (Hanelt et al., 2021), entrepreneurs need to adjust their practices by becoming innovative (Guerrero-Villegas et al., 2018), otherwise their businesses will become obsolete (Zhang et al., 2019). Therefore, for businesses to remain competitive there is need to satisfy the unmet customer needs through innovation.

Upon that backdrop, it is arguably patent that entrepreneurial networking and innovation potentially boost the performance of small businesses. However, there is very scanty literature regarding the mediating effect of innovation in the association between entrepreneurial networking and small business performance. Even then, while there are considerable efforts to understand small businesses performance challenges as explicated by entrepreneurial networking in the small business fraternity, most strands of this research have focused mainly on the global north. Thus, this study undertakes to explore this phenomenon by highlighting holistic and contextual aspects in a developing economy perspective. Therefore, scholars and practitioners will get a thorough understanding of the importance of improving their entrepreneurial networks which will catalyze their innovative potential in order to produce new or significantly improved products and services that are vital in enhancing their performance.

The remainder of the paper is structured as; Section 2 is a review of literature where hypotheses have been developed, followed by section 3 which is methodology. Section 4 presents study findings whereas section 5 is the discussion of results and lastly Section 6 presents the summary and conclusion.

2.0 Literature Review

2.1 Theoretical foundation

In this study, both the networking and Schumpeterian theories were adopted to explore the strategies that can be undertaken by small businesses in Uganda to improve their performance. As such, the networking theory suggests that small businesses can register improved performance through their networks operationalized as entrepreneurial networking (Johanson and Mattsson, 1988). Entrepreneurial networks consist of parties that small business owners-managers are directly connected to as well as people they are indirectly connected to through other people (Aladejebi, 2020). Centeno and Carmichael (2014) add that entrepreneurial networks are collaborative formal or informal relationships formed by business owner-managers with their social, business, and institutional contacts in order to gain access to resources that are relevant to fostering the performance of their businesses. It is therefore imperative to note that, through their networks, business owner-managers appreciate the contemporary needs of the market and, by addressing them, small businesses are able to attract and retain customers to support business engagements (Engel, Kaandorp and Elfring, 2017).

It is also argued that in their networks, small businesses are in position to develop innovations that can spur their performance, as postulated by the Schumpeterian theory. Schumpeter (1942) indicates that small businesses need to develop new or significantly improved products and services to satisfy customers’ needs if they are to catalyze their performance. This is achieved through a process known as "creative destruction," in which something new, like products, markets, processes, and organizations, brings about the end of whatever came before it (Kraehe, 2019; Langroodi, 2021). Thus, Schumpeter argues that attaining high performance levels among small businesses calls for innovation that will enable them to respond to the changing customer needs.

2.2 Small business performance
There is no consensus among scholars on the perception of a small business globally. As such, small businesses are defined differently in different continents, countries and industries. In the Ugandan context, a small business is a firm that employs between 5–49 people with total assets and capital of Uganda shillings 10–100 million (Ministry of Trade industries and cooperatives – MTIC, 2015). In Uganda, most businesses are still small and contribute to approximately 90 percent of Uganda’s employment, enhance innovation, income distribution, resource utilization and generation of government revenue (UBOS, 2021).

Given the contribution of small businesses to the Ugandan economy, their performance is critically important, according to Marimuthu, Arokiasamy and Ismail (2009), performance indicates the extent to which a business effectively utilizes its assets to realize more profits. Performance is further viewed as the achievement of the firm’s goals and objectives in line with the set performance standards such as profitability, market share and cost minimization (Harash, Al-Timimi and Alsaadi 2014). In this study, performance is viewed as the ability of the small business to develop strategies that foster achievement of set goals that are operational in nature. Small business performance can be viewed in terms of financial and non-financial measurements (Cho, Ibrahim and Yan, 2019). Due to lack of reliable financial records by most small businesses in Uganda (MTIC, 2015), we measured performance in terms of non-financial indicators that include learning and growth, internal processes and customers’ retention (Sebikari, 2014).

2.3 Entrepreneurial Networking and Small Business Performance

Entrepreneurial networking is the foundation stone for the performance of small businesses all over the world (Anwar and Ali Shah, 2020). The networks could be both formal and informal through which small businesses generate resources that are patent to their performance (Mayanja et al., 2019). As business managers or owners establish social ties with both internal and external stakeholders, firm trust increases, and this subsequently advances knowledge sharing and increases the possibility for better firm performance (Abu-Rumman et al., 2021). The interconnectedness of small firms with other institutions and individuals in the form of collaborations, social contacts, and partnerships facilitate knowledge exchange, redesign traditional practices, and improves services, which ultimately improves performance (Cárdenas 2021).

Small businesses utilize both their formal and informal networks to acquire resources (Mayanja et al., 2019), grow their markets (Zheng et al., 2020), as well as transact with other stakeholders like suppliers and creditors, which boosts their performance (Surangi, 2018). Several scholars (Pratono 2018; Anwar and Ali Shah, 2020; Abu-Rumman et al., 2021) have investigated the relationship between business networking and firm performance. However, concrete evidence is still missing in literature as contrasting findings are reported. For instance, positive results (Pratono 2018; Wang and Chung 2020; Al-Omoush et al., 2022) and negative findings (Abu-Rumman et al., 2021; Ribeiro et al., 2021) have been reported in past literature. Therefore, a debate exists in the literature as to which types of networks yield benefits to firm performance. We therefore focused on entrepreneurial networks and hypothesized that:

H1: There is a significant relationship between entrepreneurial networking and the performance of small business.

2.5 Innovation and performance of small businesses

The concept of innovation has attracted the attention of several scholars and there seems to be no agreement on what innovation entails. Generally, innovation is viewed as the introduction of new or significantly improved products, organizational methods, marketing strategies and processes that add value to the organization (Rexhäuser and Rammer, 2014). Innovation entails several types that can be process, product, marketing and new business model (Decker and Günther, 2017). Thus, process innovation is new or significantly improved ways of fostering productivity as well as quality in an organization. Product innovation is the introduction of new or improved products that meet the ever-changing customer needs. Marketing innovation on the other hand are new strategies of undertaking the marketing mix of an organization like the use of social media, websites and other technologies to foster marketing campaign.

Recent literature indicates that innovation and small business performance are positively related. Accordingly, Anwar (2018) reported that innovation in form of process, market and organization is critical in enhancing performance of firms. This
suggests that small businesses that are innovative register higher performance levels as compared to their non-innovative counterparts. Udriyah, Tham and Azam (2019) also indicate that market orientation and innovation positively affect competitive advantage and business performance. On the contrary, Ebrahimi, Shafiee, Gholampour and Yousefi (2018) reveal that organizational innovation and learning orientation have no effect on SME performance. Additionally, resource constraints, lack of exposure, risk aversion, limited research and poor rewarding culture among SMEs as compared to large firms which impede their ability to innovate and attain greater performance (Struwig Krüger and Nuwagaba, 2019). The foregoing discussion indicates that innovation affects small business performance. Thus, it can be hypothesized that,

H2: There is a significant relationship between innovation and performance of small businesses.

2.5 Mediation role of innovation

Basing on the Schumpeterian and network theories, business owner-managers need to establish entrepreneurial networks in order to understand the business environment so as to develop new or significantly improved innovations that are relevant for business performance (Schumpeter, 1972). As such, we view innovation as the immediate outcome of entrepreneurial networks. That is, through entrepreneurial networks, owners can get business opportunities, skills, and knowledge that are vital in unlocking the innovative potential of small businesses to foster their performance as postulated by the Schumpeterian theory (Schumpeter, 1942). In fact, these social ties give business managers/owners an opportunity to discuss ideas, share thoughts, and get exposed by visiting other innovative firms.

Through vicarious learning, they are able to come up with new strategies like new or improved products, services, processes, organizations (Bakas et al., 2018) and marketing strategies that help small businesses to register high performance (Hilmersson and Hilmersson, 2021). Therefore, entrepreneurial networking generates more value to businesses where the networks are geared towards developing an innovative culture or accessing resources to commercialize an innovation (Zhang et al., 2019; Ha et al., 2022). Entrepreneurial networks entail establishing both short- and long-term relationships with other stakeholders (Abu-Rumman et al., 2021). These entrepreneurial ties enable small businesses to understand customer needs (Zheng et al., 2020) in order to develop new or significantly improved products or services that enhance small business performance (Cárdenas, 2021). Thus, innovations are conduits through which entrepreneurial networks foster small business performance.

According to Mayanja et al. (2019), innovation itself is not an end but a means through which its antecedents impact its outcomes. Consequently, according to Aboelmaged (2014), innovation mediates the relationship between knowledge management capability and operational performance. Anning-Dorson (2018) also indicates that innovation mediates the association between involvement capability and performance of service firms. It is also noted that integrating organizational, product, and process innovation mediates organizational performance and flexibility (Camison and López, 2010).

Likewise, this study postulates that innovation can mediate the relationship between entrepreneurial networking and small business performance. This is because innovation makes firms more flexible after understanding the business environment in which they operate so as to register high performance. Thus, small business owners need to be more flexible if they are to innovate and develop appropriate networks that will translate into improved performance. Due to lack of evidence on the mediating effect of innovation in the relationship between entrepreneurial networking and small business performance. We based on the foregoing review of related extant literature to hypothesize that:

H3: Innovation significantly mediates the relationship between entrepreneurial networking and performance of small businesses.

3.0 Methodology

3.1 Research design, population and sample
The study is cross-sectional and correlational. The study population is 108,534 small businesses from which a sample of 384 small businesses was got from the membership of Uganda small scale industries association – USSIA determined using Krejcie and Morgan sampling table of 1970. Small businesses from all regions of the country were sampled to ensure that study results are a representative of the study population. We used multi stage sampling since it controls sectoral specifics that may impact small business performance (Rahman et al., 2022). Specifically, small businesses were stratified into sectors that include the manufacturing, trade and hotel & restaurants and then a lottery approach of simple random sampling was used to select the final respondents without replacement as indicated in Table I. The unit of analysis was the small businesses and the unit of inquiry on the other hand were the business managers or owners for businesses which are owner managed. Thus, every small business was represented by a manager. A response rate of 96% was attained. The high response rate is attributed to the physical distribution of the tools to the managers, phone call follows ups (after 4 days), data collection skills and experience possessed by the researcher and the research assistants.

Table I: Sample size distribution per sector

<table>
<thead>
<tr>
<th>Business sector</th>
<th>Population</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade</td>
<td>81,000</td>
<td>287</td>
</tr>
<tr>
<td>Hotel and restaurant</td>
<td>17,109</td>
<td>61</td>
</tr>
<tr>
<td>Manufacturing sector</td>
<td>10,426</td>
<td>37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108,534</strong></td>
<td><strong>384</strong></td>
</tr>
</tbody>
</table>

Source: Uganda Small Scale Industries Association (USSIA)

3.2 Sample characteristics

The results in Table II indicate that 58% of the respondents were female and only 42% were male suggesting that majority small businesses in Uganda are managed by females as compared to males. Concerning the age bracket, results indicate that 51% of the respondents are in the age bracket of 25–29, 19% in 30–34, 18% in 18–24, 10% in 34–39 and 2% in 40 and above. This suggests that most of the small business managers in Uganda are still in their youthful age. This is attributed to the fact that Uganda’s population is mainly dominated by the youths at 77% who are actively involved in operating small businesses. Regarding education level of the respondents, the study reveals that most of the respondents have a degree at 52%, followed by 37% with a master’s degree implying that small business owners currently employ workers with the required skills and competences needed to enhance performance of their businesses.

Table II: Characteristics of the respondents
### 3.3 The questionnaire, validity, reliability and operationalization of study variables

A self-administered questionnaire with closed ended questions in English was used to collect data. The Questionnaire was anchored on a 5 point Likert scale ranging from strongly disagree (1), disagree (2) not sure (3), agree (4) to strongly agree (5). This was intended to measure the extent to which the respondents were agreeing or disagreeing with the study items. The instrument was physically distributed to the respondents (business managers). Before the final survey, a pre-test was conducted to establish the validity and reliability of the questionnaire. Pre-test results revealed that all study variables had content validity index (CVI) and Cronbach’s alpha coefficient above the cutoff point of 0.7 (Nunnally, 1978), suggesting that the tool was valid and reliable. We operationalized small business performance in terms of learning and growth, internal processes and customer retention (Chong, 2008), entrepreneurial networking is measured in terms of trust, coordination and information sharing (Wincent et al., 2013) and innovation is operationalized in terms of structural, product and process innovation (Jacobs and Brand, 2007).

### 3.4 Common methods bias

Since the study adopted a questionnaire to collect data, we controlled for common methods bias that normally affects questionnaire-based results in social sciences (Gorrell et al., 2011). This was achieved by following Podsakoff et al. (2003)’s recommendations and as such; we ensured that the dependent and independent variables were not similar in content, assured the respondents (business managers) that there were no right or wrong answers, avoided double barreled questions and most
importantly, we engaged business managers as the unit of inquiry since they are considered to be more knowledgeable about entrepreneurial networking, innovation and performance of their businesses.

### 3.5 Test for parametric assumptions

We tested for the assumptions of normality, homogeneity, multicollinearity to establish the distribution of the collected data (Hair et al., 2014). Skewness and kurtosis were adopted to check if the data set is normally distributed to be able to defend the choice of analysis and to enable generalizability of findings. Our results indicate that the distribution is moderately skewed and thus normal distribution of the data. The Kurtosis values on the other hand for all the variables were within the range of ± 2.5 also implying normal distribution. For homogeneity of variance, we performed the Levene's test to verify whether the variance was equal across the sample and the results revealed non-significant (P > .05), suggesting that the data was drawn from a sample of equal variance. Finally, multicollinearity was tested to establish whether there was high inter-correlation between the study variables by using tolerance values and variance inflation factor (VIF). The tolerance values for all study variables were above 0.1 and the VIF was below 10 implying that there were no threats of multicollinearity (Field, 2009).

### 4.0 Results

#### 4.1 Descriptive statistics

We present descriptive statistics for the study variables in Table III. With respect to the dependent variable that is small business performance, we note that the mean is 3.39 and the standard deviation is 0.53. The means and standard deviations for entrepreneurial networking and innovation are 3.85 and 4.0462, 0.78 and 0.89 respectively. According to Field (2009), mean and standard deviation represent a summary of the data while standard deviations show how well the means represent the data. The goal is to decide if the statistical means match the observed results well (Field, 2009). As such, results indicate that the standard deviations are small as compared to the means and this implies that calculated means highly represent the observed data (Field, 2009).

**Table III Descriptive Statistics**

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer retention</td>
<td>368</td>
<td>1.00</td>
<td>4.50</td>
<td>3.1814</td>
<td>.59984</td>
</tr>
<tr>
<td>Internal process</td>
<td>368</td>
<td>1.00</td>
<td>5.00</td>
<td>3.3222</td>
<td>.74219</td>
</tr>
<tr>
<td>Learning and growth</td>
<td>368</td>
<td>1.17</td>
<td>5.00</td>
<td>3.6590</td>
<td>.69959</td>
</tr>
<tr>
<td>Performance</td>
<td>368</td>
<td>1.06</td>
<td>4.79</td>
<td>3.3875</td>
<td>.53487</td>
</tr>
<tr>
<td>Trust</td>
<td>368</td>
<td>1.14</td>
<td>5.00</td>
<td>3.9138</td>
<td>.77511</td>
</tr>
<tr>
<td>Coordination</td>
<td>368</td>
<td>1.00</td>
<td>5.00</td>
<td>3.6217</td>
<td>.97788</td>
</tr>
<tr>
<td>Information sharing</td>
<td>368</td>
<td>1.00</td>
<td>5.00</td>
<td>4.0111</td>
<td>.81125</td>
</tr>
<tr>
<td>Entrepreneurial networking</td>
<td>368</td>
<td>1.05</td>
<td>5.00</td>
<td>3.8489</td>
<td>.78002</td>
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<tr>
<td>Structural innovation</td>
<td>368</td>
<td>1.00</td>
<td>5.00</td>
<td>3.9586</td>
<td>.80771</td>
</tr>
<tr>
<td>Product innovation</td>
<td>368</td>
<td>1.00</td>
<td>5.00</td>
<td>4.0543</td>
<td>.72411</td>
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<tr>
<td>Process innovation</td>
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<td>5.00</td>
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<tr>
<td>Innovation</td>
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<td>1.00</td>
<td>5.00</td>
<td>4.0197</td>
<td>.72408</td>
</tr>
</tbody>
</table>

*Source: Primary data*

#### 4.2 Correlation analysis results
We present our Pearson correlation results in Table IV. Results indicate that there is a significant positive relationship between entrepreneurial networking and the performance of small businesses ($r = .604^{**}, p < .01$). This shows that a positive change in entrepreneurial networking translates into a positive change in small business performance and thus H1 is supported. Study results further indicate that there is a significant positive association between innovation and small business performance ($r = .631^{**}, p < .01$), implying that a positive change in innovation results into a positive change in the performance of small businesses and hence providing initial support for H2.

Table IV: Correlational results

<table>
<thead>
<tr>
<th>Study variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust (1)</td>
<td></td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Coordination (2)</td>
<td>.628**</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>Information sharing (3)</td>
<td>.839**</td>
<td>.790**</td>
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<tr>
<td>Entrepreneurial networking (4)</td>
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<td>.900**</td>
<td>.955**</td>
<td>1</td>
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<tr>
<td>Structural innovation (5)</td>
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<td>.632**</td>
<td>.795**</td>
<td>.783**</td>
<td>1</td>
<td></td>
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<tr>
<td>Product innovation (6)</td>
<td>.697**</td>
<td>.582**</td>
<td>.727**</td>
<td>.726**</td>
<td>.754**</td>
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<tr>
<td>Process innovation (7)</td>
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<td>.436**</td>
<td>.705**</td>
<td>.675**</td>
<td>.722**</td>
<td>.718**</td>
<td>1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Innovation (8)</td>
<td>.804**</td>
<td>.603**</td>
<td>.819**</td>
<td>.702**</td>
<td>.911**</td>
<td>.900**</td>
<td>.906**</td>
<td>1</td>
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<tr>
<td>Customer satisfaction (9)</td>
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<td>.388**</td>
<td>.463**</td>
<td>.463**</td>
<td>.565**</td>
<td>.528**</td>
<td>.320**</td>
<td>.514**</td>
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<td></td>
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<tr>
<td>Internal process (10)</td>
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<td>.437**</td>
<td>.433**</td>
<td>.506**</td>
<td>.410**</td>
<td>.250**</td>
<td>.424**</td>
<td>.500**</td>
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<td></td>
</tr>
<tr>
<td>Learning and growth (11)</td>
<td>.557**</td>
<td>.365**</td>
<td>.555**</td>
<td>.529**</td>
<td>.507**</td>
<td>.549**</td>
<td>.467**</td>
<td>.558**</td>
<td>.482**</td>
<td>.312**</td>
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<tr>
<td>Performance (12)</td>
<td>.546**</td>
<td>.500**</td>
<td>.617**</td>
<td>.604**</td>
<td>.666**</td>
<td>.626**</td>
<td>.439**</td>
<td>.631**</td>
<td>.816**</td>
<td>.786**</td>
<td>.761**</td>
<td>1</td>
</tr>
</tbody>
</table>

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

4.3 Regression analysis results

Since correlation analysis results provide preliminary support for the study hypothesis, regression was further performed to confirm our hypothesis and to establish the explanatory power of the independent variable on the dependent variable as indicated in Table V.

Table V: Regression results
### Model Summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Model I</th>
<th>Model II</th>
<th>Model III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.351</td>
<td>1.762</td>
<td>1.401</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business age</td>
<td>.095</td>
<td>.065</td>
<td>.057</td>
</tr>
<tr>
<td>Business form</td>
<td>−.066</td>
<td>−.027</td>
<td>−.011</td>
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<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Entrepreneurial networking</td>
<td>.598**</td>
<td>.274**</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>.406**</td>
<td></td>
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### Model Summary

<table>
<thead>
<tr>
<th>R</th>
<th>0.124</th>
<th>0.609</th>
<th>0.655</th>
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<tbody>
<tr>
<td>R Square</td>
<td>.015</td>
<td>.370</td>
<td>.429</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>.010</td>
<td>.365</td>
<td>.423</td>
</tr>
<tr>
<td>R Square change</td>
<td>.015</td>
<td>.355</td>
<td>.058</td>
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<td>Model F</td>
<td>2.869</td>
<td>71.383</td>
<td>68.153</td>
</tr>
<tr>
<td>Sig</td>
<td>.058</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Durbin Watson</td>
<td></td>
<td></td>
<td>.832</td>
</tr>
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</table>

**Dependent Variable: Performance**

In Model I, the control variables were regressed against small business performance. Results in Table V indicate that business age and business form ($\beta = .095$, $P \geq 0.05$) and ($\beta = -.066$, $P \geq 0.05$), respectively have an insignificant contribution in explaining performance of small businesses. The model accounts for 1.5% of the change in the performance of small businesses in Uganda. In Model II, entrepreneurial networking was introduced in the equation. Study findings indicate that entrepreneurial networking predicts 35.5% of the variance in small business performance. This shows that a change in entrepreneurial networking translates into .598 change in the performance of small businesses. As such, entrepreneurial networking is a significant predictor of business performance ($\beta = 0.598$, $p \leq 0.01$) and thus validating H1. In Model III innovation was added to the equation. The results in Table V indicate that innovation contributes 5.8% change in the performance of small businesses in Uganda. Thus for a unit change in innovation, business performance would improve by .406 units. The results show that innovation is a significant antecedent of small business performance ($\beta = 0.406$, $P \leq 0.01$) and hence confirming H2 of the study. Finally, the variables entered in the regression model explain an overall 42.3% of the changes in the small business performance. This means that 57.7% is explicated by other variables not considered in the current study.

### 4.4 Mediation results

In understanding the mediating role of innovation in the relationship between entrepreneurial networking and small business performance, Dr. Jose Paul (2013)’s approach was used to undertake this and the findings are presented with the help of two models; a) entrepreneurial networking is a significant predictor of innovation, b) the predictive effect of entrepreneurial networking and innovation on small business performance were run simultaneously considering the part correlations that come with the regression model. As such, regression coefficients were used and entered into the Medgraph software.

The Sobel z-value included indicates that the mediation is significant ($p < .01$). Regarding the Sobel z-value of 6.03071 and the presence of both a direct and indirect effect values that are 0.273 and 0.33 respectively, it is concluded that innovation mediates the relationship between entrepreneurial networking and performance of small businesses. In figure I and II, when
innovation was introduced in the association between entrepreneurial networking and performance of small businesses, the standardized beta (β) for the association reduced from (β) = 0.604 to (β) = 0.273, this indicates that innovation mediates entrepreneurial networking and performance of small businesses. Though, given that correlation didn’t reduce to zero, it indicates that there is a partial mediation effect. A ratio index that is (indirect effect/total effect) 54.7% given by (0.33/0.604*100) was calculated (figure I & II). This implies that 54.7% of the effect of entrepreneurial networking on the performance of small business goes through innovation, while the 45.3% is a direct effect. As such, innovation reduces the strength of the association between entrepreneurial networking and performance of small businesses. Thus, H3 is supported.

5.0 Discussion

According to the current study results, entrepreneurial networking is a significant predictor of small business performance. This indicates that a positive change in entrepreneurial networking translates into a positive change in business performance. As such, when small business managers develop trust through entrepreneurial ties, share knowledge and ensure proper coordination of all stakeholders, the performance of small businesses is positively affected in terms of customer retention, improved internal processes and effective learning among employees. This finding suggests that small business managers need to consider and undertake entrepreneurial networking initiatives more importantly in order to enhance performance of their businesses. Our results also demonstrate that innovation significantly predicts small business performance, suggesting that a positive change in innovation results into a positive change in the performance of small businesses. Thus, innovation in terms of new or significantly improved products, structures, processes, markets and organizations are all positively associated with the performance of small businesses. The study further reports that innovation partially mediates the relationship between entrepreneurial networking and small business performance. Hence, small business managers need to create networks with the aim of innovating through which high performance of small businesses is realized.

Given that the Schumpeterian theory identifies innovation and network theory identifies entrepreneurial networks as antecedents of firm performance. The study results support the theories since they indicate that small businesses that are innovative and highly connected register greater performance as compared to their counterparts. Even when small businesses improve upon their existing products and services systematically, it will enable them to meet the changing customer needs. It is thus paramount that all small businesses establish entrepreneurial networks as a foundation to improve their operations, be able to develop new or significantly improved products, services, structure and markets in order to attain greater performance.

Our findings are consistent with Hilmersson and Hilmersson (2021) who reported that firm innovation in terms of product, process, structure and organisation are dependent on the networking capabilities of that firm. Further, it is argued that firms that are entrepreneurially networked, they are more innovative than their counterparts. Similarly, Ribeiro et al. (2021) revealed that women entrepreneurs networks is positively associated with the firm performance of businesses in Ghana and Nigeria. It can be argued that creating strong ties with external agencies enables firms to acquire more resources that are necessary for better performance. In line with Mayanja et al. (2019) assertion entrepreneurial networking is key for the success and sustainability of small and medium enterprises. They further claim that through these networks, firms attain beneficial information, social support and physical resources that enable them attain their goals. In their qualitative study catalyzing artisan entrepreneur networks in rural Portugal as a basis to enhance creative tourism, Bakas et al. (2018) established that high level of entrepreneur networks within the local communities are important for neo-rural entrepreneurs to attain their goals.

Concerning the relationship between innovation and small business performance, our findings agree with Anwar (2018) who reported that innovation in form of process, market and organization is critical in enhancing performance of firms. Udriyah, Tham and Azam (2019) also indicated that market orientation and innovation positively affect competitive advantage and business performance. On contrary, our results disagree with Ebrahimi, Shafiee, Gholampour and Yousefi (2018) who reveal that organizational innovation and learning orientation have no effect on SME performance. Additionally, resource constraints, lack of exposure, risk aversion, limited research and poor rewarding culture among SMEs as compared to large firms impede their ability to innovate and attain greater performance (Struwig, Krüger and Nuwagaba, 2019).

For the mediation effect of innovation, our results further agree with Camison and López (2010) who reported that performance of the organization and flexibility is mediated by integrating organizational, product and process innovation.
Mpando (2015) also reported that innovation significantly mediates the relationship between networking and performance. This suggests that innovations have to be given priority if entrepreneurial networks is to promote firm performance. Aboelmaged (2014) further indicated that innovation performance mediates the relationship between knowledge management capability and operations performance. This is further supported by Anning-Dorson (2018) who established the mediating role of innovation in the association between involvement capability and performance of service firms.

### 6.0 Conclusion, Implications And Limitations

In a nutshell, this study aimed at establishing the contribution of entrepreneurial networking and innovation on the performance of small businesses. This was realized through a questionnaire survey of 384 small businesses where business managers were considered for this study as the respondents. Results suggest that entrepreneurial networking and innovation significantly predict small business performance. Results also demonstrate that innovation partially mediates the relationship between entrepreneurial networking and small business performance.

This study makes several contributions to academics, policy and the business community. The study contributes to extant literature by providing maiden evidence on the contribution of entrepreneurial networking and innovation on the performance of small businesses using evidence from the global south. The study also reveals that innovation mediates the relationship between entrepreneurial networking and small business performance. Thus, policy makers and small business managers may need to establish both formal and informal networks with different stakeholders to enable them access resources that are relevant to enhance performance of their businesses. It is also vital that innovation in form of new or significantly improved products, processes, organizations and marketing are developed frequently to enable small businesses meet the ever changing customer needs in order to boost their performance. Finally, society must acknowledge the fact that they should join small businesses that provide essential goods and services in fostering their entrepreneurial networks and innovation for better performance.

This study like any other study also has limitations. Thus, the study explains 42.5% of the variance in the performance of small businesses, implying that there are other factors explaining small business performance. Future studies could explore other antecedents of small business performance both in Uganda and outside Uganda. Nevertheless, this research provides maiden empirical evidence on the contribution of entrepreneurial networking and innovation on the performance of small businesses using evidence from Uganda’s small business sector.

### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CVI</td>
<td>Content Validity Index</td>
</tr>
<tr>
<td>MTIC</td>
<td>Ministry of Trade industries and cooperatives</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
</tr>
<tr>
<td>UBOS</td>
<td>Uganda Bureau of Statistics</td>
</tr>
<tr>
<td>USSIA</td>
<td>Uganda Small Scale Industries Association</td>
</tr>
<tr>
<td>VUCA</td>
<td>Volatility, Uncertainty, Complexity, and Ambiguity</td>
</tr>
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</table>

### Declarations

**Availability of data and materials.**

Data will be provided on request.
Competing interests

The authors declare no conflict of interest.

Funding

No funding

Authors’ contributions

All authors participated in the conceptualization of this study. Sendawula was in charge of material preparation, data collection, and analysis. Kisubi and Najjinda authored the initial draft of the manuscript, and all authors provided feedback on earlier versions. All authors read the final manuscript and gave their approval.

Acknowledgements

None

References


**Figures**

![Figure 1](image)

The mediation effect of innovation

*Source: Primary data*
Figure 2

Mediation effect

Note: The numerical values in parentheses are beta weights taken from the second regression and the other values are zero order correlations.