Networking and Performance of Small and Medium-sized Enterprises: Lessons from Tanzanian Bakeries

Kafigi Jeje

Abstract: Most of the small and medium-sized enterprises in developing nations, particularly Tanzania lack the relevant business capabilities that would foster their growth and sustainability. Most of the studies have recommended networking as a viable technique that can influence SME performance. However, Tanzanian SMEs are still facing challenges in understanding viable networking strategies. This study defines networking strategies in terms of network formation, intensity, and interdependence. We seek to establish the contribution of these strategies on SME performance that has been categorized as number of customers, and sales level. Our study focuses on the food sector particularly the bakery business whose contribution to the Tanzania’s agriculture sector, one of the leading sectors in Tanzania is noticeable. We adopt both the concurrent nested design and a multi-stage sampling technique and were able to collect data from 161 bakeries throughout Tanzania by using questionnaires. We also carried out 20 in depth interviews from bakery owners/managers and adopted a moderator analysis in confirming that both size and age of the bakery moderate the relationship between networking strategies and bakery performance. The moderator analysis was preceded by the principal component analysis, and the qualitative content analysis (manifest analysis). Our study concludes that the development, implementation, and improvement of networking practices in Tanzanian bakeries should be greatly emphasized by bakeries that seek to attain competitiveness, growth, and sustainability. Additionally, we argue that, SMEs need to develop strategic linkages with all relevant players from the business environment aiming at enhancing their networking capabilities.

Keywords: network formation; network intensity; interdependence; SME performance; Tanzanian bakeries

JEL Classification: L14

1. Introduction

SMEs are the major players in the nation’s socio-economic developments. Their dominance and impact in various sectors across the world including Sub-Saharan Africa is apparent (Robu, 2013; Savlovski & Robu, 2011; Fjose, Grünfeld & Green, 2010). The evidence of their impact on economic growth and poverty reduction in various economies is mainly characterized by job creation (Katua, 2014; Savlovski & Robu, 2011; Robu, 2013; URT, 2012; Maliti & Mnenwa, 2008), and GDP growth (URT, 2012). Similar impacts on economic growth are also noticeable in developing countries such as Tanzania (Maliti & Mnenwa, 2008; URT, 2012). In most economies, SMEs are the major drivers of innovation (Savlovski & Robu, 2011), competitiveness (Robu, 2013), and productivity (Huang, 2003; Savlovski & Robu, 2011). Despite their contribution to socio-economic developments, Tanzanian SMEs are still experiencing difficulties when it comes to competing in business. For example, they have poor access to markets and finance, and they lack proper business skills (URT, 2012; Kazimoto, 2014). To a great extent, these challenges are likely to be addressed when SMEs develop networks that

1 Former PhD Student, School of Management, IT and Governance, College of Law and Management Studies, University of KwaZulu-Natal, South Africa, Current affiliation: Department of Business Management, Institute of Accountancy Arusha, Address: PO Box 2798, Arusha, Tanzania, Corresponding author: kjeje@iaa.ac.tz.
will enable them access resources, and growth opportunities (Chimucheka, 2013; Thrikawala, 2011). SME networking is an emerging advancement in developing countries (Turyakira & Mbidde, 2015). A network is a social structure characterizing relationships among individuals (Antoldi, Cerrato & Depperu, 2011). In SMEs, the social networks can be established between SMEs and their business stakeholders such as customers, and suppliers (Škarpová & Grosová, 2015) or between employees and their close persons such as family and friends. The goal of these social relationships is to attain mutual benefits (Turyakira & Mbidde, 2015; Garbelli, 2016) and influence both SME growth (Chimucheka, 2013) and their strategic positions (Miller, Besser & Malshe, 2007). However, SMEs need to understand networking strategies that can propel their competitiveness. In this regard, a study that establishes the relationships between networking strategies and SME performance is very crucial in enlightening about the networking strategies that work. This study seeks to enlighten these relationships based on the operations and practices of small and medium-sized bakeries. We rely on bakeries due to the fact that the demand of their products in Tanzania has been growing rapidly (Bennett, Naziri, Mahende & Towo, 2012). Nevertheless, bakeries operate in the Tanzania’s food industry, one of the major job creators (URT & UNIDO, 2012) and whose link with the agriculture sector, the major driver of Tanzania’s economic growth (Chongela, 2015), is apparent. Specifically, this study seeks to determine the contribution of network formation, network intensity, and interdependence on both the number of customers and sales level of Tanzania-based small and medium-sized bakeries. We therefore seek to answer the following questions: do network formation, network intensity, and interdependence influence the number of customers, and sales level of Tanzania-based bakeries under the moderation of both the bakery size, and age respectively?

2. Literature Review

2.1. Interdependence Theory in SMEs

Interdependence can be characterized by prevailing, and future outcomes that emerge from the interaction of the partners who pursue joint behaviors (Van Lange, 1997). It increases when the partners’ relationship offers positive outcome than what is offered by alternative relationships (Agnew, Van Lange, Rusbult & Langston, 1998). Interdependence situations are complex and come in different ways. They include misunderstandings in perceiving interpersonal goals, and failure to forego individual interests particularly when faced by a social dilemma (Van Lange, 1997). Interdependence theory deals with interpersonal situations and their roles in handling personal motives (Balliet, Mulder & Van Lange, 2011). The theory tells the extent at which the partners need their relationship (Agnew, Van Lange, Rusbult & Langston, 1998; Rusbult & Van Lange, 2003). It provides an avenue for understanding the relationship stability (Van Lange & Rusbult, 2012). It provides a clear understanding on why an individual relies on an interaction partner, and whether the partners mutually depend on one another, and whether their actions mutually benefit one another (Van Lange & Balliet, 2015; Rusbult & Van Lange, 2003; Van Lange & Rusbult, 2012; Van Lange, 2012). Through interdependence theory, we find whether the partners are aware of the impact of their actions and the motives behind them (Van Lange & Balliet, 2015; Van Lange & Rusbult, 2012). We also understand that relationships develop and change (Van Lange & Balliet, 2015). We also get insights on the fact that socially interdependent decisions can be made by individuals who change given preferences into effective preferences (Van Lange & Balliet, 2015; Van Lange & Joireman, 2008). It also asserts that interaction between two individuals is driven by a particular situation. Repeated interactions foster stable orientations (Van Lange & Balliet, 2015; Van Lange & Rusbult, 2012; Van Lange, 2012).
SMEs need interdependences in order to influence their growth and competitiveness (Širec & Bradač, 2009; Turyakira & Mbidde, 2015; Ebrahim, Ahmed & Taha, 2010). The motive behind these interdependences is to create mutual benefits. Interdependent SMEs have features that complement each other (Potočan & Mulej, 2009; Jankowska, Götz & Główka, 2017). The interdependence in SMEs needs to involve the owners/managers, and their employees (Potočan & Mulej, 2009) in order to develop both formal and informal collaborations (Martin, Romero & Wegner, 2018). Through interdependences, SMEs are likely to influence their business capabilities (Jankowska, Götz & Główka, 2017), and get an opportunity to access and share resources and knowledge (De Clercq, Dimov & Thongpapanl, 2015; Liu & Yang, 2018; Jankowska, Götz & Główka, 2017; Škarpová & Grosová, 2015; Liu & Yang, 2018) including the marketing intelligence (Blankson, Cowan & Darley, 2018). These networks are facilitated by supportive culture, values (Potočan & Mulej, 2009), and mutual trust. Trust should be rewarded (Chinomona & Cheng, 2013) because it is an engine that drives inter-firm collaborations and knowledge-sharing in SMEs (Martin, Romero & Wegner, 2018; De Clercq, Dimov & Thongpapanl, 2015).

2.2. Social Network Theory in SMEs

The social network theory deals with the concept of relationships and interaction of members of the network (Surin, Halil & Edward, 2015). Networks deal with relationships between individuals, and between groups or organizations (Vargas-Hernández, 2013). Networks are characterized by intensity that explains about the strengths of the tie between members of the network (Tichy, Tushman & Fombrun, 1979). They are also characterized by network range, which explains about the connecting scope of a firm. In this regard, a firm may develop linkages with external players such as research and development institutions, government, competitors, potential business partners, suppliers, and customers (Ge, Hisrich & Dong, 2009; Maina, Marwa, Waiguchu & Riro, 2016a). Common or related characteristics may influence their connectedness. Nevertheless, the motive behind the formation of these relationships is to exchange information and resources, and to attain mutual benefits (Tichy, Tushman & Fombrun, 1979; Kadushin, 2012; Iriani, 2013). Therefore, these relationships are sustained by norms, mutual benefits, values, and trust (Wimba, Budhi, Yasa & Saskara, 2015). Trust is driven by resource sharing and repeated interactions (Surin, Halil & Edward, 2015). Trust is considered to be a more useful asset than other business assets. It influences partners to sacrifice their resources in order to attain mutual benefits (Priyanath & Premaratne, 2015). Networks play a vital role in enabling partners access and share resources, ideas, business information, relevant knowledge, business opportunities and innovations (Vargas-Hernández, 2013; Zafar, Yasin & Ijaz, 2012; Stuart & Sorenson, 2005; Memon, 2016; Oprica, 2013; McGrath & O’Toole, 2011) that ultimately influence SME performance and competitiveness (Ge, Hisrich & Dong, 2009). The information and opportunities can be accessed through social events (Priyanath & Premaratne, 2015). SMEs attend these events in order to access business opportunities and attain business benefits (Sharafizad & Coetzee, 2017). Social networks play a vital role in influencing an entrepreneurial spirit among people (Zafar, Yasin & Ijaz, 2012; Vargas-Hernández, 2013). Networks drive SME growth (Martins, 2016). To a great extent, this growth has been contributed to by informal networks whose significance in accessing business opportunities is apparent (Lawal, Adegbuyi, Iyiola, Ayoade & Taiwo, 2018). In SMEs, informal relationships are more useful than formal collaborations (Iriani, 2013). Therefore, social networks can be developed between members of the firm and their family members, friends, members of the social or professional groups, customers, suppliers, and other potential business

2.3. Networking and SME Performance

Literature confirms the relationship between networking and SME performance (Maina, Marwa, Waiguchu & Riro, 2016b; Chimucheka, 2013; Širec & Bradač, 2009), particularly the social networking (Surin & Wahab, 2013). There is little research that is based on the bakery industry. We characterize the networking strategies as network formation, network intensity, and interdependence, and seek to establish their contribution on bakery performance: number of customers, and sales level, under the moderation of bakery size, and age respectively. Sales level has been opted for based on the studies of Parida, Pemartín & Frishammar (2009), Širec & Bradač (2009), Chimucheka (2013), Surin & Wahab (2013), and Maina, Marwa, Waiguchu & Riro (2016b). The market share growth as adopted by Surin & Wahab (2013), market growth, and customer satisfaction as used by Parida, Pemartín & Frishammar (2009) have all influenced our decision to adopt the number of customers as one of the dependent variables. Our study also adopts firm size based on the insights drawn from Surin & Wahab (2013), and Parida, Pemartín & Frishammar (2009), and firm age based on Surin & Wahab (2013). We also adopt large samples based on Surin & Wahab (2013), Maina, Marwa, Waiguchu & Riro (2016b), and Parida, Pemartín & Frishammar (2009). As used by Širec & Bradač (2009), Parida, Pemartín & Frishammar (2009), Surin & Wahab (2013), and Maina, Marwa, Waiguchu & Riro (2016b), our study involves the use of questionnaires as one of the data collection techniques. We also supplement the questionnaires by in-depth interviews. These interviews were adopted by Chimucheka (2013).

2.4. Networking Practices in Bakeries

SME capabilities can be enhanced through networking particularly the personal networks (Garamoun & Hurieb, 2016). Business success can be attained if networks with key stakeholders are formed (Mayer, Harima & Freiling, 2015). One of the ways to influence business success is establishing networks with customers under the influence of trust (Neuwirth, 2012). Due to the business dynamics across industries, bakeries tend to establish relationships among themselves (Smirnova, Rebiazina & Moreva, 2014). Food enterprises need to invest in social capital development in order to access resources, knowledge and business opportunities and ultimately drive their performance (Jämsä, Tähtinen, Ryan & Pallari, 2011). The investment in social capital requires more resources and time (Agyapong, Agyapong & Poku, 2017; Hunter & Lean, 2014). Social capital strengthens networks in bakeries. Through social capital, knowledge sharing, interactions, and trust deepen (Agyapong, Agyapong & Poku, 2017). Social interactions can take place between the members of the bakery and their potential stakeholders such as employees, customers, suppliers, distributors, agents from other bakeries or related SMEs, and close persons such as friends, and family members. These interactions are crucial in accessing feedback regarding business operations and its products. These interactions can influence well served partners or customers to market the business to other potential players. Networks can also be developed with family members and friends in order to access business opportunities and knowledge (Mayer, Harima & Freiling, 2015). The intensity of the social network plays a vital role in influencing the development of potential strategies, and in exchanging knowledge aiming at enhancing business growth. The mutual dependence drives the exchange of knowledge (Hu & Hafsi, 2015). Networks help bakeries to access capital and other relevant resources (Dyck &
Russell, 2015). In this regard, small bakeries are likely to access supplies from large bakeries (Erengüç, Simpson & Vakharia, 1999). Through networks, bakeries can get an opportunity to enhance their marketing activities (Smirnova, Rebiazina & Moreva, 2014) and access promotion opportunities, distribution networks (Dyck & Russell, 2015), and strengthen their supply relationships (Jamieson, Fettiplace, York, Lambourne, Braidford & Stone, 2012). By accessing an enhanced distribution network, a firm is likely to offer effective and efficient delivery services (Neuwirth, 2012).

2.5. Conceptual Framework

We have defined the independent variables characterizing network formation as the commitment of bakeries in frequently communicating their businesses to their family members, friends, and social groups (NF1); the commitment of bakeries in understanding the interests of their family members, friends, and fellow members of the social groups in relation to their business (NF2); the commitment of bakeries in constantly training themselves with regard to communication, and relationship skills (NF3); the commitment of bakeries in constantly seeking to create new relationships with individuals who are not family members, friends, and fellow members of the social groups (NF4); and the commitment of bakeries in greatly interacting with individuals based on the connections made by family members, friends, and fellow members of the social groups (NF5). Under the network intensity, we have defined the independent variables as the commitment of bakeries in ensuring that their businesses are well known by their family members, friends, and fellow members of the social groups (NI1); the commitment of bakeries in ensuring that their relationship with their family members, friends, and fellow members of the social groups is sustained by trust (NI2); the commitment of bakeries in frequently interacting with family members, friends, and fellow members of the social groups in various social gatherings/events, and support them accordingly (NI3); the commitment of bakeries in heavily seeking to avoid, reduce and manage misunderstandings or differences between them and family members, friends, and fellow members of the social groups (NI4); the commitment of bakeries in constantly seeking to strengthen the most benefiting relationship between them and family members, friends, and fellow members of the social groups (NI5); and the commitment of bakeries in ensuring that their relationships with family members, friends, and fellow members of the social groups is based on mutual benefit (NI6). Under the interdependence, we have defined the independent variables as the commitment of bakeries in supporting the businesses run by family members, friends, and fellow members of the social groups (ND1); the commitment of bakeries in ensuring that they receive relevant information regarding their businesses from family members, friends, and fellow members of the social groups (ND2); the commitment of bakeries in ensuring that family members, friends, and fellow members of the social groups greatly act in order to please them (ND3); the commitment of bakeries in greatly and constantly acting to please their family members, friends, and fellow members of the social groups (ND4); and the commitment of bakeries in ensuring that their relationships with family members, friends, and fellow members of the social groups is based on mutual benefit (ND5). The moderator variables include bakery size (S), and bakery age (A). The dependent variables are the number of customers (CM), and sales level (SL) as shown in the diagram.
3. Methodology

3.1. Research Design and Sampling

Although we have adopted a mixed research methods, that is concurrent nested design (Almeida, 2018), a quantitative approach is predominant in this study. We collected both quantitative and qualitative data concurrently (Santos, Erdmann, Meirelles, Lanzoni, Cunha & Ross, 2017). The study took place in the United Republic of Tanzania and based in Mainland Tanzania where the then Tanzania Food and Drugs Authority (TFDA) was responsible in registering and regulating the operations of bakeries before the Finance Act of 2019 introduced the new changes that brought the Tanzania Medicines and Medical Devices Authority (TMDA). The new changes have shifted the administration of bakery operations to the Tanzania Bureau of Standards (TBS). Our study population comprised of 359 registered small and medium-sized bakeries operating in Mainland Tanzania. The Krejcie & Morgan’s (1970) Table was adopted to establish a sample size of 186 registered small and medium-sized bakeries. A multi-stage sampling technique was adopted. The stratification of all the 26 regions of Mainland Tanzania into 7 geographical zones based on TFDA’s zone classification was made. We thereafter adopted the probability proportional to size in order to determine the number of bakeries incorporated in the sample from each zone. We also adopted the simple random sampling technique in order to identify bakeries from each zone. These were 21 bakeries from Central Zone, 94 bakeries from Eastern Zone, 23 bakeries from Lake Zone, 23 bakeries from Northern Zone, 9 bakeries from Southern Zone, 12 bakeries from Southern Highlands Zone, and 4 bakeries from Western Zone.

3.2. Data Collection and Analysis

The owners/managers of the bakeries represented their bakeries by filling in the questionnaires. A total of 161 bakeries responded positively. These were 19 bakeries from Central Zone, 78 bakeries from Eastern Zone, 19 bakeries from Lake Zone, 22 bakeries from Northern Zone, 7 bakeries from Southern Zone, 12 bakeries from Southern Highlands Zone, and 4 bakeries from Western Zone. Their responses based on the operations and practices that had been taking place in bakeries for a period of three years. We also carried out in-depth interviews to 20 bakeries in the following structure: 3 bakeries from
Central Zone, 10 bakeries from Eastern Zone, 3 bakeries from Lake Zone, 3 bakeries from Northern Zone, and 1 bakery from Southern Highlands Zone. The data collection took place from November 2018 to February 2019. We adopted the principal component analysis to establish the study validity. We also employed the qualitative content analysis (manifest analysis) before analyzing the relationship between networking strategies and bakery performance, using a moderator analysis.

3.3. Variables and Measurements

The responses of both the independent, and dependent variables were collected using the seven-point Likert scale. The moderator variables were grouped to form dichotomous variables. The bakery size is categorized as advanced size (AS), and basic size (BS). It is measured as AS (50≤S≤99 employees), and BS (S<50 employees) according to URT (2003). The bakery age is categorized as advanced age (AA), and basic age (BA). It is measured as AA (A>10 years), and BA (A≤10 years).

3.4 Validity and Reliability

As mentioned earlier, we ran the principal component analysis with all variables associated with networking strategies and we realized that all variables had at least one correlation with another variable; where r ≥ 0.3. The overall KMO measure was 0.927, and the Bartlett’s Test of Sphericity was statistically significant, p = 0.000 (p < 0.0005) confirming that there was adequacy of sampling. Additionally, the rotated component matrix appeared to be a simple structure in which each variable had only one component that loads strongly on it. Also, each component loaded strongly on at least three variables. Therefore, validity was confirmed. On the other hand, the values of Cronbach’s alpha were 0.872 (network formation), 0.892 (network intensity), and 0.865 (interdependence). All these values were at least 0.700, signifying that in all cases, the scale was found to have a good level of internal consistency (DeVellis, 2003; Kline, 2005).

3.5. Testing for Assumptions

We tested the major assumptions such as linearity, multicollinearity, unusual points, homoscedasticity, and normality. Linearity was established by visual inspection of a scatterplot between: CM and NF1, SL and NF1; CM and NF2, SL and NF2; CM and NF3, SL and NF3; CM and NF4, SL and NF4; CM and NF5, SL and NF5; CM and N11, SL and N11; CM and N12, SL and N12; CM and N13, SL and N13; CM and N14, SL and N14; CM and N15, SL and N15; CM and N16, SL and N16; CM and ND1, SL and ND1; CM and ND2, SL and ND2; CM and ND3, SL and ND3; CM and ND4, SL and ND4; CM and ND5, SL and ND5. We also found that there was no evidence of multicollinearity. All the tolerance values were greater than 0.1 (the lowest were 0.276, 0.118, 0.260, 0.107, 0.267, 0.119, 0.179, 0.105, 0.261, 0.109, 0.255, 0.111, 0.239, 0.105, 0.211, 0.109, 0.255, 0.112, 0.172, 0.116, 0.224, 0.122, 0.178, 0.104, 0.269, 0.118, 0.214, 0.135, 0.254, 0.132, 0.217, 0.105). All their corresponding VIF values were less than 10 (the greatest were 3.626, 8.455, 3.852, 3.742, 8.378, 5.594, 9.534, 3.837, 9.172, 3.914, 9.039, 4.183, 9.551, 4.745, 9.167, 3.919, 8.936, 5.808, 8.590, 4.464, 8.213, 5.633, 9.647, 3.722, 8.483, 4.683, 7.405, 3.941, 7.585, 4.608, 9.526). Also, there were neither outliers nor influential case. This is because; there was no any standard deviations >±3, no leverage value >0.04969, and no cook’s distance>1. It was also found that there was homoscedasticity based on the visual inspection of the studentized residuals plotted against the predicted values for bakeries with AS
and BS between: CM and NF1; CM and NF2; CM and NF3; CM and NF4; CM and NF5; CM and NI1; CM and NI2; CM and NI3; CM and NI4; CM and NI5; CM and ND1; CM and ND2; CM and ND3; CM and ND4; CM and ND5. There was also homoscedasticity based on the visual inspection of the studentized residuals plotted against the predicted values for bakeries with AA and BA between: SL and NF1; SL and NF2; SL and NF3; SL and NF4; SL and NF5; SL and NI1; SL and NI2; SL and NI3; SL and NI4; SL and NI5; SL and ND1; SL and ND2; SL and ND3; SL and ND4; SL and ND5. Additionally, in all cases, the Normal Q-Q Plot of Studentized Residual was used and found that studentized residuals were normally distributed.

4. Findings

This study employed the principal component analysis to confirm variables that explain the network formation, network intensity, and interdependence. The principal component analysis was run with all variables associated with networking strategies and the findings reveal that all variables had at least one correlation with another variable. The Bartlett’s Test of Sphericity was statistically significant. All variables had KMO values of at least 0.868 indicating that there was adequacy of sampling. Although the visual inspection of the Scree Plot suggested that two components should be retained, three components were retained based on their Eigenvalues being greater than 1. Additionally, the three components were also retained based on the lower criterion of 60% (they explain 69.324% of the total variance). We also retained them based on the simple structure revealed by the rotated component matrix in which each variable has only one component that loads strongly on it. Additionally, each component loads strongly on at least three variables. On the other hand, based on the qualitative content analysis (manifest analysis), the interviews confirm that bakery owners/managers and their employees have kept on developing their business networks with their family members, friends, and fellow members of their social groups who are likely to advance these networks to their family members, friends, and their fellow members of their social groups as well. Through these networks, bakeries get an access to a chain of potential customers. The interviews also confirm that bakery owners/managers and their employees have been developing their business networks with their family members, friends, and their fellow members of their social groups as well. Through these networks, bakeries get an access to a chain of potential customers. The interviews also confirm that bakery owners/managers and their employees have been undergoing trainings whose intention is to advance their customer relationship management skills. Also, according to the interviews, trust, honesty, and readiness to help are the major factors that define and strengthen their networks with their close individuals as well as prospective customers. Bakeries confirmed that they were employing a lot of efforts to ensure that they managed any misunderstandings or quarrels with their fellow network members in order to safeguard the interests of their businesses. In this regard, frequent communications that seek to inform their fellow network members about the development made in the bakeries were constantly being made. Also, according to the interviews, bakeries have been sustaining their networks by regularly supporting the businesses owned by their fellow network members. For example, bakeries may purchase raw materials from their fellow network members in order to advance their networks. Also, special discounts were found to have been given to fellow network members particularly when they purchase bakery products in bulk.

4.1. Network Formation and Bakery Performance

As shown in Table 1, a hierarchical multiple regression was run to assess the increase in variation explained by the addition of an interaction term between each of the network formation strategies (NF1, NF2, NF3, NF4, and NF5) and S to a main effects model. It was also run to assess the increase
in variation explained by the addition of an interaction term between each of the network formation strategies and A to a main effects model. The findings reveal that S moderates the effect of each of the network formation strategies on CM. They also reveal that A moderates the effect of each of the network formation strategies on SL. The simple slopes analysis revealed that the linear relationship between CM and each of the network formation strategies in bakeries with AS, was not statistically significant. However, the simple slopes analysis revealed that the linear relationship between CM and each of the network formation strategies in bakeries with BS, was statistically significant. On the other hand, the simple slopes analysis revealed that the linear relationship between SL and NF1, and between SL and NF5 in bakeries with AA, was statistically significant. However, the simple slopes analysis revealed that the linear relationship between SL and NF2, SL and NF3, and between SL and NF4 in bakeries with AA, was not statistically significant. Again, the simple slopes analysis revealed that the linear relationship between SL and each of the network formation strategies in bakeries with BA, was statistically significant. The coefficient of the interaction term was statistically significant indicating that S moderates the relationship between CM and each of the network formation strategies. Also, the coefficient of the interaction term was statistically significant indicating that A moderates the relationship between SL and each of the network formation strategies.

### Table 1. Network Formation and Bakery Performance

<table>
<thead>
<tr>
<th>IV</th>
<th>MV</th>
<th>DV</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
<th>Simple slopes analysis</th>
<th>Coefficient of the interaction term</th>
</tr>
</thead>
<tbody>
<tr>
<td>NF1</td>
<td>S</td>
<td>CM</td>
<td>5.9%</td>
<td>F (1, 157) = 12.416</td>
<td>p = 0.001</td>
<td>AS (0.032 ± 0.113), p = 0.036</td>
<td>BS (0.417 ± 0.059), p = 0.001</td>
</tr>
<tr>
<td>NF1</td>
<td>A</td>
<td>SL</td>
<td>5.8%</td>
<td>F (1, 157) = 13.383</td>
<td>p = 0.000 (p &lt; 0.0005)</td>
<td>AA (0.183 ± 0.072), p = 0.012</td>
<td>BS (0.545 ± 0.069), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>NF2</td>
<td>S</td>
<td>CM</td>
<td>4.2%</td>
<td>F (1, 157) = 8.671</td>
<td>p = 0.004</td>
<td>AS (0.066 ± 0.139), p = 0.096</td>
<td>BS (0.461 ± 0.068), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>NF2</td>
<td>A</td>
<td>SL</td>
<td>11.8%</td>
<td>F (1, 157) = 23.744</td>
<td>p = 0.000 (p &lt; 0.0005)</td>
<td>AA (0.094 ± 0.106), p = 0.378</td>
<td>BS (0.577 ± 0.083), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>NF3</td>
<td>S</td>
<td>CM</td>
<td>3.2%</td>
<td>F (1, 157) = 7.416</td>
<td>p = 0.007</td>
<td>AS (0.114 ± 0.128), p = 0.371</td>
<td>BS (0.501 ± 0.062), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>NF3</td>
<td>A</td>
<td>SL</td>
<td>5.1%</td>
<td>F (1, 157) = 9.622</td>
<td>p = 0.002</td>
<td>AA (0.051 ± 0.111), p = 0.664</td>
<td>BS (0.490 ± 0.083), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>NF4</td>
<td>S</td>
<td>CM</td>
<td>3.3%</td>
<td>F (1, 157) = 7.070</td>
<td>p = 0.009</td>
<td>AS (0.114 ± 0.125), p = 0.365</td>
<td>BS (0.489 ± 0.066), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>NF4</td>
<td>A</td>
<td>SL</td>
<td>5.5%</td>
<td>F (1, 157) = 11.496</td>
<td>p = 0.001</td>
<td>AA (0.157 ± 0.093), p = 0.142</td>
<td>BS (0.546 ± 0.077), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>NF5</td>
<td>S</td>
<td>CM</td>
<td>2.7%</td>
<td>F (1, 157) = 6.004</td>
<td>p = 0.015</td>
<td>AS (0.161 ± 0.138), p = 0.246</td>
<td>BS (0.538 ± 0.068), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>NF5</td>
<td>A</td>
<td>SL</td>
<td>2.9%</td>
<td>F (1, 157) = 6.277</td>
<td>p = 0.013</td>
<td>AA (0.271 ± 0.090), p = 0.080</td>
<td>BS (0.579 ± 0.084), p = 0.000 (p &lt; 0.0005)</td>
</tr>
</tbody>
</table>

### 4.2. Network Intensity and Bakery Performance

As revealed in Table 2, a hierarchical multiple regression was run to assess the increase in variation explained by the addition of an interaction term between each of the network intensity strategies (NI1, NI2, NI3, NI4, NI5, and NI6) and S to a main effects model. It was also run to assess the increase in variation explained by the addition of an interaction term between each of the network intensity strategies and A to a main effects model. Regarding this, the findings reveal that S moderates the effect of each of the network intensity strategies on CM. They also reveal that A moderates the effect of each of the network intensity strategies on SL. The simple slopes analysis revealed that the linear relationship between CM and each of the network intensity strategies in bakeries with AS, was not statistically significant. However, the simple slopes analysis revealed that the linear relationship between CM and each of the network intensity strategies in bakeries with BS, was statistically significant. On the other hand, the simple slopes analysis revealed that the linear relationship between SL and each of the network intensity strategies in bakeries with AA, was not statistically significant. However, the simple slopes analysis revealed that the linear relationship between SL and each of the network intensity strategies in bakeries with BA was statistically significant. The coefficient of the
interaction term was statistically significant indicating that S moderates the relationship between CM and each of the network intensity strategies. Also, the coefficient of the interaction term was statistically significant indicating that A moderates the relationship between SL and each of the network intensity strategies.

### Table 2. Network Intensity and Bakery Performance

<table>
<thead>
<tr>
<th>IV</th>
<th>MV</th>
<th>DV</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
<th>Simple slopes analysis</th>
<th>Coefficient of the interaction term</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1</td>
<td>S</td>
<td>CM</td>
<td>5.9%</td>
<td>F(1, 157) = 14.795</td>
<td>p = 0.000 (p &lt; 0.0005)</td>
<td>AS (0.113 ± 0.107), p = 0.215</td>
<td>BS(0.615 ± 0.065), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N1</td>
<td>A</td>
<td>SL</td>
<td>3.3%</td>
<td>F(1, 157) = 6.486</td>
<td>p = 0.012</td>
<td>AA (0.145 ± 0.104), p = 0.163</td>
<td>BA(0.481 ± 0.081), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N2</td>
<td>S</td>
<td>CM</td>
<td>7.4%</td>
<td>F(1, 157) = 16.107</td>
<td>p = 0.000 (p &lt; 0.0005)</td>
<td>AS(-0.038 ± 0.133), p = 0.767</td>
<td>BS(0.574 ± 0.074), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N2</td>
<td>A</td>
<td>SL</td>
<td>9.3%</td>
<td>F(1, 157) = 17.499</td>
<td>p = 0.000 (p &lt; 0.0005)</td>
<td>AA(-0.040 ± 0.099), p = 0.690</td>
<td>BA(0.547 ± 0.100), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N3</td>
<td>S</td>
<td>CM</td>
<td>3.0%</td>
<td>F(1, 157) = 5.630</td>
<td>p = 0.019</td>
<td>AS(0.064 ± 0.172), p = 0.771</td>
<td>BS(0.537 ± 0.102), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N3</td>
<td>A</td>
<td>SL</td>
<td>12.6%</td>
<td>F(1, 157) = 27.516</td>
<td>p = 0.000 (p &lt; 0.0005)</td>
<td>AA(0.018 ± 0.087), p = 0.838</td>
<td>BA(0.666 ± 0.088), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N4</td>
<td>S</td>
<td>CM</td>
<td>2.9%</td>
<td>F(1, 157) = 3.869</td>
<td>p = 0.017</td>
<td>AS(0.101 ± 0.142), p = 0.480</td>
<td>BS(0.493 ± 0.078), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N4</td>
<td>A</td>
<td>SL</td>
<td>3.4%</td>
<td>F(1, 157) = 6.333</td>
<td>p = 0.013</td>
<td>AA(0.047 ± 0.106), p = 0.658</td>
<td>BA(0.369 ± 0.072), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N5</td>
<td>S</td>
<td>CM</td>
<td>2.8%</td>
<td>F(1, 157) = 3.579</td>
<td>p = 0.022</td>
<td>AS(0.086 ± 0.147), p = 0.560</td>
<td>BS(0.476 ± 0.083), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N5</td>
<td>A</td>
<td>SL</td>
<td>3.5%</td>
<td>F(1, 157) = 6.445</td>
<td>p = 0.012</td>
<td>AA(0.085 ± 0.097), p = 0.384</td>
<td>BA(0.395 ± 0.074), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N6</td>
<td>S</td>
<td>CM</td>
<td>6.7%</td>
<td>F(1, 157) = 16.628</td>
<td>p = 0.000 (p &lt; 0.0005)</td>
<td>AS(0.135 ± 0.118), p = 0.255</td>
<td>BS(0.705 ± 0.075), p = 0.000 (p &lt; 0.0005)</td>
</tr>
<tr>
<td>N6</td>
<td>A</td>
<td>SL</td>
<td>3.8%</td>
<td>F(1, 157) = 6.580</td>
<td>p = 0.011</td>
<td>AA(-0.071 ± 0.113), p = 0.531</td>
<td>BA(0.283 ± 0.079), p = 0.000 (p &lt; 0.0005)</td>
</tr>
</tbody>
</table>

### 4.3. Interdependence and Bakery Performance

As shown in Table 3, a hierarchical multiple regression was run to assess the increase in variation explained by the addition of an interaction term between each of the interdependence strategies (ND1, ND2, ND3, ND4, ND5, and ND6) and S to a main effects model. It was also run to assess the increase in variation explained by the addition of an interaction term between each of the interdependence strategies and A to a main effects model. The findings reveal that S moderates the effect of each of the interdependence strategies on CM. They also reveal that A moderates the effect of each of the interdependence strategies on SL. The simple slopes analysis revealed that the linear relationship between CM and each of the interdependence strategies in bakeries with AS, was not statistically significant. However, the simple slopes analysis revealed that the linear relationship between CM and each of the interdependence strategies in bakeries with BS, was statistically significant. On the other hand, the simple slopes analysis revealed that the linear relationship between SL and ND1, and between SL and ND5 in bakeries with AA, was statistically significant. Conversely, the simple slopes analysis revealed that the linear relationship between SL and ND2, SL and ND3, and between SL and ND4 in bakeries with AA, was not statistically significant. However, the simple slopes analysis revealed that the linear relationship between SL and each of the interdependence strategies in bakeries with BA, was statistically significant. The coefficient of the interaction term was statistically significant indicating that S moderates the relationship between CM and each of the interdependence strategies. Also, the coefficient of the interaction term was statistically significant indicating that A moderates the relationship between SL and each of the interdependence strategies.
Table 3. Interdependence and Bakery Performance

<table>
<thead>
<tr>
<th>IV</th>
<th>MV</th>
<th>DV</th>
<th>R square Change</th>
<th>F Change</th>
<th>Sig. F Change</th>
<th>Simple slopes analysis</th>
<th>Coefficient of the interaction term</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND1</td>
<td>S</td>
<td>CM</td>
<td>2.9%</td>
<td>( F(1, 157) = 5.944 )</td>
<td>( p = 0.016 )</td>
<td>AS (0.152 ± 0.143), ( p = 0.287 )</td>
<td>(0.393 ± 0.161), ( p = 0.016 )</td>
</tr>
<tr>
<td>ND1</td>
<td>A</td>
<td>SL</td>
<td>5.1%</td>
<td>( F(1, 157) = 11.133 )</td>
<td>( p = 0.001 )</td>
<td>AA (0.187 ± 0.087), ( p = 0.054 )</td>
<td>(0.383 ± 0.115), ( p = 0.001 )</td>
</tr>
<tr>
<td>ND2</td>
<td>S</td>
<td>CM</td>
<td>6.0%</td>
<td>( F(1, 157) = 13.879 )</td>
<td>( p = 0.000 (p &lt; 0.0005) )</td>
<td>AS (-0.003 ± 0.126), ( p = 0.983 )</td>
<td>(0.525 ± 0.141), ( p = 0.000 (p &lt; 0.0005) )</td>
</tr>
<tr>
<td>ND2</td>
<td>A</td>
<td>SL</td>
<td>8.3%</td>
<td>( F(1, 157) = 20.725 )</td>
<td>( p = 0.000 (p &lt; 0.0005) )</td>
<td>AA (0.149 ± 0.077), ( p = 0.054 )</td>
<td>(0.453 ± 0.100), ( p = 0.000 (p &lt; 0.0005) )</td>
</tr>
<tr>
<td>ND3</td>
<td>S</td>
<td>CM</td>
<td>3.0%</td>
<td>( F(1, 157) = 5.484 )</td>
<td>( p = 0.020 )</td>
<td>AS (-0.071 ± 0.183), ( p = 0.701 )</td>
<td>(0.470 ± 0.201), ( p = 0.020 )</td>
</tr>
<tr>
<td>ND3</td>
<td>A</td>
<td>SL</td>
<td>3.1%</td>
<td>( F(1, 157) = 6.585 )</td>
<td>( p = 0.019 )</td>
<td>AA (0.062 ± 0.122), ( p = 0.615 )</td>
<td>(0.358 ± 0.112), ( p = 0.019 )</td>
</tr>
<tr>
<td>ND4</td>
<td>S</td>
<td>CM</td>
<td>2.9%</td>
<td>( F(1, 157) = 5.704 )</td>
<td>( p = 0.018 )</td>
<td>AS (0.033 ± 0.146), ( p = 0.819 )</td>
<td>(0.385 ± 0.161), ( p = 0.018 )</td>
</tr>
<tr>
<td>ND4</td>
<td>A</td>
<td>SL</td>
<td>3.3%</td>
<td>( F(1, 157) = 6.011 )</td>
<td>( p = 0.015 )</td>
<td>AA (0.102 ± 0.121), ( p = 0.402 )</td>
<td>(0.385 ± 0.158), ( p = 0.015 )</td>
</tr>
<tr>
<td>ND5</td>
<td>S</td>
<td>CM</td>
<td>2.8%</td>
<td>( F(1, 157) = 6.277 )</td>
<td>( p = 0.013 )</td>
<td>AS (0.143 ± 0.137), ( p = 0.297 )</td>
<td>(0.384 ± 0.153), ( p = 0.013 )</td>
</tr>
<tr>
<td>ND5</td>
<td>A</td>
<td>SL</td>
<td>3.5%</td>
<td>( F(1, 157) = 5.025 )</td>
<td>( p = 0.005 )</td>
<td>AA (0.221 ± 0.076), ( p = 0.004 )</td>
<td>(0.277 ± 0.098), ( p = 0.005 )</td>
</tr>
</tbody>
</table>

5. Discussion

5.1. Network Formation and Bakery Performance

The findings tell that the size of the bakery moderates the relationships between bakeries’ network formation strategies and the number of customers. All these relationships exist in bakeries with a basic size than in bakeries with a huge number of employees. This informs that small sized bakeries tend to place their commitment more in establishing social networks, particularly informal networks than large entities and thus, increasing their customer base. Small enterprises are also less bureaucratic, and are greatly flexible. On the other hand, we have realized that the age of the bakery moderates the relationships between network formation strategies, and the sales level. Out of the five analyzed relationships, the two relationships exist in bakeries with basic age and those with advanced age. The other three relationships exist in bakeries with basic age. Based on the findings, it is tempting to conclude that the relationships between network formation initiatives and sales level exist in bakeries with basic age and those with advanced age. This informs that network formation initiatives can be instituted and ultimately drive sales performance irrespective of the age of the firm. In this regard, commitment is more important than the firm’s experience. All the results corroborate with the fact that networking with close persons such as family members, and friends who play a vital role in the growth of the business; is of paramount importance (Oke, 2013). Bakeries need to build capabilities in developing relationships. Relationship skills are built on understanding, trustworthiness and ability to persuade others (Bengesi & Le Roux, 2014). Understanding the interests of close persons and initiating strong networks with them is essential in driving business growth. This is because; networks can be used to access information, resources, and customers (Oke, 2013). However, the development of an interpersonal trust is a slow process (Hakanen, Kossou & Takala, 2016). This is because; the development of strong networks requires parties to interact and build trust. Thus, the interpersonal trust is created when parties understand the needs and preferences of one another (Hakanen, Kossou & Takala, 2016). The needs and preferences may include the readiness of parties to connect one another with potential resources, market, and growth opportunities.
5.2. Network Intensity and Bakery Performance

Based on the findings, we realize that the size of the bakery moderates the relationships between bakeries’ network intensity strategies and the number of customers. All these relationships exist more in bakeries with a basic size than in bakeries with a huge number of employees. This informs that small sized bakeries tend to place more of their commitment in intensifying their networks than large entities, and thus, increasing their customer base. On the other hand, the findings tell that the age of the bakery moderates the relationships between bakeries’ network intensity strategies and the sales level. All these relationships exist in bakeries with basic age. This informs that the network intensity initiatives can be instituted and ultimately drive sales performance in young SMEs. In this regard, commitment is more important than the firm’s experience. These findings corroborate with the fact that frequent interactions can establish business conversations. These conversations are crucial in SME’s networking arrangements (Turyakira & Mbidde, 2015). However, the owners/managers need to employ commitments in intensifying their social networks. Their commitments can be translated in terms of their readiness to establish social interactions, and ultimately social capital. It has been argued that there is a relationship existing between social capital and social interactions (Agyapong, Agyapong & Poku, 2017). Through social interactions, effective networks are intensified. Effective networks are sustained by mutual trust (Turyakira & Mbidde, 2015). However, SME owners/managers need capabilities in managing conflicts that may threaten the intensification of their social networks. Therefore, the owners/managers’ competencies in understanding and applying techniques that can be used to address disputes such as patience (Bengesi & Le Roux, 2014) are of paramount importance.

5.3. Interdependence and Bakery Performance

The findings confirm that the size of the bakery moderates the relationships between bakeries’ interdependence strategies and the number of customers. All these relationships exist more in bakeries with a basic size than in bakeries with a huge number of employees. This informs that due to their small size, small sized bakeries tend to place their commitment more in supporting interdependence initiatives than large entities and thus, increasing their customer base. On the other hand, the findings tell that the age of the bakery moderates the relationships between bakeries’ interdependence strategies and the sales level. We have noted, based on the findings that, out of the five analyzed relationships, the two relationships exist in bakeries with basic age and those with advanced age. The other three relationships exist in bakeries with basic age. Again, we are tempted to conclude that the relationships between interdependence initiatives and sales level exist in bakeries with basic age and those with advanced age. This informs that the commitment of bakeries in supporting interdependence initiatives influences sales performance irrespective of the firm age. All the results corroborate with the fact that in order to enhance business networks, SMEs need to promote other businesses (Turyakira & Mbidde, 2015). SMEs need networks in order to access valuable business information, opportunities, and resources (Chimucheka, 2013). This is because; the motive behind establishing business networks is to acquire mutual benefits such as accessing essential resources (Tehseen, Qureshi & Ramayah, 2018). Therefore, the commitment in strengthening networks can attract valuable information and resources such as capital from the family members and friends (Thrikawala, 2011).
6. Conclusion

The study has revealed that both the size and age of the bakery moderate the relationship between network formation; and the number of customers, and sales level respectively. They also moderate the relationship between network intensity; and the number of customers, and sales level respectively. The study has also revealed that both the size and age of the bakery moderate the relationship between interdependence; and the number of customers, and sales level respectively. The findings suggest that irrespective of their age, small sized bakeries need to employ their commitment in enhancing their network formation, network intensity, and interdependence initiatives in order to drive their performance and competitiveness. The conclusion corroborates the fact that both the firm size and age can impact networking initiatives in SMEs (Machirori & Fatoki, 2013). These initiatives can form sustainable entrepreneurial networks. Entrepreneurial networks influence SME performance (Chimucheka, 2013). The conclusion can be drawn from the fact that SME networks can be agents of sustainability (Jämsä, Tähtinen, Ryan & Pallari, 2011). However, interpersonal trust is crucial in driving the success of these networks (Hakanen, Kossou & Takala, 2016).

7. Limitations and Further Studies

Our study requested information from the bakeries through the owners/managers as the bakery representatives and spokespersons. We acknowledge that bakery employees are greatly involved in initiating and managing network relationships. However, they were not involved during data collection due to the fact they are not the spokespersons. We therefore argue that their involvement would provide better insights regarding networking strategies in bakeries. Given this context, further studies may involve a lot of stakeholders apart from the owners/managers in order to get a multifaceted picture on the networking practices in SMEs particularly in bakeries. These studies may also focus on other sectors, and countries other than Tanzania.

8. Acknowledgement

The Tanzania Commission for Science and Technology (COSTECH) registered our research and provided the required permit (2018-530-NA-2016-336). We heavily appreciate its support. Similar appreciation goes to University of KwaZulu-Natal for providing an ethical clearance (HSS/1921/018D). We also appreciate the support given by bakery owners/managers during data collection.

References


