The Relationship between Social Networks and Firm Performance

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ABSTRACT

The study sought to investigate the relationship social networking construct and firm performance. A quantitative research design was employed, whereby data were collected, analyzed and presented using quantitative techniques. Primary data was collected directly from the respondents who are intrapreneurs employed in small and medium bakery and beverage manufacturing firms in Kampala Uganda.

The results show a significant and positive relationship between social networks and firm performance (r=.521**, p<.01). This implies that, adhering to and implementing the advice and other information from the professionals, experienced business associates and colleagues will enhance the level of performance of the small scale manufacturing businesses.

Further, regression results show that social networks predicted firm performance (Beta = .445, Sig=000).

This study posits that social networks can be a cost-effective way of improving small firms' performance, particularly manufacturing firms. It can therefore be recommended that, small firms support information exchange and resource sharing within and without the business through building blocks that enhance trust amongst its employees. This can be inexpensive method of finding out more efficient ways of operating thus improved firm performance.

Keywords: Social Networks, Firm Performance, Small and Medium, Manufacturing Firms, Kampala, Uganda.

INTRODUCTION

The beverage and bakery manufacturing subsectors in Uganda are reported to have the highest and most increasing numbers of new business start-ups (UBOS 2007 & Hatega, 2007). However, these local firms are characterized by poor firm performance evidenced by lukewarm market shares, low sales, uncompetitiveness, product duplication and high closure rates in the initial years of operation. Whereas many factors related to business failure could be addressed through government and private sector initiatives such as programmes aimed at increasing access to long-term development finance and management trainings (MPED, 2008 and Back ground to the Budget, 2009), the persistent poor performance of small manufacturing firms could probably be attributed to low levels of social networks.

The study sought to investigate the relationship social networking construct and firm performance. The expected outcome from this investigation is a model which will help close the gap in the performance of small manufacturing firms in developing country like Uganda.

LITERATURE REVIEW

This section brings out the existing literature on social networks and firm performance as discussed by different authors. It brings out an appreciation of what has been done on the variables under study wile highlighting the gaps.

Social networks

Previous research suggests that good social networks are characterized by good flows of information, support, and sustained by the credibility and governance determining behavior within the group (Barnir and Smith, 2002). However, establishing governance without a market mechanism to control the behavior of would-be competitors requires entrepreneurs to know who to trust because it affects what and how they share information. Researchers argue that this knowledge comes from identifying different dimensions of trust and different authors have different names for markedly similar concepts.

In particular, Zucker (1986) suggests that there are three forms of trust – characteristic based trust (based on member's characteristics), process-based trust (based on established history) and institutional-based trust (determined by established practices). Process-based trust is often used to examine how entrepreneurs learn about who and when to trust and it is examined by analyzing their history of trust experiences (Bower et al., 1996) whereas McKnight et al. (1998) defines disposition

to trust (similar to Zucker's characteristic-based trust) as the extent to which one actor presents a readiness to depend on other actors across a range of situations and other actors. The argument presented is that if entrepreneurs have a predisposition to trust, then it is likely that this behaviour will advantage them because they will have the skills to balance trust and control. Using Zucker's dimensions, entrepreneurs probably experiment with trusting and respond to different situations based on past experience. Hence, if the first experience is positive, (probably because of the actor's beliefs about trusting) then they may continue to behave accordingly which increases the value of each relational exchange to each entrepreneur.

Firm performance

Performance of a firm is how well or poorly a firm is doing as compared to the set objectives. Bernadette and Gavin (2001), argue that businesses should set clear objectives, aim at growth and are able to compete both in the short run and long run to perform well and to achieve success. Failure to create such links results into failure of many small firms during their first years of operation or causes struggle in their survival. Several measures of firm performance have been advanced (McNamee, Greenan, and McFerran 1999; Barringer, et al., 2005 & Chen et al., 2007) however, the selection of suitable measures ought to be in the light of the firm's strategic intentions to suit the competitive environment in which it operates and the kind of business engaged in (Hvolby and Thrstenson, 2000). According to Alastair (1999), a balance between financial and non financial measures provide more accurate measure of the overall performance of a firm because not all aspects of organization's activity can be expressed in monetary terms.

Recent research on the performance of small firms focussed on Survival rates in terms of age of business (Lynch and Habte-Giorgis 1999), growth in sales (Watson, 2004; Dobbs and Hamilton 2007; Davis 2008 & Salvou and Avlonitis 2008), and competiveness as appropriate measures of firm performance. This is because the traditional measures of business performance particularly financial measures can be used for older firms but may not be appropriate or adequate for small entrepreneurial firms that may be in the early years of establishment (Zhang & Si, 2008).

Fasci and Valdez (1998) contend that age of a business is an indicator of firm performance. However, small firms are exposed to higher risk of failure and their performance within the first years of operation which seems to be a significant challenge, than older ones which are usually in a better financial position to effect such changes (Zhang and Yung, 2006). Therefore, for a business to survive longer, it should be performing well to be able to take care of the challenges of necessary productive resources required in the early years of operation. Esaet (2007) also cites various studies (Freeman et al. 1983 and Shepherd et al. 2000) where smallness exposed a business to a greater risk of failure resulting from dynamic competitive environment.

Social networks and Firm performance

Networks can take many different forms in a market and the process of networking has various definitions in the literature. Carson et al (1995) described networking in a small business context as "an activity in which the entrepreneurially oriented SME owners build and manage personal relationships with particular individuals in their surroundings. (Coulthard & Loos, 2007) generalized networking to include the exchange of friendship, information, benefits and influence. But for the purpose of this study, networks are defined as voluntary arrangements between firms or individuals aimed at providing a competitive advantage for the participants.

Most of the literature emphasizes the positive aspects of networking behaviour and show that interpersonal networking plays an important role in the process of enterprise creation and growth (Birley et al, 1991). In this regard social networking is seen primarily as a means of raising required resources and can include: capital raising, identifying market opportunities, identifying and developing technology, obtaining ideas and ensuring future support for these ideas (Ramachandran & Ramnarayan, 1993).

According to Hogg and Adamic (2004), a social network normally provides participants with opportunities of finding social support, establishing new social or business contacts for collaboration (O'Murchu et al., 2004), exchanging social capital including financial resources, goods or services, exploring and application of knowledge transfer. The number of contacts relations (Stocker et al., 2001), and the extent to which one person dominates in a network all affect firm performance (Nerys & Esyllt, 2004). Batjargal (2001) found relational and resource embeddedness in favorable social networks having a direct positive impact on sales growth and profit margin. Lewrick, Raeside, & Peisl (2007) further noted that, social networks have a strong influence on individual's attitude towards firm performance in terms of the value derived from information and knowledge absorbed from mutual acquaintances, friendships, family and membership of certain groups.

The earlier studies by Granovetter (1983) reported social ties to have a special role in a person's opportunity for mobility "that there is a structural tendency for those to whom one has a contact with to have better access to market information in terms of product prices, customer feedback and

supplier intentions". But highlighted the fact that firms lacking in social ties will be fragmented and incoherent, new ideas will spread slowly, scientific endeavours will be handicapped, and subgroups separated by race, ethnicity, geography, or other characteristics will have difficulty reaching a consensus towards boosting firm performance. In emphasizing the relationship between social networks and firm performance Barnir and Smith (2002) found out that, through an efficient network, a business can profit from lower marketing costs and emotional support. Brindley (2005), argues that support and assistance of trusted networks of family and friends minimize the risks of small business venture failing in the early years of operation. Ishengoma & Kappel (2008) further proved that networks can be a very cost effective way of improving firm performance.

Trust is identified as being an important link between enterprising individuals and can be defined as the willingness to rely on an exchange partner in whom one has confidence (Moornman et al, 1993). Morgan and Hunt (1994) defined trust as a situation when one party has confidence in an exchange partner's reliability and integrity. Wood, McDermott and Swan (2002) have identified several qualities associated with the term trust that is; integrity, honesty, truthfulness, reliability, dependability, openness and respect for other's autonomy and fairness. Kingsley and Malecki (2004) further explained that, individuals and firms will only rely on an information source if there is a level of trust in the relationship because trust increases the predictability of the goodwill of others. These authors found that, the more active a firm was in cultivating and using informal networks for information, the more likely they were to have both informal and formal patterns of communication with their business partners. This makes sense in that, without information no decision can be made in terms of opportunity recognition and exploitation. Albright (2004) suggests that, useful external sources of information are not published, rather most managers get much of their information from word-of-mouth through their personal network of contacts.

Research shows that trust is essential in building information sources (Kingsley & Malecki 2004, Wood, McDermott & Swan 2002). Studies by Butler and Hansen (1991) and O'Donnell (2004) showed a link between trust and strategic collaborations with suppliers, customers and business associates. O'Donnell (2004) added that, trust developed via informal networks also appears an important source for gathering information and support. These networks are associated with personal friendships, meetings with recognised experts, potential and valued customers and colleagues considered being on the same wavelength. Internal trust revolves around the relationships within the firm. According to O'Donnell (2004) most owner managers network extensively with their

employees for marketing purposes. This researcher found that those extensive and proactive networkers maintain strong ties with their employees.

However, these studies seem not to agree on variables necessary for measuring effectiveness in social networks among small manufacturing firms. Thus, this study focused on examining whether network contacts and trust contribute to better firm performance. This study also extends the works of other authors like Ramachandran & Ramnarayan (1993) and shows how social networking behaviours might link intrapreneurial individuals within a firm and their organizational environment with resultant effect on firm performance.

METHODOLOGY

This section presents the research methods used in the study.

Research design

The study used a quantitative research design whereby data were collected, analyzed and presented using quantitative techniques.

Data Sources

• Primary Data

The required primary data was collected directly from the respondents (intrapreneurs) who work in small and medium beverage manufacturing firms. This was done through administering a structured questionnaire with the help of one research assistant. Respondents were guided through the questionnaires to ensure high level of accuracy in the data collection process.

• Secondary Data

Secondary data was used to support the empirical findings of the study. This data was obtained from existing literature in previous research paper findings, journal articles, Text books, News papers, reports and conference proceedings. The type of data to be collected from the secondary sources was related to firm performance in Beverage & Bakery manufacturing firms. This data was obtained from the selected Beverage & Bakery manufacturing firms, Uganda Small Scale Industries Associations and Uganda Manufacturers Association

Study population and sampling

The study focused on beverage and bakery manufacturing firms in Kampala. This is because these two subsectors reported high numbers of new business start-ups compared to other manufacturing subsectors. In these sub-sectors the study did not cover large scale manufacturing; the reason is to minimize classification errors based on (Abuja, 2001). He argues that the number of classification errors increases with more strata. The five divisions of Nakawa, Kawempe, Rubaga, Makindye and

Central were covered because these areas have the highest concentration of manufacturing businesses according to UBOS Report 2006/2007. A total of 144 business firms were listed by UBOS in the above two categories.

Out of the 144 firms, 117 were selected to participate in the study. Of the 117, 44 firms were beverage producers, while 73 firms were into bakery business.

Data Collection Instrument

Primary data was collected through administering a Questionnaire. The questionnaire contained closed ended questions relating to each study variable in question. The questions relating to intrapreneurial orientation, social networks, organizational environment and firm Performance will be constructed on an interval scale.

Validity and Reliability of the Instrument

To establish for validity and reliability of the instrument, a pilot study was undertaken to examine for accuracy, precision, clarity and appropriateness of the procedure of instrument administration. As can be observed from the results below, all the variables had Cronbach Alpha coefficients and CVI values well over 0.5 in either case, proving that the research instrument used to collect data from the respondents was considered appropriate and could yield similar results at all time (Nunally, 1978). All the items included in the scale had been analyzed in the literature review on intrapreneurial orientation, social network, organization environment and firm performance in small manufacturing firms, for this reason I considered that content validity is ensured. Table 1 shows validity and reliability results.

Variable	Anchor	Cronbach Alpha	Content	
		Value	Validity Index	
Social Networks	5 point	0.594	0.778	
Firm Performance	5 point	0.652	0.750	

Table 1: Reliability Coefficient and Coefficient of Variation Index for the Study Variab
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Source: Primary Data

FINDINGS

This section presents the study findings.

Marital status of respondents

Through the tabulation of the respondents, table 4 below was generated to explore the marital status of the respondents. The aim was to explore the percentage distribution of the respondents by their marital status as shown below;

Table 2: Marital status

Category		Frequency	Valid Percent	Cumulative Percent
	Single	81	47.4	47.4
	Married	85	49.7	97.1
Valid	Divorced	3	1.8	98.8
	Others	2	1.2	100.0
	Total	171	100.0	

Source: Primary Data

The results in table 2 above showed that the majority of the respondents were married (49.7), followed by the single (47.4). In addition, the results showed that, the respondents who were divorced and others comprised of 1.8% and 1.2% respectively.

Age of Respondents

The tabulations of age group were generated to explore the distribution of the age group of the respondents. This was to determine the percentage distribution of the age groups of person who responded as shown in table 3.

Table	3:	Age	group
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Range		Frequency	Valid Percent	Cumulative Percent
	Under 20 yrs	3	1.8	1.8
	20 - 29 yrs	124	72.5	74.3
Valid	30 - 39 yrs	39	22.8	97.1
	40 - 49 yrs	5	2.9	100.0
	Total	171	100.0	

Source: Primary Data

The results in table 3 above showed that the majority of the respondents were in the age range of 20-29 years (72.5%), In addition, the respondents in the age Under 20 years, 30-39 years, and 40-49 years comprised 1.8%, 28.8% and 2.9% respectively.

Correlation Analysis

Correlation analysis method was used to examine the relationship between social networks and firm performance as seen in table 4.

Correlations	Number of Contacts	Trust	Social Networks	Firm Performance	
Number of Contacts	1.000	.010	.403**	.237**	
Trust	.010	1.000	.430**	.277**	
Social Networks	.403**	.430**	1.000	.521**	
Firm Performance	.237**	.277**	.521**	1.000	
** Correlation is significant at the 0.01 level (2-tailed).					

Table 4: Pearson Correlations.

Source: Primary Data

The results in table 4, further showed a significant and positive relationship between social networks and firm performance ($r=.521^{**}$, p<.01). This implies that, adhering to and implementing the advice and other information from the professionals, experienced business associates and colleagues will enhance the level of performance of the small scale manufacturing businesses. In other words the greater the quality and diversity of relations that they are likely to form with family and friends, colleagues and professionals in their field of operation for instance the regular business contacts with other intrapreneurs in the field of business can help one to acquire useful resources, information and skills which make the business operations smoother and competitive.

The Regression Analysis

Regression analysis was used to determine the predicting power of the independent variable (social networks) on the dependent variable (firm performance). Table 5 presents the results.

Model		Unstandardized Coefficients		Standardized	Т	Sig.
				Coefficients		
		В	Std. Error	Beta		
1	(Constant)	.545	.362		1.624	.000
	Social Networks	.260	.096	.445	2.696	.000
Dependent Variable: Firm Performance						

Table 5: Regression Model

The results in Table 5 show that social networks predicted firm performance (Beta = .445, Sig=000).

DISCUSSION OF FINDINGS

This section presents a discussion of findings in relation to literature.

The Relationship between Social networks and Firm performance

There was a significant positive relationship between Social networks and Firm performance. This means that the quality and large personal networks of entrepreneurs would increase the likelihood of locating clients for their products and services and suppliers to their firms, who are socially bound. This is because resourceful and powerful ties as well as weak ties produce high rates of return when they are utilized. This is likely to facilitate sales stabilization and eventual growth since the embeddedness provides a flexible room for negotiations that might allow entrepreneurs to convert the social bounds into revenue growth and other tangible benefits. The personal chemistry between the entrepreneur and the supplier will enable the entrepreneur to purchase supplies and to her production inputs at lower prices and that might influence profit margin boosting and the overall performance.

These results are also in agreement with Watson (2004) and Anderson (2007) who found a significant association between accessing particular networks and firm performance for both the male-and female owned firms. In this regard social networking is seen primarily as a means of raising required resources and can include: capital raising, identifying market opportunities, identifying and developing technology, obtaining ideas and ensuring future support for these ideas.

The findings are further supported by Hogg and Adamic (2004) and O'Murchu et al., 2004 who assert that strong ties enhance performance directly through trust building, information transfer, and joint problem solving arrangements. Weak ties with acquaintances, family, fellow intrapreneurs, are performance booting devices, as these vaguely defined relationships provide the crucial freedom to act upon opportunities and entrepreneurs with structural autonomy are likely to gain most not being bound by expectations and obligations. However, these findings may contradict Bartjargal (2001) who was unable to find any evidence linking and intrapreneur's use of networks to business performance. This is further supported by Lerner et al. (1997) who found that participation in multiple networks was negatively related to firm performance. This could be attributed to the fact that intrapreneurs are not at the helm of all business operations which leaves them with limited power for social networking.

CONCLUSION AND RECOMMENDATIONS

From the above discussion, it can be concluded that there is significant positive relationship between social networks and Firm performance. Weak ties are performance boosting because vaguely defined relationships provide that crucial freedom to act upon opportunities. Social networks further provide the productive financial resources, information, advice and ideas for a small firm to overcome the challenges of operations to survive and compete with big firms in the industry. These resources are obtained at a relatively lower costs and easier terms from partners in the network given the level of trust among the network members. Consequently, it is beneficial for small firms to emphasize expansion of their social network size, composition, strength and maintaining trust between partners to realize improvements in performance.

This study also shows that social networks can be a cost-effective way of improving small firms' performance, particularly manufacturing firms. It can therefore be recommended that, small firms support information exchange and resource sharing within and without the business through building blocks that enhance trust amongst its employees. This can be inexpensive method of finding out more efficient ways of operating thus improved firm performance.

REFERENCES

Ahuja, R. (2001). *Research Methodology*. (2nd edn), Rawat Publications, Jaipur and New Delhi.

Alastair, S. (1999). A guide to performance Measurement and Non- Financial indicators. The Foundation for Performance Measurement. Hanover House, Survey.

Barnir, A. & Smith, K.A. (2002). "Interfirm Alliances in the Small Business: The Role of Social networks", *Journal of Small Business Management*, 40 (3) 219-32.

Batjargal, B. (2000). *Effects of networks on Entrepreneurial performance in a Transition Economy*: the case of Russia. www.pdffactory.com

Bernadette, P. & Gavin, C.R. (2001). Turbulent, Flexibility and Performance of the Long lived Small Firm. University College Cork, Ireland; University of St. Andrews, St. Salvator's College, St. Andrews, Fife, Scotland, KY169AL, London.

Brindley. C, (2005). Barriers to Women Achieving their Entrapreneurial Potential. Women risk, International journal of Entrepreneurship Behaviour & Research, 11.

Coulthard, C., & Loos, J. (2007). Networking the Missing Link in Firm Based Entrepreneurial Orientation Performance Models. Monash University, Department of Management, Working Paper Series, 1327-5216.

Dobbs, M., & Hamiltonb, R.T. (2007). Small Business Growth: Recent Evidence and New Directions, *International journal of Entrepreneurial Behaviour and Research*, *13* (5) 296 322.

Esaet, M. (2007). Quality of record keeping Managerial competencies and Performance of Small Businesse. A research Dissertation.

Granovetter, M.S. (1985). "Economic Action and Social Structure: The Problem of Embeddedness", *American Journal of Sociology*, *9* 481-510.

Hatega, G. (2007). SME Development in Uganda: A paper presented on SMEs in Uganda at the public lecture by Private Sector Foundation, Sheraton Kampala Hotel (14th March 2007)

Hogg, T. and Adamic, L. (2004). "Enhancing Reputation Mechanisms via Online Social networks", Proceedings of the 5th ACM Conference on Electronic Commerce, EC'04, ACM Press, New York, NY, 17-20 May, 236-7.

Hvolby, H. & Thrstenson, A. (2000). *Performance Measurement in Small and Medium Size Enterprises*. Proceedings of the third Conference on stimulating Manufacturing Excellence in Small and Medium Enterprise. Coventry UK.

Ishengoma, E., & Kappel, R. (2008). *Business Constraints and Growth Potential of Micro and Small Manufacturing Enterprises in Uganda*. GIGA Research Programme. Transformation in the process of Globalisation. (78).

Kingsley, G. & Malecki, E. (2004) Networking for Competitiveness. *Small Business Economics*, 23, 1, 71-84

Lewrick, M., Raeside, R., & Peisl, T. (2007). The Innovator's Social network. Across- sector Exploration on the Influence of Social Networks and Social Capital on Innovation and Success. *Journal of Technology management and innovation*, *2*, issue 3.

Lynch, R.D., & Habte-Giogis, B. (1999). The Characteristics of Successful Business in Southern New Jersey. *Rowman University American City Journals*.

McKnight, D.H., Cummings, L. and Chervany, N. (1998). "Initial Trust Formation in New Organisational Relationships", The Academy of Management Review, 23 (3), 473-91.

McNamee, P., Greenan, K.,& McFerran, B. (1999). The Competitive Analysis Model. A new Approach to Strategic Development for Small Businesses. *An international journal*, 6 (2), 125-146.

Moornman, C., Deshande, R. & Zaltman, G. (1993). Factors Affecting Trust in MarketResearch Relationships. *Journal of Marketing*, 57 (1), 81-101

Morgan, R. & Hunt, S. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 58 (3), 20-38.

Nerys, F-L., & Esyllt, T. (2004). Networks in Small Manufacturing Firms. *Journal of Small Business* and Enterprise Development, 11 (2) 244-253.

O'Donnell, A. (2004). The nature of networking in small firms. Qualitative Market Research:An International journal, 7, 3, 206-217.

O'Murchu, I., Breslin, J.G. & Decker, S. (2004). "Online Social and Business Networking Communities", DERI Technical Report 2004-08-11, SIGKDD'03, Washington, DC.

Ramachandran, K. & Ramnarayan, S. (1993). Entrepreneurial orientation and Networking: Some Indian Evidence. *Journal of Business Venturing*, *9*(4) 281-305.

Uganda Bureau of Statistics, (2007). Report on the Uganda Business register. Annual Report 2006/2007www.Ubos.org.

Watson, J. (2004). *Networking Affliations*: Gender Differences and the Association with SME Survival.

Zhang, Y., & Si, C. (2008). The Impact of External Factors on the Growth of Chinese Entrepreneurship, Journal of Small Business and Enterprise Development, 13 (2) 161-173.

Zhang, Y., & Yang, J. (2006). New Venture Creation: Evidence from an Investigation into Chinese Entrepreneurship, *Journal of Small Business and Enterprise Development*, *11* (1) 25-41.

Zucker, L. (1986). "Production of Trust: Institutional Sources of Economic Structure in Cummings, *Research in Organizational Behaviour*, *8*, 53-111.