

The Impact of Business Networking and Internet Adoption on SME performance in Sri Lanka

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Abstract

Many scholars have identified the importance of the Small and Medium Enterprises (SMEs) in order to achieve a sustainable economic growth in developing countries. Practitioners and the governments in such countries have also taken steps towards strengthening the sector with the vision of sustainable economic growth yielding from the SME sector. The objective of the journal article is to identify and verify the contribution by Business Networking and Internet based ICT adoption in strengthening the performance of the SME sector. Building up alliances and the usage of new technology is deemed be vital factors in supporting the growth of SMEs. This paper flows through an analysis of the most recent literatures on the topic to construct a conceptual framework that is proposed to be utilized in the future research work together with the findings of model being empirically tested in Sri Lanka to validate the relevance of the proposed model to developing countries such as Sri Lanka. The paper also verifies the findings using statistical analysis of the data collected from a sample of SMEs in Sri Lanka covering all nine provinces. Variables in the model includes constructs of Business Networking; Competition, Necessity, Reciprocity, Stability, Legitimacy, Efficiency and constructs for Internet Adoption are business orientation, benefits, new work practice adaptability, ICT costs and complexity.

Keywords: Business Networking, Internet adoption, ICT, SME Performance

1. Introduction

Similar to some developing countries, not having an established and accepted definition for SMEs has been an issue in Sri Lanka. In order to develop a comprehensive strategy to uplift the performance of the SME sector, widely accepted definition will be critically important. Different countries use different definitions to identify SMEs (Gbandi and Amissah, 2014) where within one country different institutions were observed to be using different definitions. Aggregate revenue is being used as a measure to define SMEs by some (Nosella, 2015) where others use number of employees as a measure to define SMEs. (European Union 2011). Assets value of the SME was another yardstick to identify the SME. (Sas Aruwa, 2014). Fixed capital of the SME was thought to be more appropriate by others (Ogechukevu, 2009). In Sri Lanka there are over 13 definitions used by various institutions in the SME arena. However, irrespective of lack of a definition it is a globally acknowledged fact that SMEs play a crucial role in determining the economic performance of any country (Suriyapperuma, *et al.* 2015). Small and medium-sized enterprises (SMEs) play a central role in the European economy such that in the enlarged European Union of 25 countries, approximately 23 million SMEs provide around 75 million jobs and represent 99% of all enterprises (European Commission, 2013). This importance has been recognized not recently, but since the evolution of modern economies.

The roles of SMEs have shown greater magnitude in the developing countries as identified by many scholars. SMEs were identified as significant to countries, however particularly emerging nations. This is particularly correct in relation to countries with issues relating to unemployment and inequality of income (Berry 2007). In order for the developing countries to achieve a higher level of living standard and to cope-up with poverty, empower women, SMEs can provide a solid platform to the economy with abundance of possible solutions. Based on above it could be reasonably assumed that since SMEs strengthen the grass root layer of the economy, developing countries will have a good launching pad to thrive in the future provided the power of SME as sector is harness adequately. SMEs deliver a positive impact on both the static & dynamic front of the economy (Berry 2007). In one direction, contribution from the SME sector to GDP, employment generation; whilst on the other hand SMEs have become the breeding grounds to future larger enterprises, for successful micro business SMEs are the next level, SMEs contribution to national savings is significant while playing a similar role in investment, in many instances have being in the front of innovations due to flexible approach. Many developing countries, including Sri Lanka, have identified the importance of strengthening the SME sector in achieving sustainable economic growth. Accordingly the outreach to the rural SME sector, which forms the backbone of an economy, will contribute towards regional development by creating new employment opportunities, empowerment of women and uplifting living standards (Central Bank of Sri Lanka 2013).

There are many determinants of SME performance inter-alia based on innovative performance, innovative capacity, organizational reach, market orientation, and entrepreneurial orientation that have been thoroughly

reviewed by the academics (Sidik 2012). However, it was observed that business networking and the adoption of Internet based ICT practices are another two key catalysts of SME performances that have been overlooked, especially in the developing nation's perspective. Business networks have evolved with community by creating interaction, where the members in the groups interchange their experience in a meaningful manner where others could benefit from sharing by one another (Farinda, *et al.* 2009). Among benefits of having effective networking by business are gaining new knowledge on markets & technical knowhow, new sources for customers, equity providers, vendors, employees, generating trust among competitors/members, resolving issues and sense of collective direction.

On the other hand, internet based ICT practices also contribute to the increase of productivity in SME in developing countries (Jayathilake, *et al.* 2008). He further found through their empirical research on how internet and ICT adoption has revolutionized the small and medium agricultural industry in Sri Lanka over the recent years. Agriculture sector was facilitated with the input of internet in areas such as new overseas markets, tapping to valuable sources of information and knowledge relating to agricultural sector which include new studies by others. His findings highlighted that internet facilitates sharing of key knowhow through being a mediator for remote and underdeveloped agricultural settlements in the world, by providing information and access.

1.1. Objectives of the Study

This study will summarize the findings of the empirical study based on the theoretical model proposed by the author. The author has empirically tested the model based on the conceptual framework so as to signify the influence of Business Networking and internet adoption among SMEs in Sri Lanka on propelling the performance of SMEs. This paper combines two early studies by the author on business networking and internet adoption among SMEs and provides a comprehensive view on their impacts on SME performances.

2. Literature Review

2.1 Performance of SMEs

SME sector acts as a critical element in the country in many emerging nations. Similarly in Sri Lanka, SMEs represent 80% of businesses and is present in many sectors of industries while contributing to employment creation by engaging people with diverse skills both unskilled and skilled. (Sri Lanka National Human Resources and Employment Policy 2012). SMEs have been recognized as an important strategic sector for generating high economic growth and reducing unemployment, inequality and poverty (SME Development Task Force 2002). Many scholars have identified the fact that development of this sector is of paramount importance due to the Return on Investment (ROI) the sector can generate towards the economic growth. The sector can generate employment, contribute to the growth of the GDP, embark on innovation and stimulate other economic activities (Brem *et al.* 2008) which are essential for the developing countries to rise up from the vicious cycle of poverty.

Given this importance of the SME sector, it is vital that the performance of the sector is kept up to the required level to achieve the objectives. Performance of an operation as defined by Moullin (2003) is "how well the organization is managed" including "the value the organization delivers for customers and other stakeholders". SMEs are however using a variety of performance measurement criteria (Brem, *et al.* 2008). The introduction of Performance Measurement Systems (PMSs) in SMEs is still a field in which little research has been conducted yet (Brem, *et al.* 2008). A large portion of the extant literature is devoted to studies on how large organizations measure their performance; an apparent void of understanding how SMEs measuring their performance. The novelty of the concept in the industry has resulted in a variety of PMSs utilized across the world.

There are identified performance measures used in SMEs (Wu, 2009). Among them are Growth indicators; such as sales growth and return to providers of capital. Asset based return assessment was observed to be growing in the recent studies, compared to measures used a decade ago such as return yielded compared to investment. Similarly use of subjective measurements such as satisfaction of customers has also increased (Wu, 2009). Questions have been raised regarding the suitability of all these indicators in the SME sector. Among measures used by scholars such as return on equity, return on investment or return on assets to ascertaining the performance of SMEs. Due to inherent limitations of SME sectors, above indicators that may be suitable for larger reporting entities, however might not be suitable for SMEs. (Wu, 2009). These challenges are further amplified by non existence of a widely accepted definition on 'who is a SME'.

Given such performance indicators, the next question arises on how to improve the performance of SMEs in today's dynamic business world. Research has long recognized entrepreneurial spirit of SMEs as a major engine of economic growth (Henderson & Weiler, 2009).

Selection of appropriate business strategies is stated to be another catalyst of SME performance in recent literature.

2.2 Business Networking

A business network is a 'cluster of connected business' (Holm 1996). The same could exist in the absence of centre together with no borders allowing it to freely interact with anyone in any direction (Prenekert & Hallén, 2006). Typical understanding of interacting revolves around two-way and exchanges of agreed matters physical and otherwise, however networking expands further to imply on multiple dimensions of a relationship, multi party involvement while movement allowed in any order (Prenekert & Hallén, 2006). Networks among business entities are achieving momentum in many industries. Current management literature posits that this organizational form can best meet the requirements of the 'new economy', such as customer-orientation, tailored solutions and minimized costs and time (Fleisch, 2001).

Strategic business networks were identified having broad deliverables. In one way, this acts as a big organisation which can offer a combination of services associated with professional knowledge (Mezegar & Paganelli, 2000) whilst for membership firms, it provides the platform for sharing information, knowledge, resources which in turn can be used for advancement, creating strategies and innovation. Considering the functions of strategic SME networks into account and how they appear to be designed, it is described as a 'cluster of SMEs joined together which are typically in close proximity, typically in similar industries, typically use same resources while agreeing to coordinate and cooperate among themselves in order to achieve a defined objectives. (Human and Provan, 1997).

James Marland (2013) identified ten characteristics of a good business network; innovative, open, comprehensive, global, non-disruptive, intelligent, scalable, trustworthy, insightful and successful. Being a part of a successful business network is a definite advantage for a start-up small-scale business as they are able to utilize the collaborative benefits derived from the network. Strategic development networks help the firms in upgrading their resources and capabilities – products, technology, quality, skill, production efficiency, information etc. (Ahlström-Söderling, 2003).

What drives a successful business network was researched by many scholars. (Farinda, 2009, Prenekert & Hallén, 2006, Wincent, 2006). Based on such factors, author has developed a conceptual framework and published the same with the title 'The Impact of Business Networking on SME Performance: Development of a Conceptual Framework' and is predominantly based on the model of Oliver of 1990 (Suriyapperuma, *et al.* 2015). The first among the variables in the construct is 'Competition' and refers to competition prevalent within the network, among the participating firms. However, the competition between the firms must be meticulously dealt with as adverse competition can hinder the prosperity of the network. Tensions between cooperation and competition are naturally evident, but must be dealt with as the firms are partners in the network and work towards a (at least partly) common objectives and future (Wincent, 2006).

A business 'Necessity' is either due to voluntary reasons or mandatory requirements (Oliver, 1990) however mostly formed by virtue of being in certain types of industries. A business necessity may be a business purpose as dictated by the governing bodies in which the network is based in (Farinda, *et al.* 2009). Actors in networks contribute valued resources expecting valued outcomes in the future from the network denoting concept of 'Reciprocity' and has been a motivational mechanism driving actors' actions in networks. (Floren and Tell, 2004). 'Stability' is called for to overcome uncertainties and in networking relates to the desire of SMEs to be stable or continuity of the networks and the stability member firms derived by being connected within that particular network. Firms in a network obtain business stability by joining with other firms cooperate on new developments, cooperate on sponsorships, cooperate to collectively band themselves, and cooperate for resource sharing. 'Legitimacy' is brought about by the pressure environment exert on the SME to be compliant with regulations, norms, customs, rules, believes or expectations and to overcome pressure and to achieve this legitimate status SMEs were motivated to set up Business Networks (Oliver, 1990). In business networking literature corresponds to the recognition a member draws by being part of a network (Human and Provan 2000). Provan and Kenis (2007) explained that 'Legitimacy' is crucial for preserving the status and viability of networks. They further distinguished legitimacy as legitimacy gained by being in the business networks and legitimacy of business network itself.

'Efficiency' is concerned with minimizing costs and improving operational margins (Ahlström-Söderling, 2003) and further highlighted that by participating in networks, SMEs increased their efficiency significantly through means such as improvements in productivity, profits, customer satisfaction and sales.

2.3 Internet Adoption

The adoption of internet, particularly to conduct business over the web is rapidly evolving and challenging the traditional means of conducting business for brick and mortar companies (Tan, *et al.* 2009). The Internet and ecommerce have increased diffusion of knowledge around the world by linking countries in the world to form a global economy that is well networked (Gibbs & Kraemer, 2004). It was observed that due to multiple opportunities and advantages of internet, many organisations especially SME businesses are rapidly becoming users of internet (OECD, 2013). The continuous and growing interest in internet adoption is also due to the

explosive growth of users of internet around the world. Larger growth rates are reported from developing countries compared to developed countries (International Telecommunication Union 2013).

As the world economy continues to move toward increased integration as a result of advances in information communications technology, some of the greatest opportunities for small businesses will derive from their ability to participate in the regional and international markets (Mutula & Brakel, 2006). Among the scholars who studied internet adoption; Bartelsman and Doms (2000), Kohli & Devaraj (2003), Dedrick et al. (2003) and Melville et al. (2004) highlighted the adoption of Internet has many advantages to performances of business especially in areas of productivity, profitability, customers and share of the market. Due to significance highlighted by previous researchers the author has researched & published a journal article elaborating a conceptual framework in the area of internet adoption by SMEs (Suriyapperuma, *et al.*2015). Said article identified five significant variables that determine the extent of internet adoption by SMEs.

Among the variables are Benefits of internet, which was identified as the single most influential factor that drive businesses towards the internet adoption. Internet challenges & require business looking for innovative manners on how to compete, how to attract customers and retain them by satisfying their needs for services and products, reorganise strategies of the business and offer services and products in a efficient and effective manner (Zafar, *et al.* 2014). The second variable is 'complexity' and when adopting internet it was observed to be acting as a deterrent. As internet & ICT evolves, complications relating to applications have also increased together with management challenges associated to them. It was noted that ICT service providers have not seen SMEs as a promising segment with huge IT budgets at SME's disposal hinders less developments in off the shelf SME solutions. Low demand from SMEs to internet related solutions can be partly explained by the complexity. Outcome of this leads to a vicious cycle driven by lower supply due to lower demand which results in SMEs being kept away from benefits of internet. This indicates a negative relationship between the complexity and adoption rates (Sevrani, 2008).

Third influential variable is the 'business orientation' of the SME. Customer orientation or product orientation were analyzed by scholars but as per Sanchez *et al* (2007) SMEs who adopt internet and ICT were seen to be driven by innovation orientation. Innovation orientation directly determines the technologies choices a firm makes and how that technology is leveraged to ultimately produce high-quality innovations leading to business performance as modelled (Sanchez *et al* 2007). Kowalkowski *et al* (2013) found in their study that Internet & information and communication technology (ICT) is a key enabler for new product oriented and process-oriented businesses.

'New work-practices adoptability' another variable that influences the internet adoption by firms. Internet adoption can be a leading way to drive objectives of business hence is an "enabling factor" (Vendramin, *et al.* 2000). They have identified five significant factors that promote work practice adoptability among SMEs. Among these factors are skills flexibility, cost reduction tool, providing flexibility for working times, providing flexibility on location and able to outsource services to distant service providers. Internet itself was in fact identified as playing a mediational role that promotes new work practice adoptability with the presence of benefits such as collaboration, coordination, awareness mechanisms and information sharing (Schmidt & Bannon 2013). Next variable in the model is perceived 'cost' associated with Internet adoption. Shemi & Proctor (2013) found in their study that adoption costs such as preliminary investment relating to acquisition, hiring costs of skilled IT staff, costs of minting a website etc. pose a significant challenge to the SMEs. Alam & Noor (2009) concluded through their research that the lower the cost of adoption the higher the new innovation such as the internet will be adopted by the company and vice versa.

3. Empirical Evidence between Variables

3.1. SME Performance and Business Networking

Business performance, networking by business, knowledge sharing and information sharing has claimed attention in recent literature. However due to limited literature availability, analyzing the interaction among business who engage in networking and performance of business have been challenging (Harvie & Saleh, 2010). However, almost all the existing literature supports the hypothesis of positive relationship between business networking and improved SME performance (Harvie & Saleh, 2010).

There can be networks within the network such as the social networks and these intermittent networks have been offering benefits to their participants where they allow members accessing the network to benefit from the knowledge prevailing within the intermittent network (Florin *et al.* (2003). Knowledge prevailing within the intermittent network was found to minimise time and funding needed for gathering knowledge while improving response to challenges in the environment in which it operates (Zhang, *et al.* (2003). Engaging with business networks will enhance the trust between individuals and prevent them from engaging in opportunistic behaviour and thereby allow SMEs to enhance their performance by focusing on the core business than attempting to direct major resource allocations to counter the competition among SMEs. This facilitates SMEs to internalize any advantages of outside influence due to benefits of mutual monitoring or social peer pressures (Bandiera & Rasul,

2008). Concepts such as reciprocity, trust, and understanding relating to communal relationships facilitate informal and networks of social nature to act like an important business tool to improve performance of SMEs (Spagnolo & Lippert, 2010). Charles & Ali (2010) also investigated on the impact of business networking on firm performance using empirical data from 150 Malaysian firms. The study revealed that business performance is signifying a positive relationship with networking. However others believed, what lead to negative business performance is business constraints and not elements such as networking. Mazzanti & Mancinelli (2007) on the other hand, investigated upon the impact of networking and R&D on SME performance and states that networking can be a complementary factor in situations where cooperation and networking are needed to achieve economies of scale and/or to merge and integrate diverse skills, technologies and competencies. Based on previous research it is therefore evident that a positive and a significant relationship exist among the SME performance and business networking and the same was also observed among countries other than in Sri Lanka. Thrikalawa (2011) identified that networking by SMEs provide assistance to each other SMEs where input from chambers of commerce and working closely with larger business could further improve performance of SMEs. This is following the research based on the understanding the relationship between SMEs in Sri Lanka and strategic networks. The study indicated that when discovering business opportunities by SMEs, close connections with friends and families were seen together with presence of networking. Machirori & Fatoki O (2013) conducted a research using the SMEs in Eastern Cape, South Africa relating to SME performance and use of business networking to access. Through regression analyses, SME performances were found to be positively impacted by business networks when accessing finance by SMEs. Based on said findings the author recommends networking for SMEs to facilitate their needs such as sharing contacts, sharing information an access to resources. In-turn SME performance were seen to be increasing due to increasing likelihood of obtaining finance.

3.2. Internet based ICT Adoption and SME Performance

Internet and information communications technologies are radically changing the competitiveness of organizations (Cohen & Kallirroi, 2006). The uses of the internet for e-commerce purposes have seen a high increase due to growth in websites for commercial purposes. (Gilmore, *et al.* 2007). This has reduced existing challenges to enter in to exporting space there by increasing the success rate for many SMEs around the globe. Internet has facilitated this through by opening up new communication channels to reach out to the world with ease in a cost effective manner where as prior to internet this was a luxury for SMEs but provided unfair advantages to larger business (Nguyen & Barret, 2006). Despite this, however, the usage of internet based ICT practices are still on the low for most of the SMEs worldwide (Gilmore *et al.* 2007) and found in their study that, means such as reaching to customers via internet is at its infancy and this challenge in-turn provides an opportunity to capitalise. There are improvements seen in the adoption rate however impact seems to be sill low. Internet is able to facilitate improved business performance where it brings about cost savings of both direct and indirect. Reduced labour costs, increased productivity, lower input cost for information are few to name (Chowdhury, *et al.* 2003). Same researchers identified that when expanding the market, opportunities offered by internet due to ease of access to information is far greater and is within reach due to cost effectiveness.

The benefits of internet to SMEs have been also examined extensively with respect to e-marketing activities. When providing market intelligence internet appears to be the preferred choice for SMEs. Internet allows the SME to recapitalise on its natural advantage of being a SME by offering flexible yet speedy customer service and support. (Direction, 2008). Direction in his case study, which researched relating to small-scale bookstore in Turkey, found out that the usage of internet enhanced both richness in customer experience and reach to the customers. Where how many people can be connected to and how many products can be offered is reach and details and depth of information that can be relayed to customers offered is reflected in the richness (Direction, 2008). Piris *et al.*(2004) states that increased profitability and increased levels of operational efficiency can be offered through deployment of e-commerce. One of the main benefits reported is to increase the focus on the customer and improving internal communications and obtaining competitive advantage was also found to be a powerful motivator. However there are academic literature that suggests, this is a challenging outcome to realize (Piris, *et al.* 2004). SME performance were seen to be improving in relation to motivation to innovate, aspirations for growth and improved trading activities due to capabilities offered by e-commerce. (Pickernell, *et al.* 2013). The main benefits identified by Piris *et al.*, (2004) are Improve customer services, Speed-up business and administrative process, Increase communication with customers, Facilitate communication around the organization, Simplify ordering process, sharing acknowledgements around the organization and thereby create competitive advantage. Accordingly based on the literature review and the empirical evidences included among them, it can be concluded that there is strong substantiation for the hypothesis of a positive linkage between internet based ICT adoption and increased SME performance.

4. Data Analysis

As identified by Sekaran (2006) 339 respondents in relation to adequacy of the sample size to represent the total population of approximately 128,000 SME are justified. Shown below is the status of SME performance based on engaged in Business networking & Internet Adopted.

Table 1: SME performance and Engaged in Business Networking & Internet Adopted

	performance	Engaged in networking		Internet Adopted	
		No	Yes	No	Yes
Level of SME performance	Poor	31	3	22	12
	Average	10	46	26	30
	Good	13	173	71	115
	Very good	3	60	29	34
Total		57	282	148	191
% within SME performance		16.80%	83.20%	43.70%	56.30%

Table 2: Pearson Product-Moment Correlations between Business Networking and competition, Necessity, Reciprocity, Stability, Legitimacy, Efficiency

	Business networking	competition	Necessity	Reciprocity	Stability	Legitimacy
competition	0.343					
Necessity	0.682	0.187				
Reciprocity	0.656	.114*	0.356			
Stability	0.769	0.2	0.492	0.498		
Legitimacy	0.717	0.094	0.414	0.444	0.508	
Efficiency	0.6	0.094	0.373	0.37	0.524	0.415

*. Correlation is significant at the 0.05 level (2-tailed).

The directions of the relationships are positive and the strength of the relationship between given variables and business networking varies as indicated above with a statistical significance.

Table 3: Pearson Product-Moment Correlations between Internet adoption and Measures: Internet benefit, Complexity, New work adoptability, Business orientation, ICT cost

	Internet usage	Internet benefit	Complexity	Business Orientation	new work adoptability
Internet benefit	.808**				
Complexity	.796**	.511**			
Business Orientation	.703**	.529**	.437**		
new work adoptability	.779**	.554**	.586**	.413**	
ICT cost	.713**	.433**	.522**	.354**	.458**

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

The directions of the relationships between Internet adoption and constructs are positive and the strength of the relationship between given variables and business networking varies as indicated above with a statistical significance.

Table 4: Regression Analysis results for Business Networking (BN)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.411	.077		5.351	.000
competition	.164	.018	.174	9.270	.000
Necessity	.143	.012	.261	11.951	.000
Reciprocity	.152	.015	.226	10.281	.000
Stability	.180	.017	.269	10.650	.000
Legitimacy	.174	.013	.298	13.173	.000
Efficiency	.086	.014	.138	6.242	.000

As shown in above table 4, six variables indicated significant relationship at p-value < 0.05. The variables with significant relationship are competition, necessity, reciprocity, stability, legitimacy and efficiency. Accordingly the equation to represent the relationship is,

$$BN = 0.411 + (.164 \times \text{Competition}) + (.143 \times \text{Necessity}) + (.152 \times \text{Reciprocity}) + (.180 \times \text{Stability}) + (.174 \times \text{Legitimacy}) + (.086 \times \text{Efficiency})$$

The relationships of independent variables with BN are ; Competition (Beta=.174, t=9.270, p=000), Necessity (Beta=.261, t=11.951, p=000), Reciprocity (Beta=.226, t=10.281, p=000), Stability (Beta=.269, t=10.650, p=000), legitimacy (Beta=.298, t=13.173, p=000) and Efficiency (Beta=.138, t=6.242, p=000). Combined effect of these variables on Business Networking is 88.9%.

Table 5: Regression Analysis results for Internet Adoption (IA)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.265	.020		13.227	.000
Internet benefit	.182	.004	.305	42.178	.000
Complexity	.175	.005	.265	36.211	.000
Business Orientation	.205	.006	.238	36.297	.000
new work adaptability	.179	.005	.243	33.631	.000
cost	.178	.005	.247	37.709	.000

As shown in above table 5, five variables indicated significant relationship at p-value < 0.05. The variables with significant relationship are internet benefit, complexity, cost of adoption, new work practice adoptability and business orientation. Based on above the regression equation to represent the relationship is,

$$IA = 0.265 + (.182 \times \text{Benefit}) + (.175 \times \text{Complexity}) + (.205 \times \text{Business Orientation}) + (.179 \times \text{New work practice adoptability}) + (.178 \times \text{cost of adoption})$$

The relationships of independent variables with IA are ; Benefit (Beta=.305, t=42.178, p=000), Complexity (Beta=.265, t=36.211, p=000), Business Orientation (Beta=.238, t=36.297, p=000), New work practice adoptability (Beta=.243, t=33.631, p=000) and cost of adoption (Beta=.247, t=37.709, p=000).

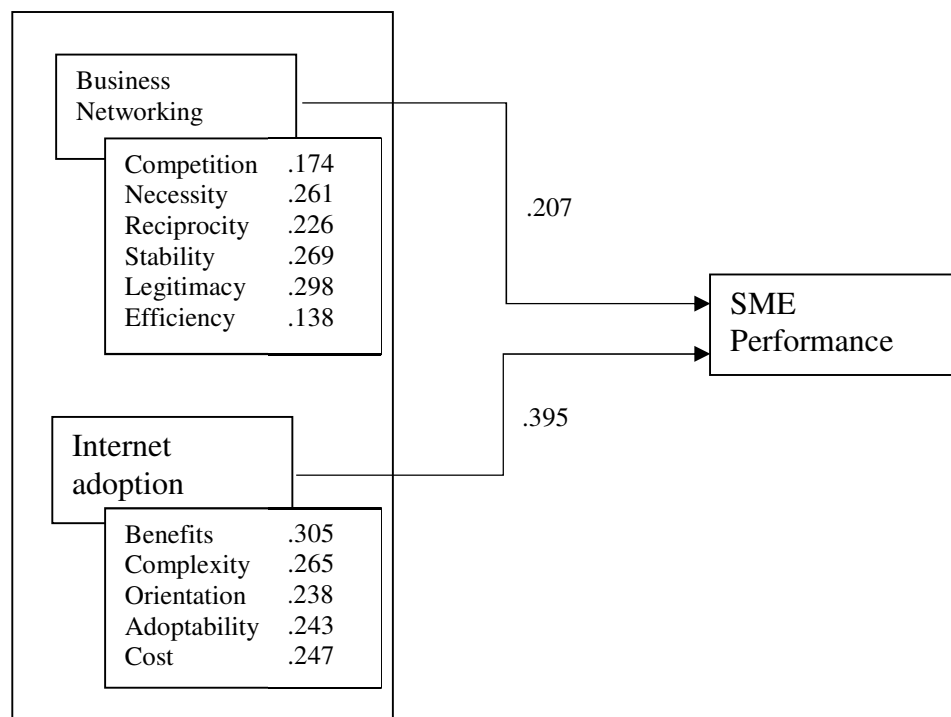
The combined effect of the model is shown in table 6 below.

Coefficients ^a	Standardized Coefficients	Sig.
	Beta	
Business networking	.207	.002
Internet adoption	.395	.000
a. Dependent Variable: SME performance		

The model combining both business networking and internet adoption predicts 31.8% of SME performance where business networking contributes to 20.7% of the variance while internet adoption contributes to 39.5%.

Figure 4.2

Model for Impact of Business networking and Internet adoption on SME performance



Accordingly the analysis has provided the answers to the questions in relation to SME performance in the model. The variables in the model explain 31.8% of the model. Business networking predicts 20.7% of the dependent variable while Internet adoption predicts 39.5% of the dependent variable.

$$\text{SME performance} = 0.450 + (0.378 \times \text{Business Networking}) + (0.577 \times \text{Internet Adoption})$$

5. Conclusion

Form the results of the research it was established that the model could be used to predict the SME performance of SMEs in Sri Lanka in relation to their engagement in Business Networking and Internet Adoption. This research contributed the theoretical knowledge base in the field and found that the model is significant and able to predict and interpret SME performance based on the impact created by Internet Adoption and Business Networking. Internet adoption was found to be the highest predictor of the model followed by Business Networking contribution to SME performance. This research study has contributed primarily on following areas. The development of a model and empirically testing of the model for validity of the model to predict the impact of Business Networking and Internet Adoption on SME performance in Sri Lanka.

The managerial implications: Governments and policymakers are drawn to the finding that promoting business Networking and Internet Adoption in Sri Lanka will create a positive impact on the SME performance which intern benefit the nation inter-alia to minimise unemployment, reduce poverty encourage innovation etc. Network platform providers such as chambers of commerce and various other providers including web-based providers can focus on the ability of the Business Networking and internet Adoption to tailor value propositions to their members for an effective engagement among membership. Consultants and SME advisors could rely on the findings of the empirical testing to provide targeted solutions to SME stakeholders while other service providers to SME segment can bank on the research findings to provide more targeted business solutions.

6. References

- Harshana P. Suriyapperuma, Prof. Dr. Mohd Shukri Ab Yajid, Prof. Dr. Ali Khatibi (2015). The Impact of Business Networking on SME Performance: Development of a Conceptual Framework. *International Journal of Management Sciences and Business Research*, ISSN (2226-8235) Vol-4, Issue 2, pp40-53, <http://www.ijmsbr.com>
- Harshana P. Suriyapperuma, Prof. Dr. Mohd Shukri Ab Yajid, Prof. Dr. Ali Khatibi, Dr. S P Premarathne (2015). The Impact of Internet Adoption on SME performance in Sri Lanka: Development of a Conceptual Framework. *International Journal of Arts and Commerce*, ISSN 1929-7106, Vol. 4 Issue No. 1, pp 46-58, www.ijac.org.uk
- Muhammad Mohsin Khan (2015), Sources of finance available for SME sector in Pakistan, *International Letters of Social and Humanistic Sciences* Vol 47 pp 184-194
- Sullivan, Arthur; Steven M. Sheffrin (2003). *Economics: Principles in Action*. Upper Saddle River, New Jersey 07458: Pearson Prentice Hall. p. 471.
- Berry, A. (2007). *The Importance of SMEs in the Economy*. University of Toronto.
- Central Bank of Sri Lanka. (2013). *Annual Report 2013*.
- Sidik, I. G. (2012). Conceptual framework of factors affecting SME development: Mediating factors on the relationship of entrepreneur traits and SME performance. *Procedia Economics and Finance*, 4, 373-383.
- Farinda, A.G. Kamarulzaman, Y. Abdullah, A. and Ahmad, S.Z., "Building Business Networking: A Proposed Framework for Malaysian SMEs", *International Review of Business Research Papers*, 5(2), 151-160, 2009.
- Jayathilake, H. A. C. K., Jayaweera, B. P. A., & Waidyasekera, E. C. S. (2008). ICT Adoption and Its' Implications for Agriculture in Sri Lanka. *Journal of Food and Agriculture*, 1(2), 54-63.
- Small and Medium Sector Development Task Force. (2002). *Small and Medium Enterprise Sector Development in Sri Lanka*.
- Gamage, A. S. (2003). *Small and Medium Enterprise Development in Sri Lanka: A Review*. Meijo University, Faculty of Business Management, Nagoya, Japan.
- Moullin, M. (2003). "Defining Performance Measurement." *Perspectives on Performance* 2(2):3.
- Brem, A., Kreusel, N., & Neusser, C. (2008). Performance measurement in SMEs: literature review and results from a German case study. *International Journal of Globalisation and Small Business*, 2(4), 411-427.
- Chong, H., (2008). Measuring performance of small-and-medium sized enterprises: the grounded theory approach. *Journal of Business and Public affairs*, 2(1).
- Wu, D. (2009). *Measuring Performance in Small and Medium Enterprises in the Information & Communication Technology Industries* (Doctoral dissertation, RMIT University).
- Pushpakumari, M., & Watanabe, T. (2010). Do strategies improve SME performance? An empirical analysis of Japan and Sri Lanka. *Meijo Asian Research Journal*, 1(1), 61-75.
- Henderson, J., & Weiler, S. (2009). *Entrepreneurs and job growth: Probing the boundaries of time and space*. *Economic Development Quarterly*.
- Prekter, F., & Hallén, L. (2006). Conceptualising, delineating and analysing business networks. *European Journal of Marketing*, 40(3/4), 384-407.
- Mezgar, I., Kovacs, G. & Paganelli, P. (2000). Co-operative production planning for small- and medium-sized enterprises. *International Journal of Production Economics*, Vol. 64, pp. 37-48.
- Wincent, J. (2006). *On building competitiveness in strategic SME networks. Empirical Analysis of 54 Firms in Two Networks*.
- Marland, J., *Ten Key Characteristics of a Business Network*. (2013). SAP Business Innovation.
- Ahlström-Söderling, R. (2003). SME strategic business networks seen as learning organizations. *Journal of Small Business and Enterprise Development*, 10(4), 444-454.
- Florén, H., & Tell, J. (2004). The emergent prerequisites of managerial learning in small firm networks. *Leadership & Organization Development Journal*, 25(3), 292-307.
- Saleh, A.S., & Ndubisi, N.O. (2006). An Evaluation of SME Development in Malaysia. *International Review of Business Research Papers*, 2(1), August, 1-14.
- Human, S. E., & Provan, K. G. (2000). Legitimacy building in the evolution of small-firm multilateral networks: A comparative study of success and demise. *Administrative Science Quarterly*, 45(2), 327-365.
- Provan, K. G., & Kenis, P. (2008). Modes of network governance: Structure, management, and effectiveness. *Journal of public administration research and theory*, 18(2), 229-252.
- Ahlström-Söderling, R., 2003. SME strategic business networks seen as learning organizations. *Journal of Small Business and Enterprise Development* 10 (4), 444-454.
- Tan, K.S. Chong, S.C., Lin, B., & Eze, U.C. (2009), 'Internet-based ICT Adoption among SMEs: Demographic versus Benefits, Barriers, and Adoption Intention,' *Journal of Enterprise Information Management*, 23(1), 27-55.
- Organisation for Economic Corporation and Development. "Seizing the Benefits of ICT in a Digital Economy" France, 2003.

- Sanchez, V., Martinez-Ruiz, M., Zarco, A. (2007). Drivers, Benefits and Challenges of ICT Adoption by Small and Medium Sized Enterprises (SMEs): A Literature Review. *Problems and Perspectives in Management*, Volume 5, Issue 1, 104-114.
- Parker, C. and castleman, T., 2007a. Why should small firms adopt ebusiness? A framework for understanding the SME ebusiness context, M. Toleman, A. Cater-steel and D. Roberts, eds. In: *ACIS 2007 : Proceedings of the 18th Australasian Conference on Information Systems*, 5-7 December 2007 2007a, University of Southern Queensland, pp. 497-507.
- Shemi, A., & Proctor, C. T. (2013). Challenges of E-Commerce Adoption in SMEs: An Interpretive Case Study of Botswana. *Botswana Journal of Business*, 6(1), 17-30.
- Alam, S., & Noor. M. (2009), ICT Adoption in Small and Medium Enterprises: an Empirical Evidence of Service Sectors in Malaysia, *International Journal of Business and Management*. Vol.4. No.2, 112-124.
- Charles Harvie and Ali S. Saleh. "The impact of networking of business performance: a case study of Malaysian SMEs" *Academy of Taiwan Business Management Review* 6.4 (2010): 74-85. Available at: <http://works.bepress.com/charvie/16>
- Thrikawala, S. S. (2011). Impact of strategic networks for the success of SMEs in Sri Lanka. *World*, 1(2), 108-119.
- Florin, J., Lubatkin, M., & Schulze, W. (2003). A social capital model of high-growth ventures. *Academy of Management Journal*, 46(3), 374-384.
- Zhang, C., Cavusgil, S. T., & Roath, A. S. (2003). Manufacturer governance of foreign distributor relationships: do relational norms enhance competitiveness in the export market?. *Journal of International Business Studies*, 34(6), 550-566.
- Bandiera, O., Barankay, I., & Rasul, I. (2008). Social capital in the workplace: Evidence on its formation and consequences. *Labour Economics*, 15(4), 724-748.
- Spagnolo, G., & Lippert, S. (2010). Networks of Relations and Word-of-Mouth Communication. Available at SSRN 1628335.
- Machirori T, Fatoki O (2013). The Impact of Networking on Access to Debt Finance and Performance of Small and Medium Enterprises in South Africa. *Journal of Economics*, 4(2): 97-104
- Mazzanti, M., & Mancinelli, S. (2007). SME performance, innovation and networking evidence on complementarities for a local economic system.
- Gilmore, A., Gallagher, D., & Henry, S. (2007). E-marketing and SMEs: operational lessons for the future. *European Business Review*, 19(3), 234-247.
- Nguyen, T. D., & Barrett, N. J. (2006). The adoption of the internet by export firms in transitional markets. *Asia Pacific Journal of Marketing and Logistics*, 18(1), 29-42.
- Chowdhury, Shyamal K.; Wolf, Susanne (2003) : Use of ICTs and the economic performance of SMEs in East Africa, *WIDER Discussion Papers // World Institute for Development Economics (UNU-WIDER)*, No. 2003/06, ISBN 9291903930
- Piris, L., Fitzgerald, G., & Serrano, A. (2004). Strategic motivators and expected benefits from e-commerce in traditional organisations. *International Journal of Information Management*, 24(6), 489-506.
- Pickernell, D., Jones, P., Packham, G., Thomas, B., White, G., & Willis, R. (2013). E-commerce trading activity and the SME sector: an FSB perspective. *Journal of Small Business and Enterprise Development*, 20(4), 866-888.
- Cohen S and Kallirroi G (2006) "e-Commerce Investments from an SME perspective: Costs, Benefits and Processes" *The Electronic Journal Information Systems Evaluation* Volume 9 Issue 2, pp 45 - 56, available online at www.ejise.com