NETWORKS, RELATIONSHIPS, AND PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN THE SHIPPING SUB-SECTOR IN TANZANIA

Lettice K. Rutashobya,
University of Dar es Salaam
P.O Box 35046  Dar es salaam
Tanzania
Tel: 255 741 323661
Fax: 255 22 2410078
Email: Lettice@fcms.udsm.ac.tz
Letticer@yahoo.com

Deogratius B. Mukasa
M/S Chinese-Tanzania Joint Shipping Company
Dar es Salaam

Jan-Erik Jaensson.
Umea school of Business and Economics, Sweden

Abstract

Integrating the entrepreneurship, networks, social capital and the IMP (interaction) perspectives this paper draws on data from 69 local and foreign owned-companies in the shipping sub-sector in Tanzania to investigate firms’ involvement in network relationships, and subsequent effects on performance. Existing literature suggests relationship between entrepreneurial networks and firm competitiveness and survival. Findings of the study reveal sparse use of linkages especially among locally owned shipping firms in Tanzania. Mutual trust (social capital) rather than contracts was paramount both in establishing and holding the inter-firm relationships. Consistent with the theory, an association between networks and financial performance was revealed, suggesting the need for business development support initiatives and capacity building to emphasize networking as a strategy.

Keywords: Networks, SMEs, shipping sub-sector, Tanzania
Introduction

There is now a growing body of literature that attests to the importance of Small and Medium Enterprises (SMEs) in economic development and poverty alleviation in developing countries. SMEs, especially small firms, could be “seedbeds for indigenous entrepreneurship” in Sub-Saharan Africa. Nevertheless, by the very nature of their smallness and newness, SMEs are resource constrained (Lechner & Dowling, 2003, Premaratne, 2001), and existing literature has described the medium enterprise sector as the “missing middle” in Sub Saharan Africa (Ferrand, D.V., 1998). A significant part of the resources must be obtained from outside the firm, as no single firm has all the resources required in its development and operation. There is now a growing literature that supports external networks as a way of overcoming the resource constraint. As a result, organizing exchanges through networks or inter firm linkages has taken roots in most economic activities especially in the developed world.

In the current globalized markets especially, networks have been viewed as important component of business strategies that helps forge long run economic change through coordination, collaboration and cooperation in economic exchanges. The challenges of globalization and liberalization are forcing firms to resort to cooperation and coordination of transactions as opposed to competition. In the same vein, the entrepreneurship literature has identified networks as one of the solutions to problems faced by SMEs in developing countries. More specifically, partnering through linkages, networks and clusters is now recognized as a way for many SMEs in developing countries to increase their sophistication and become stronger and more competitive. The literature further points to the potentiality of networks in providing competitive advantages to SMEs, because of the possibility for resource sharing and learning among the network members that could enable them to minimize their size disadvantages. Through networks informational, transactional and other efficiencies are achieved. Despite its importance, anecdotal evidence has revealed that Sub-Saharan African countries are lagging behind in this renewed business game and that generally the strategies and skills of doing business are lacking. Firms in developing countries customarily have high degree of internalization, which leads to few and weak linkages among firms thus suppressing needs for sub contracting (Quartey, 2003). In developed countries, the era of internalization was meaningfully argued for on the basis of the legacy of Henry Ford’s Mass-production due to large markets. In Africa where the market has never been large enough to support the principles of mass-production, perhaps the argument would be the political ideologies such as socialism, which brought about large state-owned firms.

Since socialist principles are no longer practiced by these countries, the reason may not hold anymore. It therefore appears that the major reason for continued internalization approach for organizing exchanges by firms in Sub-Saharan Africa could be the failure of most managers to know and appreciate the power of linkages for firms’ performances. As a result also, serious scholarship debate in the area and in particular on the proactive role of entrepreneur in forging inter-firm linkages and social networks is lacking in these countries. The role and appreciation of networks in enterprise development and growth in SSA therefore remains unexplored and unclear. The need for research in the area in Africa therefore becomes paramount. It is argued here that research on networks needs to be contextualized if it is to gain currency. This study is intended to fill this research gap in Tanzania. It examined the role and potentiality of business-to-business (B2B) relationships in the shipping sub-sector in Tanzania. Dramatic innovations have taken place in the transport area in the recent past, in response to new demands in the international trade arena. The advent of Intermodal transport, for example, which involves movement of goods that use successively more than one mode of transport free of multiple handling of the goods themselves when changing from one mode to another, essentially signifies service providers’ response to new demands from the customer’s side on efficiency in terms of flexibility, speed, reliability and convenience. It is very clear that significant resources and abilities are required to achieve this, which cannot be imagined out of linkage relationships.
While essence of linkages at the level of transport modes have always been stressed in Intermodal literature, minimal emphasis at the level of inter-firm linkages is observed. Similarly, no research has been done linking the issue of Intermodal transport with newer perspectives of Supply Chain Management (SCM), business networks and logistics (Bask et al, 2001), especially in a developing country context. Researches on Intermodal transport have mostly focused on technical issues, such as cargo handling technologies, vehicles, information and communication technologies, and infrastructure networks. Other studies have looked at the interfaces of different transport modes and organizational interfaces between the companies involved in intermodal transport operations.

Subsequently, the central research concern in the Tanzanian study is: To what extent are networks appreciated and adopted among Tanzania SMEs operators in the shipping sub-sector? More specifically, do Tanzania shipping firms recognize the importance of, and invest in networks as strategic tool and resource in business? What binds the long-term relationships (contracts or trust)? Has involvement in network governance by Tanzania shipping firms caused any difference in their performance? These are significant issues for theory and practice. Establishing the role and potentiality of networks in Tanzania would increase our understanding of the relevance of networks as a strategy in the entrepreneurship area. Business development support actors and policy makers would like to know which interventions would lead to positive effects. Similarly, managers of SMEs would be interested in choosing strategies that would lead to efficient operations and hence higher performance.

The paper takes off from a networks, social capital, entrepreneurship and the IMP (interaction) perspectives as regards the role of networks in creating competitive advantages for small and medium enterprises (SMEs) and increasing their sophistication through resource sharing and learning among the network members. Business development and growth from internal resources only is difficult for most firms especially at the start-up stage. External networks are important enablers in the current competitive business world. Although relationships and linkages are not new themes, the recent literature on networks “suggests an unprecedented degree of interlocking which in most cases can only function when relations between firms are sustained by more than minimal trust” (Schmitz, 1999). Embedded in relational economic exchanges is social capital as an important resource, which interlock the individual entrepreneurs. Possession of social capital is beneficial to the entrepreneurs as it minimizes transaction costs. It serves as a catalyst to beneficial social or economic interaction (Anderson & Jack, 2002).

Guided by the above perspectives therefore this paper examined the networks phenomenon in the shipping sub-sector in Tanzania. More specifically, it examined the involvement of firms in inter firm linkages and its effect on performance. Past studies on SMEs have focused mainly on external factors affecting firm performance at the expense of the entrepreneurs’ own strategic and behavioral orientation. The paper is organized as follows: In the next section we review the literature on networks and its role in business development and growth; the Tanzanian business environment and developments/innovation in the shipping arena are then described. The study methodology is then presented followed by the findings of the study, which help us to discuss and conclude in the final section.

**Entrepreneurial Networks, Social capital, and Outcomes**

**Studies on the Role of Networks**

Numerous studies have demonstrated the important role of entrepreneurial networks in innovation (Humphrey & Schmitz, 1996, Murphy, 2002, Schmitz, 1999.), in promoting mutual learning, and in supporting capacity building (Bangens, 1998, Flora & Flora, 1993). In this study we define entrepreneurial networks as economic exchanges of a long term nature as opposed to market or hierarchical-based exchanges. Networks have further been applauded for their role in leveraging resources for the firm (Lechner & Dowling, 2003, Premaratne, 2001). Through
networks resource constrained small firms have been able to enter distant export markets faster than expected (Rutashobya & Jaensson, 2004, Schmitz, 1999), thus challenging many of the traditional internationalization theories. Assumptions embodied in the concept of psychic distance in internationalization have also been challenged by the antecedent role of networks in exporting. Networks have enabled cooperating parties to minimize transaction costs by allowing partners to obtain resources and information with ease, hence overriding the assumptions of other cost minimization theories by institutional economists. Existing literature also suggest that networks, especially social networks, are a source of a variety of instrumental resources that are critical for business development as well as expressive (psychosocial) benefits, hence ensuring higher and more stable flow of resources (Premaratne, 2001).

At the center of the relational exchange is the role of social capital that bonds and unites the parties involved (Anderson & Jack, 2002, Ferrand, 1998, Uzzi, 1996, Schmitz, 1999). Anderson & Jack (2002) have compared the binding and lubricating role of social capital to building bridges and maintaining them. Burt (1992) has described social capital as a set of resources embedded in relationships, which helps entrepreneurs overcome their constraints.

In Developing countries, a small body of literature on business networks and clusters (e.g McCommick, 1996, Murphy, 2002, Pedersen et al, 1994, Schmitz, 1999) has helped to minimize the pessimism on the potential of small firms in these countries. Recent studies have shown that some clusters of small and medium enterprises in developing countries have enabled small enterprises in these countries to become large exporters of manufactured products (Schmitz, 1999). Inherent in the clusters are processes of relational exchange that enhance group capability and capacity. In Sub-Saharan Africa, few studies undertaken have shown the important role of networks and clusters in capacity building, technological change and industrial development (McCommick 1996, Mytelka, 1993, Pedersen 1996), and in engendering capability accumulation and learning (Bangens, 1998). A relationship between inter firm networks and firm growth have also been found (Quartey, 2003). In Tanzania, Rutashobya & Jaensson, (2004) have found networks to facilitate small firms entry into foreign markets. Murphy (2002) explored and found that social networks greatly enhanced manufacturing firms capacity for innovation, hence industrial development.

**Understanding Networks in Economic Exchanges**

The major point of departure in understanding the theoretical perspectives of entrepreneurial networks is a focus on how enterprises solve their constraints, and how they organize themselves to manage exchanges with others in the environment. According to Hakansson and Snehota, (1989) "firms or entrepreneurs generally exist and develop drawing on a set of suppliers, customers and social support partners which have substantial impact on entrepreneurial performance, as no business is an island". A firm can manage these exchange imperatives in a number of ways. Existing literature allude to a number of complementary perspectives that attempt to explain how enterprises organize economic exchanges with their environment. Institutional economists through their transaction cost economics (TCE) perspective, as characterized by Williamson (1975, 1985, 1991) and others, perhaps provide the most elaborate and widely quoted theory of the firm that helps to closely explain, theoretically, how enterprises profitably interact with their environment.. The central premise of TCE, which is a theory about the strategic choice of governance structure, is that firms will choose governance structure that will minimize transaction costs. Given transaction costs economizing objectives, a firm will choose between buying in and making internally. Between the make and buy decisions is the antecedent influence of technical conditions (viz, asset specificity, uncertainty, and frequency of business interaction) and behavioral assumptions (viz, opportunism, bounded rationality, and risk neutrality). In his analysis, Williamson identified three strategic options in the economic exchange relations of firms with their environment, namely, market, hybrid (network) and hierarchy (internalization). Given the above conditions and behavioral assumptions a firm will choose one of these options that will enable it to minimize transaction cost. For example, Jones, Hesterly and Borgatti (1997) argue that customized exchanges with high level of human asset specificity are not effectively coordinated by market mechanisms and would therefore require either hierarchies or networks. This is because, as Williamson (1985) argues, customized (or asset specific) exchanges create dependency between
parties hence imbalanced relationships. Coupled with uncertain environment, unequal exchange may lead the strongest party to adopt opportunistic behavior, which may be costly to the other firm.

Embodied in Williamson hybrid governance structure are the entrepreneurial networks and social capital perspectives that prescribe mechanism which sustain the inter-firm linkages. The network theorizing therefore goes beyond the assumptions of the TCE Theory. It defines the network construct as business relationships that are close, and of long-term nature, involving a complex pattern of interaction between and within each firm (Hakansson and Snehota, 1989). Contemporary industry at least in the West, is commonly characterized by close links between firms such as JIT agreements, joint development projects, mutual buyer-seller planning of operations, etc. An appropriate atmosphere of cooperation rather than conflicts, social exchange and trust-social capital, investment in the relationship and dependency are conditions that sustain such long-term business relations (Easton, 1992). According to the resource dependency model, the firm uses the relationships/networks to gain access to resources, which are vital to its continuing existence.

An important analysis in the network theorizing is the conditions that lead to and sustain long-term relationships. The existing literature points to the important role of trust or social capital in interlocking the individual entrepreneurs in long-term exchanges relationships. Proponents of the social exchange theories argue that social exchange has an important function of reducing uncertainty and opportunism between actors in the inter-organizational relationship, and hence minimizing transaction costs, gaining comparative advantage over market and hierarchies. It plays a very important role especially in the longer term in terms of building successive social exchanges (building blocks), which gradually interlock the parties involved. Social capital (trust) eliminates the need for contractual relationships among network partners. Building this trust, nevertheless, takes a long time and its success is a function of individual personalities and experience from each side. These conditions engender "structural embedded ness which provides the foundation for social mechanisms such as restricted access, macro culture, collective sanctions and reputations" to emerge in the network governance.

On the negative side of too much embedded ness (strong ties) is the possibility of a "dysfunctional state of organizational isolation" to emerge to the disadvantage of weak members in the economy (K'Ombonyo, 1999). Strong ties within a social network will lead to isolated cliques of entrepreneurs that are not integrated with the other groups. As a result, entrepreneurship development will be unequally distributed among different groups in society. The Asian network phenomenon in East Africa is a case in point here.

**Linking networks and firm performance**

The basic assumption in the network theory is that cooperation enables organizations to attain ends that they cannot achieve alone (Allia and McCormick, 1997), which then calls for the need by a firm to organize its operations beyond its own boundaries – creating network relationships with suppliers, customers and other stakeholders. The point of departure lies in the assumptions of the boundaries of the firm, which lays the foundation for division of labor, specialization or "flexible specialization", and collective efficiency.

Subsequently, firm’s long-term performance level is positively correlated to how well it can organize and coordinate activities emanating from both within and outside it. More specifically, firm’s long-term performance is largely dependent on how well it manages relationships with other publics in the environment (Hankasson, 1987, Johansson and Matson, 1987). A firm can minimize its own resource deployment and still attain necessary level of investment for effective operation/production by being able to accumulate capabilities through networks; gaining from investments and unique capacities owned by others. That is to say, the firm is becoming efficient by investing in networks instead of the common factors of production. Networks and Relationships are therefore considered as enterprise resource together with other resources. Investing in networks avoids creation of excess capacity and where it already exists, linkages can
help to find profitable outlet of the same. Yet, efficiency is enhanced that way due to inherent specialization and division of labor in network-system of production/operation.

Essentially, performances of Intermodal transport operators of all types have relied on the extent and composition of network they have established both locally and internationally. This is because the nature of shipping related operations have increasingly involved many activities and resources than any individual stakeholder can afford to deploy. The activities necessarily involve locally based parties and those based overseas, which the Intermodal transport operator must link with to be able to discharge his commercial and physical distribution challenges and obligations. Hence in our study on networks in the Tanzanian Shipping sector we expect that:

Assumption: The higher the degree of networks of a firm the better the performance in the market place.

We argue that for SMEs in the shipping sector to get out of isolation they must engage in networks, which means that firms should increase efforts towards linking internal operations with those performed externally.

The Tanzanian Business Environment

A brief description of the history and dynamics of the shipping industry in Tanzania and the rest of the world respectively is important if we are to understand the context within which the current study is being undertaken. To start with, this study of networks in the shipping sub-sector in Tanzania is undertaken at a time when the country has completely liberalized the sector since 1999. The business environment in Tanzania has changed radically over the years, from market-led policies before independence in 1961, to state dominance from the late 1960s to the early 1980s, and back to market-led or liberalization policies starting from the mid 1980s to the present time. This radical swing in development paradigms has greatly affected the way Tanzanians do business. The shipping sector was not spared by these radical changes. Before independence, the sector was dominated by private foreign companies. After independence, through the Arusha Declaration of 1967, the socialist blueprint, the sector went into Government hands, and a State Trading Company (STC) through which the government owned and carried business in the shipping sector, was established. In 1973 the Government established the National Shipping Agencies Company Ltd (NASACO), a state monopoly, to take charge of shipping agency and related activities from the STC, which was overburdened by many other responsibilities. Another state monopoly, the Tanzania Harbours Authority (THA) was in charge of other port operations such as pilot age, tug gage, dockage, stevedoring, shore handling, mooring and un-mooring, supply of fresh water to ships, cargo stacking and marking inside port area. Since the 1990s, the Government has attempted to liberalize the sector, by privatizing most of the activities.

Innovations in World Shipping Industry

The Shipping sector of today is best viewed with intermodalism concept in mind, which makes this study on networks in the shipping sector in Tanzania really timely and relevant. As opposed to the generic transport service, intermodal transport chain naturally consists of modular elements that can be linked together. Development of intermodal transport coupled with containerization has made it possible for cargo consolidation by freight forwarders to enable small lots by small exporters (insufficient to make full container load) to be shipped at nearly the same low unit cost as the full container load. This development entails proper coordination and sufficient networking (at cargo origin, intermediate and destination points) to ensure appropriate performance by the freight forwarder. The latter uses his network relationships to provide his clients with the very modern transport services they expect.
Multimodal and Intermodal transport concepts can also be analysed within the broader Supply Chain Management (SCM), viewed by some researchers as the management of upstream and downstream relationships and the integration of key business processes in the value chain (Bask et al., 2001). SCM provides that goods and services should flow in synchronized pattern across a firm’s internal functional areas as well as between suppliers and customers.

In the same vein, the advent of SCM has engendered new demands from the customer’s side on efficiency and service requirements in terms of flexibility, speed, reliability, and convenience. The key to meeting these demands is commonly attributed to supply chain integration. Some of the supply chain processes are tightly synchronized while others are loosely integrated and routinely managed. Multimodal and intermodal concepts represent a common view of synchronized supply chain process among modes of transport. Although these two concepts are commonly used synonymously, both work on the basis of operators’ ability and willingness to link with other service providers in the sector, vertically and/or horizontally.

By the very nature of the business, intermodal transport development is largely catalyzed by the development of unitized loads, deregulation, standard transport and handling equipment and advanced communication and information technology. As a result, transport service providers have to re-organize so as to meet customer requirements by ensuring they secure value added logistics, they optimize in handling and transport equipment systems in view of shortening time used and minimizing damage to the cargo to adhere to customer needs. The best of these changes in customer needs is creation of relational exchange. The quality of relationship between the service provider and the customer should be included in the overall service evaluation (Bask et al., 2001).

There is of course the need to ensure that the party accepting transport responsibilities in the intermodal perspective has the ability and resources to meet the technical, administrative, legal and financial obligations. Such ability and resources include, but are not limited to an international and local network of agents and offices linked with modern methods of communication, expertise in terms of knowledge and experience concerning the latest situations of the market at large, regulations, procedures and practices for trade and transport, as well as financial capability adequate to perform various activities. International networks are particularly important due to the fact that shipping largely involves international transport, which is a function of international trade. Knowledge and experience are equally important as the business entails continuous learning of what is happening now and then particularly in distant localities (e.g. foreign country). As observed earlier, the above abilities and resources cannot be imagined out of linkage relationships. Market and hierarchy structures are no longer conducive in such a market place as production/operation processes need well-combined resources and properly coordinated and connected operations. Networks therefore enhance the firms’ ability to operate more efficiently and flexibly under such environments.

Method

*The Networks construct*

A clear-cut definition of networks is not feasible due to linkages multiple nature (Bångens - 1998). A plethora of terms exists that try to describe the construct; networks, linkages, externalization, interdependence, division of labor, specialization, virtual factory, flexible production, outsourcing, subcontracting, social exchange, relational marketing, relational exchange, business to business relationships, hybrid governance, etc. For the purpose of this research we adopt Hakansson and Johansson’s (2001) definition, which defines business networks as interconnected customer supplier relationships that are of long term nature, wherein each relationship is embedded in a set of connected relationships extending to customer’s customers, supplier’s suppliers, consultants and those parties that have influence on the business to business relationship.
Methodology

The study was mainly of an exploratory nature given the absence of similar studies on the subject in Tanzania. The sample included 69 firms that were made up of 19 ship agents and 50 Freight Forwarders (FFs). This represented 59.38% of all ship agents and about 16.03% of FFs. All the firms were based in Dar es Salaam, the commercial capital of Tanzania. Dar es Salaam has also the biggest port in the country, which makes it the location of many shipping agents and freight forwarders. For example, all the 27-ship agents who are members of Tanzania Shipping Agents Association (TASAA) are based in Dar-Es-Salaam. Also all Non-TASAA members, the five former NASACO subsidiaries, are also based in Dar-es-Salaam. Furthermore out of the 312 FFs possessing valid licenses in Tanzania in 2002, over 95% were based in Dar-Es-Salaam. This justifies confining the research within Dar-es-salaam.

The sample of ship agents and FFs was drawn from TASAA members’ directory and former NASACO companies’ list, and the latest list from Customs department of Tanzania Revenue Authority, respectively. The Tanzania Freight Forwarders Association (TAFFA) was also consulted to identify physical locations of some of its members so that they can be reached for interviews. The sample was randomly drawn. Out of the 69 firms, 53 (77%) were local firms, while 15 (22%) were of foreign origin.

The study entailed a survey methodology. A questionnaire was developed to elicit pertinent data/information to meet research objectives. Follow-up questions to edit responses ensued here and there to verify contradictory answers. Also, experience survey was done to consolidate answers from the interviews and determine further researchable areas.

In the case of performance parameters of FF, only the number and values of transactions was obtained from Customs Department after facing resistance from FF to questions implicating on their performance measures. Thanks to TRA’s ASYCUDA system that enabled this information to be available almost instantly as performance measures were vital to form bases for the evaluation of “network – performance nexus”.

A semi-structured questionnaire was employed to capture most of the other primary data. For the purpose of this study, linkage relationships mean business-to-business relationships, reflecting deliberate efforts by firms to establish continuous and recurring exchanges over the period of one year or longer period. This long-term relationship should be enhanced through mutual trust or contracts between partners. To be able to determine the degree of linkages of interviewed firms, a question with 5 point scales was included in the questionnaire, where 5 represented the highest degree of network relationships (over 80% of all business is through long-term partners), 4 meant that between 60 – 80% of all business is through long-term partners, 3 represented moderate participation in networks (40 – 60% of all business is through long-term partners), 2 (between 20 – 40% of all business is through long-term partners) 1 represented low adoption of long term linkages (less than 20% of all business is through long-term partners) and 0 for “no networks at all”. Then respondents were asked to indicate the level of externalization of their activities on the scale lines. Nationalities of the owners of the firm, as well as linkage type (supply and demand linkages) were used as control variables. The response rate was 95% and 100% among the ship agents and FFs samples respectively.

The questionnaire, and questions/issues raised for experience survey, was designed to elicit information on nationality of the firm and their legal status (i.e. whether foreign or indigenous; local, multinational or subsidiary companies; objectives, functions and major activities which the firm is expected of by the market; the state of being or not being linked with other parties in the process of providing services (i.e. Internalization vis-à-vis Externalization); how networks for Tanzania shipping firms come into being; existence of contractual vis-à-vis non-contractual relationships (i.e. social capital vis-a-vis contractual relationship assessment); appreciation the power of networks in business performance by SMEs; forces holding together the networked
firms in long-term business relationships; firms’ performance in terms of activity and financial earnings. Thus, number of ship calls and number of transactions handled for ship agents and FF respectively were captured. Also, estimated agency fees and value of transactions handled over the period of 4 years was elicited. Consequently, the period of 4 years was generally adopted for the sake of consistency.

The analysis involved both qualitative and quantitative approaches. In the former approach, simple cross-tabulation enabled to ascertain relationship between variables. The analysis involved calculations of sector’s statistical values like mean performances and mode, measures of dispersion (i.e. the range and standard deviation/variance) to be able to describe the data. Hence, performances of firms with linkages on one side and those without on the other could be measured against the statistics.

Quantitative analysis was done on the measures of relationship. The degrees of firms’ linkages were tabulated against corresponding performances and correlation coefficients calculated using Ms Excel application. Networks scales for shipping firms were treated as independent variables (X) while performances (in terms of number of ship calls and agency fees or number of transactions handled and value of transactions) were treated as dependent variables (Y). Chi-square (\( \chi^2 \)) test was done at the level of significance (\( \alpha \)) of 5% to measure the significance of association between firms’ networks and performances. Firms’ performance parameters, stratified into ship agency and FF sub-sectors, were collapsed into two groups. The groups are ‘0 – 40’ and ‘41 or more’ ship calls for the operational performances and shillings ‘0 – 40 million’ and ‘above 40 million’ agency fees for financial performance in respect of the ship agency sub-sector. For the FF sub-sector, the groups are ‘0 – 400’ and ‘401 or more’ transactions for the operational performances and shillings ‘0 – 10 billion’ and ‘above 10 billion’ transactions values for the financial performance.

Results And Discussion

Firms’ Involvement in Networks with customers

Only 23 out of the 69 firms (33%) reported conducting 70% and above of their business through regular clients on the demand side (importers, exporters, etc). 15 firms (22%) and 30 firms (43%) carried 41% - 70% and below 40% of their business through regular clients respectively. Results of the study therefore revealed little involvement in networks by firms in the shipping sector in Tanzania. These results are alarming especially in the current intermodal transport chain. Intermodal transport entails proper coordination and sufficient networking, at cargo origin, intermediate and destination points to ensure appropriate performance by the shipping agents and freight forwarders. It is therefore surprising that shipping firms in Tanzania do not sufficiently invest in network relationships.

A breakdown by sub-sector reflected a worse off situation in the freight forwarding than in shipping agency business. While 9 out of 19 ship agents (i.e. 47%) had 70% or more of their business carried through regular customers, the corresponding figure in the freight forwarding was 28% (14 out of 50 firms).

It was further observed that local Tanzanian shipping firms had thinner web with foreign clients. When asked to estimate the percent of regular business that emanated from foreign client partners, 62% of respondents estimated the business to fall between 0 and 20%. This suggests that the degree of network relationships with foreign customers is very low.

This study also investigated the duration of linkages, an important dimension in the network literature. The survey results showed that most linkage relationships did not last longer than one year. Only 32 (46%) firms had 41% or more of their clients being in B2B linkages for one year and more. If we consider 41% (or more) of clients to represent substantial percent of a firm’s clients,
this observation means that 54% of firms could not hold linkage relationships with substantial percent of clients for longer period than a year. These results appear to be consistent with the previous observation on involvement in networks relationships. Cross tabulation with network scales indicated that out of the above 32 firms with enduring linkages, 22 firms (70%) had 70% of their business through long term network.

**Firms’ Involvement in Networks with suppliers**

Results on firms’ engagement in networks on the supply side were not different from those presented above. About 69% of firms’ capacity was organized through market and internalization approaches, meaning that only 31% of the firms capacity was through long-term linkages. This suggest that outsourcing was not so much practiced by shipping firms in Tanzania. Similar to the situation on the linkages with clients on the demand side, the linkage relationships with suppliers were found to be unsustainable. Only 31 firms (45%) of firms could hold linkage relationships with substantial percent (41% or more) of clients for longer period than a year. This means that the remaining 55% could not hold their exchange relationships with substantial percentage of suppliers for more than a year. Cross tabulation showed that 21 of the 31 firms (68%) with enduring linkages had more than 70% of their business through long term relationships, suggesting a positive relationship between high level of networks with sustainability of linkages. Put differently, enduring linkages were consistent with the norms of networking, which require great trust.

Similar to the results in respect of linkages on the demand side, the findings further reveal very minimal linkages of local shipping and freight forwarding firms with foreign suppliers. About 79% of the respondents had no linkage relationships with foreign-based suppliers.

**Nationality of firms and involvement in networks.**

While 38% of local firms reported undertaking 70% and more of their business with regular clients the corresponding figure in respect of foreign own firms was 92%. This means that foreign firms appreciated the importance of networks more than local firms. This finding is consistent with responses on appreciation of networks, which revealed that all those (16%) who did not appreciate the importance of networks were local firms.

**Quality of the relationships**

Consistent with the observation that few local firms exploited the benefits of business linkages the quality of the networks was found to be very poor. Opportunisms and incompetent network actors were found to interfere with linkage relationships on both demand and supply sides. For example, the findings in respect of networks with clients on both the demand and supply side revealed that 83% and 78% of the firms respectively either exercised opportunism or the actors were incompetent network partners. When asked why the exchange relationships were not enduring, many cited competition, price-driven partners and occasional trading as major reasons. These reasons confirm the presence of opportunism and lack of trust and commitment on the part of the partners.

**Reasons for networking and role of social capital**

This study also investigated how long term B2B linkages occurred in order to gain insights into the binding nature of the relationships. Results of the survey in respect to linkages on the demand side revealed common trust as the major force (39%). Other reasons included personal acquaintances with client managers (33%), connection by other partners (11%), long-term contracts (8%), and necessitated by circumstances and other reasons (9%). When these findings were cross-tabulated with those on firms’ involvement in long term linkages, the results reveal that of the 20 responses emanating from firms with high involvement in long term B2B relations (network scale 4-5), only 10 percent related to “long term contracts”, whereas “personal acquaintances” and “common trust” accounted for 55 percent of the responses. Even for those
firms that were not highly involved in long-term B2B relationships (network scales 0-3), "personal acquaintances" and "common trust" were major forces (71%-96%) that accounted for any of their long term relationship with customers.

The results were not very different on the supply side. Common trust was the leading force (37%). Other forces included, personal acquaintances with client managers (18%), connection by other partners (11%), long term contracts (7%), necessitated by circumstances (29% ), others (9%).

Firms were also asked to specify the reasons that tie them in long term business relations with their customers. The findings in respect of networks on the demand side revealed “mutual trust” as the leading tie for network relationships (64%), followed by business contracts (22%). Similarly, on the supply side, mutual trust accounted for 67 percent, while contracts accounted for 33 percent.

The findings of this study suggest that social mechanisms is paramount both in establishing and holding network relationships in Tanzania. On the demand side, social mechanisms accounted for between 71 – 96% of the reasons of firms’ networking across five network scales, while, on the supply side, social mechanisms represented 55% of the reasons of networking. Business contracts did not appear to play a major role. This puts the role of social mechanisms above that of contracts in influencing and holding network relationships in the sector. This finding is consistent with a couple previous studies on outsourcing in Tanzania, which revealed that contracts were not a common feature in business transactions (see for example Wangwe, et al 1997). The results of this study therefore suggest that investment in social capital is more apt to assist Tanzania shipping firms in formulating long-term B-B relationships. Indeed the role of social capital has recently received great attention in the both theoretical and empirical literature.

The significance of social capital in relational exchanges in Tanzania is further reflected in the analysis of the relational atmosphere and how conflicts are resolved. The general assessment on the level of conflict occurrences showed good relational atmosphere as most firms fall into favorable categories of “no conflicts”, “rare & few conflicts” and “moderate level of conflicts”. When the analysis is done by network scales a direct relationship between network scale and level of conflict occurrences is revealed. For instance on the demand side, of the 48% of the firms reporting rare and few conflicts 64% were from network scales 4 and 5, while of the 9% reporting conflicts to be more than moderate 67% came from network scale 0. More or less the same situation was observed on the supply side.

Conflicts resolution methods showed favorable atmosphere in general terms. 67% of firms reported the use of discussions and only 5% resorted to litigation. The analysis by network scales showed there was generally no difference between firms with higher and those with lower network scales in the use of “Discussions and negotiations”. This finding does not correspond to the theory when we reckon with the observed state of low commitment, lack of trust, incompetent actors and rampant opportunism in the sector. Further study to ascertain underlying reasons is recommendable.

**Networks and Capacity Creation**

While the general demand side situation showed that firms were not able to attain/expand capacity due to networks, only 30% reporting increased capacity due to networks, analysis by network scales revealed direct relationships between the two parameters. 75% of firms in scale 5, 53% in scale 4, 27% in scale 3, 14% in scale 2, 13% in scale 1 and 0% in scale 0 reported attainment/expansion of capacity due to linkages, respectively. This finding augurs well with the observation that networks in Tanzania shipping sector are mediocre and the theory that there’s direct relationship between networks and firms’ performance.
In contrast, the supply side showed majority of firms (71%) to have attained/expanded capacity due to networks. Contrary to the demand side, the breakdown by network scales did not show differences among the network categories. This is perhaps, as earlier remarked, due to observed compelled networks on the supply side, which is likely to disrupt effects of networks to this sort of performance.

Problems faced by firms in relating to their partners

Opportunism and less committed partners appeared to interfere with the linkage relationships, which engender less enduring relations. When asked to enumerate problems they face in dealing with business partners, majority firms cited poor and unreliable performance (36%), as a major problem. Other problems included, insufficient capacity (14%), need for close follow-up (11%), bureaucracy (10%), untrustworthy suppliers and price opportunisms (12%), others 17%.

Linking firm performance to networking

Pearson’s correlation analysis was used to find out relationship between involvement in networks and performance. Besides, \(\chi^2\) tests were conducted to confirm whether or not the associations between the two variables (networks and performances) did really exist. Firm performance was defined in both operational and financial terms.

Correlation coefficients for the shipping agency sub-sector show positive relationships between scale of networks and performances for years 2002 and 2001 and weak or no relationships for years 2000 and 1999 both on the demand and supply sides. As for FFs stable but weaker positive correlation coefficients throughout 1999 to 2002 were observed. Despite suggested need to improve on performance data (so as to better the performances of firms) to qualify more the investigation, the study fairly confirms the assumption that \textit{the higher the degree of networks of a firm the better the performance in the market place}. This fairly proves potentiality of network relationships to performance of shipping firms in Tanzania, the need to ameliorate information (data) on performances notwithstanding.

\(\chi^2\) tests showed that the association between networks and performances of shipping firms on the basis of available data is real, not by mere chance. Out of eight statistics, only the ship agents’ supply side “networks – ship calls” relationship revealed independence of the variables. This is a further testimony of the ‘potentiality of networks governance for Tanzania shipping firms’ that was inferred from Pearson’s correlation coefficients.

Conclusion

Building on existing theory and literature this study drew on data from 69 local and foreign owned-firms in the shipping sector in Tanzania to investigate firms’ involvement in network relationships, and subsequent effects on performance. The study recognized the fact that beyond technical factors that have been the focus in past Small and Medium Enterprises (SMEs) studies in Tanzania, are behavioral and strategic dimensions that play an equally important role in the development and growth of businesses. The existing entrepreneurship literature suggests that entrepreneurial networks are a source of firm competitiveness and survival in the market.

Findings of the study reveal little appreciation and sparse use of networks in the country’s shipping sub-sector, especially among the locally owned shipping firms. Only 33% of the SMEs made use of networks in their business. This finding is very alarming especially considering the requirements of the modern global transport business, which demand more cooperation than isolation. Furthermore, the linkages could not be sustained, suggesting a lack of appreciation of networks as a strategy. Responsive networks particularly on the supply side proved to engender linkages of less positive effect. On the other hand, proactive networking strategies engendered
better results. On the overall, foreign affiliates tended to appreciate the important role of networks more than local SMEs. In the same vein, foreign affiliates' performance was more superior to that of local SMEs, suggesting the need for business development support initiatives and capacity building to emphasize networking as a strategy. The study also notes the importance of social capital rather than contracts in holding the networks together.

Suggestions for Future Research

Future research should focus on reasons for less use of networks among the locally owned shipping firms in Tanzania. Such research should be able to guide sustainable strategies to promote networking among firms. It is quite clear that no business entity can remain in isolation in the current globalized world. SMEs in Sub Saharan Africa have no option but to join the business forces in the integrated world.

References


Burt, R.S. (1992), Structural Holes Cambridge, MA: Harvard University Press


Williamson Oliver (I 985), The Economic Institutions of Capitalism, New York, Free Press

A  BACKGROUND INFORMATION

1. What explains your company among the following? (Please tick one).
   a. A local company or subsidiary of a domestic firm
   b. A subsidiary of a multinational company
   c. A multinational company with head office in Tanzania.
   d. Others (please explain)

2. What is the legal status of this company?
   a. Sole proprietorship
   b. Partnership/ Joint Venture
   c. Cooperative
   d. Company established by Act of parliament.
   e. Limited liability enterprise
   f. Corporation

3. When was this business originally set up in Tanzania (Year)?

4. If you did not start the firm originally, when did current owners acquire this firm?

5. Please, mention the major objectives (the type of business) of your company.
   a. ...........
   b. ...........
   c. ..........., etc.

6. Kindly explain the different functions (e.g. departments) in your organization and the duties under each function/department:

<table>
<thead>
<tr>
<th>Function (e.g. Department)</th>
<th>Duties of the Function/ Department</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. How has your staff level changed in number over the last 3-5 years?
   Year 1. _________ Year 2. ______ Year 3. ______ Year 4. ______ Year 5. ______

8. How have your assets value changed over the last 3-5 years?
   Year 1. _________ Year 2. ______ Year 3. ______ Year 4. ______ Year 5. ______

B DEMAND SIDE ANALYSIS

9. Who are your clients by type/ category? (Tick) – you do not need to give names of particular clients
   a. Individuals
   b. Specialist importers and exporters
   c. Industrialists importing/exporting as part of the production chain
   d. Government importing/exporting on project basis
   e. Others (please specify)

10. a. What approximate percentage of your business do regular customers account for? (please tick)
    i. Less than 10%
    ii. Between 10 – 40%
    iii. Between 40 – 70%
    iv. Above 70%

   b. What percentage of these is based outside Tanzania? (…%)

11. Please indicate on the scale below (by ticking) the level to which your business with customers is carried through long-terms business partners in the form of strategic alliance, contractual relationships, good social relationship and mutual trust, etc. (Please read “Key” below, before you assign the scales for both core and non-core activities):

   Core business activities:
**Key:**

0 = No long-term business relationship exist
1 = Less than 20% of all business is through long-term partners
2 = Between 20 – 40% of all business is through long-term partners
3 = Between 40 – 60% of all business is through long-term partners
4 = Between 60 – 80% of all business is through long-term partners
5 = Over 80% of all business is through long-term partners

12. a. How did it happen that you established repeated trade relationships with your regular customers?
   i. Personal acquaintance with managers of client companies
   ii. Long-term contract with clients.
   iii. Common trust due to close cooperation in business.
   iv. Connection by other trade partners.
   v. Necessitated by circumstances e.g. Monopoly, Parent/subsidiary relationship
   vi. Others (Please specify).

b. Why do you think some customers are not regular to your company?

13. Do you have formal business contracts or other legal base with your regular customers that compel continued business relationship with them?  YES / NO

14. If not, how do you sustain your relationship with confidence that they will fulfill their obligations?
   i. Mutual trust
   ii. We/They do not have alternative
   iii. Others (please specify)

15. For the regular customers, what percentage has established business relationship with your company for more than one year?
i. Less than 10%
ii. Between 10 – 40%
iii. Between 40 – 70%
iv. Above 70%

16. How do you get to know about individual business transactions that your customers intend to do?
   i. Through regular inquiries/check with assured customers.
   ii. Customers call on us when in need of our services.
   iii. Through a coordinated/synchronized operations system with permanent clients
   iv. Through aggressive marketing/canvassing efforts

17. What problems do you face in the course of providing services to your customers?

18. Do you have personal relationship with any of key decision-makers in the Client Companies?
   YES/ NO.

19. a. How frequent do conflicts (e.g. claims, complaints, etc) happen between you and your clients?
   i. There are always conflicts in our business (More than 5 incidents per 20 transactions/ clients/ suppliers)
   ii. More than Moderate (About 4-5 incidents per 20 transactions/ clients/ suppliers)
   iii. Moderate level (About 2-3 incidents per 20 transactions/ clients/ suppliers)
   iv. Conflicts are rare and few (About 1 incident per 20 transactions/clients/suppliers)
   v. No conflicts at all

b. What approach do you take to solve such conflicts?
   i. Through court of law
   ii. We use pre-established system/agreed terms to handle conflicts
   iii. Discussions and negotiations as and when conflicts occur
   iv. Others (please specify)
20. Have you ever suffered any loss/damage due to unsatisfactory performance on the part of regular clients? YES/ NO

21. Are there any resources that either party (your company vis-a-vis customers) is able to access/utilize in its operations purely due to long-term relationships? YES/ NO

22. Is there any operation(s) that you perform jointly with a regular client(s)? YES/ NO

23. Please account for the impact of network relationship in consideration of the following aspects (please tick as applicable): -
   a. Ability to satisfy customers and handle their complaints
   b. Sustained customer loyalty
   c. Convenience of customers getting in touch with your firm
   d. Control of price charged to final customers

24. What Benefits do you think your regular clients enjoy due to long-term relationship with your company? ________________________________

25. What has been your performance levels (volume of business) for each type of business over the past 5 – 6 years?
   Performance level (volume business) – please show unit of account (Ship calls/ # of transactions or Bills of Lading/tonnage/USD/TEUs/etc)

<table>
<thead>
<tr>
<th>Business Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

C SUPPLY SIDE ANALYSIS

26. What kind of services/activities do you provide to the market? (Please tick as many as applicable from the appended list of services – annex 1. Use ✔(SL) for services you provide by sub-contracting (out-Sourcing) on the basis of long-term relationship with the partners,
27. Why does your company subcontract some of the services/operations that it is supposed to offer/conduct? (Please consider subcontracted services in question 30 above)

28. a. What facilities and equipment are necessary to carry out operations involved in serving your clients? (Please tick as many as applicable from appended list– annex 2)
   b. Please mention and indicate whether you own/operate or outsource each of the facilities/equipment. Use ‘P’ for owned/operated and ‘T’ for outsourced facilities against each item (in annex 2) as applicable.
   c. If no outsourcing of facilities/equipment/services at all, what is the reason?
      i. It is our policy to provide all services in – house.
      ii. No capable suppliers for all our requirements
      iii. In-house provision/production of all requirements safeguards our competitive advantages
      iv. We can better control our operations and quality of services
      v. Others (Please specify)

29. Who are your suppliers of services/facilities/ equipment that you normally procure from when outsourcing? (By type/category – you do not need to give names of particular clients)
   a. Individuals
   b. Small and medium firms
   c. Industrialists/Specialist companies as part of the production chain
   d. Government departments/ Entities on the basis of established regulations
   e. Others (please specify)
30. a. What percentage of these suppliers by approximation is regular?
   i. Less than 10%
   ii. Between 10 – 40%
   iii. Between 40 – 70%
   iv. Above 70%

b. What percentage of them is based outside Tanzania? (... %)

31. Please indicate on the scale below (by ticking) the level to which your supply (delivery of services to the market) is carried through long-terms business partners in the form of strategic alliance, sub-contracting, out-sourcing etc.

   Core business activities:

   0  1  2  3  4  5

   Key:
   0 = No long-term business relationship exist
   1 = Less than 20% of all business is through long-term partners
   2 = Between 20 – 40% of all business is through long-term partners
   3 = Between 40 – 60% of all business is through long-term partners
   4 = Between 60 – 80% of all business is through long-term partners
   5 = Over 80% of all business is through long-term partners

32. a. How did it happen that you established continuos business relationships with your regular suppliers?
   i. Personal acquaintance with managers of client companies
   ii. Long-term contract with clients.
   iii. Common trust due to close cooperation in business.
   iv. Connection by other trade partners.
   v. Necessitated by circumstances e.g. Monopoly, Parent/subsidiary relationship
b. Why do you need to have regular/permanent suppliers, if any?
   i. Eases the outsourcing process
   ii. Assures quality of outsourced services/facilities/goods
   iii. Assures purchase prices for the outsourced services/facilities/ goods.
   iv. Eases coordination and control of operations
   v. Others (Please specify)

c. If you do not need regular/permanent suppliers, what are the reasons?
   i. To enhance competition among suppliers and thus get the lowest price from the market
   ii. Avoid too much dependency on one or a few partners
   iii. No capable/reliable partners in the market.
   iv. Potential partners are not willing for such arrangements
   v. Others (Please specify).

33. Do you have formal business contract or other legal base with your regular suppliers that compel continued business relationship with them? YES/ NO

34. For the regular suppliers, what percentage has established business relationship with your company for more than one year?
   i. Less than 10%
   ii. Between 10 – 40%
   iii. Between 40 – 70%
   iv. Above 70%

35. How do your suppliers know about your transactions that lead to your requirements for services that they sell to you?
   i. Through regular inquiries/checks with us.
   ii. We call on them when in need of their services.
   iii. Through a coordinated/synchronized operations system with permanent suppliers
iv. Through our active and continuous invitation for their service when we are in need.

v. Others (please specify)

36. What problems do you face in the course of using outside suppliers to provide services to your customers?

37. Do you have personal relationship with any of key decision-makers in the Supplier Companies? YES/ NO

38. How frequent do conflicts happen between you and your suppliers?

i. There are always conflicts in our business (More than 5 incidents per 20 transactions/ clients/ suppliers)

ii. More than Moderate (About 4-5 incidents of conflicts per 20 transactions/ clients/ suppliers)

iii. Moderate level (About 2-3 incidents of conflicts per 20 transactions/ clients/ suppliers)

iv. Conflicts are rare and few (About 1 incident of conflicts per 20 transactions/ clients/ suppliers)

v. No conflicts at all

39. What approach do you take to solve such conflicts?

i. Through court of law

ii. We use pre-established system/agreed terms to handle conflicts

iii. Discussions and negotiations as and when conflicts occur

iv. Others (please specify)

40. What Benefits do you think your regular suppliers enjoy due to long-term relationship with your company? ________________________________

23
41. Have you ever suffered any loss/damage due to unsatisfactory performance on the part of your regular suppliers? YES/ NO (please enumerate the type of loss/damage suffered).

41. Do you think your long-term relationships with regular suppliers provide you with more benefit than if such relationship did not exist? YES/ NO.

42. Are there any resources that either party (your company vis-a-vis suppliers) is able to access and utilize in its operations purely due to long-term relationships? (Please enumerate)

43. Is there any operation(s) that you perform jointly with a regular client(s)? Please mention.

44. The impact of network relationship in consideration to the following aspects:
   a. Ability to service more clients and/or in a better standards
   b. Need for capital investments
   c. Reliability of services provided by linked parties in terms of quality, price, delivery, or any other (please mention)
   d. Competition in the market
   e. Strategic plans and activity coordination between in-house and out-sourced services of the firm