

Factors Contributing to Small and Medium Enterprise (SME) Growth: A Theoretical Perspective

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The purpose of this study was to develop a theory related to the functioning of SME and to identify factors contributing to the growth of SME. The methodology considered both qualitative and quantitative research. Results indicate relationship as the key element for SME growth. As an internal parameter, management practices and size of the firm were considered as major factors contributing to the growth of SME.

Field of study: Management of SME

1. Introduction

The purpose of this study was to develop a theory related to the functioning of SME and to identify factors contributing to the growth of SMEs since very little has been done in this area (Cook, 2001; Gadenne, 1997; Wijewardena & Tibbits, 1999).

The study was limited to the small and medium scale business units. The small and medium businesses were defined as those (Geraldo, 1992), which had an investment between \$0.5 to \$1.5 million in accordance with the definition of World Bank and Government of Bangladesh and.

2. Literature Review

It is well accepted that a strong SME will result in a competitive edge for an economy (Day, 2000). Reynolds, (1997) indicates that EU countries' employment, value added and sales by firm size for the SMEs have increased on all measures of economic activity; and many large organizations have experienced substantial losses. Nugent and Wang and Yao, (2002) show the SMEs in Korea reflect a much greater share in employment. Similar episodes are prevalent in China; during 1995-2000, small enterprises accounted for 62.5% of total industrial output and 73.6% of its industrial employment (Wang and Yao, 2002).

Deakins and Freel, (1998) state that, little is known about the growth process of SMEs: What is known is the unplanned management, experienced based approach to daily operations, and a reactive rather than a proactive approach That SMEs adopt. Gilmore, Carson, and Grant, (2001) acknowledges that SMEs cannot do

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conventional marketing because of limitations of resources and since the managers of SMEs think differently. White, Miles and Smith, (2001) state that financial performance for SMEs is very difficult to conceptualize since few SMEs are publicly held, and thus do not tend to maintain formal accounts. The factors contributing to the growth of SME resulted in the following hypothesis.

Growth and Sustenance of SME is

H1: directly proportional to the size of the cluster (Only for Core Business Unit, CBU).

(Davidson, 1991; Carlsson and Mudambi, 2003)

H2: directly proportional to extent of cohesiveness between the backward and forward actors.

(Duchesneau and Gartner, 1990; Kovacs and Mezgar, 1998; Capello, 1999; CERBET, IDE & BASC, 2003)

H3: directly proportional to the number of actors/players in the sub-sector chain.

(Steiner and Solem, 1988; Wijewardena and Cooray, 1995; Gadenne, 1997)

H4: inversely proportional to the parasitic relationship among the competitors and proportional to the symbiotic relationship among the competitors.

(Kovacs and Mezgar, 1998)

H5: proportional to the degree of activities undertaken by the business association of the CBU.

(Chaganti and Chaganti, 1983; Steiner and Solem, 1988; Ghosh et. al., 1993)

H6: directly proportional to the extent of information exchange amongst the competitors at the CBU level.

(Ghosh et. al., 1993; Havnes and Senneseth, 2001)

H7: directly proportional to the prospect of partnering amongst the CBU members.

(Koestler, 1989; Wijewardena and Cooray, 1995; Kovacs and Mezgar, 1998; Wijewardena and Tibbits, 1999)

H8: directly proportional to the level of knowledge the actors hold about their immediate backward and forward firms.

(Gilmore, Carson and Grant, 2001; Robson and Bennett, 2000; Torres, 2002)

H9: directly proportional to the level of its relationship with service providers.

(Yusuf, 1995; Wijewardena and Cooray, 1995; Havnes and Senneseth, 2001)

H10: directly proportional to the perceived benefits of receiving services by the CBU.

(Little, 1987; Bornheim and Herbeck, 1998; Hancke, 1998; Hingley, 2001)

H11: inversely proportional to perceived disadvantages from services not received by the CBU.

(Steiner and Solem, 1988; Gadenne, 1997)

H12: directly proportional to the eagerness to engage with the service agency.

(Duchesneau and Gartner, 1990; Yusuf, 1995; Bornheim and Herbeck, 1998; Robson and Bennett, 2000)

H13: directly proportional to the number of services purchased by the CBU.

(Bornheim and Herbeck, 1998; Gilmore, Carson and Grant, 2001; Torres, 2002)

H14: directly proportional to the volume of business of the CBU.

(Wijewardena and Cooray, 1995; Wijewardena and Tibbits, 1999)

H15: directly proportional to the status of the current business condition of the CBU.

(Chaganti and Chaganti, 1983; Little, 1987; Steiner and Solem, 1988; Davidson, 1991; Wijewardena and Cooray, 1995; Yusuf, 1995; Lin, 1998; Capello, 1999)

3. Methodology

The study used a mix of qualitative and quantitative method (Deakins and Freel, 1998; Long et. al., 2000; Wilson and Natale, 2001; O'Donnell and Cummins, 1999; Lin, 1998).

The study applied a combination of short interview, case study method, depth interview, projective technique, observation technique, and secondary literature study. A total of 13 sub-sectors were covered. For each sub sector 2 clusters were selected based on the size of the cluster. The clusters having the largest number of actors were selected for the study. Questionnaire was in the local language and open-ended with probing questions inserted based on the situation at hand. The total number of interviews numbered 156. A total of 13 back checks and 13 validation workshops representing each of the sub sectors were conducted. The validation workshops followed the projective technique.

Both qualitative as well as quantitative analysis was used (Gray and Densten, 1998). The quantitative analysis used a 10-point interval scale: 10 being high and 1 the least. The procedure used an indirect method of gathering data using interval scales after validation of the information. The qualitative data for the study of SME functioning has been used to assess and understand the dependent variables outlined in the hypotheses. The quantitative analysis helped identify the variables that actually influenced growth of SME; this was done using Pearson's correlation analysis. Quantitative analysis also included identification of factors that influence growth, adopting factor analysis.

4. Findings

Following are the major findings from the qualitative and quantitative studies. Pearson's product-moment correlation (at a level of significance of 0.01) reflects the association between growth and the selected variables.

Size of Cluster (Only for Core Business Unit, CBU): Average size of the cluster is

approximately 50 units. The minimum number was 20 while the maximum was more than 100. One of the major reasons for the formation of clusters lies in the availability of labor. Small businesses constitute a large proportion of wage labor force and thus take advantage of clustering. Availability of markets is considered another major factor. ($r = .663$ and $\text{sig.} = .000$)

Relationship Among the Competitors: Integration results in parasitic attitude formation of the larger (integrated) firm. On the other hand the rest have a high level of symbiotic relationship stretching from sharing of storage facility, sub-contracting, etc. Mergers and acquisitions are not prevalent. The notion of ownership is very strong. ($r = .563$ and $\text{sig.} = .000$)

Degree of Business Activities Undertaken by the Association of the CBU: In most cases there is either no relationship with the association or the relationship is poor. The function of association is restricted to protection from external threats. Most of the units continue their membership with the association as a precaution against future threats. ($r = .513$ and $\text{sig.} = .000$)

Prospect of Partnering Amongst the CBU Members: The prospect is found to vary between moderate to good in almost all the cases. ($r = .778$ and $\text{sig.} = .000$)

Relationship with Service Providers: This varies from moderate to good. Most of the sub-sectors purchase a handful of services. ($r = .510$ and $\text{sig.} = .000$)

Eagerness to Engage with the Service Agency: This was found to be from moderate to high. When asked about services such as advertising, product development, training, technology upgrading, legal support, etc., sub-sectors that are facing competition and are eager to go international showed interest. ($r = .706$ and $\text{sig.} = .007$)

Volume of Business of the CBU: Most of the better units run three shifts during peak seasons while operate between 60% to 70% capacities during rest of the year. A substantial number of units operate at less than 50% capacity during off peak seasons. These units are in most cases very small and utilize very low technology. This implies that volume of business in terms of capacity utilization is higher for larger and better-managed firms. ($r = .682$ and $\text{sig.} = .000$)

Current Business Condition of the CBU: The performance of the business is considered moderate. Though individual units are not expanding, the sub-sector is showing definite growth in terms of new entrants coming into the market and very few closures taking place. ($r = .557$ and $\text{sig.} = .000$)

SME Growth Parameters: According to the results of the Pearson correlation analysis hypothesis 1, 4, 5, 7, 9, 12, 14, and 15 are considered valid while 6 and 13 are moderately valid and thus contribute to the growth of SME. The rest can be considered as non-contributors to growth.

SME Growth Activation Model: Keats and Bracker, (1988) propose a simple conceptual model which suggests that small firm performance is influenced by

multiple constructs including 'entrepreneurial intensity', 'task motivation', 'perceived strength of environmental influence', 'behavioral strategy', together with moderating factors of 'cognitive strategic sophistication' and 'task environment'. Cragg and King, (1988) developed a model involving causal relationships between various factors and small firm financial performance. The model shows that the main factors directly affecting financial performance are markets in which the firm operates and managerial practices. These are in turn affected by owner's characteristics and owner's objectives. The study indicates that both models are inadequate in terms of identifying the various characteristics or factors contributing to the growth of the SME. In addition the variables are not distinctly defined. The model proposed based on this study is exhaustive in nature and indicates a more detailed relationship pattern. For developing the growth activation model, factor analysis was undertaken; the results of the factor analysis are depicted in Table 1.

Table 1: Output Showing Factors Influencing Growth of SME

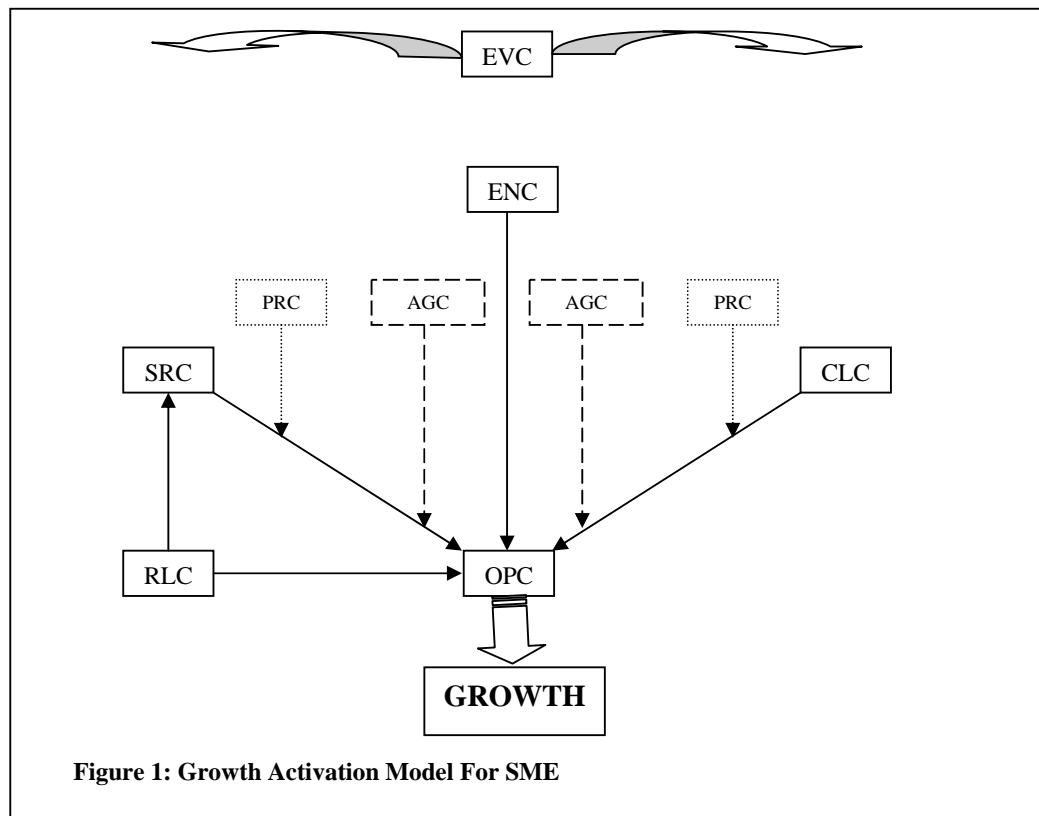
Variables under study	F1	F2	F3	F4	F5	Communalities
Size of cluster	0.916	0.16	0.026	0.016	0.202	0.906
Cohesiveness between Backward & Forward	0.489	0.779	0.101	0.056	-0.29	0.946
Average number of units in each actor	0.672	0.178	-0.06	-0.44	-0.42	0.858
Symbiotic Relationship with competitors	0.675	0.137	0.43	0.35	0.071	0.787
Degree of business support activity by the association	0.379	0.317	0.728	0.174	0.223	0.854
Information exchange among competitors while working together	0.8	0.053	0.396	-0.09	-0.32	0.909
Prospect of partnering and forming working groups	0.765	0.293	0.039	0.453	-0.07	0.882
Knowledge about backward and forward partners	0.05	0.933	-0.05	-0.07	0.027	0.882
Relationship with service providers	0.092	0.095	0.224	0.098	0.836	0.776
Benefits from services of service providers	0.12	0.885	0.184	0.011	0.141	0.851
Disadvantage associated with services from providers	0.044	-0.28	0.751	-0.1	0.353	0.777
Prospect of engaging with service providers	0.532	0.624	0.237	0.332	0.295	0.926
Numbers of services purchased from providers	0.125	0.238	0.816	0.16	-0.03	0.764
Volume of business	0.808	0.134	0.223	-0.02	0.394	0.876
Status of business	0.055	-0.02	0.108	0.945	0.083	0.915
Eigenvalues	4.336	3.075	2.322	1.617	1.561	
Eigenvalues/Number of Statements	0.289	0.205	0.155	0.108	0.104	

There are three major findings from the factor analysis. First, five unique factors have been identified. Second, the communalities indicate that all the factors explain more than 75% variance in all of the fifteen responses to the statements. Third, the Eigenvalues indicates that the five factors explains 28.9%, 20.5%, 15.5%, 10.8%, and 10.4% of the variance in the response scores from all 15 statements. In addition, the five factors together explain 86.1% of the variance in the entire set of response data. Thus this can be considered as a good fit to the data, indicating that the analysis does not require identifying more than five factors. The five factors can be classified as factors associated with:

- a) cluster
- b) vertical and horizontal partners
- c) support provided by service providers
- d) status of business, and
- e) relationship with service providers.

The major constructs influencing growth of SME is elaborated below. Figure 1 illustrates the model of factors influencing growth of SME.

1. **“Operational Criteria”(OPC)** involving the internal management and business of the organization and the key driving force.
2. **“Cluster Criteria”(CLC)** involving the competition associated with the principle of clustering. This is a special SME criteria resulting out of symbiotic competition and influences OPC directly.
3. **“Partnering Criteria”(PRC)** includes partnership with vertical and horizontal actors. This is more of a catalytic agent.
4. **“Servicing Criteria”(SRC)** including support provided by the service providers. This is more of a support criterion, which directly influences OPC.
5. **“Relationship Criteria” (RLC)** involving relationship with service providers. This criterion is a result of trust and holds the major players together.
6. **“Entrepreneurial Criteria”(ENC)** associated with the personal traits of the individual who runs the business. This acts as the major input of OPC.
7. **“Agency Criteria” (AGC)** that represent the legal relationships with stake holders. This acts as the moderating criteria.
8. **“Environmental Criteria”(EVC)** comprises of the sub-sector and the culture under which the SMEs operate.



5. Conclusions

The interests of geographic clustering for larger firms are more likely in case of certain highly R&D intensive industries, like pharmaceuticals, to be present near a research university in the region (Galambos and Sewell, 1996). The same in case of SMEs are more due to inter-personal and inter-firm networking as evident from the study.

The factors contributing to the growth of small-scale enterprises are similar to large-scale enterprises from which a number of characteristics follow. These primarily include efficient management practices resulting in high productivity based on higher level of technology, productivity of labor, efficient financial management, etc. It also includes the size of the firm directed towards attaining the economies of scale.

Most of the SME serve the local market, are small in size, have an annual turnover financial cycle, are not dependent on the research and projections of the market, have an extremely close linkage amongst the competitors, are directed towards employment generation by virtue of multiplier effect, have a shorter start-up time since sub-sector growth is more due to new entrants, are credit dependent and thus low in cash, etc. It is quite obvious that the overall functioning of the small business is different and the factors contributing to the growth also vary compared to larger enterprises.

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