Information Technology in Small to Medium Size Enterprises (SMEs)

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Abstract

IT is playing fundamental role to enhance Small to Medium Size Enterprises (SMEs) performance and their further development. Research findings of this work show that there is a need to further elaborate on the use and the benefit of IT applications within this sector. This research has found where some of the SME’s are fully equipped with IT infrastructure and Application tools. On the other side there are good numbers of SME’s lack in such functionalities. This research recommends a program could be run to create awareness of Information Technology role in Small to Medium Size Enterprises. Such program will also assist in reducing work load and to enhance overall production efficiency.

1. Introduction

Small to Medium Size Enterprises (SMEs) are defined as enterprises which have at most 250 employees and an annual turnover not exceeding 50 million Euros. In 1990 growth is being seen in SMEs using computing with a little change in their management staff. It is known that when IT was not very common all the records were on papers but after 1990 when internet was introduced and everyone was taking benefits from IT. The contribution of this work is to examine the factors causing barriers in the implementation of information technology in the SMEs.

There are about 3.7 million SMEs in UK which has annual turnover of one trillion pounds and produces forty percent of GDP. In addition, 12 million people are employed in different SMEs. In 1998 380,000 businesses were online and the UK government make a target 1.5 million SMEs to be online by 2002, Dixon, et al (2002).

There is no single, uniformly acceptable definition for small firms. Firms differ in their level of capitalization, sales and
employment. Hence, definitions that employs measures of size (number of employees, turnover, profitability, net worth, etc.) when applied to one sector could lead to all firms being classified as small, while the same size definition when applied to a different sector can give a completely different meaning. According to the definition of European Commission (2005), small and medium-sized enterprises includes enterprises which employee fewer than 250 employees. In the 25 member states of EU, there are some 23 million SMEs representing 99% of all EU companies, and employing around 75 million people. Micro firms dominate the European scene, with the average European company employing 6 people.

This work therefore studies Information Technology in the context of Small to Medium Size Enterprises. Rest of this work is organised as follows, in section 2, literature review is presented. An analysis of Information Technology in the context of SMEs is detailed in section 3 whilst conclusions and future work are covered in section 4.

2. Literature Review

Competition is often intense for SME’s. Many small suppliers are unable to influence price or quantity in competitive markets. The contingent and standard view, of competitiveness where firms compete on cost or differentiation is problematic for SMEs. They are unlikely to be able to lock in customers and suppliers, build barriers to entry, or significantly lower costs. However, such SMEs do often have processes and products that are difficult to imitate. Thus the resource based view of strategy may to be helpful in enabling SMEs to compete effectively.

Economical development is the dream of every organization. SMEs are often remarked as a great resource of industrial innovation and for their contribution to social and economic coherence. Luetkenhorst (2004) has also mentioned the following factors in studies of SMEs economic and social importance.

- SMEs have a tendency to occupy more labour-intensive production processes than larger companies. SMEs have a greater influence on the labour market.
- Countries with high percentage of SMEs has simultaneously a relatively equal distribution of income- also regionally and promote high social stability.
• SME’s are a significant source for innovation in niche-markets, which demand high flexibility and customized products.

• SME’s serve as “growth labs” for innovation and risk oriented product development. SMEs are foundations for long term dynamics growth and for development of large companies.

These show that SME’s has great influence in the economical and social development of the countries. Moreover they have an impressive contribution to the economy of European Union, as the EU Commission (2005) report said that SME’s are 99% of all the companies and they produce 75 million jobs. Castka et al (2004) argued that keeping in view the importance of SME’s in the world economy researcher are making strategies to guide SME’s and provide them tools to implement and report on their corporate social responsibility policies, processes and performances in an effective manner.

Organization often intends to become multinational company in their long term plan. However, it requires a special strategy which should focus on the challenges of SMEs during the period of globalization. Moreover, importantly how SME’S overcome the liabilities of smallness, and what make them competitive and successful.

These trade-offs are excellent source of hypothesis and provides future research directions. For instance, the dichotomy between localization and globalization suggests SME’s tacit knowledge as a main production factor that serves as a source of competitive advantage. Most of the time finance is one of the big problems of SME’s. In short it can easily be concluded from the above discussion that SME’s following a business strategy evolve into a larger firms. Tesco example is known to all of us which started from a small shop and has turned into leading retailer in the European Union.

3. Information Technology in Small to Medium Size Enterprises (SMEs)

In 1980s when the minicomputer and personal computer were getting common to use SMEs get the opportunity to introduce these low cost computers. The large organisations can afford these computers and hire specialists and maximise their information system resources. In 1990 growth is being seen in SMEs using computing with a little change in their management staff. It is known that when IT was not very common all the records were on papers
but after 1990 when internet was introduced and everyone was taking benefits from IT. Now the companies have their web sites they can access the data anywhere in the world with a single click. They have emails now they don’t need fax machines and they got scanner they can keep the record of their important document electronically. The database keep their important data easily they can get any kind of information anyway they like. The aim of this project is to explore IT application role in the success of SMEs and how these applications could further enhance SMEs performance. In this context, it is important to mention that information technology is playing an important role in the ongoing trend and success of SMEs. However, there are still issues and challenges require in order IT application to be fully utilized at all levels of SMEs, Fink & Disterer (2006).

**Characteristics of Small to Medium Enterprises (SMEs)**

Many studies have been discussed which business characteristics could be effect SMEs adoption of electronic business. Rao et al (2003) pointed out that small and medium enterprises are different in terms of business sector, business size, market etc, result are not generalisable across the whole SMEs sector. There are relationship between business size (number of employee of the SMEs) and the level of electronic business adoption. Similarly Ghulam and Shariq, (2005) found that small to medium enterprises are characterised by an absence of standardization and formal working relationships, generally have a horizontal organizational structure, and maturity of staff is limited.

Rao et al (2003) showed that SMEs are characterized by lack of standardization and formal working relationships, usually have a flat organizational structure, and lack of expertise for employees. Both studies showed that the similar results were viable despite varying geographic extend or market focus. Number of studies identified that not only business size and business sector effect adoption electronic business, Abell and Lim 1996 found that SMEs have less resources, Barry & Milner 2002, OECD 2004 found most SMEs lack from ICT skills, and OECD 2004 found that SMEs differ from slow to adopt technology.

Blackburn & Athayde (2000) have find that a level of international marketing as a business characteristic linked with adoption of electronic business technology. More details on characteristics may be determined by the
inherent characteristics, behaviours of entrepreneur, inherent size, stage of development, or identified by limitations such as: limited resources (such as finance, time, marketing, knowledge) or lack of specialist Expertise (owner-managers tend to be generalists rather than specialists) and limited impact in the marketplace.

**Small to Medium Size Enterprises and Information Technology**

In last decade SMEs are more and more using the Internet, World Wide Web (www) and other IT applications to increase their markets, to do business with customers, suppliers, and improve their competitive position. The Information technology revolution has affected all organizations but of particular interest is its effect on small and medium-sized enterprises (SMEs). SMEs just start to recognize the positive impact that information technology can provide to them such as computer terminals, e-mail, Internet, and their applications can have on their business.

There is no doubt that IT help SMEs to compete in their local market, with organization located in other countries. Developed and developing countries in the world are interested in the Information technology adoption in SMEs nowadays, because of the benefits from the adoption and greater financial success for SMEs, economic growth and revenue tax for the countries. Information technology is on the most growing business nowadays thus it contributes to economy. Information technology applications can help business to establish distinctive strategic positions to a much greater extent than previous information.

A number of organizations involve in basic IT in way from doing business, while others recognized enhance in business development and improve marketing with commercial partners. In spite of the understanding of SMEs which is different from country to country, the Internet an example of IT applications allowed to implement more technology driven solutions to improve the productivity and information for all SMEs. The Internet has emerged as a key business for SMEs enterprises in developed and developing countries more than large companies. Payne, 2006 stated that most developing countries are recognizing this opportunity to help SMEs.

Many SMEs recognize and take profit many benefits to find new customers and suppliers and compete in markets and growth economic of a country. IT
applications adoption in SMEs enhances marketing exposing to them to global competition and reached new customers. Brian, (2004) stated that SMEs have modernized and automated the way they do business and have been exploiting internet technology to expand their reach and communication with their partners, suppliers and customers. IT applications still very low in use in SMEs and most SMEs use internet for spreadsheets, accounting, word-processing, and payroll.

4. Conclusions and Future Work
This work presents an analysis of an information technology in Small to Medium Enterprises. Small and medium enterprises are companies whose turn over falls below certain limits. The abbreviation SME occurs commonly in the EU and in International organizations, such as the World Bank, the United Nations and the WTO. The term small and medium enterprises have become more standardized in few other countries. In summary, it can be concluded that SME’s play an important role both in economies and in the regional growth. Future research will look into factors which can barriers in the implementation of IT in SMEs.

References

