# **CHAPTER – VI**

## SUMMARY, FINDINGS AND CONCLUSION

This chapter presents a summary of the present research effort. It covers the objectives and research design in brief. It also discusses the implications of the findings and on their basis makes recommendations. The directions for future research are also being mentioned.

#### **INTRODUCTION**

Small and Medium Enterprises (SMEs) have been playing an important role in the development of an economy. They have been considered as the backbone of large industries. They have provided support in the form of goods/services (**Sardana**). The success of South Korea, Taiwan, and Singapore as exporters in 1970s was based largely on exports by small enterprises. With the advent of planned economy from 1951 and the subsequent industrial policy followed by Government of India, both planners and Government has earmarked a special role for SMEs in the Indian economy. The status of SMEs has been drastically changed after globalisation policy. In the present era of borderless and market oriented economy, the two big global economic forces have emerged- the emergence of 'new economy' underpinned by ICT (Information and Communication Technologies) and growing instability and uncertainty linked to globalisation (**Prasad**).

#### **SMEs in India**

In the Indian context, the SMEs have been recognised as small scale industry (SSI) since Independence. The definition of SMEs has been given in terms of investment in plant and machinery. The micro and small industries have not defined till 2001. However, tiny sector has been defined in the year 1977. The Indian small sector has evolved with time. The magnitude of SMEs sector has increased after the enactment of Micro, Small and Medium Enterprises Development (MSMED) Act, 2006.

This Act has served as a revolution in widening the scope of small scale sector. The definition of small scale enterprises has been broadened with the inclusion of micro and medium enterprises in the small scale sector. Moreover, the scope of SMEs has been increased by taking both manufacturing and services sector.

Enterprises	Investment in Plant & Machinery
Micro Enterprises	Does not exceed twenty-five lakh rupees
Small Enterprises	More than twenty five lakh rupees but does exceed five crore rupees.
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees

Table	6.1	Man	ufact	uring	Sector
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Source: Ministry of Small Scale Industries, Govt. of India

Table 6.1 shows that if the investment in plant and machinery is up to Rs. 25 lakhs, it is a micro enterprise, if the investment in plant and machinery is more than Rs. 25 lakhs but upto Rs. 5 crores, it is considered as small enterprise and if the investment in plant and machinery is more than Rs. 5 crores but does not exceed Rs. 10 crores, it is considered as medium enterprise.

# **Table 6.2 Services Sector**

Enterprises	Investment in Plant & Machinery		
Micro Enterprises	Does not exceed ten lakh rupees		
Small Enterprises	More than ten lakh rupees but does exceed two crore rupees.		
Medium Enterprises	More than two crore rupees but does not exceed five crore rupees		

Source: Ministry of Small Scale Industries, Govt. of India

Table 6.2 shows that if the investment in plant and machinery is upto Rs. 10 lakhs, it is a micro enterprise; if the investment in plant and machinery is more than Rs. 10 lakhs but does not exceed Rs. 3 crores, it is considered as small enterprise and if the

Investment in plant and machinery is more than Rs. 3 crores but does not exceed Rs. 5 crores, it is defined as medium enterprise.

With the enactment of MSMED Act, 2006, the scope of small scale sector has increased to a greater extent. The Act has provided a strong administrative framework with the setting up of Ministry of MSME and then further streamlined it by bifurcated into Ministry of SSI and Ministry of A and RI.

#### **SMEs and E-business**

The twin forces of globalisation and Internet have the potential to offer several benefits to individuals and organisation in developing as well as developed countries. They have allowed SMEs and firms from developing countries to reach customers and suppliers worldwide in a timely and cost-effective manner (**Kshetri, Nir B**). Today, E-business has been opening up new opportunities for entrepreneurship whereas, in the early stages of the commercial Internet, the main focus was on investing in ICT infrastructure. The challenge has been to use the Internet as a new business tool. E-commerce has provided a lot of opportunities to improve the performance of business. E-commerce has been empowering the small industry at a great speed and is becoming a widely spread opportunity for them to avail.

#### **Review of Literature and Research Gaps**

In the present study various studies relating to SMEs and E-business have been reviewed in the area of adoption of E-business technologies by large firms and small firms throughout the world. But not much research has been undertaken in India. A large number of studies in the area of small scale sector have evaluated the growth rate and performance. Most of the studies have examined only the factors facilitating and the barriers inhibiting in the adoption of E-business technologies. In the present study, an attempt has been made to know the adoption pattern of E-business technologies by small scale enterprises, impact of E-business on the performance of SMEs, barriers in the adoption of E-business technologies by the selected SMEs in Haryana.

E-business has been a new buzzword and it has changed the position of businesses. Globally, it has already been adopted to a large extent but Indian SMEs are yet to take a strong grip. E-commerce has delivered the tools to provide cost-effective ways for SMEs to market themselves, launch new products, improve communications, gather information and identify potential business partners. Ecommerce has offered enormous opportunities in every sphere of business. So, it has become imperative to understand the penetration of E-business in small -scale segment.

# **Objectives of the Study**

Main objectives of the research were as follows:

- 1. To study the growth of small and medium enterprises in Haryana in terms of number of units registered, investment and employment generation.
- 2. To examine the adoption pattern of E-business in selected small and medium enterprises.
- 3. To assess the impact of E-business of selected small and medium-sized enterprises.
- 4. To examine the barriers/difficulties in implementation of E-business technologies.
- 5. To suggest measures to strengthen the competitiveness of E-business in today's global environment.

#### Hypotheses of the Study

Following hypotheses have been formulated to examine the adoption pattern of Ebusiness in each district.

- H1: There is a positive relationship between size of enterprise and the use of E-Business technologies.
- H1a: There is a positive relationship between capital intensity, (measured as capital employed) and the adoption of E-business technologies.

H1b: There is a positive relationship between the relationship between the sales turnover and the adoption of E-Business technologies.

H2: There is a positive relationship between the age of owners and the adoption of E-Business technologies.

H3: There is a positive relationship between the exports intensity and the adoption of E-business technologies.

#### **Research Design**

The present study has been divided into two parts. The first part has evaluated the growth of SMEs in Haryana in the selected four districts.

- Light Engineering Goods Industry at Faridabad,
- Auto Parts Industry at Gurgaon,
- Textile Industry at Panipat
- Scientific Instruments Industry at Ambala

These districts are the major industrial hubs and have a significant contribution towards the economic development of the State. They have been recognised as 'clusters' under the 'Integrated Infrastructure Development' programme initiated by the Government of Haryana.

Growth rate has been found out in terms of number of units registered, investment and employment generation from the period of 1997 to 2009.

The second part has examined the adoption pattern of E-business in SMEs and the impact of E-business technologies on the SMEs. In this section, the barriers /difficulties in implementation of E-business technologies have also been assessed.

## (a) Sample Design

The selection of the sample was based on two parameters- owning of website and sales turnover. Additionally, a primary survey through well structured questionnaire was also conducted for industrialists and experts. For the survey, a sample of 100 industrialists and 75 experts were addressed. No distinction was made in the small and medium units in the selection process. E-business, E-commerce, Information

and Communication Technologies (ICTs), Internet technologies terms were used interchangeably.

## (b) Data Collection

Both primary and secondary sources of data have been used to collect the required data. Secondary sources include various journals, newspapers, publications from the Industries Department, Haryana, PHDCCI, National Productivity Council, Chandigarh, HSIIDC, Central Statistical Organization and Annual Reports of Ministry of Micro, Small and Medium Enterprises, SIDBI, Economic Survey of Haryana, Statistical Abstract of Haryana, Economic Survey of India and various Official Websites etc.

Two questionnaires- one for industrialists and other for experts have been designed to assess the impact, barriers and adoption pattern of E-business technologies by the SMEs. To examine the adoption pattern, eighteen parameters have been takenowning of personal computer, E-mail, functional software packages, Internet surfing, online banking, Intranet, company's website, customers orders received through website, customers payment through Internet, online queries solution, online delivery (logistics), computerised inventory, online database of customers/suppliers, network security technology, conducting secure business transactions with customers/ suppliers or other business. the impact of E-business sales, profitability, building relations with customers, reduction in on communication costs, business's domestic an international share, quality of goods/services, decrease in cost per unit of product of the selected small and medium enterprises assessed. The barriers/ difficulties in the adoption of E-business technologies have also been assessed.

#### (c) Data Analysis

Data was entered and analysed with the help of SPSS package. Analysis of data was carried out in two stages.

• At the first stage, Compound Annual Growth Rate was calculated to know the performance of SMEs in Haryana cluster-wise. Number of

units registered, investment and employment generation has been taken as performance indicators for calculating CAGR for the years 1997-2009.

At the second stage, the adoption pattern, impact and barriers of E-business technologies have been assessed.

- To examine the adoption pattern of E-business technologies by the SMEs, mean and standard deviation has been calculated and post-hoc test has been applied to know the inter-cluster comparison.
- The impact of the E-business technologies has been assessed with the help of cross tabulation of responses.
- To assess the barriers/difficulties in implementation of E-business technologies, descriptive statistics has been used to get the ascending mean value and standard deviation.
- The expert's opinions have also been appraised with the help of frequency and percentages and suggestive measures and recommendations have been evaluated.
- The hypotheses have been tested using one way ANOVA. Analysis of variance is an ANOVA technique in which there is only one independent categorical variable.

# FINDINGS

The present study shows the district-wise growth rate of small and medium enterprises in Haryana in terms of number of units registered, investment and employment generation. The results show that there has a significant difference among all the four districts in relation to growth rate. Industries in Gurgaon and Faridabad districts show an increasing trend in investment and employment generation. It reveals that Gurgaon and Faridabad provide major platform for ancilliary units, which are supplementary to large-scale industries. Moreover, these districts have large industrial base and enjoy competitive advantage of being close to National Capital. Panipat also shows positive growth rate but is low in comparison to Gurgaon and Faridabad because the city lacks infrastructural facilities. The growth rate has been improving because of large number of export- oriented units. Ambala has low growth rate in comparison to other three clusters. Industries in Ambala face problems of technological and infrastructural development. Industries are more labour intensive. The decline in growth rate of these clusters is due to these factors.

After conducting the survey on the adoption of E-business technologies, major findings of the study have been discussed. These are as below:

The present study demonstrates the adoption of E-business capabilities/ technologies by all the industries in the selected four districts. All the selected industries have their personal computers, Internet facility, E-mail, various functional software packages and website. Maximum respondents use online banking, receiving online customer's orders, placing online orders with suppliers and having computerized database of their customers and suppliers. A significant number of respondents accept to get sophisticated E-business technologies within a year or within 3 years like online inventory management, customer's after sales service, conducting secure business transactions with customers/ suppliers and making online payment, videoconferencing, internal company website and communication (Intranet). These results are in line with results given by the previous researchers. **Cloete, Eric** highlighted that maximum industries use e-mail, online billing, and online order placement at a high degree.

The results of the adoption pattern of each sector shows that Gurgaon has the high level of adoption pattern as a large number of industries in this district are using almost all the E-commerce technologies. the others are Panipat and Faridabad having all the basic and some advance Internet technologies like online orders receiving, online payment and planning to have sophisticated technologies with in a year. But Ambala lags behind all the other three districts. The industries in Ambala are using only the basic technologies. They rely more on traditional technologies. There is no significant difference in the mean scores of all the four districts. It shows that all the selected districts adopt and use almost all the Internet technologies. The difference has been found mainly in the adoption of Intranet, Videoconferencing and Online payment system. **Akkeren and Cavaye** stated that the adoption of E-commerce practices is a progression and therefore sophisticated technologies are unlikely to be adopted before entry level technologies have been successfully adopted. Adoption of Internet and Ebusiness technologies is thought to progress through several stages. Initially firm use some basic Internet tools such as e-mail, website before moving to next stage- transacting business. It is actually a move from simple commerce to Ecommerce and then to E-business, where industries use advanced E-business technologies as a strategic tool (Levy and Powell).

The adoption of Internet related technologies follows a "wait and see" attitude and is dependent upon the implementation of a defensive strategy. The academic literature gives very little information on why SMEs adopt E-business. However, more information can be found on the broader aspects of Information and Communication Technologies (ICTs) adoption and the use of the Internet in general. It has been observed that there is no significant increase in total sales through Internet. Despite the rapid growth experienced in recent years, E-commerce sales accounts for a small share of the total transactions (**Santarelli and D'Altri**).

To assess the impact of Internet and E-business technologies, 12 parameters have been taken on Likert Scale. The findings show that with the use of Internet technologies there is an increase in business profitability, company's sales, business revenue and reduction in communication costs. These results are similar with the results of previous research conducted by (OECD;Stockdale and Standing; Cheng and Cheng; Karagozoglu and Lindell) which revealed that Information and Communication Technologies (ICTs) particularly those related to E-commerce offer opportunities ad potential benefits for SMEs that include cost reduction, increase in business profitability, lower transactions costs and increasing B2B E-commerce sales growth. Some other factors also prove important and have medium to high impact on SMEs like increase in the supply of goods/services (Chau, Stephen), increase in the international share (Barsaukas and Sarapovas), increase in the level of customer satisfaction and service, building and enhancing relationship with customers (Grandon and Pearson; Cloete et al), allowed business to keep up with its competitors (Daniel and Wilson) and improve quality of goods/services. A similar study by Windrum and Berranger; Margi et al) also suggested commercial benefits of E-business in the area of expansion of geographical reach, improved efficiency in production/ procurement and logistics, improved customer communication.

The respondents show that the business operations of the SMEs have been benefited to more than 50% with the adoption of E-commerce activities. From the perspective of international trade, the Internet potentially enlarge geographical and sector markets by cutting through many of the distribution and marketing barriers, that usually prevent SMEs from entering foreign markets. Small and medium enterprises can diversify markets in terms of geography and products. By conducting business online, SMEs in developing countries can better develop image of the country (**OECD**). It has been demonstrated in the literature that the adoption of ICTs in general and E-business in particular leads to reduction in communication costs and promotes efficient electronic markets.

The present study reveals the important factors affecting the adoption and use of Internet and E-business technologies as dealing in exports, possibility to access new markets and demanding customers/ suppliers. E-commerce enables SMEs to be more responsive to and interact with customer needs (IDB-ADB) and it enlarges geographical markets. Santarelli and D'Altri; David and Wilson; Taylor and Murphy observed the factors for the adoption of E-commerce as penetration into new markets; compete with larger companies, faster operation and dealing in exports. The rate of diffusion of new technologies is positively related to the level of competitive activity. A competitive environment is more likely to lead a firm to investing in Information and Communication Technologies (ICT), as a way to strengthen performance and survive than a more sheltered environment. Ghosh provided several examples of US companies that adopted E-commerce because of competitive pressures. Survey information on the barriers to Internet commerce provides further insights. These suggest that legal uncertainties (uncertainty overpayments, contracts, terms of delivery and guarantees) remain important in all the four districts.

The research studies show that the main barriers/ difficulties in the adoption of Ebusiness technologies are fears and concerns over security, Government policies, reluctance to use new systems by employees and low use by customers/suppliers in the four districts. The results support the views of various researchers that have been done in the same field. The study conducted by **Wymer and Regan and Seyal et al** which revealed that Government policy as an important barrier to EEIT (E-commerce Enabled Internet technology) use. Common barriers for SMEs include lack of skilled personnel, security concerns and reliability of E-commerce system and legal framework (**OECD**; **Oliver and Damaskopoulos).** Major inhibitors to implementation include the low customer's use of E-commerce, uncertainty of the financial benefits, technical skills, small size; high costs (**Bowden et al; Wymer and Regan**). The major barriers in all the clusters confirmed the results of previous researches that security concerns including legal issue, privacy etc., (**Ivis and Anthony; Santarelli and D'Altri**), difficulties in implementation, lack of skills/expertise (**Adi et al; Taylor and Murphy**) uncertainties regarding the costs and benefits of E-commerce, lack of information and education, low use by customers (**Barsaukaus and Sarapovas; Cloete et al**).

	Faridabad	Gurgaon	Ambala	Panipat
Main Barriers in the Adoption of E- business	Fears and concerns over security	Insufficient education about implementation	Fears and concerns over security	Low use by customers/ suppliers
	Government Policies	Low use by customers/ suppliers	Reluctance to use new system by employees	Reluctance to use new system by employees
	Low use by customers/su ppliers	Reluctance to use new system by employees	Low use by customers/ suppliers	Government policies
	Reluctance to use new systems	Organization system/ culture	Insufficient education about implementation	Insufficient education about implementation

**Table 6.3 Main Barriers in the Adoption of E-business** 

The barriers have been presented in table 6.3 on the basis of rank given by the industries in selected four districts. E-business is considered as a value for money by most of the respondents. For small firms to adopt E-business and E-commerce strategies and tools, benefits must outweigh investment and maintenance costs (**OECD**).

The results show that there is a considerable contribution of E-business to net profits. The opinions of experts also suggests that the adoption of E-business technologies by SMEs is totally relevant in this age of globalization but confirms medium to low level of exposure of SMEs to E-business technologies.

## HYPOTHESES TESTING

Following hypotheses have been found and tested to examine the adoption pattern of E-business technology in each districts.

# H1: There is a positive relationship between size of enterprise and the use of Ebusiness technologies.

The size of the firm has emerged significant in influencing the degree of adoption of Internet and communication technologies.

The hypotheses have been discussed by dividing it into two sub-parts.

# H1a: There is a positive relationship between capital employed and the adoption of new technologies.

The above mentioned hypothesis has been tested by applying one way ANOVA. The results show that the size of a firm appears to be a determining factor in the rate of E-commerce adoption and the resulting benefits that firms are able to realize (Noce and Peters; Makipaa). The size of the firm enable SMEs to be more adaptable and responsive to changing condition and to benefit from the speed and flexibility that electronic commerce offers (Stockdale and Standing; Dholakia and Kshetri). The findings show that the industries which have capital investment above Rs. 5 crore have the highest mean score that shows its intensity towards adoption of Internet and E-business technologies.

# H1b: There is a positive relationship between the sales turnover and the adoption of Internet technologies.

The results of the study indicate that the intensity of the adoption of ICTs is positively correlated with the sales turnover (Lal). The study reveals that the

firms which have sale turnover above Rs. 2 crore adopt Internet technologies more extensively than firms with low sales turnover.

The size of operation in terms of sales turnover and capital employed influenced the adoption of ICTs (**David and Vladica**).

Small firms are less likely to have a web presence than larger firms in general (Gantt and Earl). Beveren and Thomson and Parhi pointed out that the most cited reasons for E-commerce adoption tend to be those based upon the company's size and their perceived importance of E-commerce to their business purpose.

# H2: There is a positive relationship between the export ratio and the adoption of Internet technologies.

There is an evidence of a relationship between the adoption and use of Internet technologies and SMEs export ratio. Export intensity influenced the degree of adoption of Internet technologies. It is imperative for SMEs to adopt new technologies so that they can incorporate the changes in products without much reconfiguring production processes to make themselves more competitive in the world market (**Oyelaran-Oyeyinka and Lal**). Export sales growth is significantly higher among the firms with high adoption of ICT (**Mostafa et al**). The present study confirms with results given by **Hasnu and Amjad** that the small enterprises engaged in exports adopt E-business technologies more than the other hypothesis was considered. The study concludes that industries with more export intensity tend to adopt and use more Internet and E-business technologies to be internationally competitive.

# H3: There is a positive relationship between the age of owners/ managers and the adoption of E-business technologies.

The findings of the study support the hypothesis that age and experience of owners/ managers is the most important factor governing successful ICT adoption (**Palvia and Palvia and Windrum and Berranger**). The owners/managers who come in age group of 25-34 and 35-44, use and adopt E-business technologies at a high level. They use their websites more extensively as a promotional tool to present, publicize and promote their firm and their range of products (**Mostafa et al**).

Young managers/owners are more open to competitive environment and do not hesitate in using complex E-business technologies even to face the challenges of external environment. **Palvia and Palvia** also revealed that age of owners/CEO is a determining factor in the adoption and use of Internet technologies. Young entrepreneurs manage their websites more effectively and efficiently. Neither technical qualification nor degree/higher university qualification are statistically significant. There is an evidence of relationship between the adoption of Internet technologies and age of owners/managers (**Windrum and Berranger**).

#### CONCLUSION

E-business has changed the dynamics of business and SMEs are not immune to its impacts. The firms started adopting new technologies with the liberalisation of Indian economy in 1991. Firms might have adopted ICTs due to competitive pressures from MNCs that were allowed to enter into the Indian market in 1991 (Lal). They appear to be receiving some benefit from E-commerce and they recognise the importance of E-commerce to their organisation survival (Lomerson et al). There are a number of factors that determine the adoption of E-business technologies by the SMEs. The size of a firm, their export intensity, age of managers/owners are significant factors that affect the adoption and use of Internet technologies.

The literature review suggests that the firms adopting ICT do perform better and it changes the business operations as well as customers/supplier relationship (Hasnu and Amjad). The study has found that the application of the Internet and other related network technologies promises significant returns to SMEs (Azumah et al). The lack of computer literacy of the owner and a lack of knowledge on how to use the technology results in the business being less likely to adopt E-commerce. Akkeren and Cavaye have found the main inhibitor to E-commerce adoption amongst SMEs as being the low use of E-commerce by their main customers and suppliers and concern about security aspects. E-commerce has been acknowledged as a tool for small businesses to trade and compete globally. It allows small firms to

sell directly into global markets. E-commerce is changing the way organisation interacts with customers, suppliers and other business stakeholders.

The study has examined that use and adoption of Internet and E-business technologies depend upon various factors like size of enterprise, exports intensity of the firm and age of owners/managers. It has been observed that it takes time to adapt to Information and Communication Technologies e.g., in changing organisational set ups and worker specific skills. Firms that adopted network technologies several years ago like large firms, have already been able to make the technology work, whereas, more recent adopters are still adapting their organisation, management or skills.

It is well known that survival of SMEs is very crucial for Indian economy. Any adverse impact on the growth of firms will have serious implications on the employment and foreign trade. It is suggested that Government needs to provide basic and technological infrastructure to SMEs without which firms cannot use ICTs effectively. And without adoption of appropriate ICTs firms may not remain competitive in the era of liberalisation and globalisation. (Lal, Kaushalesh).

#### RECOMMENDATIONS

Today, electronic commerce is becoming increasingly imperative for companies of any size aiming at improving their competitiveness in a constantly changing market, since its impact is not limited to economic transaction but can significantly influence both organisational and strategic issues (**Tagliavini et al**). SMEs benefited by adopting ICT in their operation enabling them to communicate quickly, increase productivity, develop new business opportunities and connect to global network.

E-business is opening up new opportunities for entrepreneurship whereas, in the early stages of the commercial Internet, the main focus is on investing in ICT infrastructure; the challenge now is to use the Internet as a new business tool. The research studies show that getting into E-business remains a difficult step for many SMEs. It requires substantial investment, Government support, critical technical and managerial skills and risks.

Based on the observations of the study the following recommendations are proposed.

- SMEs need institutional support for their survival in the era of globalisation. The Government of India has to take initiative for providing uninterrupted utility services so that SMEs can become more competitive in international markets. Government can have significant effect on adoption rates of Ecommerce by implementing various aid packages and incentives scheme. This has been the case to a greater degree in Singapore, South Korea, China and Taiwan. The role of Government is essential in promoting E-business to SMEs in emerging economies. The Government should take the initiative in providing infrastructure and subsidies, removing barriers to E-business adoption by SMEs and facilitating access to information and the global marketplace for SMEs. Policy makers have to be prepared to invest time and political capital in meeting these challenges.
- The business environment needs to be improved. This includes having environment that provides access to finances, helps workers acquire the skills they need in a rapidly changing global environment and promotes good management practices.
- There should be facility of providing E-awareness and the provision of training and skill to SMEs. Managers also need to be trained on IT skills through workshops and seminars to develop their technical abilities. Ebusiness technologies are closely linked to the ability of firms to innovate, i.e., introduce new products, services, business processes and applications. To strengthen innovation, SMEs need to frame business policy that gives priority to fundamental research and promotes the flow of knowledge.
- E-business technologies should be implemented in a phased manner. It should move from a simple commerce to E-commerce and then to Ebusiness. SMEs should follow the strategy of gradual adoption of Ebusiness and Internet technologies i.e., gradual shifting from the basic technologies to advanced and sophisticated technologies. It has been

observed that the adoption of E-commerce practices should be in progression and sophisticated technologies are unlikely to be adopted before those at the entry level have been successfully adopted. These entry-level activities provide the necessary technological infrastructure from which more sophisticated E-commerce activities can be developed.

• Security and trust need to be boosted. Government should concentrate on making legal policy support for the E-commerce transaction by strengthening cyber laws and improving security system. The present study shows that SMEs resist adopting Internet technologies because there is no strong and sound legal base for Internet technologies. So Government should take necessary steps to strengthen legal framework for the E-business transactions.

It is evident from the findings of the study that Government needs to provide marketing support to SMEs and also proactive programmes and policies for providing international quality products by SMEs. This is imperative for existence of SMEs in the domestic market in the era of globalisation. The Government should take action in facilitating SMEs with loan for investment in Information and Communication Technology (ICT) and intangible assets (software, training and introduction of Internet and E-business practices) so that SMEs can take advantage of Internet technologies in their business transactions.

## **SCOPE FOR FUTURE RESEARCH**

Further research in various areas of E-commerce will provide useful information to businesses planning to adopt E-commerce. The findings of the study investigated the adoption pattern of E-business and Internet technologies in the four districts of Haryana. The generalisability of the present results could be further confirmed by replication of the study in other states and other industries as well.

Various performance indicators can be studied to find out the impact of Ebusiness and Internet technologies on the performance of SMEs like on rate of return, sales etc. A comparison of impact of E-business on large industries and small industries can be examined so that size factor can be determined. An examination of business-tobusiness E-commerce and new supply chain relationships between SMEs and large firms that are facilitated through E-commerce would provide important guidance for SMEs in their adoption decision.

Studies to determine best practices and examples of success stories can be used to assist SMEs in their adoption of E-commerce.

Future research can further extend the scope of the present study to other industries as well as geographical domains.