CHAPTER 1
INTRODUCTION TO THE STUDY

1.1 GENERAL BACKGROUND

Information Communication Technology (ICT) is becoming increasingly important for competitiveness as institutes face challenges of dynamic competition unleashed by globalization. To nurture students, it is important to create a conducive environment within the institutes. Hence, there is a need to address the issue of how to create learning environment. The empirical research on the supportive environment for learning is limited both in volume and scope; especially in Distance Education context. Thus, the need to understand the major antecedents of supportive environment and their dynamics for ICT is important.

An introduction to the journal is presented in which the editor discusses an article regarding the electronic-learning approach in Palestine’s secondary education by Khitam Shraim and Zuheir Khlaif, article regarding the influence of cultural barriers and language to the introduction of information and communication technology (ICT) in the classroom by Greta Björk Gudmundsdottir, and article on the role of ICTs in providing the needs for special education in Ghana by Godfred Bonnah Nkansah and Tim Unwin (Assar; Amrani and Watson, 2010).

The role of institutional flexibility has been emphasized to attain learning revitalization of the institutes to gain competitive advantage (Volberda, 1998; Sushil, 2006).

While students are glorified, one cannot ignore the fact that a large number of students fail. Poor management decisions could be the major cause of business failure. Small institutes have limited resources and little margin for error. Barret and Weinstein (1998) proposed that larger institutes have resources and reputation to offset occasional lapses. The challenge for larger institutes is to simulate the positive attributes of smaller learning institutes. This can be facilitated by some positive attributes exhibited by these institutes as outlined here. The larger institutes can afford to take greater absolute risks. They have more aggregate business
knowledge and can undertake activities of which the smaller, learning institute may not be capable. Larger institutes may have an edge in education in terms of resources including well-paid scientists and researchers, support staff, modern facilities and equipments and extensive research and development. These institutes are big enough to cope with the risks of education and can finance an array of challenging projects.

The literature regarding ICT and students' behaviors associated with its successful use continues to grow. The purpose of this learning is to use the results of conceptual and empirical ICT research to understand the antecedents to students' learning behavior, and the ICT outcomes resulting from it. The research suggests that supportive environment of the institutes is strongly linked to success of ICT. Many authors have emphasized on the relationship of role and ICT (Mathur and Madhu, 2012). However, there are some other antecedents causing students to behave intelligently, which have not been extensively specified. The current research is an attempt to build upon the ICT model to increase the understanding of students' learning behavior and how to sustain it. Effective learning behavior by students is a necessary step towards achieving various institutional goals. This study examines the key supportive role of ICT by developing upon the previous learning (Gudmundsdottir, 2010).

1.2 SCENARIO OF DISTANCE EDUCATION

The government has gradually liberalized industrial and trade policies and Distance Education markets have become open to competition to a large extent. However, policies have not helped Distance Education institutes in acquiring competitive capabilities. They still have a long way to gain the required strength for developing products for global markets. To gain their competitive advantage, they must learn to revitalize the learning renaissance through ICT.

It is important to understand how cultural complexity with special emphasis on language can affect the divide in institutes that already have material access to ICT. The study is based on field learning in colleges in institutes in India. The learners answered a questionnaire regarding their ICT use and skills, and interviews were conducted with learners, teachers, and principals. In conclusion, it is argued that the challenges of language in Indian colleges can exacerbate or maintain the digital divide among learners who are already disadvantaged due to a range of social inequalities. For learners to fully master the
use of ICT in today's global knowledge society, it needs to be put in a local context, which includes use in a familiar language. Moreover, it is suggested that greater opportunities for teacher training are needed in order to enhance culturally sensitive and appropriate ICT integration based on local needs and capacity (Gudmundsdottir, 2010).

1.3 NEED FOR STUDYING ICT IN DISTANCE EDUCATION

Many authors have emphasized the importance of ICT as a growth strategy and an effective means for achieving competitive advantage. Lack of compelling empirical evidence on the contributions of ICT to institutional performance raised concerns about students' needs (Zahra, 1991). Many authors attempted to fill this gap in literature, but still a lot of substance and process of ICT is yet to be learnt (Covin and Slevin, 1991; Zahra and Covin, 1995). Some researchers have emphasized on implementation of ICT for the purpose of profitability (Granda, Pelayo Nuño, Suárez and Pérez, 2013). ICT and proactive, learning behavior through which it is practiced is used in established institutes for a host of purposes in addition to education, including increased profitability (Young-Ju Joo, Na-Yeon Yoo, Hyun-Nam Seol, 2012). ICT centers on re-energizing and enhancing the ability of an institute to acquire innovative skills and capabilities.

Learning behavior continues to be seen as an important path to competitive advantage and improved performance in institutes of all types and sizes. Some researchers believe that institutes failing to effectively use learning actions in the fast-paced and complex global economy reduce the probability of successful competition in their chosen markets. Learning behavior does not occur in a vacuum; rather, it takes place within the context of the institute's full array of actions (Dess et al., 1997). Establishing a supportive environment in large, established institutes that serves as an antecedent to learning behavior is challenging and requires appropriate decisions and actions (Sathe, 1985).

1.4 OBJECTIVES OF THE STUDY

This study aims at studying ICT within the institutes and to evolve a model for implementing learning behavior within the institutes. The broad objectives of the study are as follows:

To understand the antecedents for ICT practice.
To identify the relationship between the antecedents and the outcomes of ICT.

To evolve a framework of learning for implementing creating ICT within the institutes.

1.5 SCOPE OF THE STUDY

The scope of the research is limited to Delhi/NCR region. It does not include other strategies such as mergers and acquisitions and joint ventures for implementing ICT. It also does not include the external environmental factors such as economy, suppliers, competitors and government regulations. The basic underlying assumption is that the external environment is same for all the institutes, as the study has been undertaken in the Distance Education context. The individual level ICT outcomes including promotion, reassignment within institutes and development of political skills is beyond the scope of the research. The individual characteristics including individual risk-taking propensity, desire for autonomy, need for achievement, goal orientation and supportive locus of control have not been included in the present scope of research. The study covers the institutes in education sector.

1.6 OVERALL METHODOLOGY OF THE STUDY

The thesis is based on the empirical research on role of ICT in Distance Education context. The study has been divided into three parts, i.e. pilot study, questionnaire based survey study and case studies.

The pilot study of select institutes has been carried out to identify the CE implementation issues relevant to supportive environment. Number of macro and micro hypotheses has been evolved, based on the conceptual framework of learning, which have been statistically investigated/tested on the basis of a questionnaire-based survey conducted in institutes selected through snowball random sampling. The unit of analysis for the study is the institute. The data has been analyzed statistically using univariate, bivariate and multivariate analyses techniques. Based on the results so obtained, a ICT framework of learning has been evolved to understand its impact on the ICT outcomes. The pilot study also includes the case studies of four institutes, two in manufacturing and two in services sectors, undertaken to understand the micro issues related to implementation of ICT.
1.7 ORGANISATION OF THE THESIS

The thesis is divided into six chapters. The brief introduction of each chapter is given as follows:

**Chapter one** gives introduction to the study. This consists of the background of the study and its relation to the present education sectors. The research problem, objectives, issues and scope are defined. The overall methodology of the study has been described. In the end, organization of the thesis is outlined in brief.

**Chapter two** reviews the literature related to the research topic. The literature review has covered most of the issues related to the ICT such as institutional structures, vision, risk-taking, management support, institutional flexible boundary, learning discretion, intelligence generation, intelligence dissemination and time availability. The review of literature leads to identification of the key role for ICT outcomes.

**Chapter three** provides the research design of the study. The variables identified from the issues have been clustered into two macro variables; viz. role and ICT institutional outcomes, and a conceptual framework of learning showing relationship among them is presented. The framework of learning assumes that the role lead to the ICT institutional outcomes. The ICT framework of learning is prepared for the purpose of empirical study considering only quantitative variables. The hypotheses are formulated on the basis of ICT framework of learning and are proven by the questionnaire survey.

**Chapter four** deals with the survey of the CE practices among institutes. The systematic approach of questionnaire formulation and validation is followed before reaching to the field for actual survey. The univariate statistical analysis has been explained. The application of cross case analysis has been done to compare the education sectors.

**Chapter five** deals with validation of the conceptual model through hypotheses testing. The data obtained through questionnaire survey has been investigated through bivariate analysis and multivariate analysis to investigate the relationship(s) between the dependent and independent variables and to test the hypotheses. The correlation and regression analysis have been carried out for proving the hypotheses. Based on the results of the survey study,
dominant ICT practices for success in the supportive learning environment have been identified, and a ICT framework of learning for distance education has been presented.

**Chapter six** explains the synthesis of the study. This chapter is aimed to organize synthesis of role and ICT outcomes in terms of a guiding framework of learning. The interpretation of the ICT model in the form of interpretive matrix has also been presented.

This chapter also discusses the learning and conclusions on ICT transformation and role in education sector. Conclusions drawn from the study, implications for researchers and students, significant research contributions, recommendations and limitations of the study are outlined.

1.8 **CONCLUDING REMARKS**

Student students provides effective framework of learning for integrating the expertise, resources, processes and management systems for learning revitalization of an institute. The learning revitalization helps the institute to become innovative which is a vital blood for the survival and growth of an institute.

With setting of the research objectives in a clear manner and defining the relevant issues, the scope of the research problem has become clear and well focused. The study has been designed to understand the antecedents of implementing ICT and evolve a framework of learning for implementing distance education within the institutes.