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Research Article

User's Attitude towards ICT in Dhaka

Computer Science

Keywords: Information and communication technology, Transaction cost, speed, attitude, profit.

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Abstract

A study which is entitled 'User's attitude towards ICT in Dhaka' has been conducted. In Dhaka, Bangladesh both male and female are working hand in hand. Users of ICT have been increasing rapidly here. This study adopts with descriptive in nature. Both primary and secondary data has been used for the study. Open ended questionnaire has been followed for the study. The study reveals that users have more positive attitude towards ICT because it reduces cost, saves time, reduces human resources, improves job performances, increases customer satisfaction, improves competitiveness and profit.

1. Introduction

ICT covers all forms of computer and communications equipment and software used to create, design, store, transmit, interprets and manipulates information in its various formats. Personal computers, laptops, tablets, mobile phones, transport systems, televisions, and network technologies are just some examples of the diverse array of Information and communication technology tools. http://www.uq.edu.au/ict/what-is-ict

Information and communication technology (ICT) and e-business applications provide many benefits across a wide range of intra- and inter-firm business processes and transactions. ICT applications improve information and knowledge management inside the firm and can reduce transaction costs and increase the speed and reliability of transactions for both business-to-business (B2B) and business-to-consumer (B2C) transactions. In addition, they are effective tools for improving external communications and quality of services for established and new customers. Despite these advantages, rapid growth in businesses' purchases and sales over the Internet has yet to materialize. E-commerce is increasing but still accounts for a relatively small share of total commerce. Broad definitions of e-commerce (including established EDI as well as Internet transactions) suggest that in 2000 total on-line transactions were generally 10% or less of total business sector sales and are mainly business-to-business, and business-to-consumer sales are even lower, generally less than 2% of the total retail transactions. On-line transactions are mainly B2B and domestic, rather than B2C or cross-border. The situation is similar for small and medium-sized enterprises (SMEs), although they lag behind larger firms in Internet transactions. For small firms to adopt e-business and e-commerce strategies and tools, benefits must outweigh investment and maintenance costs. Commercial considerations and potential returns drive adoption. Beyond a certain level of connectivity (PC, Internet access, on-line information or marketing), not all SMEs will necessarily "catch up" with large firms, simply because e-commerce may not bring large benefits and SMEs will stay with traditional business processes.

Other barriers have been seen to be the availability of ICT competencies within the firm, and availability and cost of appropriate interoperable small-firm systems, network infrastructure and Internet-related support services. Lack of reliable trust and redress systems and cross-country legal and regulatory differences also impede cross-border transactions. Policies that will affect the adoption and use of e-business strategies include those designed to expand and improve the quality of network infrastructure and legal and regulatory environment, foster technological diffusion and create a favorable business environment. Beyond these general framework policies, specific policies for SMEs have focused on ICT and e-business awareness programs, business consultation services and employee and management training to enhance ICT and managerial skills. Policies have shifted over time as firms and economies have moved from concentrating on readiness and connectivity, to diffusion and use, and are moving towards mature e-business strategies which blend broad policies for the business environment with polices for particular areas such as IPRs and competition. Policy has moved beyond a narrow concept of e-commerce (on-line transactions) to a wider view of e-business integration of internal and external processes, based on technology neutrality. Policy initiatives in some cases aim at facilitating SME participation in product and sector value chains and providing them with information to assess the opportunities and costs of e-business. However there are no one-size-fits all approach to policy and the policy mix and priorities will depend on national circumstances (leading or lagging countries) and sect oral distribution of economic activity, as well as size factors. SMEs have gradually recognized the positive impact that ICTs, such as computer terminals, e-mail and the Internet and their applications can have on their business. In advanced OECD countries, most small firms, including micro-enterprises with fewer than ten employees, now have at least one computer terminal, usually with Internet access. Many types of business software can improve information and knowledge management within the firm, leading to more efficient business processes and better firm performance. Communication via e-mail and the Internet can help to improve external communication, in either B2C or B2B contexts, and may reduce transaction costs, increase transaction speed and reliability, and extract maximum value from each transaction in the value chain. ICT and e-commerce offer benefits for a wide range of business processes. At firm level, ICT and its applications can make communication within the firm faster and make the management of the firm's resources more efficient. Seamless transfer of information through shared electronic files and networked computers increases the efficiency of business processes such as documentation, data processing and other back-office functions (*e.g.* organizing incoming orders and preparing invoices). Increasingly sophisticated ICT applications such as KMS (Knowledge Management System) and ERP (Enterprise Resource Planning) allow firms to store share and use their acquired knowledge and know-how. For example, customer databases with a history of client-specific correspondence help managers and employees to respond more effectively to customers. A company-wide electronic data source aims to disseminate employees' professional experience, for example tips for winning a contract, from which others in the firm can learn (Box 1). At inter-firm level, the Internet and e-commerce have great potential for reducing transaction costs and increasing the speed and reliability of transactions. They can also reduce inefficiencies resulting from lack of co-ordination between firms in the value chain.

Internet-based B2B interaction and real-time communication can reduce information asymmetries between buyers and suppliers and build closer relationships among trading partners (Moodley, 2002).

In fact, adopters of e-commerce tend reduce transaction costs, increase transaction speed and reliability, and extract maximum value from transactions in their value chains (OECD, 2002a).

In the B2C context, the Internet and e-commerce can be effective tools for better communication. A corporate Web site that provides information on products, services or technologies can enhance the quality of a firm's services to customers and attract new customers. By collecting information on customers' needs, it can be used for product development or innovation. A home page with a direct link to the corporate e-mail account provides an easy-to-access contact point. For those in different time zones, 24-hour availability of the contact is especially attractive. Euros tat's E-commerce Pilot Survey shows that SMEs' motives for Internet commerce include reaching new/more customers, geographic expansion of market and improvement of service quality. In SMEs, there is often insufficient sharing of business information between managers and employees and among employees in part because the personnel's daily routine tends to be extremely busy. To improve a firm's responsiveness to customers, client feedback and information on employees' professional experience, such as know-how for winning a contract, can be electronically stored and thus available to be shared within the company. Some SMEs have exploited ICT effectively to improve internal communications and have improved their reputation through swift responses to customers' complaints and an ability to capture clients' (hidden) needs (METI, 2001).

A Japanese company with 40 employees, which previously recorded sales representatives' field experience in written reports, has developed a marketing database, which allows every sales person to access general information about customers and previous correspondence concerning their complaints. Another firm with 40 employees has established a company-wide intranet with an on-line BBS (bulletin board system) which all employees can access and in which customers' claims and inquiries are categorized and updated daily. These companies' intranet and electronically integrated customer database not only provide the latest client-related information, which better equips managers and employees for responding to customer inquiries, but also make business processes and knowledge accumulation more efficient. All personnel can share valuable business knowledge and experience, once entered into the office computer, simultaneously. This is very different from paper records, which can normally only be consulted by one person at a time and must be photocopied for wider circulation. Such benefits can be greater for SMEs than for larger firms. Internet and e-commerce enable SMEs that remain in local and regional markets because of a lack of information and marketing capability to gain access to new customers and to expand their markets geographically. Internet technology makes it possible to transmit order information seamlessly between different systems. It can therefore provide small players with an opportunity to join and compete in a wide variety of supply chains, including those previously inaccessible because of the use of costly closed EDI networks (electronic data interchange).

Through their Web site, SMEs can attract potential investors and persons seeking employment from abroad by providing information on their technologies and financial positions (e.g. balance sheets). Some small firms with leading-edge technologies and/or unique products and an on-line presence have received substantial capital from larger firms (Sakai, 2002).

Internet can convey the ideas of knowledge-based small businesses. Extensive use of ICT can allow micro-enterprises with ideas and technologies to remain small and profitable, and some micro-enterprises have generated substantial global sales by exploiting their intellectual property over the Internet. Despite the potential benefits of ICT and e-commerce, there is debate about whether and how their adoption improves firm performance. Use of and investment in ICT requires complementary investments in skills, organization and innovation and investment and change entails risks and costs as well as bringing potential benefits. While many studies point to the possibility of market expansion as a major benefit for SMEs, larger businesses can also expand into areas in which SMEs dominated. Moreover, it is not easy for SMEs to implement and operate an on-line business, as this involves complementary costs for training and organizational changes as well as direct costs of investing in hardware and software solutions. While many studies provide evidence of the positive effects of ICT adoption on firm performance, others have shown no relation between computer use and firm performance. A study of Canadian manufacturing establishments (plants) with ten or more employees (excluding food processing establishments) drawn from Statistics Canada's Business Register, shows that those with high productivity growth are more likely to be using greater numbers of advanced ICTs (Baldwin, 2002).

Between 1988 and 1997, advanced technology users grew more in terms of both productivity and profitability than non-ICT users, especially when they used communication technologies, including company-wide and/or inter-company computer networks. Recent OECD analysis shows the impacts of ICTs and e-business strategies on firm performance are positive overall, but that ICTs are not a panacea in themselves. The OECD's Electronic Commerce Business Impacts Project (EBIP) studied a set of 220 early successful adopters of e-business strategies in a range of established sectors in eleven different countries. This study showed the positive impacts of e-commerce on their turnover and profitability and to a lesser extent on employment, most notably when e-commerce is part of larger business strategies of firms (OECD, 2002a). Further work by researchers in 13 OECD countries based on large scale statistical surveys provides evidence that the use of ICT can contribute to improved firm performance, in terms of increased market share, expanded product range, customized products and better response to client demand. Moreover, it indicates that ICT may help reduce inefficiency in the use of capital and labor, *e.g.* by reducing inventories, and that the more customers or firms are connected to the network, the greater the benefits (spillover effects). However, the analysis shows that complementary investments in skills, organizational change and innovation are key to making ICT work, and that the use of ICT affects firm performance primarily when accompanied by other changes and investments and that without these, the economic impact of ICT may be limited. The use of ICT by SMEs is increasingly common according to survey for OECD countries. A Euro stat survey on e-commerce shows that nine out of ten SMEs were equipped with computers at the end

of 2000/early 2001. Internet access is also commonplace among SMEs. While Internet penetration is generally higher in larger enterprises, the gap between larger firms and SMEs is narrowing. In most OECD countries, Internet penetration rates for medium-sized firms (50-249 employees) are the same and sometimes higher than for larger firms (more than 250 employees), with penetration rates of over 80%, although there are exceptions. Small firms (10-49 employees) have a slightly lower penetration rate, between 60% and 90%. Even in micro-enterprises, the penetration rate is nearly 60% in most countries and in Denmark 85% have Internet access. A study based on the 1998 US Survey of Small Business Finances (SSBF), which covers firms with fewer than 500 employees, suggests that firm performance, as measured by profit or sales, is not associated with computer use (Bitler, 2001).

Differences in Internet access in the 21 countries for which data are available seem to be greater for smaller enterprises. The Nordic countries have a more homogeneous distribution across firms of different sizes, while in countries with lower Internet penetration (Portugal, Greece, Mexico) there are larger dispersions across firms in different size classes (OECD, 2002c).

Small company attitude towards ICT based solutions: some key-elements to improve it. In this paper the authors illustrate some research results concerning the attitude of small companies towards ICT based solutions (specifically Distance Communication, Training and Consultancy); in addition, authors introduce some key-elements to overtake the obstacles to introducing ICT in small companies for new business processes; amongst others, the study highlights the need for training about technological innovation as well as about organizational and cultural changes that must occur within a company(Allegra, 2003).

Information and Communication Technologies (ICT) offer enterprises a wide range of possibilities for improving their competitiveness: they provide mechanisms for getting access to new market opportunities and specialized information services such as distance consulting, continuous training, new advisory modes, etc.; organizations can exchange real-time information and build closer relationships with their customers, suppliers and business partners; immediate customer feedback allows companies to react fast to changing customer demands and recognizing new market niches. This means that organizations that are able to exploit the potentials offered by ICT can handle innovative processes, such as Supply Chain Management, Customer Relationship Management, Knowledge Management, more effectively. Small and medium sized Enterprises in Italy, a lot of cases they are used only for basic functionalities, and not to improve internal and external communication or to activate new information services. In particular, concerning the use of computers and the Internet in SMEs, statistics for 2001 (Euro stat, 2002) reported that 86.4% of firms in Italy use information technologies; of these, 84% are connected to the Internet, mainly by means of ISDN. Of course, the author distinguishes among the different uses of Internet, in relation to the size and the activity of the enterprise. While the percentage of enterprises with their own web site is about 40.1% of computerized enterprises (Euro stat, 2002), the author emphasizes that the web site is mainly used to describe the firm and the products/activities and it is rarely used to manage the relationships with customers; in fact, only one in twenty sites also offers the

opportunity of interacting and communicating with the enterprise. According to these statistics it emerges that, up to now, the Internet has been little used by Italian enterprises to activate innovative processes of management. Another important factor influencing the use ICT is the size of the enterprise; in fact, statistics show that in enterprises with more than 200 employees an effective use of information and communication tools is more frequent (Assintel, 2001).

The Neeps network involved a diverse range of professionals: human resource development consultants, vocational training agents, research and educational institutions.

Some of the partners had experiences of introducing and using ICT in SMEs, and established, in the context of the Neeps partnership, a Focus Group aimed at investigating the perceived advantages and disadvantages of using ICT in SMEs, as well as the barriers to entrepreneurs/managers/workers utilizing these technologies. With this aim, the Focus Group conducted an international survey among the SMEs involved in the national ADAPT projects through a three-page questionnaire to collect necessary data, containing 18 Likert-scale statements. As far as the perceived benefits are concerned, the improvement of information flow and communication both inside the enterprise and towards the external world is considered a benefit by almost all of the respondents. High consideration has also been given to the creation of competitive advantage provided by ICT, to the reduction of time and space constraints and to the improvement of services to existing customers and suppliers. There were positive responses, though with less enthusiasm than to the previous issues, about the growth of external prestige in the market, the increase in profitability and the reduction of existing core costs. Finally, the increment of motivation and/or satisfaction for employees is perceived as a benefit by 42% of interviewed people, 47% are not able to answer and 11% do not consider it as a real benefit. The second main goal of the survey was to assess the importance of some issues perceived as obstacles to using ICT in SMEs. Surprisingly, the results suggest that some of the barriers expected by the research team were not perceived as real difficulties by most respondents. In fact, internal corporate problems (e.g. board/staff/union resistance to issues) are not considered a real barrier by most of the interviewed people; similar conclusions can be drawn about fears of ongoing changes and of bad investment; however, the people interviewed have expressed a more decisive opinion on the first issue then on the second one. On the other hand, the lack of initial capital and staff support for implementation and the lack of availability of training services and products (concerning both the technology and its application for enterprises) have been indicated as the main barriers. The first issue indeed indicates two different problems: lack of money coupled with staff support for implementation; however, by considering the second issue, the most important barrier seems to be the lack of training courses and support to use ICT solutions in SMEs. This is confirmed by other answers (Fulantelli, Allegra 2001).

The study shows that the lack of information and advice on relevant ICT solutions and benefits is still considered a major problem. Technologies for cooperation: the Supply Chain Partnership project.

The main objective of the Supply Chain Partnership project was to analyze the communication, social and technological obstacles to the implementation of effective Supply Chain Management (SCM) strategies in SMEs (Beamon, 1998). Specifically, the project investigated whether these obstacles depend mainly on the limited use of the potentials of ICT in SMEs, or if there are further and even more important elements that can seriously hinder the implementation of SCM. The project involved partners from three European countries: Germany, Great Britain and Italy. A common research methodology was agreed between all the partners: small samples of companies from two different industrial branches were selected in each country; through national workshops with the SMEs, each partner gathered information on the SCM strategies adopted in the selected industrial branches, in order to identify the main obstacles to the application of effective SCM strategies. Afterwards, three one-day training sessions were organized in the SMEs in order to overtake some of the obstacles identified in the workshops; a final national workshop was organized to assess the organizational changes (if any) in the companies related to the training sessions. Transnational meetings among the European partners were scheduled in-between the national workshops in order to compare the different European realities as well as to agree on the common methodological approach to the problem. In this paper, we focus on the results from the Italian situation, and specifically from two industrial districts located in Sicily that are highly representative of the industry in the southern part of Italy: the marble industry and the clothing industry. It should be said that common conclusions have been reached in Germany and, to some extent, in the UK. The project has shown different problems; firstly, micro-enterprises (enterprises having fewer than 10 employees, according to the Commission Recommendation of 3 April 1996 concerning the definition of small and medium-sized enterprises) and SMEs do not have full awareness about the potentials of the new technologies, even if the project has shown a very positive trend towards better results: for example, several entrepreneurs are aware that ICT can provide a powerful means for reducing the geographical distance between Sicily and the most industrialized part of the country and that can be extremely useful for fostering the development of SCM strategies. Moreover, in the industrial district that we have analyzed there are several approaches to the use of ICT and, of course, this is related to the different kinds of activities: in the clothing industries there is awareness that ICT, and in particular B2B solutions, can improve the effectiveness of communication with suppliers, improving in general the supply chain and their production. This positive attitude is greatly weakened by the fact that ICT-based solutions are still viewed with suspicion: financial transactions, electronic payments and privacy are perceived as the main obstacles to the diffusion of ICT solutions in SMEs. Another major obstacle is that SMEs undergo serious problems in introducing ICT into their organization processes: micro-enterprises and SMEs suffer from ICT skill-shortage problems and do not have the capabilities to perform the organizational changes that are necessary to activate ICT-based processes. The shift of the focus on the problems towards social factors rather than technological ones has become increasingly clear during the project: a systematic use of ICT for business is a direct consequence of trust and cooperation between SMEs. A common European outcome of the project has been that cooperation between SMEs in general seems to be a serious problem: cooperation is extremely limited, and usually it is aimed at

defining marketing consortia; actually, the cooperation at production level is still restricted to a very small number of enterprises. The lack of trust in other SMEs' capabilities is a serious obstacle to cooperation and, therefore, to the adoption of ICT- based solutions; the social factors underpinning the relational and communication interfaces between SMEs are the main obstacle to the boosting of SCM strategies: a systematic use of ICT for business is a direct consequence of trustiness and cooperation between SMEs (Fulantelli, Allegra, Vitrano 2001).

Technologies for distance training and consultancy: the SOLARE project In the SOLARE project we have developed an experience of Distance Consulting, an ICT-based approach to consultancy, which systematically provides companies with information, communication and training services in an effective way. The main objective of the SOLARE project was allowing a group of SMEs located in the inland areas of Sicily (Italy) to benefit from consulting services through an innovative on-line cooperative environment. Twenty enterprises were connected, through the Internet to a consulting center, to research and academic institutes, thus establishing the SOLARE laboratory. It is important to highlight that the involved enterprises were mainly family companies, not placed in any industrial district, working on traditional economic sectors and, finally, their use of ICT was restricted to PC's for accounting and administration purposes. The ICT based consulting approach in the SOLARE project has proved effective for the SMEs as well as for the consulting center. Most of the benefits are an immediate consequence of more general advantages from using ICT for information exchange and communication purposes. Firstly, the communication facilities activated in the SOLARE laboratory have dramatically reduced the need for face-to-face meetings and seminars and, at the same time, improved the communication mechanisms as a whole; as a consequence, entrepreneurs, company managers and consultants have cut down travel costs, keeping in touch with each other in a continuous way. In particular, through the asynchronous communication facilities in the SOLARE project, it was possible to schedule distance consulting activities in a very flexible way. A second important benefit of the SOLARE approach has been the possibility of providing consulting services in a continuous way: the set-up of Web-based informative areas has guaranteed that the consulting process keeps on also at the end of the face-to-face meetings, especially to support companies in putting into practice the concepts acquired at the meetings. In addition, thanks to the possibility of publishing information on-line, in an economic way, the consulting activity can be tailored to the need of a single enterprise or of a sector of enterprises much better than in traditional settings; in addition, ICT-based communication tools have been associated to each area, in such a way to provide SMEs with a direct communication channel with the consulting center on each specific topic. A side effect from using ICT to provide Distance Consulting services has been that the involved SMEs have developed awareness of e-commerce solutions as well as of the need to move towards a full integration into the emerging digital economy. Finally, it should be noted that effectiveness of the overall consulting process has been guaranteed by the availability of several technological solutions, according to the implementation of different consultancy models (Fulantelli, Allegra, Chiazzese 2000).

Concerning the obstacles to using ICT, it should be said that it was not easy to reach the objectives of the project, because SMEs, at the beginning of the project, were not used to considering the computer as a communication medium and they did not know its potentialities for the interaction inside and outside the enterprise. This factor implied that the initial motivation in the experiment of ICT for consulting services was low, even though the participation to the project was free and the involved enterprises had already used the services of the consultancy center in traditional ways; the solution for this problem has been the definition of training/consulting paths starting from the specific needs of the involved enterprises, avoiding to develop generic or theoretic, even though interesting, consulting materials, and organizing them according to a practical view.

Key elements to improve small company's awareness of ICT potentialities. According to the direct experiences reported in this paper, some key-elements to foster the introduction of ICT based solutions in small companies have been highlighted. Developing a full awareness of the huge potentials of ICT is the starting point for every attempt to introduce ICT-based processes in a company. Forcing the introduction of technology is one of the main reasons behind the failure of several attempts of the SMEs to become e-business organizations or simply to use ICT effectively for new services. The path to full awareness should move from introducing concrete and short-term benefits for the companies, followed by the presentation of more general and long-term advantages. Furthermore, by bearing in mind that the introduction of ICT in SMEs can bring a real modification in the way of working, the introduction of ICT-based processes should take into account the specific culture of the company: the background of the entrepreneur and/or the managers is important as well as their openness to innovation; we learned an important lesson about this in the SCP project, where the attempts to introduce ICT in the companies to improve communication with other companies failed because of a really weak social and cultural attitude to cooperation between companies. Another important aspect is that ICT-based solutions should be introduced gradually: sudden transformations risk failing against unaware and unready business organizations. A further fundamental element concerns adequate training and support. It is useful to stress that one of the main difficulty for SMEs in exploiting ICT potentials is the lack of awareness of the benefits to be derived coupled with little or no specific training on ICT (both at application and methodological levels). The smaller the enterprise, the greater this problem becomes, since most small companies are not using information technology for their activities (apart from specific accounting services, and little more). Consequently, several problems must be solved to make ICT simpler to use, reliable and well integrated in the enterprises activities. The adoption of continuous training solutions can play an important role in increasing the awareness of the huge potentialities of ICT for concrete situations; in this way employees, managers, entrepreneurs, can acquire a learning culture, integrating the training in their work activities and understanding in depth the potentialities of communication and information tools. In our experience a key factor to success was that the provider and organizer of training was a consultancy company, which knew the informative/training/updating needs of the companies, so finding, organizing and proposing just enough learning, to be very motivating and well integrated with other activities. To conclude, the proposed key-elements to bring ICT in a small company are

based on the central idea that the introduction of ICT-based solutions should be coupled with continuous training on both technological aspects as well as on the socio-relational and cultural changes that must occur inside the company. The need for training on technological aspects is a direct consequence of the ICT skill shortage problem; training on the socio-relational and cultural aspects is extremely important to develop awareness of the social implications of the introduction of new tools and methods of work and to perform the necessary organizational changes.

Research Gap

Various authors have been conducted different types of research on ICT. Within those 'attitude of small companies towards ICT', 'obstacles to using ICT' 'advantages and disadvantages of using ICT' are very important. Those studies are important to identify variables but it is not possible to know attitude of users towards ICT. This study titled 'user's attitude towards ICT in Dhaka' will be able to covers the lacks of aforesaid studies.

Research Questions

- Do demographic profiles influence to choose ICT?
- What benefits or attributes do users evaluates during the consumption of ICT?
- What are the attitudes of users towards benefits of ICT?
- Is it possible to make suggestions on the basis of findings?

2. Objectives of the study

Broad objective of the study is 'User's attitude towards ICT in Dhaka' and the specific objectives are:

- to find out demographic profiles that influence users' choice behavior;
- to find out users attitude towards benefits of ICT;
- to make suggestions on the basis of findings.

3. Methodology of the Study

3.1 Type of research

The study is descriptive in nature based on both primary and secondary data. Primary data have been collected from the respondents by using questionnaire method.

3.2 Sources of data

Both primary and secondary data has used for the study. Primary data has been collected directly from the respondents. The secondary data for the study is collected from different sources

such as technical and Trade journal, articles, news paper, magazines, internet, periodicals, books, reports, publications of associations related to mobile phone service phone users.

3.3 Questionnaire design and pretesting

This research adopts with open ended and close-ended questionnaire.

3.3.1. Sampling plan

3.3.2 Populations

Population of the study was defined here in terms of elements and unit. Elements are all users of ICT either business owner or service holder in Dhaka city. Unit is each individual users of ICT within the population.

3.3.4 Sample size

240 respondents have selected for interview.

3.3.5 Sampling method

Convenience sampling method was followed for the study.

3.3.6 Sampling Framework:

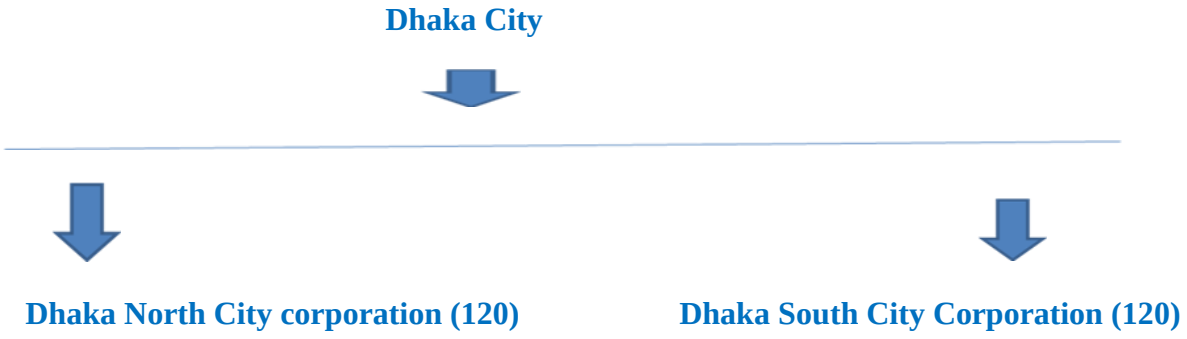

Figure: 1

4. Findings

Table: 1 shows that the highest numbers of respondents (50.83%) ages are 25-34 years and the lowest numbers of respondents (0.42%) ages are above 60 years. Table: 2 shows that the highest numbers of respondents (72-92%) are male and the lowest numbers of respondents (27.08%) are female.

Table: 3 shows that the highest numbers of respondents (70.00%) are Graduate and the lowest numbers of respondents (02.92%) are level educated.

Table: 4 shows that the highest number (39.58%) respondents' monthly income are TK20000-30000 and the lowest number (04.17%) respondents' income are above TK 80000.

Table: 5 shows that the highest number (57.32%) respondents' ICT experiences are on others and the lowest number (00.25%) of respondents' ICT experience is on MS Excel.

Table 6 shows that the highest number (37.50%) respondents are engaged with service industry and the lowest number (06.67%) respondents are engaged with others.

Table: 7 shows that the highest number 34.17% respondents' market position is slightly well and the lowest number 000% respondents' market position is extremely bad.

Where,

1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well
6 indicates quite well
7 indicates extremely well

Table: 8 shows that the highest number 33.33% respondents' last year revenue is slightly well and the lowest number 000% respondents' last year revenue is extremely bad.

Where,

1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well
6 indicates quite well
7 indicates extremely well

Table: 9 shows that the highest number 32.50% respondents' sales in last year is slightly well and the lowest number 00.42% respondents' sales in last year is extremely bad.
Where,

1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well

6 indicates quite well
7 indicates extremely well

Table: 10 shows that the highest number 23.75% respondents' profit in last year is slightly well and neither well nor bad is the lowest number 01.25% respondents' profit in last year extremely bad.

Where,

1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well
6 indicates quite well
7 indicates extremely well

Table: 11 shows that the highest number 23.33% respondents' expenditure in last year is slightly well and the lowest number 02.08% respondents' expenditure in last year extremely bad
Where,

1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well
6 indicates quite well
7 indicates extremely well

Table: 12 shows that the highest number of 25.83% respondents' annual turnover is 2000001-5000000 taka and the lowest number of 05.00% respondents' annual turnover is up to 200000 and 5000001-10000000 taka.
Table: 13 shows that 29.17% respondents make profit more than 5% but less than 10 % and the lowest number of respondents those are 000% make loss at least 10% on sales.

Table: 14 shows that 70.42% respondents do not get benefits from government and the lowest number of respondents those are 29.58% get benefits from government.

Table: 15 shows that 69.17% respondents do not get subsidies from government and the lowest number of respondents those are 30.83% get subsidies from government.

Table: 16 shows that the highest number of respondents utilizes ICT for document transfer and lowest number of respondents those are 05.96% utilizes ICT for interaction with government.

Table: 17 shows that 100% respondents have come from urban area.

Table:18 shows that 100% respondents do agree with ICT increases competitiveness.

Table: 19 shows that 100% respondents do agree with ICT improve job performances
Table: 20 shows that 100% respondents do agree with ICT saves time.

Table: 20 shows that 100% respondents do agree with ICT saves time.

Table: 21 shows that 100% respondents do agree with ICT reduce cost.

Table: 22 shows that 100% respondents do agree with ICT reduce human resources.

Table: 23 show that 100% respondents do agree with ICT increases profit.

Table: 24 shows that 100% respondents do agree with ICT improves customer satisfaction

5. Conclusion

This chapter provides theoretical, statistical and overall conclusions on the basis of findings of the study.

Theoretical Conclusion

Information and Communication Technologies (ICT) offer enterprises a wide range of possibilities for improving their competitiveness: they provide mechanisms for getting access to new market opportunities and specialized information services such as distance consulting, continuous training, new advisory modes, etc. organizations can exchange real-time information and build closer relationships with their customers, suppliers and business partners; immediate customer feedback allows companies to react fast to changing customer demands and recognizing new market niches. This means that organizations that are able to exploit the potentials offered by ICT can handle innovative processes, such as Supply Chain Management, Customer Relationship Management, Knowledge Management, more effectively. Users of ICT in Dhaka city have positive attitude because it reduces cost, saves time, improves competitiveness, improves job performances, and improves customer satisfaction and profit.

Statistical Conclusion

The study shows that the various ages' people, gender, income, occupation, religion, and educational people are using ICT. The users have greater positive attitude on the benefits of ICT.

Overall conclusion

It is hoped that the academic proponents and concerned professionals would accept the study outcomes and its implications for the government, business organizations and general users.

6. Suggestion

Most of the users do not get benefits and subsidies from the government so, the government should provide subsidies for ICT users. The study concentrated on the Dhaka city. It did not include the users of all over Bangladesh. Another research could be done on the users of all over Bangladesh.

7. Appendices

Table: 1 Age of the Respondents

Age	Number	Percentage
Below 25 years	13	5.42%
25-34 years	122	50.83%
35-44 years	90	37.5%
45-60 years	14	5.83%
Above 60 years	01	0.42%

Source: Field Study

Table: 2 Genders of the Respondents

Gender	Number	Percentage
Male	175	72.92%
Female	65	27.08%

Source: Field Study

Table: 3 Educations of the Respondents

Education	Number	Percentage
PhD	007	02.92%
Post Graduate	065	27.08%
Graduation	168	70.00%

Source: Field Study

Table: 4 Monthly Incomes of the Respondents

Monthly Income	Number	Percentage
Less than 10000	11	04.58%
10000-20000	46	19.17%
20000-30000	95	39.58%
300000-40000	54	22.50%
50000-80000	24	10.00%
Above 80000	10	04.17%

Source: Field Study

Table: 5 ICT Experiences of the Respondents

Experiences	Number	Percentage
MS Word	43	10.86%
Excel	49	12.37%
Office Excel	06	01.52%
MS Office	23	01.77%
Web Browsing	16	05.81%
Photo Shop	12	04.04%
Adobe Reader	12	03.03%
Office Word	01	03.03%
Ms Excel	07	00.25%
Others	227	57.32%

Source: Field Study

Table: 6 Nature of Business

Type of Business	Number	Percentage
Manufacturing	60	25.00%
Service	90	37.50%
Wholesale	40	16.67%
Retail	34	14.17%
Others	16	06.67%

Source: Field Study

Table: 7 Market Position

Position	Number	Percentage
1	00	00.00%
2	07	02.92%
3	26	10.83%
4	53	22.08%
5	82	34.17%
6	65	27.08%
7	07	02.92%

Source: Field Study

Where,

1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well
6 indicates quite well
7 indicates extremely well

Table: 8 Last Year Revenue

Sales	Number	Percentage
1	00	00.00%
2	05	02.08%
3	31	12.92%
4	54	22.05%
5	80	33.33%
6	56	23.33%
7	14	05.83%

Source: Field Study

Where,

1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well
6 indicates quite well
7 indicates extremely well

Table: 9 Sales in Last Year

Sales	Number	Percentage
1	01	00.42%
2	04	01.67%
3	24	10.00%
4	49	20.42%
5	78	32.50%
6	62	25.83%
7	22	09.17%

Source: Field Study

Where,

1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well
6 indicates quite well
7 indicates extremely well

Table: 10 Profit in Last Year

Profit	Number	Percentage
1	03	01.25%
2	08	03.33%
3	19	07.92%
4	57	23.75%
5	57	23.75%
6	64	26.67%
7	32	13.33%

Source: Field Study

Where,

1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well
6 indicates quite well
7 indicates extremely well

Table: 11. Expenditure in Last Year

Expenditure	Number	Percentage
1	05	02.08%
2	07	02.92%
3	56	23.33%
4	33	13.75%
5	56	23.33%
6	48	20.00%
7	35	14.58%

Source: Field Study

Where,
1 indicates extremely bad
2 indicates quite bad
3 indicates slightly bad
4 indicates neither well nor bad
5 indicates slightly well
6 indicates quite well
7 indicates extremely well

Table: 12 Annual Turnovers

Income(in Taka)	Number	Percentage
Up to 200000	12	05.00
200001-500000	24	10.00
500001-1000000	41	17.08
1000001-2000000	50	20.83
2000001-5000000	62	25.83
5000001-10000000	12	05.00
More than 10000000	39	16.25

Source: Field Study

Table: 13 Annual Profits

Profit	Number	Percentage
At least 10 % on sales	67	27.92%
More than 5% but bellow 10%	70	29.17%
Up to 5% on sales	41	17.08%
No profit no loss	50	20.83%
Loss up to 5% on sales	12	05.00%
Loss more than 5% but below 10% on sales	00	00.00%
Loss at least 10 % on sales	00	00.00%

Source: Field Study

Table: 14 Privilege or benefit from the Government

	Number	Percentage
Yes	71	29.58%
No	169	70.42%

Source: Field Study

Table: 15 Grant or Subsidies from Government

	Number	Percentage
Yes	74	30.83%
No	166	69.17%

Source: Field Study

Table: 16 Utilization of ICT

	Number	Percentage
Electronic Mail	146	22.32%
Document Transfer	147	22.48%
Financial: Paying Bills, Salaries, Invoicing	118	18.04%

Submitting Tenders	41	06.27%
Purchasing Raw materials, Office supplies	75	11.47%
Making Order	88	13.46%
Interaction with government	39	05.96%

Source: Field Study

Table: 17 Company Locations

	Number	Percentage
Urban	240	100%
Suburban	000	000%
Rural	000	000%

Source: Field Study

Table: 18 ICT increases competitiveness

	Number	Percentage
Yes	240	100%
No	000	000%

Source: Field Study

Table: 19 ICT Improves job performances

	Number	Percentage
Yes	240	100%
No	000	000%

Source: Field Study

Table: 20 ICT saves time

	Number	Percentage
Yes	240	100%
No	000	000%

Source: Field Study

Table: 21 ICT reduces cost

	Number	Percentage
Yes	240	100%
No	000	000%

Source: Field Study

Table: 22 ICT reduces human resources

	Number	Percentage
Yes	240	100%
No	000	000%

Source: Field Study

Table: 23 ICT increases profit

	Number	Percentage
	240	100%
	000	000%

Source: Field Study

Table: 24 ICT improves customer satisfaction

	Number	Percentage
	240	100%
	000	000%

Source: Field Study

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