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2.1: INTRODUCTION

The combination of commerce and electronic began in 1970. Expanding and acceptance of e-commerce need some preparations of this technology as telecommunication infrastructure, legal affairs and information security.20

The most important aim in the present commerce is to gain more benefits and also whether it uses the most electronically advances or traditional approaches. Naturally banks and commercial institutes play important roles in money transfer. In 1994 when internet represented its commercial merits in addition to its scientific and research aspects, banks and commercial institutes in developed countries were the first organizations that started their serious efforts in this field.21

Although E-Commerce is like a child in the world, some comprehensive researches were done and should be done. This chapter provides a review of current empirical, and theoretical literature that addresses several common themes found in the research about the subjects relevant with the use of e-commerce in SMEs: 1) Definition of e-commerce, 2) A kind of e-commerce, 3) The nature of small and medium size enterprises, 4) E-commerce and small and medium size enterprises, 5) Benefits of e-commerce in small and medium size enterprises, 6) E-commerce acceptability in small and medium size enterprises, 7) Payment in e-commerce, 8) Consumer behavior in e-commerce, 9) Contract in e-commerce, 10) Trust in e-commerce, 11) Security in e-commerce, 12) E-marketing.

2.2: DEFINITION OF E-COMMERCE

Rastogi, Rajiv (2006). In three chapters of this researcher's dissertation, electronic commerce is explained in the following categories:

1- EC transactions over the Internet include
   • Formation of Contracts
   • Delivery of Information and Services
   • Delivery of Content

2- Future of Electronic Commerce depends on “the trust that the transacting parties place in the security of the transmission and content of their communications”.

And also the other part shows the Barriers to e-commerce adoption in India:

1- Limited internet access among customers and SMEs (current level of internet usage is low among businesses and users)

2- Poor telecom and infrastructure for reliable connectivity (Internet connectivity slow, access costs are high and connections are unreliable)

3- Multiple gaps in the current legal and regulatory framework

4- Multiple issues of trust and lack of payment gateways

Risch, Daniel, Schubert, Betra, Leimstoll, U.W.E. (2006). These three researchers concluded that there is no standard procedure for the selection of personalization functions in a given context. Every company has to identify the most appropriate personalization functions for its own ecommerce.

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environment.

**Uherek, Remo** (2006). This researcher displays that there are very different aspects to consider and to build the perfect e-commerce retailing solution. To achieve this point, there are still a lot of innovations in the different fields to be done.

**Delisle, Sylvain, Moreau, Éliane M.F., and Desroches, Bernard Vermot** (2005). A group of mentioned researchers believe that e-business-in particular B2B (business-to-business), B2C (business-to-consumer) or B2G (business-to-government)-and information technologies in general offer potentially powerful means to boost the development of SMEs in the context of today’s global economy. In the province of Quebec (Canada), a large proportion of SMEs are located outside a handful of large urban centers. Consequently, any large-scale regional development initiation, based on specific policies put forward by a government, must consider SMEs’ dynamics and need to be in order to stand a reasonable chance of success.

**Shim,Gae K., Qureshi, Anique A., Siegel, Joel G. and Siegel, Roberta M.** (2006). In chapter 1 of their study, these researchers deal with the topic "What e-commerce is all about?" They consider "we have to take into account the structure of our business and its operations, our competition, and the characteristics of our industry".

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Kvainauskaite, Vaida, Sarapovas, Tadas and Cvilikas, Aurelijus (2005). In a study these researchers clarify that electronic commerce is judged as one of the most effective factors of success in many business sectors. Electronic commerce enables to reach not just the higher efficiency of activity, but to create the competitive advantage, and to influence company’s success in the market.

Rajaraman, V. (2005). This researcher believes that electronic commerce is rapidly growing in the world and is expanding into what is known as e-services. A number of technologies have converged to facilitate the proliferation of e-commerce. Rapid advances in computer technology exemplified by the availability of very powerful personal computers at low cost, coupled with rapid acceleration in communication networks, have enabled computers worldwide to be interconnected and thus have revolutionized the way business is done. The mere availability of hardware infrastructure is not sufficient to proliferate the applications. In an article, the researcher had given a flavor of the software systems which constitute the building blocks of e-commerce. Even though technology is essential to enable the emergence of e-commerce, it is not sufficient to promote and flourish e-commerce applications. The researcher explained how much one needs an appropriate legal framework. He had thus discussed the enabling legal framework which has been enacted in India. In the age of internet, national boundaries are

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becoming meaningless. Data can travel at the speed of light across national boundaries; they can flow not only along wired networks but also by wireless. Governments find it very difficult to stop data flow. Applicability of national laws in international e-commerce has become impractical. This is exemplified particularly by the emergence of vandals who disrupt the internet by proliferating viruses, worms etc., which affect all countries. International cooperation in standardization of not only technology but also laws is needed. It is evident that the cost of doing business has come down and the gain of business has increased with the emergence of e-commerce. With international cooperation, e-commerce is bound to improve the quality of life of individuals all over the world.

Antunes, Mafalda, Dortia, Maria (2004). In a paper written by these two researchers, the process of elaboration of the DTCE planned to present. Thus, after the characterization of e-commerce speech, they have presented this dictionary for revealing how it is structured. Methodological questions involved in the construction of this dictionary were the aim of a particular enhancement, presenting the methodological criteria established by ILTEC linguistics’ team before the beginning of a work that involves the creation of a dictionary with such characteristics.

Fensel, Dieter (2003). In one of the chapters of the book written by this researcher, e-commerce is profoundly explained. The researcher says that e-commerce in business-to-business (B2B) relationships is not new initiatives

to support electronic data exchange in business processes between different companies already existed in the 60's of the last century. To perform business transactions, sender and receiver had to agree on common content formats and transmission protocols. In general, however, these arrangements did not live up to the expectations of their proponents: establishing an e-commerce relationship required a major investment and it was limited to a predefined number of trading partners, connected via a specific type of extranet. Since then, the internet and the World Wide Web have drastically increased the online availability of data and the amount of electronically exchangeable information. Internet-based electronic commerce now allows for more openness, flexibility and dynamics. This will help to improve business relationships in many ways, e.g.:

- Instead of implementing one link per supplier, a supplier can be linked to a marketplace with a large number of potential customers.
- Consequently, suppliers and customers can choose between a large number of business partners, and they can update their business relationships as the markets evolve.

Economic and Social Commission for Western Asia (ESCWA) (2003). In a paper written by this researcher, a number of issues is debated in relevant with the development of national and regional Arab e-commerce strategies. Neither the list of issues covered here, nor the substantive discussion of each issue should be considered exhaustive. Rather, the paper's goal is to identify selected key elements of strategies that can be discussed in depth by the experts attending the meeting. In the debate on national and regional e-

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commerce strategies, it is needed to address the methodology of the design and implementation of the strategies. Here a participatory approach is essential. Creating awareness at the political level or adopting a state-of-the-art regulatory framework will be fruitless unless the elements of an e-commerce strategy are rooted in the reality of the national economy. This can only be achieved through a consultative process that allows the involvement of all the stakeholders of the development process, especially the private sector and the NGOs. Therefore, experts are particularly encouraged to introduce into the debate their experiences in designing and implementing e-strategies as well as identifying the successes and failures of specific policies.

Malaysian External Trade Development Corporation (MATRADE) (2002).\(^\text{32}\) This researcher gives a broad definition of e-commerce as generally used to cover the distribution, marketing, sale or delivery of goods and services by electronic means. In the study, the definition by MATRADE is used: The Internet has created a universal platform for buying and selling goods and services and driving important business process inside the organization. Small and large companies are using the internet to make product information, ordering, and customer support immediately available and to help buyer and sellers make contact.

Laudon, K. C. and Traver, C. G. (2002).\(^\text{33}\) In a paper written by these two researchers e-commerce is described as a tool digitally enabled commercial transactions between and among organizations and individuals.


Kalindaga, Yusuf (2002). The empirical research presented that most e-services sectors are also dynamic export sectors, characterized by above-average growth rates in the world market. Significantly, developing countries’ exports of e-services experienced the highest growth rates during the past decade and computers related to service exports from developing countries were the most dynamic export sectors during this period. At the same time, developing countries' global shares in e-service exports are still small and few of them have a comparative advantage in this area.

Dignum, F. (2002). This researcher believes that although IT is an important component, the biggest mistake made by many organizations is that they believe that by simply introducing e-commerce technology, they would succeed without having to worry about their organizational structure.

Raymond, L. (2001). In a book, the researcher defines the term of e-commerce as: ‘functions of informative exchange and commercial transaction support that operate on telecommunications networks linking business partners (typically customers and suppliers).’

Charoenying, Dhamadit. (2001). In a thesis, Dhamadit indicates that in Thailand, both technology infrastructure and legal actions needed to be studied in order to determine whether a plan of new revolution business model is worth implementing or not before the launch of electronic business.

The traditional consumer of Thai people is difficult to adopt with e-business because Thai people cling to the old fashioned way of shopping by cash rather than credit card.

In Thailand, the communication structure such as Telephone line, telecommunication system, and Internet Service Providers (ISPs) should be improved to support the new business model.

The small number of Internet user in Thailand, when compared with any other country’s impact on the e-commerce growth, is of smaller significance.

The cyber laws, which compose of:

1. The Data Protection Law
2. The Computer Crime Law
3. The Electronic Data Interchange Law
4. The Digital Signature Law
5. The Electronic Funds Transfer Law and,

The Universal Access Laws are important issues for e-commerce in Thailand because these laws will be used to take care of consumer rights online and make a reliable transaction.

The researcher cites that the future of e-commerce in Thailand is going to expend to the wireless technology based on the technology WAP (Wireless Application Protocol), a secure description allows users to access information instantly via handheld wireless devices such as mobile phones, pagers, two-way radios, smart phones and communicators.

Damanpour, F. (2001).\(^{38}\) By comparison, the researcher defines e-

commerce as: "any 'net' business activity that transforms internal and external relationships to create value and exploit market opportunities."

2.3: KINDS OF E-COMMERCE


B2B and B2C have distinctive characteristics: in B2C, the connection mechanism is Web browser of a business interacting with a Web server application of another business. In B2C, the business is placing orders; in B2B, it is online procurement and order fulfillment. In B2C, the control mechanism is unidirectional; in B2B, control ranges from one-sided control to peer-to-peer setups.

Among the advantages of B2B are suppliers using the purchaser's website to respond online to bids and sell excess inventory. B2B also allows business firms to from electronic alliances with distributors, suppliers, resellers, and other partners. On the other hand, most of the B2B Web exchanges have yet to make money. The question of antitrust violations resulting from alliance types of business also arises.

Course, Thomson. (2007). This researcher defines a kind of e-commerce, Business-to-consumer (B2C): Businesses sell products or services

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to individual consumers in one of the chapters of his book.

Business-to-business (B2B): Businesses sell products or services to other businesses.

Consumer-to-consumer (C2C): Participants in an online marketplace can buy and sell goods to each other. Because one party is selling, and thus acting as a business, this book treats C2C transactions as part of B2C electronic commerce.


**Davies A.J., Summers, Caroline and Black, Donna (2005).** These three researchers demonstrate the variations in drivers, benefits and barriers between SMEs with different customer types (B2B and B2C) and suggest that apparent similarities are likely to mask subtle differences between the two.

While their study focuses on differences between B2B and B2C SMEs, the SME business community is a diverse group. An individual approach to advice and support is required, that recognizes differences between SMEs such as size, industry sector, existing ICT infrastructure, regional variations (e.g. urban vs. rural location), and enterprise culture. They indicate that SMEs often require business planning and strategic/management advice in order to deploy B2B e-commerce effectively through their business and value chains. A means of addressing the disparity between expectations and

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41 Davies A.J., Summers, Caroline and Black, Donna. (2005). "Disparities between B2B and B2C Commerce for SMEs" e-commerce Innovation Centre, Cardiff University, Cardiff Business Technology Centre, Senghenydd Road, Cardiff, CF24 4AY.
experiences of e-commerce would be through policy makers and funding and advisory bodies. In such a manner, advice is suggested to be beneficial. This is a stated aim of the Welsh Assembly Government’s Economic Development Strategy: “A Winning Wales”, which includes the “development of a better co-ordinate and well-targeted business support network” as a key objective.

The results of such survey indicate that B2B SMEs are ahead of their B2C counterparts in terms of the level and complexity of e-commerce implementation. SMEs are experiencing benefits through the use of e-commerce, particularly in the B2B sector, and a third of these SMEs plan to implement further e-commerce as a result of their experiences. The researcher explained that further research in to B2B opportunities within the SME sector would enable advice to be improved and tailored to meet their diverse needs, and enable one to make further progress in this growing area of e-commerce.

Sarmadsaeedi, Soheil and Mirabi, Vahid R. (2004). In a book written by these researchers the definition of e-commerce is given and the different types of e-commerce are offered such as Business to Business (B2B), Business to consumer (B2C), consumer to consumer (C2C), consumer to Business(C2B), peer to peer(P2P), Business to administration(B2A) and consumer to administration(C2A). And they suggest that B2B and B2C are more important than the others.

Dryden, John (2001). This researcher makes clear that B2C e-commerce still accounts for a very small share of all retail trade in (OECD) countries, usually less than 1%. It is understandable that some public attention

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has shifted to the B2B ecommerce sphere which accounts for more than four-fifths of all transactions. However, increases in the B2C sphere are still expected and should not be overlooked by policy makers.

Moodley, Sagren, Morris, Mixe and Velia, Myriam (2003). The results of these researcher's come out to contradict the key propositions of the standard model of e-commerce. Based on their study, there is no evidence to support the view that e-commerce is: (1) being used for completing inter-firm commercial transactions; (2) allowing firms to bypass “middlemen” in the value chain; (3) enabling/facilitating international trade by reducing coordination costs; and (4) transforming firms’ business models.

Graja, Hubert and McManis, Jennifer (2001). These two researchers' book refers to the modeling customer satisfaction with web and e-commerce sites which are not as well studied as web server modeling, but determining whether and how the customers of these sites are satisfied with their interactions is becoming more important as the web matures. These researchers have proposed a methodology for estimating how satisfied defined classes of customers are with a website. Their approach recognizes that customer satisfaction is a complex issue and includes factors which are not easily measured.

They also noticed a wide range in some of the users' satisfaction components; e.g. internal students in DCU averaged 1.7 for complexity, 3.5 for time response, and 2.9 for quality on a 4-point scale. Depending on how users

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of this type weight these components in deciding on their overall satisfaction, they may form a quite negative impression of the Web site even though some components are satisfactory. This implies that assumptions about which components matter more to users should be checked against actual users, in order that the Web site is not optimized for some satisfaction component that users rate as less important.

2.4: THE NATURE OF SMALL AND MEDIUM SIZE ENTERPRISES (SMEs)

There are a number of definitions of what constitutes an SME. Some of these definitions are based on quantitative measures such as staffing levels, turnover or assets, while others employ a qualitative approach.

It is appropriate that we examine some of the characteristics found in the literature:

Mendo, Alonso Fernando and Guy, Fitzgerald (2006). There is a paper by these researchers which presents and utilizes an alternative, multidimensional, research framework, based on organizational change concepts, such that the study of SMEs Web evolution can be undertaken in a more insightful way. The framework consists of three dimensions: process of change, content of change, and drivers of change.

Verheugen, Günter (2005). This researcher in his e-book characterizes a new definition of Small and Medium sized Enterprises (SMEs):

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<table>
<thead>
<tr>
<th>Enterprise Type</th>
<th>Employee Limit</th>
<th>Turnover Limit</th>
<th>Balance Sheet Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro enterprise</td>
<td>Staff: &lt; 10</td>
<td>≤ € 2 million</td>
<td>≤ € 2 million</td>
</tr>
<tr>
<td>Small enterprise</td>
<td>Staff: &lt; 50</td>
<td>≤ € 10 million</td>
<td>≤ € 2 million</td>
</tr>
<tr>
<td>Medium enterprise</td>
<td>Staff: &lt; 250</td>
<td>≤ € 50 million</td>
<td>≤ € 43 million</td>
</tr>
</tbody>
</table>

Source: Secondary data

**Boucher, Xavier and Lebureau, Emilie** (2005). A chapter of a book written by this researcher discusses a formalization of the notion of SMEs' competencies, and it points out a collaborative decision process aiming at enhancing the competence development of partners within a network. On a conceptual point of view, the main value added consists in the decisional criteria which provide both an objective measure of the organizational learning a network of SMEs and a measure of equity concerning the transfer of competencies. Of course, the approach is based on several restrictive hypotheses concerning the model of competencies, the way to make explicit a strategy of competencies, and the decisional process. Such hypotheses induce several perspectives which could enlarge the application field. The most important task would be to take into account not only the development of similar competencies between firms, but also complementary competencies. On an applicative point of view their book demonstrates the possibility to develop quantitative decision tools applied to the notion of competence management.

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Estrin, Len, Foreman, John T. and Garcia, Suzanne (2003). The article written by these researchers refers to small and medium manufacturing enterprises facing a number of issues, risks, and barriers to adopting advanced software technologies. In general, these fall into five categories: lack of information, lack of expertise, perception that advanced technologies are not affordable, pressure to be productive, and lack of fit. The TIDE program addressed the issues, risks, and constraints associated with these categories through its demonstration projects, workforce development, and technology development activities.

Barry, H. and Milner, B. (2002). In a comparison of SMEs with larger counterparts these researchers found that SMEs suffered from a lack of trained staff and had a short-range management perspective. They termed these traits 'resource poverty' and suggested that the net effect is to magnify the effect of environmental impact, particularly where information systems are involved.

2.5: E-COMMERCE AND SMALL AND MEDIUM SIZE ENTERPRISES (SMEs)

Studies carried out at the onset of e-commerce predict that since SMEs had always operated in an externally uncertain environment, they were more likely benefited from e-commerce.

Unlike previous technological innovations, e-commerce brings with it changes to both procedures within the organization as well as changes to the structure of the organization itself. These changes include the way businesses

interact, their approaches to marketing, products and customers and the way
decisions are made and disseminated, particularly decisions concerning
technology adoption and use. For SMEs, these changes can have both positive
and negative effects. Those SME owner/managers who have developed an
organization-wide strategy for e-commerce adoption, report increases in
efficiency.

Ambrose, Emonn and Fynes, Brian (2006). These researchers's
paper is written to develop propositions concerning the impact of e-commerce
on buyer/supplier relationships in SMEs as part of a wider research study. In
their study, review of the literature along with in-depth interviews has led to
the development of a series of hypotheses.

Elia, Elie, Lefebvre, Louis A. and Lefebvre, Elisabeth (2006). These researchers had an empirical research into business-to-business. They
explained that e-commerce issues involving manufacturing small and medium
size enterprises (SMEs) are still embryonic. In an attempt to partially fill this
gap, their study presents empirical data from an electronic survey conducted
among 96 manufacturing SMEs to investigate e-commerce initiatives and their
related benefits. E-commerce initiatives are assessed using a set of 36 business
processes that can be conducted electronically.

These processes were classified according to their focus: customer
(downstream), supplier (upstream) or in-house. The first group seems to lack
any focus or may still be exploring e-commerce opportunities. The second and
third groups are supplier-and customer-focused, respectively. The fourth group

relationships" driven research national institute of technology management (NITM), pp18-26.
initiatives and related benefits in manufacturing small- and medium-sized enterprises"
Published online: Springer-Verlag ISeB: DOI 10.1007/s10257-006-0035-8.
consists of the more involved SMEs that have leveraged their e-commerce initiatives with both their customers and their suppliers.

**Coulthard, Darryl, Castleman, Tanya and Batten, Lynn** (2004). In a study done by these researchers they found few clear relationships between SMEs’ business strategies and their orientation to electronic trading. The accepted tenets of business strategy were not reflected in the behavior and attitudes of the SME owners. Their conclusion is that e-commerce researchers have, to some extent, been looking in the wrong place in that we have focused too much of our attention on the dynamics within the individual firm rather than on influences from the broader business and industry context. SMEs trading in multiple sectors are particularly exposed to the vagaries of this context and their strategic options may be dominated by the inconsistencies and difficulties of this setting. It would be premature to leap to such a conclusion, however, since survey methodology is unable to pick up the complexities of suppliers’ responses or the complexities of the cross-industry trading context. SMEs’ e-commerce decisions are highly individualized and thus not able to be measured completely or accurately in a questionnaire format.

**Johansson, Bjorn** (2004). In one of the chapters of this researcher, adoption of the ASP (application service provision) concept for provision of ICT in SMEs is explored.

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There are at least two possible explanations for why the SMEs do not emphasize the cost factor. First, it can be explained by the fact that once they have reach an agreement with a service provider and pay a fix fee each month, they do not see this as the main factor any longer. The second explanation is that they do not see this as a problem before they outsource.

The second explanation can be explained by the fact that ICT costs are not a big deal in these kinds of companies. These SMEs do not see these costs as the problem. Instead, the problem is how to maintain and handle the ICT so that it works properly.

The primary reason the ASPs gave for non-adoption is concerns of losing control. This concern is expressed in two ways: first, the fear of losing control over ICT assets, and second, the fear of losing control over the data. The customers do not emphasize this as a reason for not adopting the ASP concept. This is perhaps because they have already adopted the solution.

The main conclusion of his study was the disparate view of what affects the adoption or non-adoption. These perspectives can be summarized as follows. The ASPs cite cost control and the ability to decrease the cost as motives for SMEs decisions. The clients report mentions three main reasons for adopting the ASP concept. First, maintenance of ICT is not the core competence, and they want a convenient solution for their ICT. Second, SMEs lack skilled personnel and necessary resources for the support of ICT. Third, the adoption is an effect of the organization’s overall strategy.

Asia, Castel (2002). This researcher has an e-book in which he examined the use of Internet and e-commerce by small and medium-sized

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Indonesian enterprises in 12 cities across the country, and aims to identify the benefits of current usage and the obstacles to greater use. His study also explores broader policy issues relevant to improving the accessibility of the Internet and e-commerce facilities, as well as the effectiveness of their use by Indonesian SMEs.

The results of such survey suggest three phases in the evolving use of Internet by SMEs, each of these phases represented by a company type:

1) SMEs which use the Internet;
2) SMEs which are preparing to use the Internet in the near future;
3) SMEs which know very little, if anything, about the Internet and have no plans to use it in the future. The labels "Users", "Prospective Users" and "Traditional Companies" are used to classify these three types of SMEs.

Lallana, Emmanuel C., Pascual, Patricia and Andam, Zorayda Ruth (2002).\textsuperscript{56} The survey done by these researchers gives a profile of the extent of ICT use and its various applications among SMEs in three largest metropolitan cities in Philippines. Because the sample is not randomly generated, the conclusions of their study are not necessarily true for all SMEs in the three cities or indeed, for all SMEs in the country. However, in the absence of a more scientific study on Philippine SMEs and e-commerce, the results of the study provide the best current indicators on issues related to SME use of ICT and ecommerce.

These researchers wrote that nearly all of the SME respondents consider the internet and e-commerce as important to business - both in the present and in the future. Among the perceived drivers of doing business

through the internet are: convenience and efficiency; the drive to be competitive in the industry in order to keep up with existing trends; its necessity to business operations; and the attainment of customer satisfaction.

**Quayle, M.** (2002). This researcher found that the tangible benefits derived from e-commerce (such as reduced administration costs, reduced production costs, reduced lead-time, increased sales) were marginal in terms of direct earnings. He also found that the intangible benefits (such as improvement in the quality of information, improved internal control of the business, improved relations with business partners) are of far greater value to SMEs.

### 2.6: BENEFITS OF E-COMMERCE TO SMALL AND MEDIUM SIZE ENTERPRISES (SMEs)

The first component used by government offerings is the notion of benefits that can be derived from e-commerce adoption and use. Recent literature abounds with studies examining the benefits of e-commerce to the SME marketplace.

**Hoi, J., Shim, J. P. and Yin, A.** (2003). This researcher observes that increasing international exposure and enhancing customer service quality and responsiveness is one of the perceived benefits of e-commerce to SMEs.

**Schafer, Ben J., Konstan, Joseph and Riedi, John** (2002). These researchers mention that there are many different techniques for implementing recommender systems, and the different techniques can be used nearly

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independently of how the recommender system is intended to increase revenues for the site. E-commerce sites can first choose a way of increasing revenue, then choose the degree of persistence and automation they desire, and finally choose a recommender system technique that fits that profile. Technologists often assume that the holy grail of recommender systems is fully Automatic, completely Ephemeral recommendations.

**Julta, D., Bodorik, P., Dhaliwal, J.** (2002). In a study done by these researchers they indicate that e-commerce can improve SMEs ability to compete with the large organization and bring smaller supplier to compete internationally or regionally from being lack of knowledge and expertise about international trade issues and foreign markets and thus upgraded a company to international scale.

**Matlay, H.** (2001). A study done by this researcher shows that while many SMEs have adopted e-commerce in order to gain a greater share of the global market, many other SMEs are simply intent on improving internal efficiency. Thus, while many studies have shown that certain benefits are achievable, the applicability of these benefits to the SME sector needs to be critically assessed.

**2.7: E-COMMERCE ACCEPTANCE IN SMALL AND MEDIUM SIZE ENTERPRISES (SMEs)**

**Jaidee, Sarut and Beaumont, Nicholas** (2006). These two...
researchers have a paper into which they concluded that B2B electronic commerce has been available to industry for a number of years, but Small to Medium Manufacturing Enterprises (SMMEs) are still slow to adopt this technology. From the studies based on an extension of Technology Acceptance Model (TAM) and Electronic Data Interchange (EDI) literature as a framework, they have interviewed a number of SMME principals in Thailand; discovering that few have adopted B2B electronic commerce techniques. The results of their study have shown that perceived usefulness and the influence of trading partners positively influences the decision of owners/managers and plays a part in B2B electronic commerce adoption decisions.

They also found that Small to Medium Manufacturing Enterprises (SMMEs) owners/managers will tolerate new technology - even if it is difficult to use - if its use is beneficial. The factors perceived usefulness and perceived ease-of-use do not fully explain B2B electronic commerce adoption in Thai SMMEs. A critical mass of organizations using B2B electronic commerce in industry has little influence on adoption decisions. Their studies show that Major trading partners have tried to persuade Thai SMMEs to adopt B2B techniques but have not yet resorted to strong-arm tactics.

Georgina, Joyce, Cashman, Asing, Obit, Joe Henry and Bolongkitik, Jetol (2005). The study done by these researchers found that the potential benefits are perceived to be important, despite the perceived limitations of not adopting e-commerce application. It is now up to the SMEs,

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63. Georgina, Joyce, Cashman, Asing, Obit, Joe Henry and Bolongkitik, Jetol. (2005). " An Exploratory Research of the Usage Level of E-Commerce among Small and Medium Enterprises (SMEs) in the West Coast of Sabah, Malaysia " University Malaysia Sabah, Labuan International Campus, 87015 Labuan F.T.
with or without the assistance from the government or other incentives to use this technological tool to improve their business scope. There has been a lack of research undertaken in Malaysia and in Sabah particularly to determine SMEs perception of the benefits of e-commerce and the current level of e-commerce adoption. Their study was performed in the West Coast of Sabah, and it is recommended that the future research can be extended to all the five divisions in Sabah in order to obtain a more representative results. The adoption attentions and benefits realized from e-commerce might be expected to vary according to the industry sector in which a firm operates, therefore future studies should be undertaken in order to understand the impact of industry sectors on e-commerce adoption and use.

Limthongchai, Passachon, Speece, Mark W. (2005). The purpose of the study done by these researchers was to look into how perceived characteristics of innovation affect e-commerce adoption rate by Thai SMEs. The research was done under diffusion of innovation theoretical framework, with security and confidentiality introduced as an additional variable.

Dholakia, Ruby Roy and Kshetri, Nir (2004). The empirical survey done by these researchers confirm previous research suggesting a phased approach to internet adoption. Firms in their sample were at different stages in the adoption process – 91 percent of the sampled SMEs owned a computer, about half (51%) owned a website but only 15 percent use the

website to sell products and services over the internet.

The concluding section of their study indicates that the influence patterns of internal and external factors vary with the phase of adoption. The factors found to have significant effect on internet adoption and e-commerce application (at 90% or higher level of confidence).

As a component of the internal factor, technology contributes to the phases of adoption process – ownership of a web site as well as its use for commerce applications. Similarly, customer service subscale of perceived competitive pressure, an external factor, significantly influences both phases of the adoption process.

Other variables, however, have limited influence. For instance, market research subscale of perceived competitive pressure, privacy-security subscale of self-efficacy and firm size had a significant effect on ownership of a website but had no effect on the use of a website for commerce. This indicates that once a firm decides to own a web site, these variables become less relevant for further use of the internet.

They explained that within the self-efficacy component of the internal factor, privacy-security concern is the only variable of significance. Other concerns regarding managing online customers, cost of web-based operations, knowledge and competence, internet suppliers and speed-reliability do not have any influence. Similarly, within the perceived competitive pressure component of the external factor, only customer service is statistically significant. The other two subscales – environmental monitoring and market research – has no impact on adoption behaviors.
The survey work of these researchers deals with a longitudinal analysis of the e-business situation of Belgian companies (1999-2002) also a comparison of drivers and barriers for e-business adoption between large companies and SMEs was made (under 500 employees being an SME in a wider European context). Research showed that larger companies more often formalized their Internet technology objectives into an e-business plan than SMEs. This poor formalization explains why SMEs lag behind.

Internet technologies affect all processes of an organization: selling, finding partners, marketing, transfer documents, after-sales service, etc. But according to a report of the French Ministry of Economic Affairs, Finance and industry few enterprises, large and smaller ones are aware of all the opportunities the internet has to offer. Moreover the 2004 e-readiness report of the Economist Intelligence Unit stated that Belgium is not yet completely ready for the internet-economy, with only a 17th place out of 60 countries over the world. The Internet is not something that can be neglected. Essential to the success of internet-adoption, is the capacity of companies to adopt and innovate in order to face international competition.

The Public Governments have an important role to play in order to create a favorable context for Internet-adoption (especially for SMEs), elevate the barriers, and more importantly to integrate these necessary evolutions in their own organizations when they act as client, supplier or partner for other companies.

As far as the drivers concerned in their study, they are shown that whatever the size of these companies, interest in e-business is very much oriented towards obtaining cost-reduction in some of the major processes. It can be seen that other drivers, such as the improvement of customer service, but especially collaboration and cooperation are sometimes of greater importance. For some processes and some application fields, their study shows a widening gap between SMEs and large companies in the importance of e-business over time.

To have a more detailed view on the drivers and barriers that influence the internet ability, their study made an analysis about the differences between larger and smaller companies for a limited number of variables. They can conclude that larger companies are mainly driven by cost-savings to implement internet technologies whereas SMEs are more driven by improving cooperation with suppliers and clients than by cost-cutting only. This is in contradiction to some other views on SMEs.

Lucchetti, Riccardo and Sterlacchini, Alessandro (2004). These researchers in their paper emphasized that the adoption and effective use of ICTs among SMEs depend on the types of ICT and on different firm characteristics. In terms of cost and technological requirements, these technologies range (in increasing order) from general-use (e-mail and Internet access) to marketoriented (presence and quality of Web sites) and, finally, production-integrating ICTs (LANs, Intranet and EDI).

Apart from industry effects, the penetration of general-use ICTs is not linked to any specific feature of SMEs. On the other hand, market-oriented ICTs are associated with the share of highly educated employees and, above all, with the firm’s presence in foreign markets (either via exports or commercial branches). The adoption of production-integrating ICTs depends instead on the firms’ size, the extent of productive linkages with other firms, the use of advanced information technologies in production and the educational level of the labour force.

In terms of policy implications, the above findings suggest that European actions aimed at increasing the use of ICTs among SMEs should be based on a well-aimed policy mix. If the objective is to help firms increase their productivity, then the development of production-integrating ICTs should be given priority; if, on the contrary, the policy is aimed at enhancing market opportunities, then the focus should be on market-oriented ICTs.

In such a case, a key factor is the improvement of the human capital within SMEs, which can be achieved by lowering, through different types of policy instruments, the hiring and training costs of educated workers, and especially university graduates. Moreover, the main “institutional” obstacles to the adoption of e-commerce practices (different standards and regulations, security of transactions and consumer protection), which are particularly harming for cross-borders’ transactions (and, therefore, for the exporting firms), should be removed, and this task pertains necessarily to the European Commission. It must be stressed that the above findings and policy considerations mainly refer to the European SMEs located in well-developed areas; for the backward regions of the European Union, in which even general-
use ICTs are not so generally diffused.

**Tandon, Nidhi** (2002). This researcher in his study exposes that the reality of SME approaches to adopting and integrating ICT into the business and marketing functions lies somewhere between these two quotes. Our training experiences with women entrepreneurs to date confirm our optimism about the potentials and opportunities presented by ICT to micro, small and medium enterprises.

**Buhalis, Dimitrios and Deimezi, Ourania** (2003). These researchers examined the generic level of ICT penetration and the level of e-commerce both for the production/supply and consumption/demand sides in their paper. The results are critical for decision makers in both the private and public sectors as they determine both public policy and investment decisions. Greece presents some of the lowest levels of ICT and Internet adoption in the European Union for both consumers and enterprises. It is apparent that the use of e-commerce is in embryonic stage. The adoption of new technologies in SMEs is generally lower than other European countries, mainly due to lack of awareness and IT skills. Moreover, low e-commerce transactions confirm that Mediterranean consumers are in the habit of buying through interpersonal networks.

From the production point of view, this situation threatens the future competitiveness and the ability of Greek SMEs to develop and commercialize their products. Ultimately this can jeopardize regional development and

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69. Buhalis, Dimitrios and Deimezi, Ourania. "Information Technology penetration and eCommerce developments in Greece, with a focus on Small to Medium-sized Enterprises" Center for eTourism Research (CeTR) School of Management University of Surrey, Guildford, GU2 7XH, UK, (2003).
economic growth. From the consumption point of view, consumers and citizens seems less able than other European nations to access information, interact and purchase products on-line. However, there is real potential for growth propelled by the education system, which encourages both school and university students to use the Internet. The evidence demonstrates that younger people in Greece are almost as prolific computer users as in northern Europe.

They refer to The European Commission and the Greek governments are developing initiatives and policies which aim to encourage the widespread adoption and adaptation of ICTs. Initiatives, such as the Go-Digital, have already made an impact. There are some concrete results in terms of internet and e-commerce use, while prospects for future adoption and use seem to be optimistic. Statistics in this fast moving and fluid area are notoriously unreliable. Nevertheless the picture emerging is one of an electronic market that is developing fairly quickly.

Gladstone, Keith, Rundle, Cathy and Alexander, Tara (2002). In one of the chapters of the book of these researchers' it is concluded that the digital revolution has placed unimaginable amounts of information within the reach of most people throughout the technologically developed world. The advent of e-commerce has brought many services into people’s homes. They have a duty to ensure that the design of such services meets the needs of everyone wherever possible. With modern access techniques, people who are unable to see the screen need not be disadvantaged so long as applications are designed carefully. While many of the current guidelines are excellent, they

concentrate on accessibility rather than usability. However, people have to use the systems that we design and that requires designers to think more carefully about the context in and the tasks for which they are used. Though end users remain the key stakeholders, system designs must address the needs of service providers and intermediaries, such as support engineers and trainers.

Technology has its place within our lives but the failure of many recent initiatives is a clear demonstration that many people have reached a threshold above which they are not prepared to go. It is all too easy to see technological devices as the way to give disabled people a degree of independence that they are otherwise denied. There is no doubt that such advances have improved the quality of life for many people. However, there is also growing evidence that increased independence can also mean greater social isolation.

Rashid, M. A. and Alqirim, N. A. (2001). These researchers in their empirical study of New Zealand’s SMEs found that accepting e-commerce will help a sector in better planning for its EC uptake. Being an ideal sector or industry would provide a good exemplar to other SMEs within New Zealand. At the outset this research will assist legislators, policy makers and technology providers in understanding EC adoption criteria within SMEs and in devising best means and approaches in encouraging EC uptake among SMEs.

At the theoretical level, their research attempts to utilize IS/IT adoption and diffusion theories in identifying essential influencing factors on EC adoption and diffusion within New Zealand’s SMEs. It is contended that

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the adoption decision for any technological innovation like EC is an organizational one and hence, a link between the innovation and the organizational factors will provide an essential insight into the adoption criteria for EC within New Zealand’s SMEs. This should not contradict with the importance of other influencing factors like the effect of the environment. It may be argued that the diffusion of EC (if adopted) within SMEs will depend among other factors on the same factors that would influence its adoption.

These researchers achieved the overall objective of identifying the impact of contexts and factors on EC adoption and whether such impacts lead to EC adoption within New Zealand SMEs can be realized by applying the proposed theoretical framework extended from IT innovation theories with particular focus on New Zealand SMEs.

2.8: PAYMENT IN E-COMMERCE

Shim, Jae K., Qureshi, Anique A., Siegel, Joel G. and Siegle, Roberta M. (2006). In chapter five of the book of these researchers’ they wrote about electronic payment. An electronic payment is in many ways like a conventional physical payment. The exchange is usually a digital financial instrument baked by a bank or an intermediary. The growth in electronic banking and commerce is fueled by:

- Increasing numbers of internet users
- Reduced operational and processing costs due to improvements in technology
- The affordability of high performance technology

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Traditionally, large businesses have made electronic payments with EDI or electronic fund transfer (EFT), but high administrative and technology costs have forced smaller operators to contend with conventional physical payment methods. A further limiting factor was the inability of EFT systems and protocols to handle small amounts of money. These issues have been resolved; it is no possible to make, immediate (real time) payments for goods and services using a web browser.

An also they refer to that credit cards, electronic cheque and digital cash are ways to e-payment.

**Murthy, C.S.V. (2002).** This researcher's book refers to the fact that electronic funds transfer (EFT) is an electronic transfer of information that equates to moving funds from one financial institution to another. Electronic payment systems are alternative cash or credit payment methods using various electronic techniques to pay for products and services in electronic commerce.

**Lacoursière, Marc (2001).** This researcher had a study of current payment systems in North America, like cheques, electronic funds transfers and documentary credits. The researcher shows that none of them is well suited for the needs of SMEs. However, with the help of new technologies, it is a belief that documentary credit rules could be adapted for use on the internet. This instrument could be made more affordable than it is in its traditional form, and hence, could be used by SMEs. Based on these premises, the researcher submits that a model of payment must be conceived and based on the concept

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of letters of credit. The main advantage of using a delivery versus payment system is to lower credit and liquidity risks. Taking these observations into account, his proposed model of payment should be self-regulated via proposed uniform rules. These would address relationships between counterparties, relationships between a customer and its bank, and interbanking relationships.

**Bajaj, Kamlesh K. and Nag, Debjani** (2000). Chapter eighteen of these researchers' book they refer to elements of electronic payments:

1- **Client Software**: This is available from various solution providers. It entails the use of web browser for browsing encrypted information. In most of these cases, the software at the customer site is free. Almost all solutions require a TCP/IP network connection.

2- **Merchant server software**: Some solution providers design custom application software from the merchant, while others integrate function with the web server.

3- **Payment by the customer**: The customer can make payment using a credit card, buy e-cash from a participating bank, or through an Automated Clearing House (ACH). Again the option depends on the solution being provided by the service provider.

4- **Payment to Merchant**: In debit-based transactions, the merchant gets payment immediately, from the customer's bank in his account, through ACH, through a bank transfer, or within a day of the clearing period. In credit transaction, the merchant gets paid through a bank transfer or through a normal credit card processing cycle.

A few tools provide this feature of subscription accounting,

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cumulative billing, etc. in the remaining cases; the merchant's server has to support these functions.

5- **Transaction cost:** the cost per transaction varies for credit and debit transactions and with the service provider. In some cases, there is a fixed amount per transaction, whereas others charge a certain percentage of the amount of transaction.

6- risk: In most of the solutions provided, the risk is that of the merchant for fraudulent transactions. In case of disputed debit transactions or after payment in case a merchant is unable to deliver, the customer loses.

As e-cash works like traveler cheques, in case the customer loses e-cash, the bank has to be provided with details about the serial numbers of the lost e-cash so that the bank can refund the money.

**Usman, Arshad** (1999). The study of this researcher's refers to below consequences:

1. The results showed that for certain product categories the secured payment method is the dominant choice. For example, merchants of computer hardware and software are more likely to use the secured payment method

2. The entry barrier to supporting the secured payment method is low.

3. Given that most grocers use the non-secured payment method, a grocer who uses the secured payment method may drive competitive advantage.

4. The methodology present in the research can be used for

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76. Usman, Arshad. (1999). "The effect of product price and product category on online payment methods and on the decision to own the secure server" A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements of the degree of Master of Engineering in Telecommunications Technology Management Department of Systems and Computer Engineering Carleton University Ottawa, Ontario K1 S 5B6, Canada.
benchmarking and competitive intelligence by looking into some other factors, which are peculiar to electronic space such as the effects of using graphics, animations, and Java applets on the number of visits to web pages. The process is fast and inexpensive.

2.9: CONSUMER BEHAVIOR IN E-COMMERCE

Dileep, H.D. (2006). This researcher's study brings to display the fact that customer delivered value is the difference between total customer value and total customer cost. Total customer value is the bundle of benefits customer expect from a given product of service. Total customer cost is the bundle of the cost the customer expects to incur in evaluating, obtaining, using and disposing of the product or service. A satisfied customer will act as the spokes person of the company's products and bring it more buyers. So marketers have to ensure customer value satisfaction.

Charles, Dennis, French, Tio, Merrilees, Bill (2004). These researchers searched on electronic integrated marketing and found following results. Integrated marketing is a key concept which selects some suitable technique and tools. Through these retailers create valuation for their customer. Integrated marketing had used by Nill Barden for the first time in Harward commerce college the concept of integrated marketing has been mixed with Mack Karti marked 4P. But Dennis and his co-workers have selected 7C for integrated marketing.

1- Convenience for the customer (convenience which reflects to main aspects of web designing, having research application, way of selecting

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site, and convenience in buying).

2- Customer value and benefits.(goods description which has benefits and values for its customer)

3- Cost to the customer. (price in internet buying must be less than in available price in other shopping center, and also less than in using of minimum transportation costs and goods delivery)

4- Communication and customer relationship.(in internet shops with designing of beautiful dimensions sites along with calm music)

5- Category management issue and computing,(customer are sensitive for goods reaching time, delivery place and kind and size of goods)

6- Customer franchise.(collected values of goods are included mental image of goods, reputation, and commercial name)

7- Customer care and services.(services and customer interested goods delivery in the concerned time and place)

Brodie, Carolyn, Karat, Clare Marie and Karat, John (2004).79

The book of these researchers’ refer to the point of Personalization, Personalization Policies, and Personalization Features and Overall. They found that the choice of personalization policies and features implemented on an e-commerce website does affect website visitors’ willingness to share personal information with the site. In these studies, they told participants to assume that data held by the e-Commerce company was kept secure. Given that starting assumption, all of the participants in Study, they would be more likely to use the site if the personalization features and policies that they found most

valuable were implemented. These researchers finally conclude that website
visitors are more willing to share information when they have confidence that
the e-Commerce company will 1) protect their information from theft by others
(provide security), 2) not allow the information to be used in ways they did not
intend (protect privacy), and 3) provide value to their customers through the
use of shared information (make it worth the visitor’s while).

**Headcount** (2002). The researcher's paper discussed that the term
"consumer protection" has taken on a variety of meanings in electronic
commerce. A survey of current initiatives on consumer protection in the
electronic marketplace finds that there are seven major areas of focus being
addressed under the rubric of consumer protection in electronic commerce:
Truth in Advertising, Electronic Contracting, Consumer Redress and Online
Fraud, Privacy Protection, Authentication and Security and Consumer
Education.

**Cook, Don Lloyd** (2002). The thesis of this researcher's concludes
that regulatory mechanisms can take a variety of forms and be promulgated by
a variety of Sources. Within the boundaries of the regulatory matrix a broad
array of possibilities exist for businesses and policy makers and his research
provides a place to start examining the interactions between the regulatory
mechanisms, the regulatory entities and the businesses and consumers that are
affected by their existence. Regulations cannot be simply viewed as the
relatively inert creations of lawyers and bureaucrats aiming to achieve

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particular results but must also be considered in terms of their psychological effects on the consuming public, business and other interested parties. His research suggests that taking the signal value of regulations into effect can provide diagnostic information to regulators in achieving their goals.

Dillo Lehloke, Malema, Francis (2001). These researchers in the chapter eight of their book refers to the fact that consumers must be assured of confidence when conducting online transactions. This chapter investigates and identifies the possible mechanisms of protecting consumers against dangers resulting from the easy and convenience of buying on-line. Ways to resolve dispute between buyers and merchants, redress and enforcement mechanisms are required to gain consumer confidence in the electronic environment.

2.10: CONTRACT IN E-COMMERCE

Salle, M. (2002). This researcher has proposed in his paper a multi-agent architecture based on an existing e-commerce platform for the trade of translation services built around the electronic contracts concept. One of his goals has been to match the notion of electronic contract in e-commerce and the one concerning social contract used by multi-agent systems. The formal definition and the architectures proposed are adapted to our application specificities. Even so to improve automation and autonomy characteristics all the processes of contract creation and execution will be treated online by agents. This researcher believes that the future works can be dedicated to the modeling of others special services such as a "Socialization service" and a

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"Facilitator" for the framework. Furthermore the agents wanting to join the society should provide common components such as "Sensor" and "Effectors", an "Events list" and an "Events interpreter" and finally a "Reasonner".

He also requires a protocol allowing agents to inform the "Arbitrator" that they have fulfilled an obligation. This is the way to control and verify that the contract is well executed.

Schulze, Corinna and Baumgartner, Jeffrey (2001). These researchers by focusing on consumers' contract believe that three elements must be present for a contract to be formed - and normally a sale closed:

1. An offer from the seller to the buyer;
2. Its acceptance by the buyer;
3. The e-commerce Directive specifies that the seller has to acknowledge the receipt of the buyer’s order without undue delay and by electronic means.

They referred to the e-commerce directive provides for consumer contracts that:

- The service provider must acknowledge receipt of an order electronically and without undue delay; and
- Technical means to identify and correct input errors prior to the placement of the order must be available.

When a customer in your e-shop completes his order and clicks on the “proceed to checkout” button, give him a preliminary receipt with all items

84. Schulze, Corinna and Baumgartner, Jeffrey. (2001). "Don’t Panic! Do E-commerce” Published by the European Commission’s Electronic Commerce Team (Information Society Directorate General), Corinna Schulze and Jeffrey Baumgartner, pp12-16.
purchased, their cost and any optional features (such as color, size, etc). Have tick boxes and fields so he can change his order without having to cancel the entire order. Every time he makes a change, give him a new preliminary receipt. Make it clear that this is a preliminary receipt and he must still click on the “Buy” button to finalize his order (amazingly, a large number of people leave ecommerce sites at the preliminary receipt stage thinking they have already completed the purchase - so it is critical to ensure the customer understands at what point the order is made and at what point it is not.)

Samtani, Anil, Harry, Tan Sk. (2001). These researchers in their paper look at how the regional countries have developed their local laws to address the various legal issues of electronic commerce law and regulation. While many countries have adopted or adapted the model ICT laws, such domestic legal development would arguably be only the first of many to come.

2.11: TRUST IN E-COMMERCE

Rajashekar, H. and Mousavizadeh, S. R. (2008). These researchers, in their article have concluded that trust in information services and technologies have become an increasingly important issue for today's ever-changing networked world. The development of trust among business, consumers, and other stake-holders is seen as crucial to the expansion of e-business and the full exploitation of technological developments in this area. However, the way in which trust may be gained in this content is not yet well understood. There is therefore a need for a common framework or language.

that will support a shared understanding of the concept of trust and permits the crafting of requirements of different stakeholders based on which trust gets developed across participating agents.

A high level of general trust in a community is an important factor for the prosperity and economic fitness of that community. This applies to both traditional geographically bound communities as well as to online and virtual communities. Unfortunately, stakeholders in the development of the online services and systems find it hard to ensure that systems are secure and that participants are always behave in good faith. Finding ways to make the online environment more secure and dependable, and to increase the transparency regarding the participants' honesty and reliability, is crucial for attracting people and organizations to create and use online application.

Lanford, Patricia (2007). This researcher, in her dissertation, defined a conceptual model for trustworthiness in online stores. That conceptual model was developed from the current literature and validated by both an observational study and a questionnaire. The combination of both qualitative and quantitative data provided insight into the online shopping experience, identifying relationships between consumers and elements of online shopping.

With the use of the observational study, for the first time, real consumers were observed making real purchases online. That new methodology can be used in future research of ecommerce.

A large amount of data was obtained during both the observational and questionnaire study. Future work can include taking a deeper look at

87 Lanford, Patricia. (2007). "A Model for Building Trustworthiness in Online Stores" A Dissertation Submitted to the Graduate Faculty of Auburn University in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy Auburn University, Alabama.
interface elements of each online store visited during the observational study. Also, a “where are they now” look can take the design of the online stores visited during the observational study and comparing and contrasting it to the current design of stores today. Her study could be run looking at the online shopping experience in general and results could be used to make online shopping more enjoyable and make online shopping easier for consumers. In retrospect, when conducted again, the study should keep in contact with the observational study participants and interview them after their item arrives, giving a full and complete view of the purchase experience from start to finish. Finally, using the conceptual model presented here, guidelines can be created for merchants in creating online stores perceived trustworthy by consumers.

Yao, Jingtao (2006). This researcher has found that truly innovative exploitation of the Web has yet the time to come. The majority of insurance company websites are operating at level three on Moore’s e-commerce escalator (Customer support via Web), few websites have made the transition to level four (online order processing) and five (Web access to order information) and none have entered level six (Web-based marketplaces). While it has been recognized that the absence of some website features, such as online business, is not improving the state of e-commerce in the industry, it is questionable whether or not customers want to use some of these features. Exactly what features and level of e-commerce customers’ want is unknown in the insurance business.

Delgado, Estibaliz (2006). This researcher's paper argues that there

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is a need to develop measures to evaluate or compare competing schemes, as well as a need of trust marks benchmarking and harmonization initiatives, together with awareness and promotion initiatives.

**Morton, Hazel, McBreen, Helen and Mervyn, Jack** (2005). These researchers, in the eleven chapter of their book, concluded that, it is important for the developer of embodied conversational agents (ECAs) to have available a means of assessing agents within the environment or application for which they are intended, using an approach that combines experimental control with realistic use. The research illustrates three different e-commerce applications in which ECAs were employed. Much of the evaluation of the conversational agents concentrated on the usability of the application, when the user is interacting through speech technology with the agent. In addition, the study described research conducted to assess the perceived trustworthiness of an agent in two e-commerce environments when varying text input and output functionalities are employed. Further, methods of assessing the voice of agents, which can be seen to be a tangible realization of the agent’s personality, were addressed.

In their work, a usability assessment approach, which merges experimental rigor with task realism, has been shown to be a valid approach to assessing the roles of ECAs in e-commerce applications. The data presented in their book confirm:

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• Users prefer applications in which the agent acts as a conversational partner compared with a non-visual telephone application using speech recognition.

• Users clearly appreciate the opportunity to personalize the ECAs involved in e-commerce services in the dimension of selection of voice.

• Extending the role of the ECA to allow text modalities boosts user confidence in the e-commerce applications. These were judged to be more reliable when text input was coupled with text output.

• Users feel significantly more confident that the ECA has understood them when the interface used text output.

• Data in this paper confirm the positive role of ECAs in interfaces and the benefits to that role of adding other modalities such as text output.

Bonanni, Carol and Cyr, Dianne (2004). As indicated by these researchers' study, high levels of trust in e-commerce may not be the only condition necessary to generate e-loyalty. Other variables such as satisfaction may also need to be considered. The differences in institutional-based trust across cultures indicate that companies should focus efforts in building trust factors uniquely important in each culture. This finding reinforces the complexity of online consumer attitudes resulting in website trust and e-loyalty – a complexity compounded by culture.

Marsh, Stephen, Meech, John F. and Dabbour, Ala’a (2000). These researchers, in their article, had presented a web site architecture which

uses the concept of page as agent. In that architecture, each page is able to reason about specific societal aspects of dialogue and interaction between page (web site) and user. Initial work had concentrated on construction of pages with personality, and which can reason about user trust in web site. Initial results with prototype architecture are promising, and a working demonstration version of the site will be available at the workshop for evaluation.

They believe this is the first truly adaptable web site, and that it is the first e-commerce web site which pays more than lip service to the concept of user trust in a site. Specifically, the site pays attention to estimates of user trust and adapts accordingly in order to facilitate and if possible increase the amount of trust a browsing user has in the site, with the ultimate aim of encouraging user purchases and users to return to the site.

Tan, Yao Hua and Thoen, Walter (2000). These researchers presented a generic model of trust for electronic commerce. The basic idea of the model is that an individual will only engage in a transaction if his level of trust exceeds his personal threshold, which depends on the type of transaction and other parties involved in the transaction. They have shown with the model that these two activities actually require two different types of trust, and that complete different services are needed to create these different types of trust.

2.12: SECURITY IN E-COMMERCE

Mazumdar, Sengupta C. and barik, M. S. (2005). These researchers represent that electronic commerce is growing rapidly. A number

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of technologies have converged to facilitate the proliferation of e-commerce. The rapid advances in computer technology coupled with rapid acceleration in communication networks and the development of sophisticated software have revolutionized the way business is done. However, this is not sufficient to proliferate e-commerce applications. Proper management of enterprise information security resources is the need of the hour.

Vincent, Sacha Wunsch (2004).\textsuperscript{95} These researchers represent that neither the existing free trade environment nor intellectual property protection is secured for digital products via the WTO’s rules-based trading system. It is important that Members use the Doha negotiations to secure a high level of market access for digital products so that the existing free trade environment does not slip away. It is also important that Members continue monitoring the work of WTO on Internet-related instruments as well as other developments given the significance of intellectual property to e-commerce.

Kallioranta, Sonna Maria (2002).\textsuperscript{96} This researcher emphasized the greatest challenge in implementing e-commerce in the industry seems to be a resistance to change.

Loebbecke, Claudia and Hornig, Vera (2001).\textsuperscript{97} This researcher illustrates that two different insurance models are conceivable depending on the transaction relation: (1) insuring the online buyer against non-delivery and/or (2) insuring the online shop against nonpayment.

\textsuperscript{96} Kallioranta, Sonna Maria. (2002). "Some thoughts on ecommerce in the US paper industry" resources Louisiana state university agricultural center baton rouge, April.
\textsuperscript{97} Loebbecke, Claudia and Hornig, Vera. (2001). "Increasing trust in e-commerce: concepts and examples of insurance solution" university of cologne,14\textsuperscript{th} Bled e-commerce conference,Bled,Slovenia,June 25-26.
Mcknight, Harrison, Cmar, Chuck Ka. and Choudhury, Viek (2002).98 These researchers explained that risk is endemic to e-commerce scene and needs to be addressed by both trust and distrust concepts. They show that several types of institution-based trust and disposition to trust influence site quality, willingness to explore, and trusting intention in the site. It clearly shows distinct roles for disposition to trust versus distrust and structural assurance versus no-structural-assurance.

Garrett, S. G. E. and Skevington, P. J. (2000).99 These researchers explained the definition of security in e-commerce. As they say, concerns over the security of the internet, much hyped by the media, have done little to reassure users that the Internet is a safe place to trade. These concerns must clearly be addressed if buyers and sellers are to have the confidence to trade electronically. Major security issues include:

- Confidentiality - data must not be visible to eavesdroppers,
- Authentication - communicating parties must be certain of each other’s identity and/or credentials,
- Integrity - communicating parties must know when data has been tampered with,
- Non-repudiation - it must be possible to prove that a transaction has taken place.

Much of the public concern centre on confidentiality - is it safe to send personal information (such as credit card details) over the Internet? However, the other issues are probably more important to e-commerce - it is

the issues of trust that are essential for trading.

Thanh, Do Van (2000). This researcher has his research on mobile e-commerce system. Taking into account the physical and functional limitations that prevent mobile phones from participating to mobile e-commerce, the system introduces a proxy server that offers the necessary assistance to mobile phones. In addition to the security functions, the mobile e-pay also have payment functions such as prepaid account, interface towards financial systems. With Mobile e-pay, the user can perform in a secure way any mobile ecommerce service such as doing bank transaction, buy goods or services, from mobile phones. The proposed solution is far from being perfect and quite a lot of issues remain to be done such as time stamping for electronic signature, the relation between the private public key pair and the user, i.e. how many key pair should the user have and the relation between key pair and certificates, how many certificates can be associated to a key pair, etc.

2.13: E-MARKETING

Hall, Charlie (2008). This researcher in paper on the virtual market compared marketplace and market space, and he concludes:

**Marketplaces:**

- Information exchange is costly
- Physical location is key
- Efficiency driven by mass
- Large companies have flexibility

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• Emphasis on market segments
• Intermediaries fill the channel

Marketspaces:
• Information exchange is cheap
• Physical location is irrelevant
• Efficiency driven by velocity
• Small companies have flexibility
• Emphasis on market niches
• Infomediaries fill the channel

Rubino, Joe (2005). This researcher, in his book referred to network marketing and in one of chapters he represented 50 qualities of a successful leader and business partner:

Authentic, Disciplined, charismatic, Focused, Willing to Sacrifice for Future, Able to Bond with Others, Believable, Visionary, Supportive, Dose Not take Rejection, Personally, Inspirational, Confident, Powerful, Enthusiastic, International in Personal Growth and Development, Vulnerable, compassionate, Sensitive, Organized, At peace, Persistent/Consistent, Teachable, Empowers Others, Ambitious, High Level of Physical Energy, Positive Up-Beat Attitude, Committed, Good Self Image, Positive Expectation, Happy, Works in Partnership, Burning Desire to Succeed, intuitive, Happy to Serve, Genuinely Humble, Willing to Contribute to Others, Interested to Others, Entrepreneurial, Doesn't Dump Information, Takes Initiative, Good Communication Skills, Has Integrity-can make and keep commitments, Is Proactive-takes initiative, Is a Team Player, Follows Up and Follows Through,

And

A Good Listener who listens…
For what's Important…
For what Missing…
For what It's Like in the…
Other Person's World…
For Contribution…
For the Fit…
For the Gold…

Rayport, Jeffrey F. and Jaworski, Bernard j. (2004). These researchers, in their book, wrote four categories of marketing communication. Market communications can be categorized into a simple two-by-two framework based upon the audience focus (broad versus individual) and communication media (off-line versus online) the four categories of communication are direct, personalized, traditional mass marketing, and general online approaches. And also the ten steps branding process can be broken down into two general stages: building the value cluster and the integrated campaign. The steps are as follows:

A. Clearly define the brand audience.
B. Understand the target customer
C. Identify key leverage points in target customer experience.
D. Continually monitor competitors.
E. Design compelling and complete brand intent
F. Execute with integrity.

G. Be consistent over time.

H. Establish feedback systems.

I. Be opportunistic.

J. Invest and be patient

Bijl, Paul de and Peitz, Martin (2000). These researchers analyzed the impact of regulatory instruments on entry and consumers’ surplus. They have seen that a balanced application of regulatory instruments, that takes the development of competition and the resulting competitive pressure on the incumbent into account, can increase the benefits for consumers, and can facilitate entry in the market. It can also provide a flexible framework for a wide range of future issues, such as the development of broadband services and fixed-mobile convergence.

Their models used in the analysis sometimes yielded results that confirm basic intuition or current policy. That formalization of basic intuition is more important than it perhaps appears at first glance. Sometimes, namely, apparently intuitive outcomes turned out to be falsified and reversed by the models. This falsification is not easily achievable by other methods.

An attractive feature of the models is that they are sufficiently simple in nature to enable clear interpretations: they are not black boxes. Yet the models are far from trivial. Sophisticated software is needed to solve even the simplest of models, while the software also allows solving more complex variants of the model. Also, simulation models make it possible to do “dry runs” to address a wide range of regulatory instruments and questions.

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2.14: SUMMARY

Subsequent to an introduction in the second chapter, review of the literature comes in the form of twelve parts in the present study. This section is consists of a reference to the former works of numerous researchers that among them the following names are highlighted:


2- AWad, Elias M.A. (2008), Course, Thomson. (2007), Davies A.J., Summers, Caroline and Black, Donna (2005), Sarmadsaeedi, Soheil and Mirabi, Vahid R. (2004), Dryden, John (2001), Moodley, Sagren, Morris, Mixe and Velia, Myriam (2003), Graja, Hubert and McManis, Jennifer (2001). The researchers explained the kind of e-commerce that are used in SMEs. They told there are (B2B), (B2C), (C2B), (G2B), (B2G), (C2G), (G2C), (G2G) and (P2P) in e-commerce trade and (B2B), (B2C) and (C2B) are more important in e-commerce.

3- Mendo, Alonso Fernando and Guy, Fitzgerald (2006), Boucher, Xavier and Lebureau, Emilie (2005), Estrin, Len, Foreman, John T. and
Garcia, Suzanne (2003), Barry, H. and Milner, B. (2002). The researchers referred to the nature of small and medium size enterprises (SMEs) and illustrated the distinguished scale of firms to the turnover or number of employment.


The researchers showed e-commerce acceptability in SMEs and also they described that performance of ecommerce depends on geographic situation and culture of country, state and etc.


9- Salle, M. (2002), Schulze, Corinna and Baumgartner, Jeffrey (2001), Samtani, Anil, Harry, Tan Sk. (2001). The researchers discussed about contract in e-commerce and also they enlightened that suitable contract in e-commerce is very important to developing trade in SMEs.

The researchers explained security in e-commerce. They believed that it is very important for us to use suitable instrument for the security in e-commerce.

The researchers illustrated e-marketing, that means a new tools for the marketing through the internet. The researchers concluded that the new techniques of marketing can be effective as much as the traditional techniques. Even since we are involved with the higher speed in the world of electronics, sometimes the new techniques of marketing such as e-marketing can be more effective than traditional approaches.

Since, none of the above studies revealed any information about the effectiveness of E-commerce application in small and medium sized enterprises (SMEs) in Karnataka State and more particularly in Bangalore District. In order to overcome this limitation the present study attempts to a comprehensive analysis of the effectiveness of E-commerce application in small and medium sized enterprises (SMEs) in Karnataka State and more particularly in Bangalore District.