CASE STUDIES OF INDIAN SMALL BUSINESSES ADOPTING E-COMMERCE: ASSESSMENT OF STRATEGIC USE

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ABSTRACT

Small and medium-sized business (SMEs) usage of e-commerce has grown in significance as a study area in information systems. There are already several advantages of e-commerce for small- to medium-sized businesses (SMEs) that have been thoroughly documented in both theoretical and applied literature. Little study has been done in defining methods of ecommerce adoption for SMEs in developing countries, notably India, despite the great attention paid to encourage SMEs to use it both by academics and governments. The purpose of this article is to better understand the aspects and combinations of factors that SMEs must take into account before incorporating e-commerce into their operations by taking a deeper look at the real experiences of SMEs in India. To examine and explain the underlying reasons that are likely to affect the varied degrees of e-commerce adoption in SMEs, particularly the service sector, case study research was conducted.

KEY WORDS: ICT uses, ICT Adoption, SMEs and ICT, e-commerce in SMEs

INTRODUCTION

The significance of Small and Medium-sized Enterprises (SMEs) has increased over the past several decades in the global economy. Economic and business development literature that is both theoretical and applied recognises the crucial roles that SMEs have played in the development of both national and global economic growth. This fact is reflected not only by the number of SMEs, which account for about 90% of all establishments worldwide, but also by their considerable contribution to the creation of job possibilities (Hall 2002). On the other hand, information, communication, and technology (ICT) is discovered to play a significant function for any company (KaiUwe Brock 2000).

ICT usage has significantly impacted big, medium, and even small enterprises (Doukidis et al. 1996). ICT use ranges from mainframe to personal computers, from word processing to sophisticated applications and systems. Recent studies have discovered encouraging evidence that SMEs may use electronic commerce (e-commerce), an ICT, to benefit their business growth (MacGregor et al. 2002).

Many organisations are using a variety of e-commerce adoption strategies and e-commerce application types that have been proposed in the literature, including both academic and commercial periodicals. However, the majority of this study has been on industrialised nations where the economic system is widespread. Only a few studies have attempted to provide some insight into e-commerce adoption techniques for SMEs in developing nations, particularly India.

This study set out to fill this knowledge gap by identifying the elements and combinations of factors that SMEs should take into account before integrating e-commerce into their operations.

BACKGROUND OF THE LITERATURE

ICT characteristics in SMEs

The negative effects of the globalisation of the world economy and the economic recession in Southeast Asian countries, particularly in India, highlight the need for SMEs, the foundation of the national economy, to become more competitive and robust. According to Thorp (1998), successful ICT deployment gives the possibility of a significant competitive edge for both large companies and small businesses.

SME's are not 'small' versions of huge corporations, nevertheless (Culkin and Smith 2000; Dandridge 1979). Before defining additional concerns of technology adoption and strategies, it is necessary to pay close attention to and have a solid grasp of SMEs' characteristics.

The lack of internal ICT skills and financial resources is a well-known feature of SMEs, which are prevalent in most nations. Additionally, prior study by Heikkila et al. (1991) showed three key distinctions between SMEs and large enterprises in terms of their use of ICT:

SMEs often utilise computers more as tools than as a method of communication; there are typically less issues with organisational politics since there are fewer interested parties in a SME; and there are far fewer resources available to SMEs to deploy ICT solutions.

Studies on SMEs and online shopping

E-commerce is any economic or commercial activity carried out through websites that allows for the purchase and sale of goods and services as well as the facilitation of business transactions and activities by and among individuals and organisations (Schneider, 2002). However, a broader definition of e-commerce encompasses more than only online goods purchases and sales. An internet firm will also locate its suppliers, accountants, payment providers, government authorities, and rivals there along with its clients. The way they do business, from production to consumption, must alter in response to their online partners'

demands (Alter 2002; Bidgoli 2002). Ecommerce, to put it briefly (Seyal and Rahman, 2003; Schneider, 2002; Rahman and Raisinghani, 2000), is a new method of conducting business.

Recently, there have been a lot of exploratory and qualitative research on the usage of e-commerce in SMEs (Drew 2002). While dot-coms and the "new economy" are expanding quickly, SMEs in developing nations have been slower to adopt e-commerce than their counterparts in affluent nations (Intrapairot and Srivihok 2003).

Additionally, a number of topics have been brought up in contemporary SME literature, such as:

- Examining the benefits and drawbacks of e-commerce in Thai SMEs (Intrapairot and Srivihok, 2003)
- The significance of e-commerce infrastructure in supporting attempts to encourage SMEs in poor countries to adopt e-commerce (Jennex et al. 2004, Stylianou et al. 2003).
- How Italian SMEs in the industrial sector use e-commerce (Santarelli and D'Altri, 2003).
- Adoption characteristics that might influence Brunei SMEs' adoption of e-commerce (Seyal and Rahman 2003)
- The factors that small and medium-sized businesses (SMEs) in Thailand take into account when deciding whether to use e-commerce (Lertwongsatien and Wongpinunwatana 2003).
- Australian SMEs' adoption of e-commerce (MacGregor et al. 1998).

Additionally, many of the challenges experienced by SMEs while transitioning to e-commerce have also been covered in the business press and trade journals (Matlay and Addis 2003; Phillips 1998; Schlenker and Crocker 2003).

However, there are some topics that have received very little attention in research up to this point, such as: • Framework that aids SMEs in evaluating the strategic use of e-commerce as well as providing adoption process guidance; and • Assessment of e-commerce application and post adoption experiences in various sectors of Indian SMEs.

Effects and Advantages of SME's Strategic E-Commerce Use

The fast expansion of e-commerce in recent years has some people wondering why. The chances and advantages that are obvious from the existing deployment by many businesses are the only reason, after all. Through the use of Internet software and services, the idea of strategic use of e-commerce also aims to connect Internet use with the potential it presents to the company (Sadowski et al. 2002). It also acknowledges that using the Internet strategically enables the exercise of control over the parameters of the interactions and interfaces used in relationships between consumers and the company, which are also connected to the strategies of the organisation.

E-commerce provides a wide range of potential advantages for both SMEs and big businesses. Many research assert their conclusions on the advantages and effects of e-commerce. These conclusions are summed up as follows (Chan 2001; Schneider 2002):

- E-commerce provides unequalled cost reductions for transactions.
- Companies may shorten their conventional supply chains, decrease transportation barriers, and lower delivery costs;
- Physical limits of time and location are removed;
- Costs associated with advertising and marketing are reduced;
- Buyer and seller can communicate more quickly.

SMEs have considerable challenges in determining the proper application of e-commerce and its strategy owing to a lack of ICT understanding and planning, despite the alluring benefits that they may receive from incorporating it into their businesses. Therefore, it should come as no surprise to see that the majority of SMEs' owner/managers would ultimately establish their ICT strategy using a "trial-and-error" manner.

Revolutionizing India: The Impact of Information and Communication Technology (ICT)

In recent years, India has experienced a remarkable transformation fueled by advancements in Information and Communication Technology (ICT). From urban centers to rural communities, ICT has revolutionized various sectors, including education, healthcare, governance, and business. This article explores the profound impact of ICT in India, highlighting its benefits, challenges, and future prospects.

Bridging the Digital Divide:

ICT has played a crucial role in bridging the digital divide in India. Through extensive internet connectivity initiatives and affordable mobile devices, access to information and communication has become more inclusive, reaching even the remotest corners of the country. This digital inclusivity has opened up new opportunities for education, skill development, and employment, empowering individuals and communities to participate in the digital economy.

Education Revolution:

ICT has transformed the landscape of education in India. E-learning platforms, digital classrooms, and online courses have expanded access to quality education beyond traditional boundaries. Distance learning programs and Massive Open Online Courses (MOOCs) have enabled millions of Indian students to access educational resources and learn from renowned institutions across the globe. Additionally, educational apps and interactive learning tools have enhanced engagement and personalized learning experiences for students.

Healthcare Advancements:

The integration of ICT in healthcare has revolutionized India's healthcare sector. Telemedicine services have connected patients in rural areas with specialist doctors in urban centers, improving access to healthcare services. Electronic medical records (EMRs) and health information systems have streamlined patient data management, enhancing diagnostic accuracy and treatment outcomes. Mobile health applications have also empowered individuals to monitor their health, access medical information, and avail preventive healthcare services.

E-Governance and Digital Services:

ICT has played a significant role in transforming governance and public service delivery in India. The government's Digital India initiative has led to the digitization of numerous services, reducing bureaucratic hurdles and enhancing transparency. Online portals for tax filing, e-governance platforms for citizen services, and digital payment systems have made government services more accessible and efficient. Furthermore, ICT-enabled initiatives such as Aadhaar (biometric identification) and Direct Benefit Transfer (DBT) have streamlined subsidy distribution and social welfare programs, reaching the intended beneficiaries directly.

Thriving Digital Economy:

The rise of ICT has catalyzed the growth of India's digital economy. The emergence of e-commerce platforms, digital payment systems, and fintech services has transformed the way business is conducted. Start-ups leveraging ICT have witnessed exponential growth, creating employment opportunities and contributing to economic development. The proliferation of digital marketplaces has provided a platform for small and medium-sized enterprises (SMEs) to reach a broader customer base, boosting entrepreneurship and innovation.

Challenges and Future Outlook:

Despite the significant progress, challenges remain in harnessing the full potential of ICT in India. Issues such as the digital divide, privacy concerns, cybersecurity threats, and the need for digital literacy and skill development require attention. However, the Indian government and various stakeholders are actively addressing these challenges through policies, investments, and awareness programs.

Looking ahead, the future of ICT in India appears promising. Emerging technologies like artificial intelligence (AI), blockchain, and the Internet of Things (IoT) hold immense potential for further transformation across sectors. Continued investments in digital infrastructure, research and development, and skill enhancement will pave the way for a digitally empowered and inclusive India.

METHODOLOGY

As was already indicated, the goal of our research is to comprehend the elements and combinations of factors that SMEs in India should take into account before integrating e-commerce into their operations. The qualitative case-study technique was deemed suitable for this research due to the paucity of empirical evidence on the e-commerce management practises in Indian organisations and the exploratory character of the study. The low generalizability of the results is one of the main drawbacks of case study (Eisenhardt 1989). Working within this limitation, this study is examined from interviews with two SMEs owners/managers in order to provide a pretty generic set of results and relevant information.

The size of the two SMEs' businesses and their particular post-ecommerce adoption experiences were taken into consideration while choosing them. When contacted, every participant was asked if they would be open to taking part in the study. It is significant to remember that every person in this study agreed to take part voluntarily.

Furthermore, given our goal was to examine "local" commercial entities working in typical developing country contexts, our research did not include any international or transnational organisations. The SMEs included in this study will be referred to as business A/B due to the non-disclosure agreements with these organisations. The entire dialogue is based on open and semi-structured interviews, all of which were videotaped (Mahemba and De Brujin 2003).

Information Gathering and Analysis

We used the two hours of semi-structured interviews to get experience information from each participant. This approach offers the benefit of getting clear answers to specific questions, but it runs the danger of swaying answers due to attitudes and how the questions are phrased. Control and assessment questions can overcome these problems. Each interview was recorded and afterwards verbatim transcribed for the sake of analysis. This made sure that the information included in the interview notes accurately reflected what the interviewees had to say. Additionally, numerous sources of information were leveraged to increase the value of the data gathered. Several data sources were consulted throughout the interview process as part of the data triangulation technique.

CASE STUDIES

Company-1:

Nagarjuna Educational Service, Bangalore.

it is an educational service provider with offices in Bangalore, India. This company's main line of work is offering academic coaching services to junior and senior high school students from any local school.

In order to provide the students a more convenient method to retrieve results, download any course materials for their studies, or even post the questions online simply from the closest Internet café or even at

their own convenience at home, the Manager eventually started the implementation of e-commerce. Finding prospective students who are interested in remote learning is a supplementary objective, since it will help reduce the expense of hiring additional instructors.

The manager made the decision to invest in technology by employing a professional web developer to design and create their website after taking into account how the functionality of the web may impact the comfort of the client.

The issue of few students using the online facility while no students have signed up for distant learning sessions has now come to light. The owner discovered that most students thought there was little cost difference between accessing the website from the nearest Internet café and picking up the results in person from the office after the organization's evaluation of the survey and interviews with a few students.

Company-2:

DetlaGreen Transportation Service Company

In Bangalore, India, business Delta green is a privately held inner-city cab operator and car rental that was founded in 2019.

It was the owner's initiative to integrate e-commerce into their firm; in fact, one of his coworkers who had recently returned from an e-commerce conference hosted by government organisations had advised it. His coworker thinks that e-commerce will benefit the company by lowering costs, boosting revenues, and enhancing efficiency.

There is just one employee on staff who is capable of utilising email programmes and a PC. The owner's only option is to hire a programmer to create the website for the business because none of the staff members has experience designing and constructing websites. The business successfully launched a website in 2021 that enables prospective clients to learn about the services offered, the car types that are available for rent, price data, cab routes, and information about the office location.

Just a few months after adopting e-commerce, the company has already begun to run into a number of difficulties running their business online. The business's owner stated that a number of complaints had been made by clients who were dissatisfied with how quickly their email messages were responded to. Additionally, the majority of clients seem to prefer getting information the old-fashioned manner, by phone and fax.

DISCUSSION

Following a discussion of the key findings from the examination of the two businesses examined in the case studies above.

Important business strategy benefits

Numerous academic works recognise that SMEs' capacity to succeed may be hampered by the absence, or lack of, a business plan (Ballantine et al. 1998, Morison et al. 2003, Shaleh 1986). The two incidents mentioned above have proven this assertion to be true.

It is clear that both businesses shown are looking for methods to maximise the return on their investment in e-commerce, which is one of their shared objectives. The initial step of determining their company strategy prior to the choice to implement e-commerce, however, has been left out of the aforementioned adoption procedures.

The company's ability to understand its business objectives, strength, resources, and environment is facilitated by a thorough identification of its business strategy, which may then be utilised to identify the main business processes.

It is also crucial to underline that e-commerce is not only a technological endeavour. It is more accurate to view e-commerce as a means for businesses and organisations to benefit from and modify important business processes using the Internet and related technology. If the owner or management thinks that the problems with the current business processes can be remedied by simply changing them to electronic form, this can also lead to the failure of e-commerce adoption.

Limitations and Directions for Future Research

The conclusions that may be derived from this study are restricted by the research situation. The difficulty of applying the suggested framework to the adoption of B2B forms of e-commerce is one of the study's major flaws. This is because the research environment, which was limited to a small service firm adopting a B2C website, made it difficult to generalise and apply the findings to other study situations.

Therefore, more research is required to evaluate the relevance and significance of the suggested determinants, taking into account how culture, management styles, and other factors may potentially affect adoption processes. To establish a more complete knowledge of the elements influencing successful e-commerce adoption, it should also take into account the opinions of successful adopters.

CONCLUSIONS

This article presents case studies of two Indian SMEs' use of electronic commerce (e-commerce). It provides study of the significance of business strategy alignment with SMEs' e-commerce adoption. Through a suggested framework, the research also highlights a number of criteria and outlines a step-by-step procedure for implementing e-commerce.

The findings of this study are helpful for government authorities in developing nations like India who are concerned about the growth of SMEs in addition to managers of SMEs. The author thinks that the findings will also offer some insights to ICT consultants that work with SME clients in order to enhance their customer satisfaction and service. By offering a practical example of how the use of case studies may be employed to uncover significant variables that SMEs need to consider before embracing e-commerce, this paper advances the area of qualitative research in IT. A framework for e-commerce adoption was also developed using the case study data. The experiences we had using the technique are believed to be useful to other researchers interested in doing case studies in developing nations, notably India.

Despite the fact that the research environment is extremely specialised, it is thought that the conclusions apply to other markets and other nations.

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