
Role of Information Technology in Sri Lankan SMES

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Abstract: Small and Medium-sized Enterprises are widely regarded as an important component of both developed and emerging nations. They are especially crucial for developing economies such as Sri Lanka, as SMEs contribute greatly in reducing poverty through job creation. While businesses and enterprises continue to undergo significant changes, information technology has a very significant impact in most businesses and all aspects of the economy. This study is helpful for comprehending the various functions of SMEs in which entrepreneurs employ information technology and E-Commerce platforms. The study is significant because it identifies the influencing factors that lead to the implementation of information technology in a business, Government Policy Interventions and Strategies to Adapt Modern Appropriate Technology, utilizes advantages and Drawbacks of Information Technology Adoption in Small and Medium-Sized Enterprises. The study is beneficial for gaining a better understanding of the impact and contribution of information technology and e-commerce to overall business performance.

Key words: Information technology (IT), SME, E Commerce, Interventions, Key Strategies.

INTRODUCTION

Information technology (IT) refers to everything that businesses use computers for. Information technology is building communications networks for a company, safeguarding data and information, creating and administering databases, helping employees troubleshoot problems with their computers or mobile devices, or doing a range of other work to ensure the efficiency and security of business information systems. Demand for professionals in this field is high and growing, and people entering the field have a range of career paths to choose from [1]. Small and Medium-sized Enterprises are widely regarded as an important component of both developed and emerging nations. They are especially crucial for developing economies such as Sri Lanka, as SMEs contribute greatly in reducing poverty through job creation. In the industrial and service industries, small and medium-sized firms (SMEs) are the driving force behind innovation. Technology allowed us to see things in new ways and engage everything we were doing in new ways. We were also able to do business more efficiently due to technological advancements. IT has aided SMEs in more effective management by allowing them to enquire about a specific problem, comprehend its complexity, and develop new products and services, so improve their efficiency and production. SMEs are today exposed to more opportunities for expansion and diversification across industries than they have ever been [2].

Information technology is an essential component of SME operations in today's competitive conditions. The increased adoption of IT and E-Commerce technologies has fundamentally changed how SMEs are managed and administered. The global trend of using IT and E-Commerce has an impact on SMEs' business procedures. Many small and medium-sized businesses aim to use technology to help them run their businesses. Due to a scarcity of resources, SMEs now have a global reach because of technological advancements. Almost everyone recognizes the

importance of information and communication technology adoption in SMEs, and the value of SMEs as engines of economic growth is well recognized. Information technology is having a big impact on the Small and Medium Sized Enterprises (SME) sector, particularly in industries that are declining or where unemployment is high. SME development is gaining traction in Sri Lanka. The internet and the WWW (World Wide Web) are the best platforms of this. Especially the Internet, is having a considerable impact on SME operations, and it is said to be essential for the survival and development of nations' economy in general, and SME in particular furthermore internet allows SME's to reach and expand their customers all over the world [3].

Current global trends indicate that information technology could be a critical factor in SME competitiveness in regional and international marketplaces. SME's are being forced to compete for new markets, new goods, and new distribution channels as the competitive pressure mounts. Only those businesses with high-quality information systems can face these environmental movements. Companies and SME's only competitive advantages are their innovation processes and their capacity to create benefit from information as a resource [4].

RESULT AND DISCUSSION

Information technology (IT) skills can address the important concerns at each life cycle stage to support continuing growth and development. While SMEs struggle to stretch resources to meet ever-increasing demands as they grow, many claim that IT investment may become unavoidable [5].

A strategy for SMEs to use information technology: a case study of an Indonesian furniture company's adoption of email The guidelines for SMEs adopting IT were developed based on existing literature and the authors' experience working with SMEs in Indonesia. It entails assessing SMEs' IT requirements (step 1), assessing organizations' IT maturity (step 2), evaluating available IT solutions in the market (step 3), matching available solutions to SMEs' IT requirements and IT maturity/readiness (step 4), implementing the selected IT solution (step 5), and post-adoption evaluation (step 6). Even though the rules appear to be in a sequential order, they can be used in iteration [6].

The similarities and contrasts between research on IS implementation and research on IS in small businesses, as well as research gaps. To assess the research in the two categories and identify areas of opportunity, an overall research framework is constructed. A study model is built as a result of this analysis to investigate the factors influencing the adoption of computer-mediated communication technologies in small businesses. A telephone interview was utilized to gather information from 207 businesses about their organization, their usage of communications technologies, and the factors driving their adoption. Competitive advantage, top management support, and size were all major drivers of communication technology adoption, according to statistical analysis of the data [7].

The Information Technology in Small Business: Issues and Challenges. This chapter's goal was to introduce a book that combines the work of a number of different authors in the field of IT and small company. I've tried to cover some of the many features of small firms that indicate that their use of technology differs greatly from that of larger companies. As a result, a number of themes that receive only a cursory mention in this chapter are discussed in greater depth throughout the book, such as political and economic culture, as well as security concerns [8].

The role of information technology (IT) in human resource management, specifically in the recruiting function of the small-sized firm under consideration, with reference to the usage of an applicant tracking system (ATS) The study investigates the different processes and intricacies of one of an organization's most crucial activities. The goals are To investigate the candidate tracking system of the organization under investigation using free application tracking software (Zoho Recruit). To comprehend the effects of using the aforementioned applicant tracking system on the organization's recruitment process [9].

The influence of new technologies on SMEs. The focus is on examining the opportunities that new technologies bring to small and medium-sized businesses. While the goal of the paper was to highlight the state of SMEs in Kosovo in terms of using information technology to gain a competitive advantage in both local and international markets [10].

The influence of information technology in small and medium-sized businesses' corporate strategy. The opportunities afforded by the Internet to facilitate the internationalization process of Small and Medium Enterprises (SMEs) as well as strengthen relationships with other firms within the same value chain are explored in this study, both theoretically and experimentally. The empirical comparison was conducted using appropriate statistical and econometric methods. We employed OLS estimations and tobit models in particular (model with censored dependent variables). The statistical program utilized in this study was STATA. Having an online presence appears to be beneficial. We may also say that SMEs profit from the adoption of Internet-based technologies in terms of worldwide expansion and improving supplier relationships [11].

The role of information technology in the dynamics and evolution of SMEs in Timis County, Romania. In Timi County, size identification of the vectors that direct, manage, or buffer the adoption of IT governance principles at the public and private organizational levels, profit and non-profit, respectively. The sociological investigation was used as an approach. The questionnaire was the tool we employed. IT governance has grown in size and importance, with an emphasis on IT transformation performance in order to meet current and future business and customer needs, as well as organization activity optimization [12].

This study is useful for understanding the various functions of SMEs in which entrepreneurs use Information technology and E-Commerce platforms. The study is particularly significant because it identifies the influencing factors that lead to the implementation of an Information technology in a business, Government Policy Interventions and Strategies to Adapt Modern Appropriate Technology, use ,benefits and Consequences of IT Adoption in Small and Medium-Sized Enterprises. The study is useful for getting a greater understanding of entrepreneurs' points of view on the impact and contribution of IT and E-Commerce to overall business performance.

SME CONCEPT, INFORMATION ACCESS, AND USE IN SME

The Government of Sri Lanka recognizes SMEs as the backbone of the economy, as it accounts for more than 75% of the total number of enterprises, provides 45% of the employment and contributes to 52% of the Gross Domestic Production (GDP). SMEs promote broad based equitable development and provide more opportunity for Women and Youth participation in the economic development of the country. With the globalization trend, the SME sector is not merely seen as a sector for “protection and promotion” but, more importantly as driving force for “growth and development”. Therefore, Government of Sri Lanka recognizes that enhancing national and international competitiveness is fundamentally important for this sector to face the emerging challenges and develop SMEs as a thriving sector. (National Policy Framework for SME Development) [13].

SMEs are today exposed to more opportunities for expansion and diversification across industries than they have ever been. Globalization of the world economy and technological developments transformed the majority of wealth-creating work from physically based to knowledge based, greatly increasing the value of information to business organizations by providing new business opportunities. As the key wealth-creating assets, information and knowledge are displacing capital and energy. Information has evolved into a valuable commodity and a necessary component of progress and development. Power has become synonymous with information. As a result, reliable, timely, and relevant information is deemed critical for SMEs.

The capability of SMEs to achieve their objectives is determined by how successfully they obtain, interpret, synthesize, evaluate, and comprehend information, as well as how well their information channels support organizational processes. Information technology is among the most crucial aspects of any manufacturing process, and technological shifts can have significant ramifications.

These technologies will continue to support the expansion of global work, in which small businesses operate across national borders. Today, new technologies, particularly the Internet, are altering global information flows, trade, and investment, as well as the competitive advantage of businesses, services, and regions. These changes necessitate that all businesses, regardless of size, invest in the adoption of new technology.

Effective information's generated by Information Technologies would be required by SMEs to support and distribute information to various users. Information technology that supports decision making, provides an effective interface between users and computer technology, and provides information for management on the day-to-day operations of the organizations are examples of such information systems. Information is a valuable commodity or product that is required for a variety of objectives. Managers use information as a resource to plan, organize, staff administer, and control activities in ways that fulfill the enterprise's objectives [14].

Information technology, in particular, is altering the economy, and becoming increasingly reliant on new technologies. New technologies, enable more interactivity, flexibility, and low-cost business transactions, as well as improved interconnection with SME partners and customers.

SRI LANKAN GOVERNMENT POLICY INTERVENTIONS AND STRATEGIES TO ADAPT MODERN APPROPRIATE TECHNOLOGY

The Government will facilitate the acquisition and adoption of state of-the-art modern and appropriate clean technologies for SMEs to increase quality, innovative, productive and competitive products. Industrial policy thrust is directed towards the promotion of knowledge based, technology intensive industry while focusing on regional industrialization.

Key Strategies:

- Establishment of a Technology Transfer and Development Fund (TTDF) with appropriate incentives to support the acquisition and adoption of modern, clean technology for SMEs.
- Establish a strong network, platform and link between SMEs and technology providers. Strengthen the technology transfer programs, outreach of technology demonstration platforms and centers in the industrial park sand through special technology showcase and dissemination exhibitions.
- Promote and conduct special technology transfer and diffusion programs to promote the adoption of modern technology by SMEs. Establishing and strengthening technology bank for collection and dissemination of information on technology resources. Also strengthen training centers by upgrading the course contents and capacity development of resource personals to meet the market sensitive training requirements.
- Recognize and reward innovative and technology leading SMEs and assist them to participate in foreign trade fairs, exhibitions and technology demonstration platforms.
- Foster University – Business linkages and ensure curriculum development of Universities and Technical and Vocational Education Training (TVET) institutions by following a consultative process with SMEs to meet the needs of the industry.

Source: National Policy Framework for SME Development

WHY SME FAIL?

Lack of commitment. The expectation that everything will go perfectly and no effort to work through any problems that arise. Having hours posted, no one there, and the doors locked.

Nothing worth selling. This can be both a product that has not enough appeal or a service without enough demand.

Overspending. Unrealistic use of monies, both for business use and as draws from the business for personal uses. An inability to turn off the spending.

Unwise purchasing. This relates mainly to advertising. Most ads don't pay for themselves.

Location. A great product can die while a mediocre product succeeds due to the convenience attached to where a product is available.

Rumors. You rarely get a chance to repair a bad first impression. You're least expensive and most effective advertising is word of mouth, and it also has the most potential for harm.

USE OF INFORMATION TECHNOLOGY IN SME'S

According to the Department of Census and Statistics, Sri Lankans' computer literacy rate was 32 percent last year, with nearly 44 percent in the urban sector, nearly 31 percent in the rural sector, and nearly 12 percent in the estate sector.

Occupation group	Computer literacy rate (%)		
	2018	2019	2020
Services and Sales workers	60.6	50.9	57.6
Skilled Agricultural, Forestry and Fishery workers	18.7	21.4	20.2
Craft and Related Trades workers	40.7	37.3	38.4
Plant and Machine operators and Assemblers	42.3	42.8	38.1
Elementary occupations	30.5	27.8	34.0

Table: 1 Source-Department of Census and Statistics

(Computer literacy among computer aware employed population (aged 15 – 69 years) by Occupation group – 2018, 2019 & 2020)

Percentage of Computer Literate population (Computer Literacy- ability to use a computer) over the survey periods has been gradually increasing. Overall Computer Literacy reported in 2020 for Sri Lanka is 32.3 percent and the Digital Literacy which means ability to access/find, analyze, evaluate, utilize, share and create using information technologies and internet is 50.1 in Sri Lanka.

According to the Department of Census and Statistics Services and Sales personnel, computer literacy percentages in primary occupations, which is their ability to operate a computer, have grown in 2020 compared to 2019. We can anticipate that more SMEs will be able to employ information technology to provide more efficient and effective results.

E-commerce appears to have already taken root in the country, with a number of businesses already offering goods and services online, according to the Sri Lanka E-commerce Readiness Assessment Report. E-commerce applications are primarily available for travel and hospitality services. Business maturity for e-commerce in Sri Lanka is estimated at 34%. This indicates that companies have started using e-commerce, but the current level of maturity is still insufficient. (Digital Economy of Sri Lanka: National Goals and Lessons from the South)

THE BENEFITS OF INFORMATION TECHNOLOGY IN SMES

Modern tech can ease up your SME business processes and allow for more flexible ways of working. It can also convert your business operations and save you money and effort.

Wherever you are, user can now reach out to more potential customers. Using technological advancements, communication within an office, as well as communication with clients and external stakeholders, is much faster and easier. You can reach more customers from home and even arrange a meeting with partners while traveling. Also encourages all employees to use information technology at work. Mobile phones, laptops, and wireless Internet have made it possible for professionals to work from anyplace, including their homes.

Assisting you in making better decisions more quickly. Decisions are made using Information technology on a daily basis can conduct more comprehensive market research with the help of information technology. Data supports every decision you make. You can now ensure that your resources are allocated correctly. Business managers can track resource use more easily, whether it's about finances or manpower. By embracing new technology, businesses can save money by

increasing the productivity efficiently and effectively. New technology makes day-to-day business operations easier

The Online world, e-mail, and video - conferencing are just a few of the technologies that allow businesses to collaborate with anyone, anywhere in the world. Data and money can be sent in real time, enabling businesses to operate on a larger scale. Reduces need of large file paperwork's Easy access to information's.

Bookkeeping functions now can be handled by software applications such as QUICKBOOKS.

Best Accounting Software for Small Business of 2022 are mentioned below,

Best Overall: QuickBooks Online

Best for Micro-Business Owners: Xero

Best for Service-Based Businesses: FreshBooks

Best for Part-Time Freelancers: QuickBooks Self-Employed

Best Free Software: Wave

Source: www.investopedia.com

Information technology has substantially reduced operational expenses. The execution necessitates a significant amount of time spent on needs assessment. Information technology has aided in business expansion and has altered the way businesses operate.

THE CONSEQUENCES OF IT ADOPTION IN SMALL AND MEDIUM-SIZED ENTERPRISES

While the advantages of using IT are obvious, what are the reasons that SMEs traditionally backed away from it?" Some of the primary reasons for this were as follows:

Accessibility: Limited access to larger markets through market linkages, transportation, telecommunications, and information exchange reduces demand for their products.

Infrastructure: As the economy expands, poor physical infrastructure reduces the productivity and competitiveness of Sri Lankan SMEs in relation to imports.

IT awareness: There is a significant need to invest in educating SMEs about the tangible benefits that technology can bring to their business. • **Relevance of IT solutions:** SMEs require typical business and industry-specific core processes, and it is critical that the solutions provided to them are tailored to their specific needs.

Finances and affordability: For SMEs to adopt any IT solution for business growth, the cost of these solutions must outweigh the value provided. The difficulty in obtaining adequate and timely financing on competitive terms, particularly for longer-term loans, which has been exacerbated by the current global financial crisis.

Generic SME characteristics in relation with IT .What is the problem?

- Lack of good and appropriate methods for governing Information Technology in SMEs.
- SMEs should adopt more Information Technology: Information Technology is seen as a driver for innovation and progress
- Information Technology is not always very positively perceived by SMEs (not a good image)
- The main lessons to be learnt
- E-Business is not a top priority for most SMEs
- Networking is the most successful marketing strategy to reach SMEs
- Awareness raising needs to be based on realistic targets and expectations SMEs often lack appropriate information about e-business and ICT

- Most SMEs remain skeptical about ICT and e-business
- Training and managerial change are key issues
- E-business might not always be beneficial for SMEs
- Many Information Technology solutions are still too expensive or not trusted

How are small businesses benefiting from today's technology?

A few examples:

- A small business owner today can open a website, and without help from a programmer and with minimal costs start selling online anywhere in the world.
- Easily accessible and cheap software helps in different aspects of running a business, such as inventory management, bookkeeping, communication, etc.
- Tools for efficient communication with staff, suppliers and clients - cell phones, text messages, email and software tools such as Slack and CRM.
- Cheap, targeted and effective advertising on search and social media platforms.

CONCLUSION

Information technology aids in the rapid and precise generation of data. What matters here is what kind of data it should produce. Will it actually assist you in making decisions? If it doesn't, it's not worth the effort to get data. Taking notes on the data isn't going to help you much. It needs to be transformed into useful data. You will fail if you rely on business leaders to tell you what information they require. What you should do is inquire about the challenges that business executives are encountering, and then consider what information you can supply to help them handle the issues. This necessitates a thorough understanding of the business process. A bad Information Technology investment decision can be disastrous for a small business. As a result, SMEs must exercise extreme caution when making IT investment decisions. One of the fastest expanding segments of the economy is small business. This industry's businesses are becoming increasingly dependent on information systems (IS) to run their businesses. SME's (Small and Medium-Sized Enterprises) play a vital role in an economic development of a nation.

In the industrial and service industries, small and medium-sized firms (SMEs) are the driving force behind innovation. SMEs are today exposed to more opportunities for expansion and diversification across industries than they have ever been. The increased adoption of IT and E-Commerce technologies has fundamentally changed how SMEs are managed and administered. The global trend of using IT and E-Commerce has an impact on SMEs' business procedures. SMEs' use of IT and E-Commerce has an impact on their business processes all over the world. IT and E-Commerce are infiltrating every aspect of Sri Lankan SMEs' business. In order to extend their manufacturing and economic operations and contribute to greater business, SMEs must compete more successfully in an increasingly competitive world.

In Sri Lanka, SMEs are quickly adopting information technology. The improvement of information technology infrastructure in SMEs is regarded as critical in terms of creating employment and job opportunities. As a result, their level of information technology usage remained high. Various factors pertaining to limited IT adoption include: a lack of access to credit, insufficient information to make informed decisions, a lack of expertise, digital illiteracy, a high cost of access to information technology infrastructure, and high taxation. Without the use of information technology today, SMEs will face serious and fatal consequences in the future, including the risk of falling behind economically, with all of the consequences that entails.

Especially when we consider that information technology is a critical factor in the development of the economy overall and SME's in specific. This technology should be used by SME's in Sri Lanka as an effective instrument to stay ahead of the competition, produce high added value processes and products, and develop competitive strategies within a business, regionally and

internationally, implement programs to promote sustainable regional integration, and create a conducive environment to stimulate SME's competitiveness in the regional environment. The government should play a role in creating an environment that encourages and assists SMEs in making better use of information technology, thereby increasing the economic competitiveness, productivity, and growth through investment in new technology, e-business, and innovative business models.

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