



MSME Sector (Information & Communication Technology)

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Abstract

The impact of globalization has compelled MSME sector to adopt Information and Communication Technology practices to survive and compete with large scale companies. The potential benefits of information and communication technologies (ICTs) to micro, small- and medium-sized enterprises (MSMEs) are well known. ICTs enhance MSME efficiency, reduce costs, and broaden market reach, both locally and globally. Since the MSME sector plays a major role in national economies, these benefits to individual MSMEs collectively translate into positive results in the form of job creation, revenue generation and overall country competitiveness. Governments, therefore, have an interest in the promotion of access to, and use of, ICTs by MSMEs. This study is an attempt to describe about the benefits of ICT in MSME sector and also describe that how the Ministry of MSME promotes the ICT in MSME sector through their schemes as a policy.

Keywords

MSMEs, Enterprise, ICT, Promotion, Technology, Internet, Information, Communication, globalization, Supply Chain Management (SCM), E- commerce, Intranet and Video Conferencing.



INTRODUCTION

- Information and Communication Technology

Information and communication technology, usually called ICT, is often used as a synonym for information technology (IT) but is usually a more general term that stresses the role of telecommunications (telephone lines and wireless signals) in modern information technology. ICT consists of all technical means used to handle information and aid communication, including computer and network hardware as well as necessary software. It consists of IT as well as telephony, broadcast media, and all types of audio and video processing and transmission. The expression was first used in 1997 in a report by Dennis Stevenson to the UK government and promoted by the new National Curriculum documents for the UK in 2000. Today we can encounter different definitions for ICT like: "Information and Communication Technologies broadly refer to set of activities that facilitate - by electronic means - the capturing, storage, processing, transmission, and display of information, Information and Communications Technology is "an umbrella term that includes computer hardware and software; digital broadcast and telecommunications technologies as well as electronic information repositories such as the World Wide Web or those found on CD-ROMs . It represents a broad and continually evolving range of elements that further includes television (TV), radio, mobile phones, and the policies and laws that govern these media and devices".

The concepts, methods and applications involved in ICT are constantly evolving on an almost daily basis. It's difficult to keep up with the changes - they happen so fast. Anyhow, the term ICT is now also used to refer to the merging (convergence) of telephone networks with computer networks through a single cabling or link system. There are large economic incentives (huge cost savings due to elimination of the telephone network) to merge the telephone network with the computer network system.

- **Micro Small and Medium Enterprises**

The Micro, Small and Medium Enterprises (MSMEs) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. MSMEs not only play crucial role in providing large employment opportunities at comparatively lower capital cost than large industries but also help in industrialization of rural & backward areas, thereby, reducing regional imbalances, assuring more equitable distribution of national income and wealth. MSMEs are complementary to large industries as ancillary units and contribute enormously to the socio-economic development of the country. The Ministry of Micro, Small and Medium Enterprises (M/o MSME) promotes the development of micro and small enterprises in the country with the objective of creating self-employment opportunities and upgrading the relevant skills of existing and potential entrepreneurs. In order to promote establishment of new enterprises and creation of new entrepreneurs, M/o MSME has been implementing various schemes and programmes, one of them is Promotion of ICT in MSME sector.

Use of ICT in MSME Sector

Based on SMEs needs and access for ICT, its usage differs regarding to their degree of complexity from basic technology such as radio and fixed lines to more advanced technology such as email, e-commerce, and information processing systems:

Degree of Complexity

Technology	Changes
Basic Technology	Fixed line/ Mobile phone, Fax
Basic Information Technology	PC equipped with basic software and hardware
Advanced Communication	Email, Internet Browsing, Video Conferencing, Intranet, File Sharing, creating websites, E-Commerce, voice over internet protocol
Advanced Information technology	PC with advanced software such as databases,



	enterprise resource planning, inventory management, customer relationship management
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The ICT tool that almost all MSMEs adopt, considered as more economic and convenient in having basic communications is a fixed line or mobile phone. MSMEs which use ICT agree about the positive impact that ICTs, such as computer terminals, e-mail and the Internet and their applications can have on their business. Many types of business software can improve information and knowledge management within the firm, leading to more efficient business processes and better firm performance making communication within firm faster and management of firm's resources more efficient. Using communication tools leads to improvement of external communication, in either B2C or B2B contexts, or result in a reduced transaction cost, increased transaction speed and reliability, and extract maximum value from each transaction in the value chain.

At inter-firm level, the Internet and e-commerce have great potential for reducing transaction costs and increasing the speed and reliability of transactions. They can also reduce inefficiencies resulting from lack of co-ordination between firms in the value chain. Internet-based B2B interaction and real-time communication can reduce information asymmetries between buyers and suppliers and build closer relationships among trading partners.

Role of Information and Communication Technology (ICT) in MSME Sector

ICTs are technologies and tools that people use to share, distribute, and gather information and to communicate with one another, one on one, or in groups, through the use of computers and interconnected networks. In addition ICTs are mediums that utilize both telecommunications and computer technologies to transmit information. ICT environment helps in fast and accurate decision-making by the SMEs due to increased mobility. The critical components before SMEs are speed of services, access to information, empowering employees in terms of skill and delivering highest valued services at competitive cost. SMEs need ICT-based



solutions in terms of multi-tasking, expanding customer base, raising productivity, controlling cost, working remotely, fast and accurate decision-making and facilitating collaboration. SMEs have various needs in order to function in an aggregative manner to reach out for value addition by keeping in mind the variable cost model. ICT usage by the SMEs raises productivity of the sector in particular and the economy in general. Product leadership, operational excellence and customer relationship, which SMEs look at while using ICT-based solutions is essential. SMEs have to be good decision-makers, planners and strategy-makers regarding the type of technology, which they are adopting. There is the need for best manufacturing practices in the SME sector. Innovation, design development and validation by the SMEs in the face of globalization and rapid technological advancement, to stay afloat during competition are the essentials. There is also the need for investment in infrastructure i.e. roads, ports and power, and effective fiscal interventions by the government so as to promote SMEs. Instead of IT use being limited to accounting or some in-house activities, there is the need to use IT to look at inventories and capacity utilization. TQM, TPM, Six sigma, ISO etc are essential for effective standardization of the SMEs. SMEs instead of adapting to proprietary software like Microsoft Office can rely upon free and open source software (FOSS) like Open Office, Linux Red Hat et al for cost reduction. it has been found ERP software such as NAVISON can reduce operational cost drastically. Other web-enabled ERP vendors are BaaN and IFS. ERP is considered as an integrated system, which allows information to enter at a single point in the process and update a single, shared database for all functions that directly or indirectly depend on this information. ERP solutions cover human resource, corporate finance, production planning and control, materials management, quality management, plant maintenance, services management, quality management, plant maintenance, services management, and sales and distribution. Accounting software like Tally helps in financial management of an organization. Integrated Transactional Information Systems such as Radix, MakeESS, Octopus-E, Tech Solutions etc. can also help the SMEs. SCM (Supply Chain Management) software help in raising productivity and efficiency of inventory controls. CRM (Customer Relationship Management) is considered to integrate people and technology to maximize external relationships.

Promotion of Information and Communication Technology (ICT) in MSME Sector

The manufacturing industry is witnessing an increasing turbulent, dynamic and complex business scenario. The lowest entry barriers across countries, complex cost structures and relentless pursuit of customer satisfaction in response to rising expectations and adoption of Information and Communication Technology (ICT) compared to other nations has resulted in loss of global competitive advantage. The scheme envisages for a planned model of IT adoption in potential MSME clusters based on need analysis of stake holders. Under the scheme 100 MSME clusters will be benefitted. The objective of the scheme is to carry out diagnostic mapping of potential clusters and motivate them to adopt the ICT tools and applications for their production and business processes, with a view to improve their competitiveness in national and international market. The scheme will facilitate in extending the support of basic ICT infrastructure to MSMEs, sensitizing MSMEs with potential businesses of ICT tools, standardization of the business processes/ activities, incentivizing MSMEs and software partners for long term partnership in ICT adoption etc.

The broad activities planned under the scheme include, identifying target cluster for ICT intervention, setting up of E-readiness infrastructure, developing web portals for clusters, skills development of MSME staff in ICT application, preparation of local software solution for MSMEs to enhance their competitiveness, construction of e- catalogue, e-commerce etc. and networking MSME cluster portal on to National level Portal in order to outreach MSMEs into global markets.

Salient Features of the scheme adopted by the Ministry of MSME to promote the ICT

1. Selection of target clusters,
2. Appointment of Technology Providers,
3. Awareness Programme and Feasibility Report,
4. Preparation of Detailed Project Report (DPR),
5. Setting up of e-Readiness Centres,
6. Subsidy for procurement of hardware and software,
7. Establishment of National Portal for MSMEs,



8. Evaluation/Impact assessment studies.

Conclusion

Since the global economy becomes increasingly reliant on information and communication technologies (ICTs) in order to receive, process, and send out information, SMEs in developing countries are expected to go for ICTs. It is said that SMEs face competition from global giants due to which they ask for protection, and technological and financial support from the State. SMEs in the developing nations should integrate into the global supply chain, bid for outsourcing businesses, and increase their own productivity. In the course of time, however, their reliance on the informal sector of the economy for fetching raw material and informal goods should not become exploitative in nature. The key for SMEs is that the information and communication technology provides so many options and avenues to take advantage of in a way that big business just can't or doesn't see value in. Whether this opportunity lasts for long is unknown, but what is known is that those businesses that change to meet the ongoing needs of customers will succeed. SMEs should establish appropriate ICTs goals; identifies critical ICTs needs and allocates financial resources for the same. This makes ICTs adoption by SMEs possible. System characteristics within a business aids in ICTs adoption. For instance SMEs with large number of administrative applications readily support ICTs adoption as a tool for management control, operational control and administration.

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