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CONTENTS

Sr.	TITLE & NAME OF THE AUTHOR (S)	Page
No.		No.
1.	ROLE OF TRAINING FOR MAINTAINING AN ISO 9001 SYSTEM	1
	DR. VINOD N. SAYANKAR	
2.	AN ANALYSIS OF THE ROLE OF SMALL SCALES INDUSTRIES' SECTOR IN INDIA	4
	SONIKA CHOUDHARY & DR. M. L. GUPTA	
3.	REDUCING PATH CONGESTION AND FAILURE IN AN INTERACTIVE NETWORK	7
	APPLICATIONS	
	S. SATHYAPRIYA, A. KUMARESAN & K. VIJAYAKUMAR	
4.	SEGMENTING THE SHOPPERS OF GREEN FASHION PRODUCTS ON THEIR SHOPPING	11
	BEHAVIOUR	
	DR. MANOJ KUMAR	
5 .	SEARCHING THE CAUSES OF ORGANIZATIONAL FAILURE IN CONTROLLING DRUG	
	ADDICTION IN THE PERSPECTIVE OF SOME RELEVANT VARIABLES IN BANGLADESH WITH	
	SPECIAL REFERENCE TO SYLHET	
	ABDUL LATIF & SARUAR AHMED	
6.	AN ASSESSMENT OF QUALITY OF SERVICE DELIVERY IN ETHIOPIAN PUBLIC HIGHER	20
	EDUCATION INSTITUTIONS	
	DR. SOLOMON LEMMA LODESSO	
7.	A STUDY OF THE EFFECTS OF INSUFFICIENT SLEEP, CHANGES IN THE SLEEPING AND	26
	FOOD HABITS OF NIGHT SHIFT WORKERS	
•	CHHAYA P. PATEL	47
8.	ELECTRONIC COMMERCE ADOPTION BY MICRO, SMALL AND MEDIUM SIZED ENTERPRISES	47
	BISWAJIT SAHA	
9.	THE WORKING CAPITAL ANALYSIS OF DISTRICT CENTRAL COOPERATIVE BANKS IN	50
J .	TIRUNELVELI REGION, TAMILNADU	
	DR. A. MAHENDRAN & R. AMBIKA	
10.	QUANTIFICATION OF QUALITY AS PER USER PERSPECTIVE IN SOFTWARE DEVELOPMENT	58
	SHABINA GHAFIR & MAMTA SHARMA	
11.	A STUDY ON CORPORATE SOCIAL RESPONSIBILITY	65
	M. UMREZ, B. SWATHI & K. LAVANYA	
12.	COMPUTERIZED ACCOUNTING INFORMATION SYSTEMS AND SYSTEM RISK	67
	MANAGEMENT IN NIGERIAN BANKS	
	DR. DAFERIGHE, EMMANUEL EMEAKPONUZO & DR. UDIH, MONEY	
13 .	EVALUATION OF CUSTOMER SATISFACTION ON BROADBAND INTERNET SERVICE USERS	73
	OF ETHIO TELECOM	
	ADEM MOHAMMED HABIB & YIBELTAL NIGUSSIE AYELE	
14.	EXPERIMENTATION IN OSPF MULTIPATH ENVIRONMENT WITH OPTIMAL INTERFACE	80
	TIMERS	
	KULDEEP DESHMUKH	
15 .	FINANCIAL INDICATORS FOR BUY BACK OF SHARES	86
	PRERNA SEHGAL & DIMPY HANDA	
	REQUEST FOR FEEDBACK & DISCLAIMER	90

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ELECTRONIC COMMERCE ADOPTION BY MICRO, SMALL AND MEDIUM SIZED ENTERPRISES

BISWAJIT SAHA ASST. PROFESSOR COMPUTER SCIENCE & ENGINEERING DEPARTMENT DR. B. C. ROY ENGINEERING COLLEGE DURGAPUR

ABSTRACT

Micro, small and medium sized enterprises (MSMEs) play a pivotal role in nation building. They are considered to play a vital role in guarantying the national economic and social development. MSME give a strong foundation to maintain steady and fast development of national economy. Electronic commerce is becoming the new battlefield of competition among enterprises. The number of transactions and the volume of business generated through electronic commerce is increasing steadily. However, the penetration of electronic commerce in MSMEs' of our country is still at a nascent stage. This in turn is slowing their growth story to a large extent. Their development and expansion is getting restricted owing to the lack of adoption of electronic commerce as a viable business model. Micro, small and medium sized enterprises are generally not in a position to compete with the larger well established business organizations due to the visibility acquired by the latter. By adopting electronic commerce MSMEs' can get visibility in the global market place. This will be of immense help to them. This paper analyzes the problems existing in the electronic commerce set up of micro, small and medium enterprises of our country. A solution is proposed keeping in mind the existing cyber laws and other regulations, which hopefully will be conducive to micro, small and medium sized enterprises launching electronic commerce.

KEYWORDS

Electronic commerce; micro, small and medium sized entrprises; problems; strategies.

1. INTRODUCTION

-commerce in simple terms is the capability of doing business with the help of internet, in which the sellers and buyers conduct various business activities without meeting each other. E-commerce combines the resources of information systems with the reach of network connectivity to directly link the key business constituents - Customers and Businesses [1]. The history of e-commerce dates back to the early 1990's but only in the last few years it has made a strong foothold in the Indian sub-continent. A micro-enterprise is one where the investment in plant and machinery (their original cost excluding land, building and items specified by the Ministry of Small Scale Industries in its notification No. S.O. 1722(E) dated October 5, 2006) does not exceed Rs.25 lakh. A small enterprise is one where the investment in plant and machinery is more than Rs.25 lakh but does not exceed Rs.5 crore. A medium enterprise is one where the investment in plant and machinery is more than Rs.5 crore but does not exceed Rs.10 crore. This applies for the manufacturing sector [2]. The definition of MSMEs in the service sector is:

- Micro-enterprise: Investment in equipment does not exceed Rs.10 lakh.
- Small enterprise: Investment in equipment is more than Rs.10 lakh but does not exceed Rs.2 crore.
- Medium enterprise: Investment in equipment is more than Rs.2 crore but does not exceed Rs.5 crore [2].

The Indian micro, small and medium sized enterprises (MSMEs) sector plays a pivotal role in the country's industrial economy. It is estimated that in value, the sector accounts for about 45 percent of manufacturing output and about 40 percent of total export. In recent years, the MSME sector has consistently registered a higher growth rate than the overall industrial sector. The major advantage of the MSME sector is its employment potential at a low capital cost. According to available statistics (4th Census of MSME Sector), the sector employs an estimated 59.7 million people in 26.1 million enterprises; labor intensity in the MSME sector is estimated to be nearly four times that of large enterprises.

2. CLASSIFICATION

Electronic commerce can be broadly classified into the following categories:

BUSINESS TO BUSINESS

This category of e-commerce helps inter-organizational interaction and transaction. It requires two or more business entities interacting with each other directly or through an intermediary [1]. Business applications of this type can be used to facilitate almost all types of interactions among organizations such as inventory management, channel management, order fulfillment and delivery. This category is further sub divided into supplier-centric, buyer-centric and intermediary-centric.

BUSINESS TO CONSUMER

This category of E-commerce helps consumers the capability to browse, select and buy merchandise online from a very wide variety of sellers at better prices [1]. This model has been utilized mainly by on-line internet based stores and small businesses trying to surpass entry barriers. Existing business organizations may use this model by making a web presence and expanding the market space and revenues by utilizing the internet as a new channel to do business with customers.

CONSUMER TO BUSINESS

In this model the consumers get a choice of wide variety of products and services. They also specify the range of prices they are willing to pay for a particular product or service. As a result there is a reduction in bargaining time, increase of flexibility and ease of operation at the point of sale for both the merchant and the consumer.

CONSUMER TO CONSUMER

In this model consumers get opportunity of trading products or services among themselves through internet. Products that are sold through this model are mainly small gift items, craft merchandise etc. This model is a platform for consumers to transact goods or services with other consumers present on the internet.

BUSINESS TO GOVERNEMENT

In this model transaction takes place between business organizations and government. The transactions are guided by much stricter rules and regulations as it should be when dealing with the government.

3. BENEFITS OF ELECTRONIC COMMERCE

Indian companies intending to join the e-commerce business must consider the short term and long term benefits that the companies will get. The main benefits of e-commerce are considered to be the following:

WEB PRESENCE

Web presence or having an own website makes a company visible across geographical boundaries. This for a company is an entry to the virtual marketplace. This offers tremendous advantages to companies of any size and sector. Web sites can help a company by providing timely and relevant information to customers

about the products and services that are offered. One of the important benefits that a company gets out of a web presence is image enhancement, larger influence of the brand and expansion of overseas market as well as national market.

SUPPLY CHAIN

E-commerce helps companies in refining their supply chain to a large extent. A proper supply chain can help in reducing costs while ensuring the customers get right quality of product at the right place and at the right time and at the least cost. Channel partners work together in an environment of trust and results are seen through reduction in costs, proper maintenance of stocks in the inventory and cycle time reduction. Refinement of supply chain can also be possible over traditional route but e-commerce provides far too many benefits over the traditional route.

ENHANCED CUSTOMER SERVICE

E-commerce also provides lot of opportunities to enhance customer service. As for example a bank customer who has an online access to his account is spared the burden of visiting the bank branch and carrying out transactions in the traditional way. This saves a lot of time and results in improved customer service and satisfaction.

COMPETITIVE PRICING

Buyers and sellers come together in electronic market place and it is a win-win situation for both. E-commerce offers the benefit of online ordering of goods and online payment options. Buyers get competitive pricing and sellers do not have to build brick and mortar stores. This results in direct reduction of costs of the products and the companies pass on to this benefit to their customers. MSME segment players can make their bids online. When it comes to bidding or quoting prices of products online in an electronic marketplace constraint of bidding in the traditional way are overcome. This may result in increase in business for many organizations.

INTERNAL BUSINESS PROCESSES

E-commerce initiative can be linked with the internal business processes of an enterprise as well. Companies can link the e-commerce initiative with their enterprise resource planning, supply chain management and customer relationship management initiatives through a seamless integration of business processes and providing great value to the end customers. This initiative if taken properly will also help companies to stay ahead of the competition.

4. ROLE OF ELECTRONIC COMMERCE

E-commerce allows companies to be available 24 hours a day throughout the year to their prospective and existing customers. So it can be said that e-commerce breaks away from the limitation of time and space when it comes to reaching the customers or for customers looking for prospective suppliers of goods and services. In short which means transactions can be conducted at any time and at any place. This improves the companies operating efficiency and global competitiveness. Additionally the advantages of being paperless to a large extent and low operating costs make up for the deficiencies of MSMEs in capital, technology, scale and image. This in turn creates more chances for them to develop. One of the major benefits of an e-commerce initiative which is in perfect synchronization with E.R.P, S.C.M and C.R.M initiatives of a company is maintenance of proper inventory levels so that the customer can get the quality product at the least cost. E-commerce has a distinct role in reducing cost of MSMEs. The following are some of the various categories of expenditure of MSMEs that can get reduced:

- i. Raw materials procurement cost.
- ii. Inventory cost.
- iii. Production cost.
- iv. Promotion as well as export marketing cost.
- v. Cost related to retaining present customers.
- vi. Cost related to identifying prospective customers.
- vii. Product information dissemination cost.
- viii. Communication costs within the enterprise.
- ix. Communication costs with external entities.

5. PROBLEMS OF ADOPTING E-COMMERCE BY MSME

Though there exist lots of benefits of e-commerce there are some areas of concern in the adoption of e-commerce by MSMEs that needs to be addressed. Those areas are mainly:

SECURITY

The security problems still remain the main factor that affects the development of e-commerce. To do transactions in the open internet safe transmission of data is the most important factor and this factor plays a major role in popularizing electronic commerce. Surveys about the application prospect of e-commerce clearly point out that the majority of people express their fear of personal information being lost or infringed because of the invasion of hackers. Therefore, security or the lack of it is an area of concern that has become the biggest obstacle to the development of e-commerce. The operation of e-commerce involves many types of security problems such as capital security, information security, commodity security and business secrets. In order to popularize e-commerce it is very important that the security issues are addressed properly.

LACKING STRATEGIC PLAN

The management in many micro, small and medium-sized enterprises does not understand the power of internet as a means to boost business. The management leaders have a weak sense of using information, not fully recognizing the importance of information in the era of knowledge economy, or only partially understanding how to conduct e-commerce such as considering e-commerce as surfing the internet or simply establishing a website, without having the related management foundation. Thus e-commerce only stays on the surface of website construction. The e-commerce conducted by many micro, small and medium-sized enterprises tends to lack long term planning. E-commerce involves business transformation and different enterprises have different ways to develop e-commerce. In order to reap the benefits of internet the implementation of e-commerce in many micro, small and medium-sized enterprises needs to be gradually realized, planned for a long time and implemented step by step. This can be done by making use of the internet to browse, collect and issue information, to establishing enterprise's own website and information platform, conducting online purchase, and to setting up joint purchase platform of the trade and perfecting the management system of supply chain [6].

LACK OF TALENT

The managers of many micro, small and medium sized enterprises haven not fully realized the revolutionary changes e-commerce has brought to business development and marketing methods and hence importance hasn't been attached to the cultivation of talents. As a result of which there is a lack of talents in e-commerce. To conduct e-commerce, the small and medium-sized enterprises need both technology and talents, and because of the lack of professional personnel and of innovation in the pattern of e-commerce, the micro, small and medium-sized enterprises are short of network-running experience, and superiority of e-commerce could not be given full play. Consequently many such enterprises engaged in e-commerce are not competent enough [6]. The lack of professional personnel is the most important factor hindering the application of e-commerce in micro, small and medium-sized enterprises.

6. STRATEGIES TO ADOPT E-COMMERCE BY MSME

E-commerce is a herculean and complicated systematic project, which can hardly be done at one shot. To be successful in the e-commerce business in the long run, it is extremely necessary for organizations to make proper plans and policies. Reference [7] states that before entering e-commerce managers must be able to answer some very important questions related to e-commerce implementation strategy. The government also has an important role to play. The government should bring advanced technology and platform of developed countries to strengthen the construction of technology infrastructure. The government should help in all possible ways to cultivate the developing environment of e-commerce.

SECURITY

The security problem of e-commerce needs to be addressed effectively. Securing e-commerce must occur on four fronts:

- i. Securing the web clients.
- ii. Securing the data transaction.
- iii. Securing the web server.
- iv. Securing the network server operating system.

Organizations need to be proactive in protecting their resources linked to the network. It is reasonable to tolerate a flaw that will hardly occur. It is also reasonable to assume that logically independent failures will be statistically independent and not happen in concert. In contrast, security vulnerability, once discovered, will be rapidly disseminated among the growing community of hackers and will be exploited on a regular basis until it is fixed [1].

PROMOTE ONLINE CONCEPT BY TOP MANAGEMENT

The top management of micro, small and medium-sized enterprises should promote e-commerce, applying modern technology to the management of the enterprises, and making them succeed in the competition. At present, in case of many micro, small and medium-sized enterprises, e-commerce is only limited to maintaining a web site which gives information about the enterprises and their products. But the various other advantageous avenues of e-commerce have been overlooked. The top management of MSMEs should come forward whole heartedly to reap the full benefits of e-commerce. Since conducting business over internet also requires a change in mentality the top management should also train employees so that there is no resistance from the employees to carry business over the internet. In order to have a successful e-commerce development it is necessary to have board level commitment and support from all stake holders. Projects have been known to fail without such commitment [7].

INFRASTRUCTURE IMPROVEMENT

Our country has already achieved initial achievement in the construction of information infrastructure but compared with the information highway of developed countries, we are still in the initial stage. India has got a low personal computer penetration and consequently internet usage is also low as compared to the developed nations. But it can be expected that more and more people will get connected with the internet in the near future. E-commerce infrastructure should be highly usable and reliable, and at the same time, it should be safe. The e-commerce site should be easily accessible 24/7. Any time a visitor tries to reach the site, it must be available instantly. Non availability of the site will cause serious negative impact on the buyers. Speed of internet is another crucial factor. Given the Indian scenario where the online buyer is paying for the internet connection as well as for the telephone, the speed of content downloading is of great importance [4].

TALENT HUNT

Lack of employable engineers is an area of serious concern. According to NASSCOM only a small percentage of fresh engineering graduates are employable [3]. Top companies attract talent owing to a number of factors. The most important being the salary package that they offer. Apart from this the learning environment and the growth potential that an employee gets while working in a big company are the other advantages that lure young and experienced engineers alike to join top companies. However, MSMEs should recruit new talents and devise ways to retain old talents. Developing e-commerce setup is a pioneering and creative task, which requires high quality personnel engaged in the profession. The people selected for the job should be prospective in vision, open in mind, passionate and bold in starting business.

GOOD CLIENT BASE

In business good relation with clients is always beneficial for any enterprise irrespective of the size and sector to which the enterprise might belong to. MSMEs do not have a huge client base as compared to the large multinational companies. After adopting e-commerce the MSMEs can get feedback in real time from their clients for their existing products and thus can have a very clear idea about the likes and dislikes of their customers. These enterprises can also go onto customize products according to the requirements and demands of their customers. They can also provide their customers with enhanced after-sales service. But they have to fulfill their customer demands promptly. Speed of execution of customer orders is very important. Otherwise those customers may switch loyalty and move to other business competitors. Customer response and queries have to be dealt with extreme care. These will definitely prove to be of great help in expanding the client base.

CONTINUOUS EVALUATION

E-commerce implementation involves various stages. Each and every stage of e-commerce implementation should be carried out after planning meticulously. Problems if any should be removed. Business processes involved in the proper functioning of e-commerce have to be closely monitored and modified as per the customer requirements. A long lasting supervision and management mechanism should be present to promote the constant improvement of e-commerce. Thus a continuous evaluation of the e-commerce initiative by the top management is necessary.

COMMUNITY BUILDING

A strong community building exercise is also required for an e-commerce enterprise to be a success. Frequent online visits by individuals or by persons representing business organizations having a sense of belonging or feeling a part of community that the e-commerce venture represents is very helpful. This community building exercise goes a long way in making the e-commerce venture a success [4].

7. CONCLUSION

E-commerce makes use of the internet and mobile communications network to conduct various business activities. E-commerce as a concept basically involves the applications of high end technologies and as stated earlier it has got lot of benefits. So it will continue helping the human society in ways too many. The micro, small and medium sized enterprises must fully recognize the trend and explore different ways to carry out e-commerce activities to remain competitive in the information age of today as well as in the years to come. Though it must not be overlooked that setting up an e-commerce venture or shifting from doing business in the traditional way to an e-commerce organization has got lot of challenges but e-commerce is poised to become an important driving force for the development of enterprises as long as there is a highly professional and proper management and commitment, clear goal and deep knowledge of all stake holders.

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