Implementation of E-Commerce in Tiny and Micro Organizations

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Abstract Globalization of products and markets will push companies to the internet, to be competitive. e-commerce has the potential to significantly improve the efficiency of operations in the six phases of the business supply chain. The key components are Design, Brand recognition, Reliability and trust, Quality, Availability, Delivery, Security and Privacy.
Key words: e-commerce, Globalization, Internet, Brand recognition, Relation

Introduction

E-commerce is the art and science of selling products and/or services over the Internet. E-commerce is a type of industry where buying and selling of product or service is conducted over electronic systems such as the Internet and other computer networks. Globalization of products and markets will push companies to the online medium, in order to be competitive. Most businesses use e-commerce because it provides the opportunity for increased profits (through higher sales or lower costs) and thus enhanced sustainability of the firm. E-commerce has the potential to significantly improve the efficiency of operations in the six principal phases of the business' supply chain. Specifically, e-commerce may benefit a firm in product and service development, supply and inventory management, manufacturing and assembly, marketing, sales and distribution, and customer service. E-Commerce is the application of current and emerging information and communication technologies (ICTs) to conduct business. With the use of e-commerce it is said that geographic boundaries are removed, new global markets can be opened, and the Internetis the vehicle in which to do e-commerce [1]. Although SMEs increasingly use the Internet for a variety of commercial and production-related purposes, on average they have a limited understanding of the full range of benefits of electronic commerce. This lack of awareness of the great potential of e-commerce is one important barrier to its adoption, together with inadequate investment in skills, and the relatively high initial investment costs involved in developing electronic commerce strategies[9]. The advent of Internet-based electronic commerce offers considerable opportunities for firms to expand their customer base enter new product markets and rationalize their business. Although problems of definition and measurement of electronic commerce make it difficult to gauge the phenomenon, available data indicate impressive growth in the rate of adoption of the Internet by small and medium-sized enterprises (SMEs) in a number of countries. SMEs appear to be gradually bridging the gap in uptake in comparison with larger firms [2].Electronic commerce can be widely acknowledged as a powerful tool in creating a level field for small businesses when competing with the larger firms.[3]

Motivation:

Keeping in mind the benefits that can be accrued by small organizations an effort is made to educate and implement e-commerce in small organization [4]. The need to publicize the benefits of the e-commerce and implementation of e commerce in small organizations is viable. e-commerce can help deliver economic growth, increased business opportunities, enhanced competitiveness and better access to markets. This is at a time when the opportunities for small enterprises to adopt e-Commerce are growing due to improved access to the technical and communication infrastructure[5]. Keeping in mind all these barriers to e commerce implementation in Small organizations, the need of popularizing e-Commerce with small organizations is felt. The benefits that can be accrued by the small and tiny organizations are much more. This motivated me to do this project work on implementation of e-Commerce in small and tiny organizations, from Indian perspective[10].

Methodology of e-commerce Implementation

3.1 All the organizations who want to implement e- commerce must follow the following guidelines in order to make e-commerce a successes are listed below.

1   Educate everyone in the organization, with the risks involved with the e-commerce transactions. Employees of the organization must be aware of fraud and the possible risks involved with the ecommerce implementation. Then only it is possible to combat the online threats and to carry out the risk mitigating measures.

2   Communicate organizational policies and procedures to the customers through the website to address the customer disputes and customer dissatisfaction.

a   Privacy policies – These should be available through links on the website.

b   Information security. Create a Webpage that educates the customers about the security practices and controls.

c   Shipping and billing policies

d:Refund policies: Establish and display a clear, concise statement of your refund and credit policy.

1.   The organization must adhere to the rules outlined by the Payment Card Industry Security Standards Council (PCI) [6], if not the organization may be exposed to severe fines and the risk of having payment ability removed.

2.   The e-commerce business [8] must be protected against the intrusions from various sources listed below.

a)   The e-commerce website must be up to date, with the latest security software.

b)   Encrypt the sensitive data and confidential data with the help of encryption software.

c)   Ensure that the employees change passwords regularly and passwords kept confidential.

d)   By using Software packages,   to carryout regular assessment, how vulnerable is the website to hackers.

e) Scan the computers for viruses, to prevent data loss.

3. Payment service provider contract should carefully studied, and the liability for fraudulent transactions should be understood.

3.2 Checklist which will be useful for SMEs[7] for website creation: Define the main purpose for which the website is to be created.

3.3 The detailed step by step methodology of implementation of e-commerce in organization is listed below. They are

1. Contact existing and potential customers about their ideas and experiences relating to e-commerce implementation.

2. Discus and determine what other organizations in the similar industry are doing.

3. Hire a consultant and also create a project team

4. Evaluate and purchase the required hardware and the software that can be up graded whenever required.

5. Sufficient training should be provided to the employees.

6. Start with simple procedures such as purchase orders and e mails etc.

7. After completing internal testing, the testing of the systems must be extended to friendly external customers or suppliers, with prior intimation.

8. Document all the requirements and procedures and guidelines.

9. Monitor the website for possible up gradation and necessary changes regularly.

Results and discussion

A detailed survey is conducted in various tiny and small organizations and the following results were obtained. Total number of organizations surveyed is 100 numbers. For few of these organizations, e mails were sent, personally contacted some of them and with the remaining organizations telephonic interviews were conducted. The results were listed below:-

Sl no.	Reason for using internet	Percentage
1	Collecting information and collaborating with other firms	25
2	Share the information with the customers	30
3	Share the information with the suppliers	18
4	Receive the orders from the customers	11
5	Place the orders with the suppliers	9
6	Other reasons	7

Table no. 1

Sl no.	Level of implementation of e-commerce in organization	Percentage
1	Basic computing skills & knowledge of computerized accounting	34
2	Computerized inventory specialized/ Custom computer application	7

3	EDI (electronic data interchange)	15

Table no. 2

Sl no.	Benefits accrued from implementing e-commerce	Percentage
1	Reduced time of production of the product	13
2	Improved relations with the suppliers	14
3	Improved relations with the customers	16
4	Reduced cost	12
5	New channel of marketing with a global reach	15
6	Others	

Table no. 3

Sl no.	How is the revenue affected by the implementation of e-commerce	Percentage
1	No change	2
2	Increased	53
3	Decreased	14
4	Significantly increased	26
5	Drastically reduced	5

Table no. 4

Sl no.	How is the cost affected by the implementation of e-commerce	Percentage
1	No change	6
2	Increased	9
3	Decreased	64
4	Significantly increased	1
5	Drastically reduced	20
6	Common reasons for not using E-commerce extensively	

Table no. 5

After developing the e- commerce in stage by stage method the following benefits were observed.

1 The advertisement expenses are reduced

2 Wide reach out for customers is achieved. Customers all over the world are able to use the resources provided.

3 Lot of money is saved in the form of stationery.

4   The time period between placing the order and receiving the final product has been drastically reduced.

5   The customers were given 24 x 7 hours of attention. All the customer grievances have been addressed in a very short span of time.

By online monitoring of the current trends in the industry and the competitors the organization can be more innovative and much more responsive to the demands of the customers by adopting e-commerce in a phased manner the initial investment required to start e commerce has came down.

Conclusion

The e-commerce implementation in a tiny organization can be carried out in a most effective manner. From the project work it can be inferred that the small and tiny organizations are also can also be part of the e-commerce revolution, in a phased manner. The tiny organizations can save cost and time, can be more effective, with the implementation of e-commerce.

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