Internet Enabled E-Markets : Some Obstacles

*Naresh Malhotra
**Sunil Arora

ABSTRACT

The present study explores the obstacles faced by the industrial units in exploiting e-markets. It focuses on the various factors which delay the industrial units to take-off these markets. The provision of an electronic market place within the Internet will significantly improve the productivity and competitiveness of all participating companies regardless of whether they are suppliers or customers. The Internet provides access to an on-line global market place, which operates on a 24x7 basis with billions of customers and thousands of products and services. It also provides companies with new more cost effective and time efficient means for working with customers, suppliers and development partners. The study highlights the problems faced by the organizations in deploying the E-markets and also provides remedial strategies. The major barriers to cultivate these markets include technical barriers, customer reluctance, cost factor etc. The study proposes different recommendations from the product, price and the place point of view in order to overcome these obstacles.

Keywords: *Internet, E-markets, Barriers, Strategies*

1. Introduction

As the world steps into the new millennium, the IT revolution, that has triggered in the last decade of the 20th century intensified, mainly because of the invention of Internet which has turned the world into a global village. Now, people can interact instantly with anybody in any part of this planet through click of mouse and sitting before a computer, connecting on world wide web (WWW), which enables the individual to collect so much volume of information in a year that of a person living in nineteenth century could gather in his entire life. The Internet provides access to an on-line global market, which operates on a 24x7 basis with billions of customers and thousands of products and services. It also provides companies with new, more cost effective and time efficient means for working with customers, suppliers and development partners. E-marketing is about buying and selling products and services on the World Wide Web via Internet. The sellers are individuals, small businesses and large corporations. The buyers are consumers or businesses. Payments can be made through credit or debit card, money order, cash, cheque etc.

The rapid spread of the Internet as a low cost business medium has improved awareness of electronic business which attracted industrial units to invest in various forms of e-business technologies. However, gaining benefits from the adoption of these technologies is not easy as SMEs need to overcome many barriers associated with their implementation. Truly, Internet has transformed the traditional marketing system as it is not only working as a medium of communication rather it has been used as a market space where buyers and sellers interact and share goods and services with the hurdle of time and geographical constraints . Marketing activities are done online through interactivity and connectivity which are replacing the traditional mode of face to face negotiation and communication.

Though there are bulks of benefits in deploying e-markets but it is not so easy to exploit them, mainly because of the terror in capturing these markets. The present research work tries to study the hindrances faced by the industry in exploiting e-markets. It focuses on the various factors which delayed the industrial units to take-off these markets.

2. Review of Literature

The present study explores the important factors which induce the industrial units to exploit e-markets. (James, 1997) found the factors restricting the companies to exploit the E-markets such as new business opportunities, communication barriers etc. Similarly, (Stone ,1999) also studied the problems involved in exploiting E-markets such as Low penetration level , Requiring Computer skill ,E-Payment and E-Security issues and many more. (Jungpil et al. 2001) and (Schoop,2001), concluded that the level of participation in E-markets depends on ability and motivation. The ability is influenced by age based learning, effort based learning and IT capabilities. The second variable motivation is influenced by efficiency motive & legitimacy motives. (Ruth et al. ,2001) , (Jungpil et al. 2001) suggested the strategy enabling organization to cultivate the advantages to participate in E-markets such as attractive web presence, e-payment security, prompt delivery of goods, safe surfing , effective handling of e-mails and suitable EDI system depending on the organization nature and size of market. The various barriers to e-markets include ambiguous privacy policy, lack of payment security, lack of touch and feel, fear of hidden cost, delayed delivery, complicated ordering system (Grewal et al., 2001).

* *Associate Professor and Head, P.G. Dept. of Commerce and Business Management, Doaba College, Jalandhar. profmalhotra@yahoo.com*
** *Assistant Professor and Head, Dept. of Commerce, St. Soldier College, Jalandhar. prof_ska@yahoo.com*

Technical barriers is the most significant obstacle trailed by legal and regulatory barriers, whereas lack of Internet security is the chief barrier that constrain the implementation of e-commerce in SMEs followed by limited use of Internet banking and web portals by SMEs (Ndyali,2013). This in fact suggests that the participating SME suppliers were potentially ill-prepared for the introduction of e-business technologies. They have seriously underestimated the importance of adequate upfront planning activities in support of e-business technology adoption(Anckar, 2003). Study found mainly four factors which hinder the organization to exploit the e-markets which are shopping limitations, Excessive Costs, Financial risks and Search problems. Results show that technical barriers are the most important barrier followed by legal and regulatory barriers, whereas lack of Internet security is the biggest barrier that inhibits the implementation of e-commerce in SMEs in Egypt, followed by limited use of Internet banking and web portals by SMEs (Zaied, 2013).

3. Objectives of the Study

In view of the above, the present study focuses on the various factors which hinder the industrial units to participate in the internet based E-market. However, the specific objectives of the study are as following:-

a. To study the factors restricting the industrial units to participate in E-markets, and

b. To recommend the suitable strategies to cultivate E-markets.

4. Methodology

The basic objective of the present study is to evaluate the factors which delay the industrial units to participate in E-markets. To elicit theoretical conclusion, the researcher examined the available literature in the form of books, research works, research articles, reports of various committees/ commissions. To study the various hindrances, a sample of 100 registered industrial units dealing in E-markets was drawn from the three districts namely Jalandhar, Amritsar, and Ludhiana situated in Punjab through a well-structured interview schedule.

Factor Analysis

Principal Component Analysis was employed for extracting factors and the number of factors to be extracted were finalized on the basis of 'Latent Root Criterion' i.e. variables having eigen values greater than 1. Six factors were extracted which together accounted for 77.543 per cent of the variance. Finally, the Principal Component Analysis with Orthogonal Rotation has been used in the present study. In Orthogonal Rotation, it is assumed that factors operate independently of each other. Varimax Rotated Factor Analysis which is the most popular method of Orthogonal Rotation has been used and the results are presented in table 2.

Suitability of Data for Factor Analysis

In order to test the suitability of data for Principal Component Analysis, the following steps are taken:

1. Apart from correlation matrix, anti-image correlations are also computed. These show that partial correlations are low, indicating that true factors exist in the data.

2. Kaiser-Meyer-Oklin Measure of Sample Adequacy (KMO) is calculated. Overall, MSA is found to be 0.720 which supports that the sample is good enough for factor analysis.

3. Bartlett's Test of Sphericity shows statistically significant number of correlations in the variables.

4. Anti-image Correlations are calculated. These show that partial correlations are low, indicating that true factors exist in the data.

5. Cronbach's Alpha is calculated to be .825 which shows that data is reliable for Factor Analysis.

6. The communalities of the variables range from 0.411 to 0.907 whereas the factor loadings range from 0.438 to 0.969 as given in the table 2.

Hence, as revealed by the above parameters, the data was found fit for the factor analysis.

Extraction Method and Number of Factors Extracted

Principal Component Analysis is employed for extracting factors and the number of factors to be extracted are finalized on the basis of 'Latent Root Criterion' i.e. variables having Eigen Values greater than 1. Seven factors are extracted which together account for 78.198 per cent of the variance. Finally, the Principal Component Analysis with Orthogonal Rotation has been used in the present study. In Orthogonal Rotation, it is assumed that factors operate independently of each other. Varimax Rotated Factor Analysis which is the most popular method of Orthogonal Rotation has been used and the results are presented in table 1.

The results are obtained through orthogonal rotations with Varimax and all factor loadings greater than 0.40 (ignoring signs) are retained. The results of the principal component analysis with Varimax rotation of the respondents are presented in table 2. The results show that 78.198 per cent of the total variance is represented by the information contained in the factor matrix. The percentage of variance explained by seven factors I to VII are 24.447, 16.612, 9.971, 8.002, 7.187, 6.798 and 5.181 respectively.

Table 1
E-Markets Constraints

Label	Statement
F1	Complex private policy
F2	Everything is available in nearest store
F3	Lack of touch and feel
F4	Fear of hidden cost
F5	Customer do not purchase as they think that seller will not provide after sale services
F6	Delayed delivery
F7	Complicated delivery system
F8	It is too much confusing to understand the e-markets
F9	Customers do not want to change their purchase habit of buying from outlets
F10	Hardware and software penetration are very costly system
F11	Lack of effective cyber laws
F12	Low connectivity.
F13	People use internet for entertainment
F14	People give wrong information.
F15	One needs to be computer literate.
F16	Person must be educated and possessing technical skill.
F17	Slow downloading or bad server.
F18	Too many advertisement
F19	Missing links.
F20	Need to update website at higher cost.
F21	Fear from hackers.
F22	There is no payment security.
F23	Internet is an open system.
F24	Fear from virus infection.
F25	One needs to have electronic penetration. ⇨

Table 2
Rotated Correlation Matrix

Factors ⇨ Statement	I	II	III	IV	V	VI	VII	Communalities
F1	.12	.413	-.092	.157	-.077	.282	.378	.438
F2	.007	-.015	.021	-.098	-.020	-.051	.889	.803
F3	.102	.290	-.003	-.069	-.073	.205	.615	.644
F4	-.074	-.037	.979	.049	-.017	.125	.041	.970
F5	.103	.764	-.117	-.063	-.042	-.287	.057	.699
F6	-.066	-.022	-.016	.056	.947	-.002	-.074	.910
F7	.786	.053	-.132	.020	-.006	-.107	-.020	.650
F8	.060	.392	-.033	-.066	.112	.641	-.004	.586
F9	.136	.834	.005	.022	-.015	-.082	.066	.725
F10	-.076	-.097	.958	-.024	.004	-.034	-.040	.937
F11	-.029	-.096	.043	.134	.903	-.062	-.045	.852
F12	.977	.068	-.031	.041	-.025	.065	.053	.969
F13	.116	.831	-.043	.113	-.030	.304	.081	.819
F14	.025	.728	-.024	.131	-.015	.251	.046	.614

F15	.872	-.063	-.058	-.050	.016	.124	-.027	.786
F16	.883	.227	-.061	-.003	.004	.038	.067	.841
F17	.929	.008	-.018	.092	.027	.010	.039	.874
F18	.087	.018	-.016	.011	.851	-.004	.004	.732
F19	.902	.080	-.045	.124	.050	.010	-.019	.840
F20	-.086	-.037	.978	.011	.021	-.041	-.007	.967
F21	.071	-.012	-.014	.920	.071	.058	.097	.869
F22	.046	.100	.008	.904	.135	-.073	-.104	.865
F23	.078	.111	.043	.905	.001	.011	-.131	.856
F24	.887	.084	.034	.032	-.063	.058	.024	.804
F25	.079	-.060	-.032	.021	-.126	.782	.127	.654
% Variance	24.554	13.082	11.869	10.860	8.256	5.440	4.279	
Cumulative Percentage	24.554	37.636	49.505	60.365	68.621	74.061	78.340	

Source: Primary Data collected through field study

Table 3
Factors Naming

Factors	Factor Name	Label	Statement	Loadings
I	Technical Barriers	F7	• Complicated delivery system	.786
		F12	• Low connectivity.	.977
		F15	• One needs to be computer literate.	.872
		F16	• Person must be educated and possessing technical skill.	.883
		F17	• Slow downloading or bad server.	.929
		F19	• Missing links.	.902
		F24	• Fear from virus infection.	.887
II	Customer Reluctance	F9	• Customer do not want to change their purchase habit of buying from outlets	.902
		F1	• Complex private policy	.413
		F5	• Customer do not purchase as they think that seller will not provide after sale services	.764
		F13	• People use internet for entertainment	.831
		F14	• People give wrong information.	.728
III	Cost Factor	F4	· Fear of Hidden cost	.979
		F10	· H/WARE AND SOFTWARE penetration are very costly system	.958
		F20	· Need to update website at higher cost.	.978
IV	Insecurity	F21	· Fear from hackers.	.920
		F22	· There is no payment security.	.904
		F23	· Internet is an open system.	.905
V	Inborn Ineffective	F6	· Delayed delivery	.947
		F11	· Lack of effective cyber laws	.903
		F18	· Too many advertisement	.851
VI	Nature of E-Markets	F8	· It is too much confusing to understand the e-markets	.641
		F25	One needs to have electronic penetration.	.782
VII	Off-Line Alternative	F2	· Everything is available in nearest store	.889
		F3	· Lack of touch and feel	.615

Source: Computed Data

Factor I Technical Barriers

Technical barriers have emerged as significant factor accounting for 24.55 per cent of the total variance. Seven out of twenty five statements are loaded on this factor, which are highly correlated. The high positive loading on these factors such as Complicated delivery system, Low connectivity, one needs to be computer literate, person must be educated and possessing technical skill, slow downloading or bad server, missing links, Fear from virus infection play dominate role need to be handled with due care to participate at high level in E-markets.

Factor II Customer Reluctance

Customer is the king of the market and that is why this factor has emerged to be the second major factor with percentage of variance equal to 13.082 per cent. Five statements are loaded on this factor. Some of the most important statements loaded on this factor are: Customer do not want to change their purchase habit of buying from outlets, Complex private policy, Customer do not purchase as they think that seller will not provide after sale services, People use internet for entertainment, People give wrong information. The study found that the customer plays the dominating role in conduct of business through e-markets.

Factor III Cost Factor

This is the third important factor with percentage of variance equal to 11.869. Three statements have been loaded on this factor, which are highly correlated stating that the cost is very important factor which decides the level of organization participation in e-markets. The existing studies on e-markets also revealed that fear of hidden cost remained an important obstacle in the way of customer to shift to these markets. Further, it has been widely accepted by various researchers that it is very costly to update website. As both these variables are significantly loaded on this factor, therefore, this study also substantiates this fact.

Factor IV Insecurity

This is the fourth important factor with percentage of variance equal to 10.860. Three statements have been loaded on this factor which are highly correlated stating that the E-markets can only be successful if these ensure total security of the transaction to the marketers as well as customer. The study suggests that e-markets should not only be safe from customer's point of view but from the marketer's point of view also.

Factor V Inborn Ineffective

Three statements have been loaded on this factor with percentage of variance equal to 8.256. All the statements are positive. The study found that delayed delivery, lack of effective cyber laws and too many advertisements act as hindrance in the way of development of e-markets. Sometimes customer needs a product immediately which can be bought from virtual market only. Further, numbers of cyber laws exist but they proved to be ineffective in dealing with the problems of e-markets.

Factor VI Nature of E-Markets

E-markets are the new wind blowing in India hence very few customer and marketers understand its working. Two statements have been loaded on this factor with variance equal to 5.44. One statement that the companies need to have electronic penetration is highly relevant in the present scenario. Again, only computer literate customers can transact business through e-markets.

Factor VII Off-line Alternative

Conservational marketing system is still a threat to a new type of marketing system. Two statements have been loaded on this factor with percentage of variance equal to 4.279. Everything is available in the nearest store and the lack of touch and feel in case of e-markets acts as a big hindrance in its development.

5. Recommendations and Conclusion

The study of the various factors and their respective divergence provides great help to the industrial units before participating in the e-markets. In the light of above analysis, the study proposes different recommendations from different angles as summarized below:

Product related Strategies

E-markets are entirely different from the traditional markets because it is not like the real store of brick and mortar where the customer can touch and feel the products and then buy. The study revealed that the marketers need to provide the complete information about the product , comparative prices in more attractive way through fascinating web sites and must ensure to provide the right quality of product at right prices.

Price related Strategies

Customers feel that the internet provides the product relatively at higher rate as compared to conventional marketing system and hence the efforts should be made to provide the goods at price lower than offline marketing and ensure attractive offers to promote the business.

Place related Strategies

There is dire need to deliver the goods to the customer in time through making the simplified order system. If possible the marketers must ensure the instant delivery of digital goods with full e-payment security to the customer through technically sound Hardware and Software penetrations.

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About the Authors:

Naresh Malhotra, Ph.D. is working as Associate Professor at Doaba College, Jalandhar. He has 22 years teaching experience to Post - Graduate and Under-Graduate classes. He has written 5 books on different fields in Commerce and Management. He has contributed two research papers to international journals and ten research papers to national journals of repute. He has attended / organized large number of seminars / conferences. He is life member of Indian Commerce Association.

Sunil Arora, Ph.D. is Assistant Professor and Head, Department of Commerce and Business Management, and possesses 15 year experience to teach the students of commerce and business management. He has done M.Com. (Business Finance), MBA (Finance), M - Phil. and Ph.D. and a Life member of Indian Commerce Association and has published 10 research articles in various national and international journal. He has written four books on accounting and finance and his area of specialization is Finance and Marketing. He has presented and participated in 12 national levels Seminar and like to work at a growth oriented position in a professionally managed and dynamic organization, which provide opportunities for development and responsibility to contribute towards organisation's success.

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