Decoding E-Commerce for Marketers

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ABSTRACT

E-commerce being in its infancy, needs to establish certain benchmarks. The paper attempts to establish rules for the e-marketers, who are joining in the e-commerce bandwagon, by studying the opinion of key functionaries of the leading websites. An effort has been made in the study to demystify the scenario by deriving the factors which explain the understanding of the marketers in this relatively new medium of exchange. Since all the respondents were from the renowned websites and the decision makers in their respective organizations, their viewpoint has been evaluated and may be established as rules for the new entrants.

Keywords: E-Commerce, Factor Analysis, Marketers

INTRODUCTION

E-commerce is now nearly two decades old, yet due to its interesting dimensions, it remains a relatively challenging area for management professionals as well as researchers. Though, the present form of e-commerce started only in 1991, but the scientists, military professionals and academic researchers have been using it since 1960s (Walt Howe,2010). From sharing strategic military information to exchange of research papers/ideas, the use of internet extended to the business world with the advent of the web. A new dimension has been added to the marketers' job with the emergence of the WEB. Web provides a relatively new medium for conducting business, with no pre-defined rules. These benchmarks are developed almost at an adhoc basis and are generally reactional. In this paper, an effort is made to churn out factors for understanding the perspectives of the marketers towards Electronic Commerce and to develop general marketing rules.

E-Commerce uses the electronic medium to address the need of businesses and consumers. Convenience is its key driving force and people around the world, can sit in the comfort of their homes and accomplish what they desire through a few mouse clicks, taps on keyboard or touch (Apple's i-pad). They can choose the products/services through the virtual e-catalogues. E-commerce helps the customer avoid the problems of stock, time and distance.

The advantages of E-Commerce are manifold, namely-convenient, affordable, faster, global phenomena, flexibility, etc. The demerits include payment security, privacy, returns, SCM, etc. In this paper, we research the most prominent factors governing the perceptions of the marketers towards E-commerce.

METHODOLOGY

The key marketing functionaries in organizations viz., the CEOs, Chief Marketing Officers and top level marketing professionals play very significant roles in design, deployment and monitoring of the activities of the e-commerce installations and are therefore capable of providing insights to internal operations of the e-commerce installations.

A structured questionnaire with closed ended questions was administered to 51 marketers using either personal interview or completion of e-questionnaire. The questions constituted the twenty (20) independent variables with associated contributing factors and described below. As mentioned earlier, the respondents consisted of experts, including CEOs, Chief Marketing Officers and top level marketing professionals from the leading web sites. Their opinions on the statements were rated on Likert Scale, with values ranging from 1 to 5, for strongly agree to Strongly disagree. The range of values was 1 to 5, for the variables - that were coded to the statistical package (SPSS or SAS). Using the method of Factorial Analysis, we were able to determine factors influencing the variables to a greater degree of confidence. Factor analysis refers to a variety of statistical techniques, which have the common objective of representing a set of variables in terms of smaller number of hypothetical variables. It is done with the idea of simplifying complex and diverse relationship that exist among a set of observed variables by exploring common dimensions or factors that link together the apparently unrelated variables and consequently provides insight into the under lying structure of the data. The analysis isolates the underlying factors that explain the data.

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Every factor conveys the rules, that can be framed for the new entrants.

The factor analysis has been conducted in the following stages.

Independent Variables

Label	Description of Variables
X_1	I understand well what my customers need from my site.
X_2	We cannot afford to ignore the fact that customer loyalties are more vulnerable than ever.
X_3	Building customer confidence is my top priority.
X_4	A disgruntled customer can cause more harm to any business now than he could a few years back.
X_5	Interactivity is the key feature that provides online presence an edge over the traditional.
X_6	All my customers are the most valued ones.
X_7	I feel retention of existing customer is more important than attracting new ones.
X_8	It is too expensive to acquire customers on the web.
X_9	Investing on the web is not profitable.
X_{10}	Duality of both online and offline presence is a must.
X_{11}	All traffic is good traffic.
X_{12}	Cultural differences are too difficult to handle.
X_{13}	I feel native language sites are more grasping.
X_{14}	If you cannot sell on the web, you don't need to make a web presence.
X_{15}	Payment security issues on the web are yet to be tackled in perfection.
X_{16}	On the web, small companies can compete with the larger ones.
X_{17}	My web site is listed at the top of several prominent search engines.
X_{18}	Mass customization is the trend of the day.
X_{19}	I elaborate on my Unique selling proposition
X_{20}	Web business requires huge amount of investment

Table A: Description of Independent Variables

FINDINGS

The computed correlation matrix of the independent variables is depicted in Table I below. As it is clearly evident from the table, the correlation coefficient (R^2) ranged from -0.33 to 0.47, therefore, there are no significant (positive or negative) relationships among the independent variables, a situation that calls for further analysis as described in following paragraphs.

It has been argued in the literature that high correlation among the variables, results fewer number of factors to explain a large number of variables. Furthermore, the less correlated the variables are, the better the explanatory factors will contribute to the variables for which they are associated using Factor Analysis. But such a highly desirable situation may not exist in real life problems. It is inevitable to extract more number of factors to account for large variance (Srinivasan & Murthy, 1994)

	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}	X_{13}	X_{14}	X_{15}	X_{16}	X_{17}	X_{18}	X_{19}	X_{20}
X_1	1.0																			
X_2	.07	1.0																		
X_3	.07	.39	1.0																	
X_4	.11	.47	.46	1.0																
X_5	.23	.09	.04	.21	1.0															
X_6	.21	.18	.17	.18	.07	1.0														
X_7	-.15	.31	.22	.36	.21	.18	1.0													
X_8	-.27	-.01	.13	.10	.16	-.03	.54	1.0												
X_9	-.33	-.30	-.13	-.14	-.06	-.13	.22	.37	1.0											
X_{10}	.05	.16	.11	.31	.29	-.02	.21	.24	.03	1.0										
X_{11}	.08	-.00	.07	.01	.29	.30	.06	.10	.04	.06	1.0									
X_{12}	-.06	-.13	-.07	.25	-.02	-.15	.06	.24	.23	-.32	.11	1.0								
X_{13}	-.01	.03	-.14	-.24	-.07	-.07	-.17	-.06	-.15	-.00	.12	.25	1.0							
X_{14}	.12	-.20	.07	-.05	.05	.02	-.12	.02	.02	-.07	.08	.13	-.04	1.0						
X_{15}	-.01	.20	.06	.12	.03	.11	.17	.04	.09	.10	.01	.01	.22	-.11	1.0					
X_{16}	-.20	.26	-.07	.10	.09	.07	.20	-.02	.12	.13	-.25	-.18	.06	-.19	.40	1.0				
X_{17}	.10	.22	.00	.11	.03	.20	.32	.00	-.21	.20	.15	-.21	.16	-.02	-.09	.11	1.0			
X_{18}	.04	.12	.02	-.06	.12	.04	.04	.02	.05	.22	.12	.02	.04	.00	.02	.28	.02	1.0		
X_{19}	.26	.33	-.00	.23	.17	-.00	.04	.19	.07	.32	.01	.24	.10	-.05	.15	.30	.11	.38	1.0	
X_{20}	.08	.25	-.11	.14	.17	.07	.17	.04	.15	.17	.29	.07	-.20	.28	-.16	.00	.33	.09	.17	1

Table I Correlation Matrix for the Perceptions of Marketers

In what follows, we utilized Factor Analysis to determine relevant factors that expressedly contribute to the variable. While there are several approaches for Factor Analysis, the Principal Component Analysis was our favored approach for the simple reason that it is readily available in the SPSS statistical package. As a rule of thumb, we chose the number of factors for which the number of 'Eigen Values' is greater than unity.. The component matrix was further rotated orthogonally using Varimax rotation algorithm. The results obtained are depicted in Charts I & II below. The total variance accounted for by all the factors with Eigen Value greater than 1 was 70.46 percent and the remaining variance was explained by other factors. A total of eight factors were loaded, namely, customer focus (F1), reluctant customer (F2), competitive advantage (F3), expensive strategies (F4), interactively and duality of presence (F5), frame strategies to sell (F6), respect all the customer (F7) and culture and language (F8).
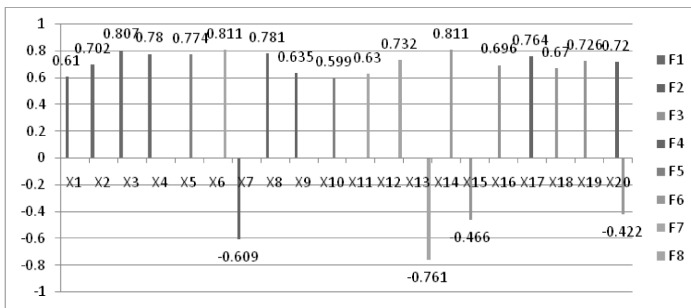
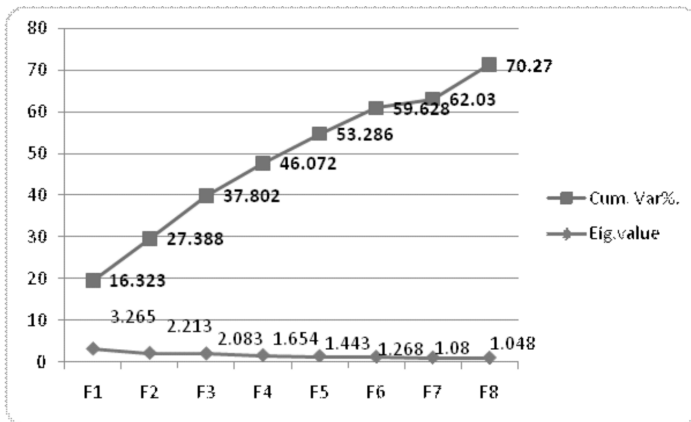***Chart I: Depicting Variables with Factor Loadings***

Chart II: Depicting Eigen Values and Cumulative Variance for The Factors

1. CUSTOMER FOCUS

The rotated matrix revealed this factor as the most important factor with the highest eigen value of 3.265. In all, three variables were loaded on this factor and are arranged according to their loading values. The variables composing this factor, with their codes and factor loading are given in Table-II below:

Table-II
Customer Focus

Codes	Variables	Loading
X_3	Building customer confidence is my top priority.	.807
X_4	A disgruntled customer can cause more harm to any business now than he could a few years back.	.780
X_2	We cannot afford to ignore the fact that customer loyalties are more vulnerable than ever.	.702

These variables loaded on the factor 1 indicate that the marketers attach a lot of significance to customers and want to satisfy customers at all costs. They understand that customers are aware of the level of competition and the potential of losing market shares to competitors. Marketers claim that building customer confidence is their top priority because they feel that a disgruntled customer can be more damaging for the web business (with social networking, tweeting, etc) and also because they understand that due to immense competition, customer loyalties are also vulnerable and hence in order to retain them they need to be impressed and satisfied. The maximum loading on the factor reveals that for marketers, customers are supreme.

Rule: Do not lose focus of the customer

2. RELUCTANT CUSTOMER

The second important factor that emerged from the analysis with eigen value 2.213, is the fact that the e-commerce has 'reluctant customer'. The four variables loaded on this factor, arranged according to their loading values are given in Table-III below:

Table-III
Reluctant Customer

Codes	Variables	Loading
X_8	It is too expensive to acquire customers on the web.	.781
X_7	I feel retention of existing customer is more important than attracting new ones.	-.690
X_9	Investing on the web is not profitable.	.635
X_1	I understand well what my customers need from my site.	.610

The result of the analysis shows that customers are selective and may be resistant to change and accept E-Commerce, which makes it expensive to acquire customers on the web and hence makes it less profitable to invest on the web. The statement 'retention of existing customers is more important than attracting new ones' has been loaded negatively on Factor 2 implying that new customers are more important than existing customers. All these factors strengthen the belief that 'customer' has attained a stronger position. Once retained the process becomes self-perpetuating that it might have the multiplier effect (word of mouth) with little or no cost. Marketers may be inclined to believe that they know their customers and are able to retain them.

Rule: Treat the customers as reluctant ones, and you'll be prepared to work harder to get them.

3. COMPETITIVE ADVANTAGE

The rotated matrix has revealed this factor as the third important factor, with the eigen value of 2.083. The four variables loaded on this factor are arranged according to their loading values in Table IV given below:

Table-IV
Competitive Advantage

Codes	Variables	Loading
X_{19}	I elaborate on my Unique selling proposition	.726
X_{16}	On the web, small companies can compete with the larger ones.	.696
X_{18}	Mass customization is the trend of the day.	.670
X_{15}	Payment security issues on the web are yet to be tackled in perfection.	-.466

The four variables loaded on Factor 3 show that the marketers believe that the Unique Selling Proposition (USP) and customized goods/services are required by the customer and that small companies can compete with the larger ones if they are exploited. In this era of high competition, everyone has the same dynamic medium of exchange (web), so what a business needs is an USP.

Marketers understand the need of a USP, and also know that they need to elaborate on it. USP can be so many things, it can be a unique product/ service (ebay initiated the concept of auctions online and was successful, amazon started in a garage and provided the facility of ordering books from anywhere in the world), it can be customization facility/ or a website. However, online payment security possesses a significant hindrance to small businesses that may not have capacity for such an undertaking.

Rule: Work on USP (small or big, doesn't matter then!). Find solution for payment security issues!

4. EXPENSIVE STRATEGIES

The fourth important factor regarding the perspectives of the marketers on E-commerce is the factor of 'expensive strategies' with the eigen value of 1.654. Table-V represents the two variables loaded on this factor, with their loading values.

Table-V
Expensive Strategies

Codes	Variables	Loading
X_{17}	My web site is listed at the top of several prominent search engines.	.764
X_{20}	Web business requires huge amount of investment	.720

The two variables as loaded on the Factor 4 implies that marketers utilize the search engine strategies and other tactics to remain prominent, requiring a huge amount of investment.. Having a name in e-commerce does not guarantee revenues. e.g. amazon earned their first profit after 8 years (amazon set up in 1995 and first profit in 2002) of start up.

Marketers need to be abreast with two types of marketing i.e. get customers to the website and get the customer to buy online. Both processes require a different set of expenditure budget and both are equally important.

Rule: Be Prepared, though it is easy and inexpensive to set up web presence but It is expensive to Entice the customers

5. INTERACTIVITY AND DUALITY OF PRESENCE

The rotated matrix has revealed this factor as the fifth important factor, with the eigen value of 1.443. Table-VI represents the two variables loaded on this factor, with their loading values.

Table-VI
Interactivity and Duality of Presence

Codes	Variables	Loading
X_5	Interactivity is the key feature that provides online presence an edge over the traditional.	.774
X_{10}	Duality of both online and offline presence is a must.	.599

The two variables loaded on factor 5 reveal that marketers feel that 'interactivity' is the main feature that provides online business an edge over the traditional ones and that duality of presence, both online and offline is equally important. This may be attributed to the fact that the web business is still at the stage of evolution and that customers may need some adjustment over time.. The marketers feel that the customers prefer to 'glean information about the products/ services' rather than 'buying on the web' (not within the purview of this paper). There is a need to provide customers sufficient information online and the option to buy either online or offline. More importantly, marketers treasure the quality of the web to provide high interactivity and generally delay fully online capability to allow customers to adjust.

Rule: Exploit Interactivity but be prepared to be omni-present

6. FRAME STRATEGIES TO SELL

The rotated matrix has revealed this factor as the sixth important factor, with the eigen value of 1.268. Table-VII

represents the two variables loaded on this factor, with their loading values.

Table-VII
Frame Strategies to Sell

Codes	Variables	Loading
X_{14}	If you cannot sell on the web, you don't need to make a web presence.	.811
*X_{20}	Web business requires huge amount of investment.	-.422

While the Web may be an excellent medium for marketing (selling and buying), the investment are sometime huge and therefore, businesses that feel they cannot survive or sell via the web, are advised not to engage in any web presence. The term, "sell" as used in this paper is referred to selling of products or services in the e-commerce. For examples, Ebay, which is an auction site, generates revenues by charging fee for its services; amazon makes profit on sales of products while offering other renowned sites like Twitter, providing advertising space to companies called "Promoted Tweets", in order to earn revenues. This approach of including Twitter and other social network websites generates compounding advertisement effects.

Rule: Sell Sell Sell!!! If not products and services, advertising space!!!

7. RESPECT ALL THE CUSTOMERS

The seventh important factor that emerged from the analysis, with eigen value 1.080 is 'respecting all the customers'. Table-VIII represents the two variables loaded on this factor and their loading values.

Table-VIII
Respect all customers

Codes	Variables	Loading
X6	All my customers are the most valued ones.	.811
X11	All traffic is good traffic.	.630

The above given table-VIII reveals that factor 7 consists of two variables which show that customers are the most valued when all the traffic is considered good traffic. This shows that the marketers are fully committed to the customer, they value all of them, whether they come to buy or only to surf their site.

Rule: All traffic, whether to buy or surf is a good one, try to convert them into your customers

8. CULTURE AND LANGUAGE

The eighth and the least important factor about the perspective of marketers has eigen value of 1.048 and as shown in the rotated matrix, is the Culture and Language. In total two variables have been loaded on this factor that are arranged in table-IX, with their codes and load values:

Table-IX
Culture and Language

Codes	Variables	Loading
X_{13}	I feel native language sites are more grasping.	-.761
X_{12}	Cultural differences are too difficult to handle.	.732

According to the eighth factor, the marketers feel that the native languages are more grasping and that the cultural differences are difficult to handle. Language and culture has been one thing people are possessive and sensitive about. This factor is considered the least important because globalization has united the world, in terms of language and cultures.

Rule: Try and consider the cultural and linguistic differences

CONCLUSION

The analysis shows that the marketers are well aware of the fact that customer needs to be satisfied and the customers are reluctant, expensive and demanding. Implying that the earlier myth, "everything will sell" (groceries to consumer durables) with ease; has been busted. Further efforts are required to entice the customers, main focus has to be the customer and not the product or the technology. Customers are reluctant to change and this makes the web an expensive place to acquire and retain the customers. The need to provide the customer with both online and offline presence has also been recognized and the marketers know that 'interactivity' provides web business so much more finesse than the traditional business. Customization is the need of the day.

The analysis proves that the marketer's understanding of the customers is commendable and they are the ones who didn't let the "web" sink, they helped it sail (survive) during the turbulent times (early 2000) and the web businesses with the efficient system and relevant products and services have finally entered the calm seas and are flourishing.

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