A STUDY ON MARKET POTENTIAL OF E-COMMERCE TOWARDS CUSTOMERS, CHENNAI

M. Manoj Kumar
Research Scholar, Pachaiyapas College, University of Madras, Chennai.

Introduction
The term "Electronic commerce" refers to the use of an electronic medium to carry out commercial transactions. Most of the time, it refers to the sale of products via Internet, but the term e Commerce also covers purchasing mechanisms via Internet.

A client who purchases on the Internet is called a cyber consumer. E-Commerce is not only limited to online sales, but also covers Preparation of estimates online, Consulting of users, Provision of an electronic catalog, Access plan to point of sales, Online payment, Delivery tracking, After-sales service etc.,

This study examines the quality the customers' judgment in purchase decisions and broadens the scope of lead qualification and prioritization.

Need for the Study
- To Study Alignment between sales and marketing is one of the primary challenges preventing organizations from optimizing marketing and sales performance.
- This study broadens the scope of Lead qualification and prioritization.
- The main purpose of the study is to examine the customer's judgment in purchase decisions.

Scope of the Study
This study broadens the scope of Lead qualification and prioritization. The main purpose of the study is to examine the quality the customers' judgment in purchase decisions. These changes stress upon improved functionality and efficiency of the Sales team and the marketing efforts as well as prioritizing the prospective customer. The alignment between the sales and marketing department has to be geared towards understanding the prospect to be followed up.

Objective
Primary Objective
To Study Market Potential of e-commerce towards customers in Chennai.
Secondary Objectives
- To ascertain the quality of leads generated.
- To appropriate the sales management activities based on prioritization
- To offer suggestions on further improvement.

Research Methodology
The word "Research" is used to describe a number of similar and often overlapping activities in valuing a search for information. Systematic investigative process employed to increase (or) revise current knowledge by discovering new facts. It is divided in to two general categories like basic research is inquiring aimed at increasing scientific knowledge and applied research is effort aimed at using basic research for solving problems (or) developing new processes ,products (or) techniques.

Research Design
It's detailed out line of how an investigation will take place a research design will typically include how data is to be collected what instruments will be employed, how the instruments will be used and the intended means for analyzing data collected. Descriptive research is applied in this project.

Sampling Design
Sample Size - The sample size chosen for this study is 150.

Sampling Method
There are various sampling techniques used in collection of data. Simple Random sampling has been chosen for this study for the analysis of the data. Random numbers were generated using SPSS. The results of the predictive study are to be analyzed rationally to interpret.

Statistical Package for Social Sciences (SPSS), 14th version   was used for analyzing the data.

Data Used
Primary Data: The type of data used in the study is the primary data that will be collected from the respondents through a structured questionnaire.

Data Source
Secondary Data: The main Sources of secondary data consist of information that already exists which has been collected from various company records, documents, brochures etc. The information relating to the topic under consideration was collected by means of books, Journals and internet relating to particular subjects.

Questionnaire Design
Type of Questionnaire
The tool used for data collecting was questionnaire method. The questionnaire was a highly structured one with multiple choices.
Variables Used to Construct the Questionnaire
The variables that were used to construct the questionnaire are:
- Gender
- Type of e - Commerce
- Mode of Business
- Purpose

Tools Used for Data Analysis
The Questionnaire method were been used with list of questions to be asked from the respondents questionnaires are given to the respondents with a request to return after completing the same survey research is the method of gathering data from responds thought to be representative of same population, using are instrument composed of closed structure (or) open-ended question.
Statistical Tools
- Percentage Analysis
- Discriminant Analysis
- Anova
- Correlation
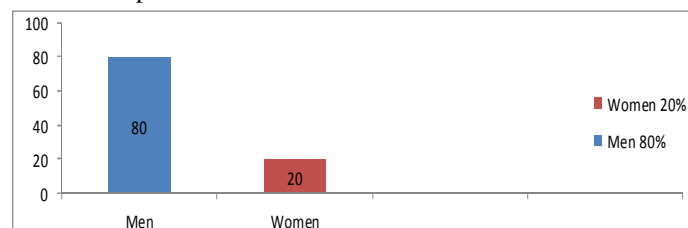
Data Analysis
Percentage Analysis
Percentage Analysis of the data collected

The Below Table Showing the Gender of Respondents

Particulars	No. Of Respondents	Percentage
Male	120	80%
Female	30	20%
Total	150	100%

Interpretation
The above table shows that 80% of the respondents are male and 20% are female.

Discriminant Analysis Summary
The Sample size was used to build and validate the model. Of the 150 cases 40 cases were used to build the model and 110 cases were used to validate the model. The first 40 cases are customers who were previous customers and used a random

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sample of these 40 customers to create a discriminant analysis model, setting the remaining customers aside to validate the analysis. Then use the model to classify the 110 prospective leads into buyers and non buyers.

Analysis Summary

Unweighted Cases		N	Percent
Valid		55	49.3
Excluded	Missing or out-of-range group codes	10	23.3
	At least one missing discriminating variable	5	9.0
	Both missing or out-of-range group codes and at least one missing discriminating variable	1	.1
	Unselected	4	18.2
	Total	75	50.7
Total		150	100.0

Descriptive Statistics

Enrollment	Variables	Mean	Std. Deviation	Valid N (List wise)	
				Unweighted	Weighted
No	Gender	1.30	.461	305	305.000
	Type of eCommerce	1318.9	**165.535**	305	305.000
	Mode of Business	1.05	.586	305	305.000
	Purpose	3.54	1.032	305	305.000
	Marketing and selling activities	1.21	.852	305	305.000
	Point of Sale	2.16	**1.795**	305	305.000
Yes	Gender	1.26	.442	88	88.000
	Type of eCommerce	1457.3	**112.081**	88	88.000
	Mode of Business	1.13	.521	88	88.000
	Purpose	4.06	1.021	88	88.000
	Marketing and selling activities	1.33	.931	88	88.000
	Point of Sale	6.10	**4.235**	88	88.000
Total	Gender	1.30	.457	393	393.000
	Type of eCommerce	1349.9	165.456	393	393.000
	Mode of Business	1.07	.572	393	393.000
	Purpose	3.65	1.051	393	393.000
	Marketing and selling activities	1.24	.870	393	393.000
	Website activity	3.05	3.030	393	393.000

Test of Equality of Group Means: (ANOVA)
The tests of equality of group means measure each independent variable's potential before the model is created.

Test of Equality of Group Means (ANOVA)

	Wilks'	F	df1	df2	Sig.
Gender	.998	.621	1	391	.431
Type of eCommerce	**.878**	**54.283**	**1**	**391**	**.000**
Mode of Business	.997	1.200	1	391	.274
Purpose	**.957**	**17.359**	**1**	**391**	**.000**
Marketing and selling activities	.997	1.293	1	391	.256
Point of Sale	**.706**	**163.072**	**1**	**391**	**.000**

Within Group Correlation Matrix
The within-groups correlation matrix shows the correlations between the predictors. The table below does not show any correlation between the predictors, which satisfies the assumption in Discriminant analysis.

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Correlation Matrices

Details		Sex	Target	Status	Year of Completion	Source Referral	Website Activity
Correlation	Gender	1.000	.009	.113	-.056	.032	.060
	Type of eCommerce	.009	1.000	-.015	.010	-.036	-.015
	Mode of Business	.113	-.015	1.000	.371	-.045	.067
	Purpose	-.056	.010	.371	1.000	-.186	.105
	Marketing and selling activities	.032	-.036	-.045	-.186	1.000	.025
	Point of Sale	.060	-.015	.067	.105	.025	1.000

Box's Test of Equality of Covariance Matrices

Log determinants are a measure of the variability of the groups. Larger log determinants correspond to more group's covariance matrix difference. The "Rank" column indicates the number of independent variables 6 in this case. Since discriminant analysis assumes homogeneity of covariance matrices between groups, by the log determinant value are equal it can be determined that analysis meets the homogeneity of covariances assumption.
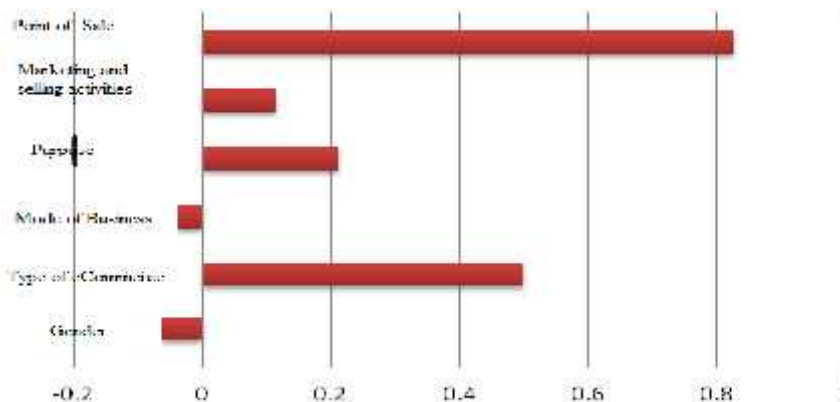
Log Determinants

Enrollment	Rank	Log Determinant
No	6	8.287
Yes	6	8.915
Pooled within-groups	6	8.829

Box's M test tests the assumption of homogeneity of covariance matrices. This test is very sensitive to meeting also the assumption of multivariate normality. Discriminant function analysis is robust even when the homogeneity of variances assumption is not met, provided the data do not contain important outliers. For the data below, the test is significant so we can conclude the groups do differ in their covariance matrices, violating an assumption of DA.

Standardized Discriminant Function Coefficients

Also termed the standardized canonical discriminant function coefficients, are used to compare the relative importance of the independent variables, much as beta weights are used in regression. The relative importance of the independent variables in predicting the dependent is given below. Website activity, Target, Year of completion are of higher importance.

Details	Function
	1
Gender	-.093
Type of eCommerce	**.498**
Mode of Business	-.039
Purpose	**.211**
Marketing and selling activities	.112
Point of Sale	**.827**

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Structure Matrix
Structure coefficients, also called structure correlations or discriminant loadings, are the correlations between a given independent variable and the discriminant scores associated with a given discriminant function. They are used to tell how closely a variable is related to each function in DA. Looking at all the structure coefficients for a function allows the researcher to assign a label to the dimension it measures, much like factor loadings in factor analysis. A table of structure coefficients of each variable with each discriminant function is called a canonical structure matrix or factor structure matrix. The structure coefficients are whole coefficients, similar to correlation coefficients, and reflect the uncontrolled association of the discriminating variables with the criterion variable. The structure matrix table below shows the correlations of each variable with each discriminant function.

Table 5.11 Structure Matrix

Details	Function
	1
Gender	.836
Type of eCommerce	.483
Mode of Business	.273
Purpose	.074
Marketing and selling activities	.072
Point of Sale	-.052

Inference: The website activity, target variables have reasonable correlation with discriminate function.

Canonical Discriminant Function Coefficients
Unstandardized discriminant coefficients are used in the formula for making the classifications in DA, much as b coefficients are used in regression in making predictions.

Details	Function
	1
Gender	-.204
Type of eCommerce	.003
Mode of Business	-.068
Purpose	.205
Marketing and selling activities	.129
Point of Sale	.325
(Constant)	-5.888

The table above shows the unstandardized discriminant function coefficients. They are used to construct the actual prediction equation which can be used to classify new cases.

Discriminant score (D) = -5.888 + Sex (-.204)+ Target score (.003) + Employment Status (-0.68) + Year of completion (.205) + Referral source (.129) + Website activity (.325). The classification is based on the Discriminant score >1, there is a high probability that the customer will be Prospective.

Findings
Based on Statistical tools applied findings of the study includes the following:
1. Using Discriminant analysis of the 150 cases 40 cases were used to build the model and 110 cases were used to validate the model. The first 40 cases are customers who were previous customers and used a random sample of these 40 customers to create a discriminant analysis model, setting the remaining customers aside to validate the analysis. Then use the model to classify the 110 prospective leads into buyers and non buyers.
2. The structure matrix shows the website activity, target variables have reasonable correlation with discriminate function.
3. The unstandardized discriminant function coefficients. They are used to construct the actual prediction equation which can be used to classify new cases. Discriminant score (D) = -5.888 + Sex (-.204) + Target score (.003) + Employment Status (-0.68) + Year of completion (.205) + Referral source (.129) + Website activity (.325). The classification is based on the Discriminant score >1, there is a high probability that the customer will be Prospective.

4. Majority of the customers use Online shopping web sites for retail sales direct to consumers. E-commerce helps in providing or participating in online marketplaces, which process third-party business-to-consumer or consumer-to-consumer sales & Business-to-business buying and selling.
5. Study states E-Commerce helps in Gathering and using demographic data through web contacts and social media and Marketing to prospective and established customers by e-mail or fax & Engaging in retail for launching new products and services.

Conclusion

E-Commerce in today's era plays an important role for retailers and business people to market their products and services. Electronic Commerce enables the customer to have an increasing say about what products are made, how products are made and how services are delivered. We may achieve greater economic efficiency and more rapid speed, accelerated, or real-time interaction with the help of electronic commerce. Electronic Commerce has the Potential to increase revenue by creating new markets for old products, creating new information-based products, and establishing new service delivery channels to better serve and interact with customers.

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