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Analysis of Factors Affecting E-Commerce Sales: A Study of Delhi

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ABSTRACT

The internet has brought about a potent change in the way consumers are interacting with the manufacturers through enabling technologies like Electronic Data Interchange and payment systems like UPI (Unified Payments Interface) and Electronic Funds Transfer (EFT). Rapid access to internet throughout the country has helped the companies to penetrate markets which were hitherto not possible. Since 1991 post liberalization till recently , E-Commerce has lured the customer to itself due to various factors. The major objectives of the research study wereto explore factors which influence E-commerce sales and to analyze the impact of factors which influence E-commerce sales. For analysis a sample size of 300 was decided and out of 300 total of 285 responses were acknowledged and after discarding prejudiced responses for the statistical analysis final sample size of 282 was considered and Hypotheses testing was done by application of Multiple Regression.

Keywords : E-commerce, Customer etc.

Introduction

The advent of E-Commerce has brought about a ubiquitous change in the way products are bought and sold in the market. The internet has brought about a potent change in the way consumers are interacting with the manufacturers through enabling technologies like Electronic Data Interchange and payment systems like UPI (Unified Payments Interface) and Electronic Funds Transfer (EFT). Rapid access to internet throughout the country has helped the companies to penetrate markets which were hitherto not possible. Since 1991 post liberalization till recently , E-Commerce has lured the customer to itself due to various factors.

The major online domains are Business to Consumer (B2C) wherein businesses sell goods and services online to final consumers , the consumers can buy almost anything online-from clothing,gadgets,airline and railway tickets to computers and cars. With growing accessibility and increasing penetration of internet in India around 24% of the population is purchasing online today .As more and more people find their way onto the world wide web, the population of online consumers is becoming more mainstream and diverse.Many companies use the Business to Business(B2B) websites,e-mail,online product catalogs, online trading networks and other online resources to reach new business customers. They provide product information, customer purchasing and customer support services online. A lot of Consumer to Consumer (C2C) websites facilitate online exchange of goods and information through exchange of communication on the Web between interested parties over a wide range of products and services. The final online domain, is Consumer to Business (C2B) wherein there is online exchanges in which consumers search out sellers, learn about their offers and initiate purchases and give feedback.

E-Commerce is an embodiment of the changing times of the ways of doing commerce electronically. It has brought a paradigm change to the way goods and services are bought and sold in the market.The customers who buy electronically generally research online before buying, use mobile devices,pay online through credit cards and majority of them buy clothes and electronic products online(Trobjoin,2013).Therapid growth of e-commerce has been fueled by various factors like:

> Increasing penetration of internet and broadband spectrum including 4G and advent of 5G technology availability, thereby improving net usage.

> Rising standards of living and increase in average income of the people especially the middle class having high disposable incomes.

> Payment options like net banking and cash on delivery, envisaging convenience and trust to the consumer.

> Emphasis on distribution logistics which entails tracking details and reliable delivery systems.

> Access to new technological developments like use of AI (Artificial Intelligence) enabling an enhanced user experience.

> Many types of government initiatives to support development of modern technology to harness the growth potential of E-Commerce.

> Availability of a much wider product assortment compared to what is available offline.

> Willingness and ability of the people to adopt to new technology due to increase in literacy level.

> ➤ The E-Commerce gateway provides leverage of low overheads, low maintenance, worldwide market, 24x7 operations, growing demand for goods available online, affordable advertising , advantages for medium and small sellers and brings a faster response to changes in buyers' preferences to the online sellers.

E-Commerce players have entered in a variety of areas like:

- **Health Tech**-Portea,Healthkart, Netmeds.
- **FinTech**- Paytm, Freecharge ,PhonePe ,Mobikwik ,Google Pay.
- **Entertainment**- Book Myshow, Netflix,Dailymotion,Spotify,Disney+.
- **Tourism**-Make my Trip, IRCTC,Goibibo,Yatra,EasemyTrip.
- **Education**-BYJU's, Unacademy, Coursera,National Geographic Kids.
- **E-Tailing**-Amazon, Flipkart, Snapdeal,Myntra,Jabong.

Review of literature

Sharma (2013) stressed on the need to study trends, influences, preferences of customers towards E-Commerce and online shopping and also gave suggestions to improve online shopping websites. This study also reiterated the fact that most of the online consumers are of the age group 21-30 years, thus the websites should be planned accordingly keeping this in mind.**Mitra (2013)** attempted to study the status and facilitators of E-Commerce in India, analyze the trends and barriers to E-Commerce in India. The study found that major Indian companies have embraced E-Commerce in a big way and their portal sites have also shifted towards E-Commerce instead of solely depending on advertising as a tool of promoting their products.**Chanana and Goele (2012)** attempted to study the overview of the future of E-Commerce in India and discusses the future growth prospects and factors which will define its progress. They also stated that overall, the growth of E-Commerce will increase exponentially in all the emerging markets.**Ray (2011)** discussed the chronological evolution of E-Commerce, categorization and description of businesses that are actively doing E-Commerce in India. The author also stated that the role of the government is to outline a legal framework for conducting businesses legally in E-Commerce , which should envisage the basic rights such as privacy, intellectual property, prevention of cyber fraud and consumer protection rights.**Al-Adwan***et.al* **(2019)** studied the pertinent benefits of e-commerce applications and activities available in a mobile environment and their accessibility through mobile devices. These smart devices have propagated the adoption of e-commerce sites and online shopping due to their inherent convenience and personalized approach. In another article they have delved on the omnipresence character of mobile commerce which provides seamless connectivity regardless of customer locations. Through internet enabled mobile devices, consumers are no longer restricted by time and place.**Nair**(2013), expresses there is increased usage of mobile devices due to penetration of internet across various segments of the society. The shifting of the customers' preferences from traditional model to digital model of transactions will accelerate the adoption of e-commerce . "E-Commerce has a very strong impact on the world economy, the pricing, availability of products and method of transportation on customer behavior". **Kazami and Saeedy (2019)** stressed on the fact that e-commerce helps to improve the marketing practices, manufacturing processes and supply chain significantly.(2020),states that payment gateways like Amazon pay, Google Pay etc. have provided a tremendous impetus to customers to leverage technology without manually entering detailsof debit or credit cards. This enables asmooth checkout process thereby enhancing the customer experience on e-commerce platforms.

Objectives of the Study

1. To explore factors which influence E-commerce sales.
2. To analyze the impact of factors which influence E-commerce sales.

Hypotheses of Study

Ha1: Competitive pricing strategies significantly influences E-commerce Sales.

Ha2: Availability of quality product/service significantly influences E-commerce Sales .

Ha3: Quick shipping with low cost significantly influences E-commerce Sales .

Ha4: Availability of online customer reviews significantly influences E-commerce Sales .

Ha5: Availability of ease of return policies significantly influences E-commerce Sales .

Ha6: Availability of loyalty rewards significantly influences E-commerce Sales .

Ha7: Ease of Navigation significantly influences E-commerce Sales .

Ha8: Word-of Mouth recommendations significantly influences E-commerce Sales.

Ha9: Ease of Check out significantly influences E-commerce Sales.

Theoretical Model
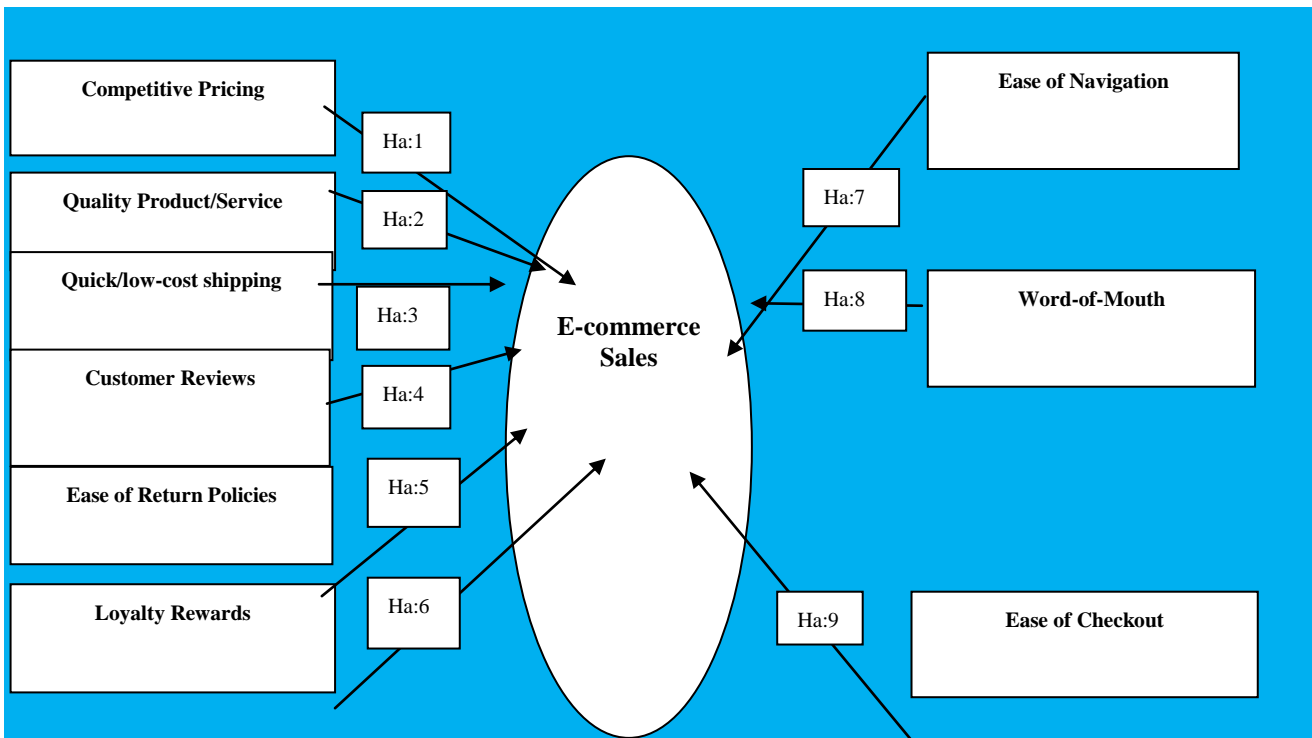
Figure 1: Proposed Model

Research Methodology

- ➢ **Research Theme:**

- • Exploratory Research.

- ➢ **Universe of Study:**

- • Delhi.

- ➢ **Focus of Study:**

- • Factors influencing E-commerce Sales.

- • **Sampling Technique used:**

1. **Convenience Sampling:** It is defined as a techniqueimplemented by investigators where they gather data for market research by means of conveniently accessible respondents.

- ➢ For analysis a sample size of 300 was decided and out of 300 total of 285 responses were acknowledged and after discardingprejudiced responses for the statistical analysis final sample size of 282was considered.

- ➢ For Hypotheses testingMultiple Regression was used. (SPSS Version 25).

Analysis & Results

Table 1:

Case Processing Summary

		N	%
Cases	Valid	282	98.9
	Excluded[a]	3	1.1
	Total	285	100.0

a. Listwise deletion based on all variables in the procedure.

Table 2:

Reliability Statistics

Cronbach's Alpha	N of Items
.752	10

Cronbach Alpha value of all 10 items is .752, which emphasized a decentinnerconstancy of all the variables of the research study, as it came above the threshold value of .70.

Table 3:

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Competitive pricing strategies influences e-commerce sales.	37.10	19.890	.408	.734
2. Availability of quality product/service influences e-commerce sales.	37.31	19.532	.296	.750
3. Quick shipping with low cost influences e-commerce sales.	37.15	19.871	.323	.744
4. Availability of online customer reviews influences e-commerce sales.	37.42	20.045	.293	.748
5. Availability of easy return policies influences e-commerce sales.	37.13	18.944	.449	.728
6. Availability of loyalty rewards influences e-commerce sales.	37.82	18.040	.454	.726
7. Ease of navigation influences e-commerce sales.	37.53	17.901	.573	.709
8. Word-of-mouth recommendations influences e-commerce sales.	37.73	18.105	.450	.727
9. Ease of check-out recommendations influences e-commerce sales.	37.74	18.258	.433	.730

10. E-commerce sales are influenced by competitive pricing, quality of products, word of mouth, online reviews, quick shipping, ease of navigation and ease of use, ease of check-out and presence of loyalty rewards.	37.18	19.008	.497	.722

Table 4:

		E-commerce sales	Competitive pricing	Quality product/service	Quick/loe cost shipping	Customer reviews	Easy return policies	Loyalty Rewards.	Ease of navigation	Word-of-mouth	Ease of check-out
Correlations											
Pearson Correlation	E-commerce sales	1.000	0.175	0.135	0.290	0.177	0.316	0.313	0.325	0.403	0.330
	Competitive pricing	0.575	1.000	0.598	0.206	0.241	0.340	0.226	0.269	0.237	0.200
	Quality product/service	0.535	0.598	1.000	0.234	0.064	0.211	0.081	0.305	0.253	0.081
	Quick/loe cost shipping	0.590	0.206	0.234	1.000	0.092	0.299	0.101	0.146	0.172	0.167
	Customer reviews	0.577	0.241	0.064	0.092	1.000	0.304	0.203	0.221	0.068	0.189
	Easy return policies	0.516	0.340	0.211	0.299	0.304	1.000	0.276	0.315	0.082	0.204
	Loyalty Rewards.	0.313	0.226	0.081	0.101	0.203	0.276	1.000	0.427	0.314	0.344
	Ease of navigation	0.525	0.269	0.305	0.146	0.221	0.315	0.427	1.000	0.417	0.559
	Word-of-mouth	0.403	0.237	0.253	0.172	0.068	0.082	0.314	0.417	1.000	0.310
	Ease of check-out	0.530	0.200	0.081	0.167	0.189	0.204	0.344	0.559	0.310	1.000

Out of nine predictors in the model seven predictors demonstratedrobustcorrelation with the research study's dependent variable (E-commerce Sales) i.e., Competitive Pricing, Quality Product/Service, Quick/ low-cost shipping, Customer Reviews, Easy return policies, Ease of navigation, and ease of Check-out with the values of 0.575, 0.535, 0.590, 0.577, 0.516, 0.525 and 0.530 respectively.

Within the set of predictors:

• Quality of product/service & competitive pricing and Ease of navigation & Ease of check-out (.598) and (.559) respectively.

Table 5:

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
					Change Statistics				
1	.552[a]	0.305	0.282	0.629	0.305	13.268	9	272	0.000

Table 6:

ANOVAª

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.315	9	5.257	13.268	.000ᵇ
	Residual	107.777	272	.396		
	Total	155.092	281			

a. Dependent Variable: E-commerce sales

b. Predictors: (Constant), Ease of check-out, Quality product/service , Customer reviews , Quick/loe cost shipping , Competitive pricing , Loyalty Rewards., Word-of-mouth , Easy return policies , Ease of navigation

Table 7: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.516	0.353		4.292	0.000
	Competitive pricing	-0.061	0.063	-0.055	-0.972	0.332
	Quality product/service	-0.034	0.045	-0.042	-0.758	0.049
	Quick/loe cost shipping	0.152	0.051	0.162	2.962	0.003
	Customer reviews	0.043	0.051	0.046	0.850	0.396
	Easy return policies	0.173	0.055	0.189	3.166	0.002
	Loyalty Rewards.	0.071	0.045	0.094	1.582	0.115
	Ease of navigation	0.046	0.055	0.053	0.826	0.410
	Word-of-mouth	0.220	0.045	0.289	4.883	0.000
	Ease of check-out	0.099	0.044	0.129	2.265	0.024

The result of table 4 portrays testing the fit of the model. In the model summary table, value of multiple correlation (R) is .552, with a corresponding value of R square of .305, signifying that 31% of the variance is elucidated by set of predictors. R square change is also .305. The value of adjusted R square value is .282.ANOVA depicts the test of statistical significance of the regression model. The research model comprises of noteworthysum of research study's dependent variable variance, $F_{(1,272)}= 13.268$, $p<.001$. The total degrees of freedom are: N-1 i.e., 282-1= 281, parting272 degrees of freedom for the error term.

Table 6: shows the coefficients for the variables in regression model.

Only five predictors proved to be statistically significant ($p<.05$) in this model i.e., Quality product/ service, Quick/low-cost shipping, Easy return policies, Word-of-mouth and Ease of

Check-out has the highest correlation with the dependent variable of E-commerce sales.

Conclusion

In the light of results achieved after reliability analysis and Regression and correlation analysis, it can be seen that only five predictors proved to be statistically significant ($p < .05$) in this model i.e., Quality product/ service, Quick/low-cost shipping, Easy return policies, Word-of-mouth and Ease of Check-out has the highest correlation with the dependent variable of E-commerce sales. The sample size used in the study does not represent the scenario of whole India. In future this research study will inculcate more variables and a bigger sample size to deliver sustainable results for further research.

References

1. Sharma, Dr. Anukrati, "A Study on E-Commerce and Online Shopping : Issues and Influences," International Journal of Computer Engineering and Technology.(IJCET),2013.

2. Mitra , Abhijeet, "E-Commerce in India-A Review", International Journal of Marketing ,Financial Services and Management Research, 2013.

3. Chanana, Nisha and Sangeeta Goel, "Future of E-Commerce in India", International Journal of Computing and Business Research, 2012.

4. Ray ,Subopriya, " Emerging Trends of E-Commerce in India: Some Crucial Issues; Prospects and Challenges", Journal of Computer Engeneering and Intelligent Systems, 2011.

5. Fredriksson, Trobjoin, UNCTAD, Division on Technology and Logistics, Workshop on E-Commerce, Development and SME's, WTO, Geneva, Switzerland,2013.

6. Adwan, Al, A.SAlrouan,M,Al-Saud-A &Al-Yaseen H, 2019 "Revealing the Black Box of Shifting from Electronic Commerce to Mobile Commerce", Journal of Theoretical and Applied Electronic Commerce Research, 14(1),2 Sci Elo 10.4067.

7. Nair K.S, "Impact of E-Commerce on Global Business and Opportunities – A Conceptual Study", International Journal of Advanced Engineering and Management Research, 2(2) p 327 Research Gate, 2017. https://www.researchgate.net/publication/316191305_Impact _of_E-Commerce_on_Global_Business_and_Opportunities_-_A_Conceptual_Study

8. Kazemi ,A .and Saeedy ,S.S "Economics and Impacts of E-Commerce", UCT Journal of Management and Accounting Studies,3(2), 2 journals. 233.239.

9. Big Commerce, "Your M-Commerce Deep Dive: Data, Trends and What's Next in the Mobile Retail Revenue World". 2020. https;//www.bigcommerce.com/blog/mobile-commerce/#why-does-mobile-commerce-matter.

10. Mattila.A.S, & Wirtz. J.(2008), The Roll of Store Environmental Stimulation and Social factors on Impulse Purchasing. Journal of Services Marketing, 22(7), 562-567.

11. Manzoor-A (2010), E-Commerce : An Introduction – Amir Manzoor, LAP Lambert Academic Publishing. p-394.

12. Richa, D. (2012). Impact of Demographic Factors of consumers online shopping behavior: A study of consumers in India. International Journal of Engineering and Management Sciences, 3(1), 43-52.

13. Dsouza, F.P, and Parappagoudar, S.K (2021), SWOT Analysis of Zomato – A case of online food delivery services, International Research Journal of Modernisation in Engineering Technology and Science, 3(3), 537 – 544.