



Research Article

CONSUMER PERCEPTION OF THE FEATURES AND USAGE OF ELECTRONIC WALLETS

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ABSTRACT

This study attempts to find out the behaviour of customers while searching for a product on Electronic wallets. To see how customer experience is related to the internal search system of Electronic wallets. The customers can search for the product through navigation or through the search tab on the ecommerce site. The search on the search panel can be of two types brand specific search (e.g. Vero moda, Levis, Samsung etc.) or category specific search (e.g. Top, Jeans, mobile etc.). Electronic wallets is one of the largest digital goods and M-Commerce platforms. The company is driven to give customers maximum satisfaction and superior customer experience. Electronic wallets is India's largest e-wallet service that provides premium payment solutions to the e-commerce websites using its RBI approved wallets. One97 provides all kinds of mobile services to millions of Indians through its telecom application cloud platform. Customers are used to finding results quickly and mainly from search engines, and will expect a similar experience on e-commerce sites. The search on the search tab can be of two types brand specific search (e.g. Vero moda, Samsung etc.) or category specific search (e.g. Top, Jeans etc.). Customers can use any of the search type according to their convenience. Internal searches are very important, they account for most of the Gross Merchandise Value (GMV) of the company.

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INTRODUCTION

Contextual Background

The extent of study is to analyse the customer behaviour on Electronic wallets website. To see how the customer experience is linked to the internal search system of Electronic wallets. Buying and selling of products or service over internet is electronic commerce. It provides technologies such as automated data collection systems, inventory management systems, online transaction processing, Internet marketing, supply chain management and automated data collection systems electronic funds transfer. An effective site search function on an e-commerce site has a number of potential benefits. For ecommerce sites, it is very important to increase the site traffic. The site traffic will only increase if the customers have better experience on your site.

The customers can search for a product by two ways Navigation and Search Bar. Most of the Gross Merchandise Value (GMV) comes from the searches on the search bar. The customer conversion ratio is high in case of searches. The customers type in their detailed searches queries using the very keywords that describe their shopping intent. This study will help us to know about the customer behavior and how to increase the conversion ratio. Smart businesses will listen and use internal search data to boost conversion rates and profit. By this study, we can improve the search bar.

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Effective site search means better usability, so customers can find things more quickly. Internal search system of any online shopping site includes search bar and navigation. Search bar is where you can directly search for your product and navigation is where you have to navigate to reach your desired product. Jan Willem Bobbink (2015) says that the importance internal search engine is highly underestimated. The search bar can be of a vital importance to consumers and the e-commerce site. He says that there are four reasons to invest time in strategically making your internal search bars. The reasons are you must optimise your website according to consumer preference, the users may indulge in long search query if they don't find their desired product, they may enter unnecessary keywords to find their desired product, conducting extensive market research to find if there is any necessity for the product that the website does not sell. Kruschwitz, Lungley, Albakour, and Song (2013) in his research examined university site logs, reporting that users generally prefer past users' query suggestions, in comparison to content-generated items. Huntington, Nicholas, and Jamali (2007) studied the search engine log files of a news website, indicating that the effectiveness of search engine functionality could be evaluated using the number of searches in a session. Chau *et al* (2005) in his research on internal search, found close association with External Search on web search engines (i.e., short sessions, short queries). Bucklin & Sismeiro (2003) in his research found that the number of results viewed on Internal Search seems somewhat bigger as compared to External Search. This may be because of the richer and more

focused content, which more closely aligns itself with the user’s searching intent. Andrei Broder (2002) in his research on “A taxonomy of web search” discussed how global search engines have evolved to deal with web-specific needs. The intent behind a web search can be informational, navigational as well as transactional. Bernard J. Jansen, Danielle L. Booth and Amanda Spink (2007) in their research on “Determining the informational, navigational and transactional intent of Web queries” found that more than 80% of Web queries are informational in nature, 10% each being navigational and transactional in nature. Electronic wallets is based on an acronym of ‘Pay through mobile’. The company was launched as the main product of One97 communications in 2010. Founded by Vijay Shekhar Sharma, who got inspired to open this venture by observing the vendors in China, who received the money by their mobile phones. This inspired the founder to launch a business that allows it’s consumers to pay online. It started by offering consumers to pay their bills and utility online by Electronic wallets and went on expanding. One97’s venture became successful as Electronic wallets employees about 14000 people across India and has many big shots as their investors. The investors list includes Ratan Tata who made a remarkable investment in the company. Alibaba made an investment of five hundred and seventy five million dollars in the company and it’s affiliated venture Ant financial services own stake of 25% in One97. Silicon Valley Bank and ICICI are also affiliated to this growing corporate giant. ICICI bank gave a loan of three hundred crores to this company in 2016. In 2017, that is recently soft bank invested 1.4 billion dollars in the company, that is one of the largest funding that any Indian company has come across. Due to this the total value of Electronic wallets rose to eight billion Dollars. Electronic wallets is also known to be user friendly and it targets the need of the customers and satisfying them to the fullest. It is user available on various app platforms of Android, IOS. With their e- wallet a consumer can pay all his bills, allows multiple bill payment modes, book movie tickets, buy IRCTC tickets and a lot more! Electronic wallets is one of India’s largest and successful e-commerce websites. It’s growth graph is one of the benchmarks for all the new ventures opening across the nation.

The major objectives of this research had been: understanding the browsing behaviour of customers of Electronic wallets and To find out whether the customers search their product through Navigation or Search panel. The research also focuses on understanding the customer behaviour, while searching for their product through search tab. The search on the search tab can be of two types brand specific search (e.g. Vero moda, Levis, Samsung etc.) or category specific search (e.g. Top, Jeans, mobile etc.) and to find out how customer experience is related to the internal search system of Electronic wallets. A descriptive research design has been used. Descriptive research is used to describe the characteristics of a population or phenomena being studied. Users of ecommerce sites were the respondents chosen with a sample size of 50 on which the Primary data is been taken to arrive at the conclusion. Questionnaire was used for the survey. For the purpose of getting the responses, a self-administered questionnaire having 15 questions is prepared. The questionnaire was divided into four sections. Two questions are of Ordinal Scale, other two questions are of Nominal Scale, three questions are of Likert Scale and other questions are to know the users opinion about

ecommerce site and their searches. Pilot study - is a small scale preliminary study conducted in order to evaluate feasibility, time, cost, adverse events, and effect size (statistical variability) in an attempt to predict an appropriate sample size and improve upon the study design prior to performance of the small scale. A pilot study was done by taking sample 5 users of ecommerce sites and changes in the questionnaire were done accordingly. Prepared a questionnaire on validation and analysis of Electronic wallets internal searches and take views from the users about those questions. After doing analysis of the received data results were found. Data Analysis done on the received data from the users.

Data Analysis

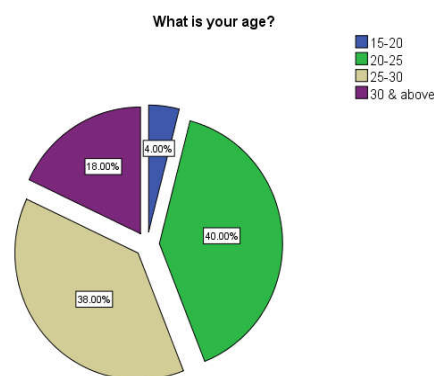


Figure 4.1 Demographic profile of the respondents: Age

Interpretation

From Figure 4.1, we interpret that the age group of respondents studied were from 15 years of age to 30 years and above. 40% of the respondents were from the age group of 20-25 years of age. 38% of the respondents were from the age group of 25-30 years of age. 18% of the respondents were from the age group of 30 & above years of age. 4% of the respondents were from the age group 15-20 years of age.

Gender

For the research, the gender of the respondents is studied.

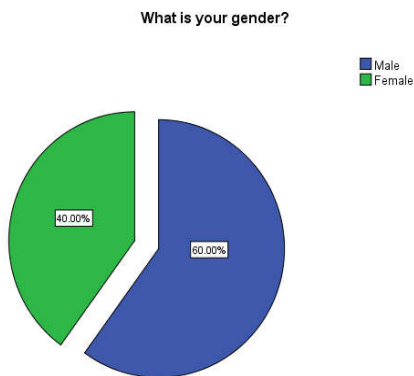


Figure 4.2 Demographic profile of the respondents: Gender

Interpretation

From Figure 4.2, we interpret that 60% of the respondents are male and 40% of the respondents are female.

For the research, the profession of the respondents is studied.

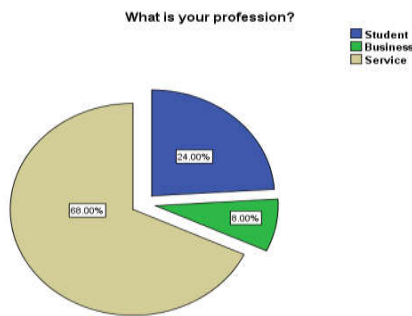


Figure 4.3 Demographic profile of the respondents: Profession

Interpretation

From Figure 4.3, we interpret that 68% of the respondents are from service class, 24% of the respondents are students and 8% are from business sector.

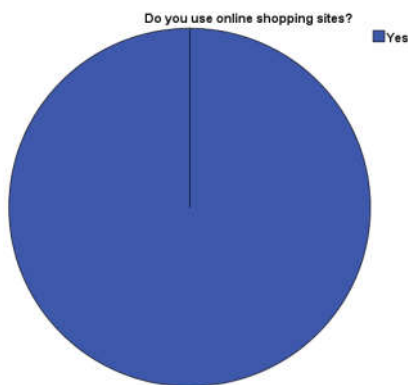


Figure 4.4 Usage of online shopping sites

Interpretation

From Figure 4.4, we interpret that 100% of the respondents use online shopping sites.

Usage of Online Shopping Sites

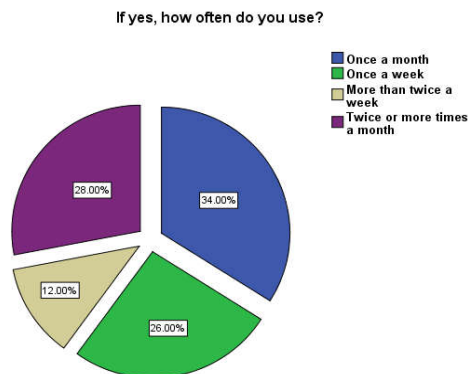


Figure 4.5 Frequency of usage of online shopping sites

Interpretation

From Figure 4.5, we interpret that 34 % of the respondents use online shopping sites once a month. 28% of the respondents use online shopping sites twice or more times a month and 26% of the respondents use online shopping sites once a week. 12% use online shopping sites more than twice a week.

Site Preference

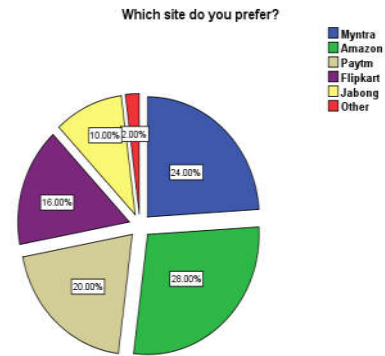


Figure 4.6 Most preferred online shopping sites

Interpretation

From Figure 4.6, we interpret that the most preferred site is Amazon (28%). After this, Myntra is the second most preferred site (24%). Electronic wallets is the third most preferred site (20%). There is not much difference in the site preference of these three sites. Jabong is the fourth most preferred site (10%) after Amazon, Myntra and Electronic wallets.

Customer Experience Of Electronic Wallets

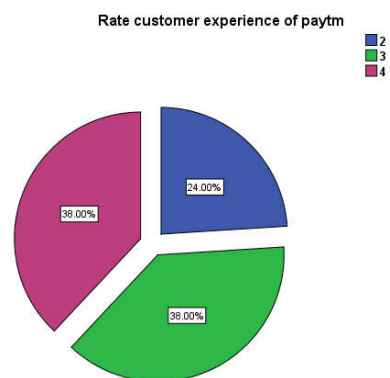


Figure 4.7 Rate customer experience of Electronic wallets

Interpretation

From Figure 4.7, we interpret 38% of the respondents have given the rating of 4 for the customer experience of Electronic wallets. 38% of the respondents have also given the rating of 3. 24% of the respondents have given the rating of 2 for the customer experience of Electronic wallets.

Internal search system of Electronic wallets

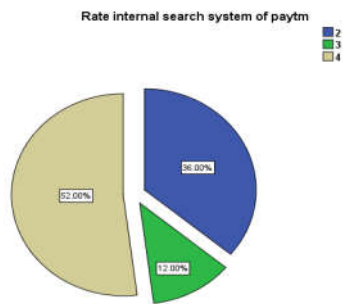


Figure 4.8 Rate internal search system of Electronic wallets

Interpretation

From Figure 4.8, we interpret that 52% of the respondents have given the rating of 4 to the internal search system of Electronic wallets. 36% of the respondents have given the rating of 2 to the internal search system of Electronic wallets. 12% of the respondents have given the rating of 3 to the internal search system of Electronic wallets.

Preference of search panel or navigation

Do you prefer to directly write on the search panel or going through navigation?

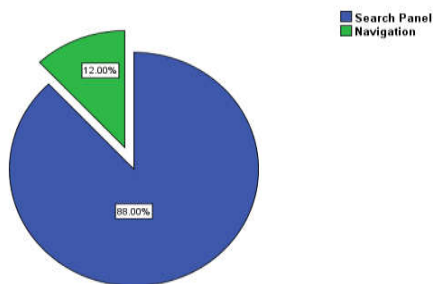


Figure 4.9 Preference of search panel or navigation

Interpretation

From Figure 4.9, we interpret that 88% of the respondents prefer to search for the products on the search panel where as 12% of the respondents prefer to search for the product through navigation.

Type of Search

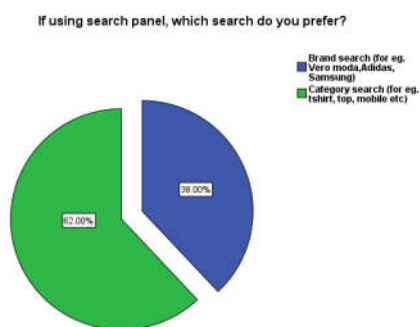


Figure 4.10 Type of Search

Interpretation

From Figure 4.10, we interpret that 62% of the respondents prefer to category search (for e.g. tops, jeans, mobile etc.) on the search panel where as 38% of the respondents prefer to do brand search (for e.g. Vero moda, Adidas, Samsung etc.).

User Friendly Attribute Of Search Bar Of Electronic Wallets

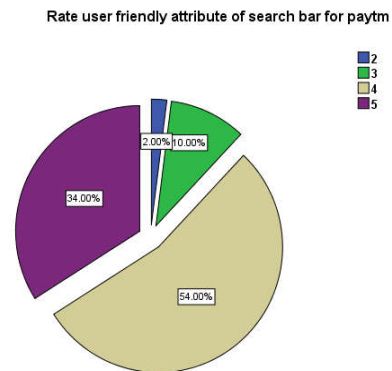


Figure 4.11 Rate user friendly attribute of search bar

Interpretation

From Figure 4.11, we interpret that 54% of the respondents have given the rating of 4 for the user friendly attribute of search panel of Electronic wallets. 34% of the respondents have given the rating of 5 for the user friendly attribute of search panel of Electronic wallets. 10% of the respondents have given the rating of 3 for the user friendly attribute of search panel of Electronic wallets. 2% of the respondents have given the rating of 2 for the user friendly attribute of search panel of Electronic wallets.

Desired Result Attribute Of Search Bar

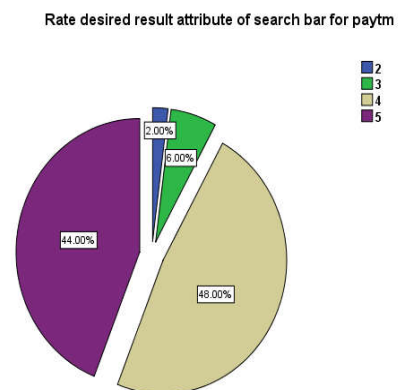


Figure 4.12 Rate desired result attribute of search bar

Interpretation

From Figure 4.12, we interpret that 48% of the respondents have given the rating of 4 for the desired result attribute of search panel of Electronic wallets. 44% of the respondents have given the rating of 5 for the desired result attribute of search panel of Electronic wallets. 6% and 2% of the respondents have given the rating of 3 and 2 simultaneously

for the desired result attribute of search panel of Electronic wallets.

Time saving attribute of search bar

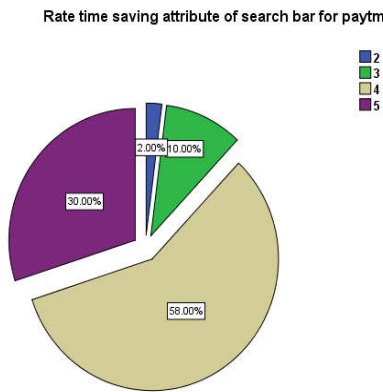


Figure 4.13 Rate time saving attribute of search bar

Interpretation

From Figure 4.13, we interpret that 58% of the respondents have given the rating of 4 for the time saving attribute of search panel of Electronic wallets. 30% of the respondents have given the rating of 5 for the time saving attribute of search panel of Electronic wallets. 10% and 2% of the respondents have given the rating of 3 and 2 simultaneously for the time saving attribute of search panel of Electronic wallets.

User Friendly Attribute Of Navigation

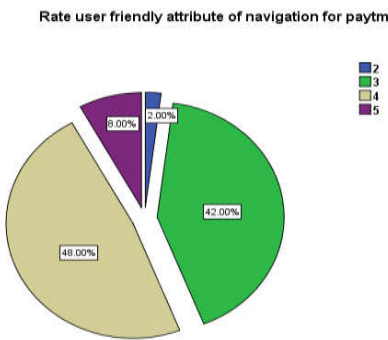


Figure 4.14 Rate user friendly attribute of navigation

Interpretation

From Figure 4.14, we interpret that 48% of the respondents have given the rating of 4 for the user friendly attribute of navigation of Electronic wallets. 42% of the respondents have given the rating of 3 for the user friendly attribute of navigation of Electronic wallets. 8% of the respondents have given the rating of 5 for the user friendly attribute of navigation of Electronic wallets. 2% of the respondents have given the rating of 2 for the user friendly attribute of navigation of Electronic wallets.

Desired result attribute of navigation

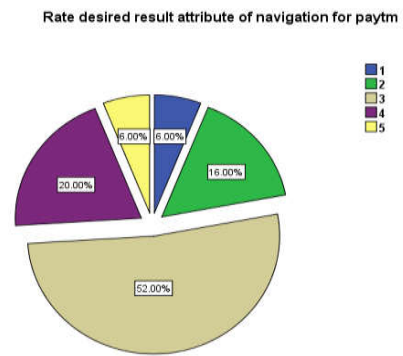


Figure 4.15 Rate desired result attribute of navigation

Interpretation

From Figure 4.15, we interpret that 52% of the respondents have given the rating of 3 for the desired result attribute of navigation of Electronic wallets. 20% of the respondents have given the rating of 4 for the desired result attribute of navigation of Electronic wallets. 16% of the respondents have given the rating of 2 for the desired result attribute of navigation of Electronic wallets. 6% of the respondents have given the rating of 5 for the desired result attribute of navigation. 6% of the respondents have given the rating of 1 for the desired result attribute of navigation.

Time Saving Attribute of Navigation

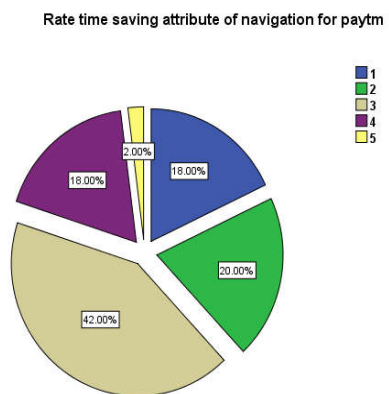


Figure 4.16 Rate times saving attribute of navigation

Interpretation

From Figure 4.16, we interpret that 42% of the respondents have given the rating of 3 for the time saving attribute of navigation of Electronic wallets. 20% of the respondents have given the rating of 2 for the time saving attribute of navigation of Electronic wallets. 18% of the respondents have given the rating of 1 for the time saving attribute of navigation of Electronic wallets. 18% of the respondents have given the rating of 4 for the time saving attribute of navigation of Electronic wallets. 2% of the respondents have given the rating of 5 for the time saving attribute of navigation of Electronic wallets.

Preferred option, if not getting desired result while searching through search bar

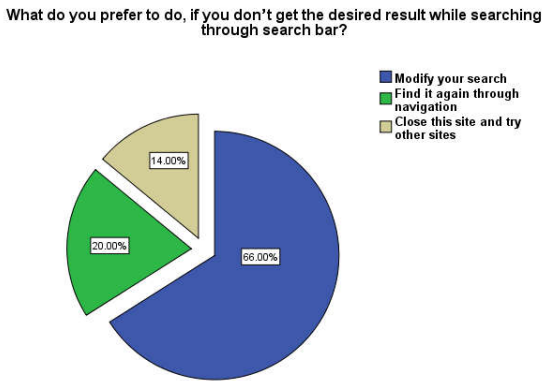


Figure 4.17 No the desired result through search bar

Interpretation

From Figure 4.17, we interpret that 66% of the respondents modify their search, if they don't get the desired result through search bar. 20% of the respondents find it again through navigation, if they don't get the desired result through search bar. 14% of the respondents close the site and try other sites, if they don't get the desired result through search bar.

Is Going Through Navigation Time Consuming?

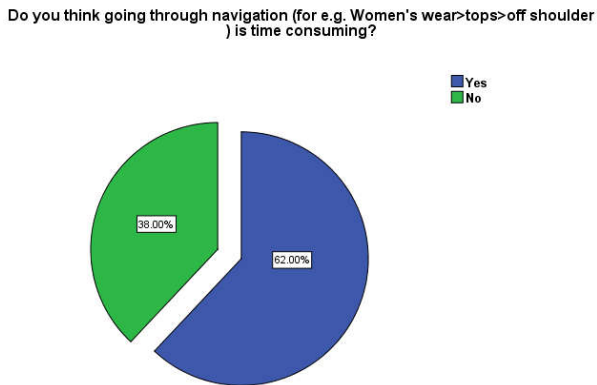


Figure 4.18 Navigation time consuming

Interpretation

From Figure 4.17, we interpret that 62% of the respondents say that going through navigation is time consuming and 38% of the respondents say that going through navigation is not time consuming. Therefore there is not much difference between the opinions.

Correlation

In this study, the two continuous variables for the measure of correlation are following

- 1) Customer Experience
- 2) Internal search system

Table 4.1 Descriptive Statistics

	Mean	Std. Deviation	N
customer experience	3.1400	.78272	50
internal search system	3.1600	.93372	50

Table 4.2 Correlations

		customer experience	internal search system
customer experience	Pearson Correlation	1	.667**
	Sig. (2-tailed)		.000
	N	50	50
internal search system	Pearson Correlation	.667**	1
	Sig. (2-tailed)	.000	
	N	50	50

** . Correlation is significant at the 0.01 level (2-tailed).

Interpretation

From the table 4.2, Thepearson correlation in the study is found out to be 0.667. This shows, there is a positive and high degree of association between customer experience and internal search system of Electronic wallets. The pvalue is 0.000 which is less than alpha (0.5), therefore there is significant association between the two variables.

Table 4.3 Group Statistics

Do you prefer to directly write on the search panel or going through navigation?		N	Mean	Std. Deviation	Std. Error Mean
Rate customer experience of electronic wallets	Search Panel	43	3.28	.734	.112
	Navigation	7	2.57	.787	.297

T-Test

In this study, there is dependent and independent variables. The dependent variable is continuous variable and independent variable is categorical variable.

Table 4.4 Independent Samples Test

		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Rate customer experience of electronic wallets	Equal variances assumed	.012	.912	2.343	48	.023	.708	.302	.100	
	Equal variances not assumed			2.227	7.800	.057	.708	.318	-.028	

Dependent variable- Rate customer experience
 Independent variable- Type of search system on Electronic wallets
 Null Hypothesis (H0)- There is no significant difference in the mean of the dependent variable (rate customer experience) and independent variable (type of search system i.e. Search panel and Navigation).
 Alternate Hypothesis (Ha)- There is significant difference in the mean of the dependent variable (rate customer experience) and independent variable (type of search system i.e. Search panel and Navigation).

Interpretation

From the table 4.4, The pvalue is 0.023 which is less than alpha (0.5), therefore there is significant association between the two variables. Therefore we accept alternate hypothesis that is there is significant difference in the mean of the dependent variable (rate customer experience) and independent variable (Type of search system i.e. Search panel and Navigation).

Regression

The dependent variable in the study is customer experience of using Electronic wallets. The independent variable in the study is the internal search system of Electronic wallets i.e. search bar and navigation.

Table 4.5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609 ^a	.370	.357	.621

a. Predictors: (Constant), Rate internal search system of electronic wallets

Equation

$$\text{Rate customer experience of Electronic wallets} = 1.585 + 0.505(\text{internal search system of Electronic wallets})$$

Line Graph

In this study, the attitude of the respondents was measured with the help of likerd scale towards search bar and navigation system of Electronic wallets. Following attributes were taken into consideration i.e. User friendly, desired result and time saving.

Table 4.7 Statistics

		Rate user friendly attribute of search bar for Electronic wallets	Rate desired result attribute of search bar for Electronic wallets	Rate time saving attribute of search bar for Electronic wallets	Rate user friendly attribute of navigation for Electronic wallets	Rate desired result attribute of navigation for Electronic wallets	Rate time saving attribute of navigation for Electronic wallets
N	Valid	50	50	50	50	50	50
	Missing	0	0	0	0	0	0
	Mean	4.20	4.34	4.16	3.62	3.04	2.66

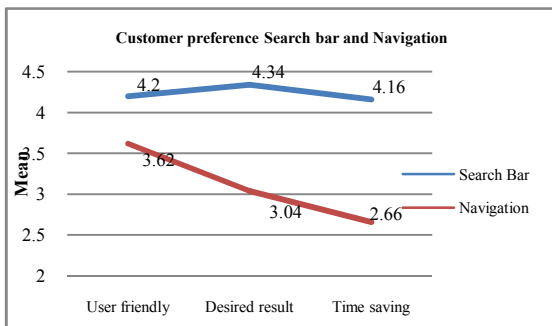


Figure 4.19 Line graph

Interpretation

From figure 4.19, the line graph shows that search bar is preferred by respondents for all the three attributes i.e. User friendly, desired result and time saving as compared to navigation.

FINDINGS & CONCLUSION

- Respondents said that 34% of them use online shopping sites once a month, 28% of them use it twice or more times a month and 12% of them use it more than twice a week.
- Respondents ranked Amazon as the preferred online shopping site at 28% followed by Myntra at 24%, Electronic wallets at 20% and so on. These three are the most preferred sites.
- Respondents have given rating 4 and 3 on a scale 5 of which 1 being the lowest and 5 being the highest for Electronic wallets's customer experience at 38% simultaneously followed by rating of 2 at 24%.
- Respondents have given rating 4 on a scale 5 of which 1 being the lowest and 5 being the highest for Electronicwallets's internal search system at 52% followed by rating of 2 at 36% and rating of 3 at 12%.
- 88% of the respondents prefer to directly write on the search panel on Electronic wallets. Only 12% of the respondents prefer going through navigation
- Respondents who prefer writing on the search panel - 62% prefer to do category search and 38% prefer to prefer to do brand search on Electronic wallets.
- 66% of the respondents prefer to modify their search, if they don't get the desired result while searching through for search panel. 20% prefer to find it again through navigation followed by 14% who prefer to close this site and try other sites.
- 62% of the respondents think that going through navigation is time consuming.
- The correlation coefficient between customer experience and internal search system of Electronic wallets is 0.667. Therefore there is a positive and high degree of association among the variables.

- According to t test, Thepvalue is 0.023 which is less than alpha (0.5), therefore there is significant association between the two variables. Therefore we accept alternate hypothesis that is there is significant difference in the mean of the dependent variable (rate customer experience) and independent variable (Type of search system i.e. Search panel and Navigation).
- The line graph shows that search bar is preferred by respondents for all the three attributes (user friendly, desired result and time saving) as compared to navigation.

Scope of Study

This study is conducted to study the importance of internal search system of any ecommerce site and how it influences the customer experience. By referring to the research conducted by the self-administered questionnaire that was filled up the respondents and by the journals studied, it can be seen that the desired search result of the customer should be the same as the actual output of the search result to stand out from the competition. Most of the Gross merchandise volume of an e commerce company comes through search bars on any ecommerce site. Through the research it is observed that customer find search bar more user friendly as compared to navigation. Search bars as compared to navigation system saves more time of the customers and mostly leads to a successful search. It can also be seen that a search bar takes less time than navigation. Search bar gives customers more freedom to search for a product for the simple reason that customer can type any keyword which is there in their mind. In navigation specific options are there to search for the desired product. This suggests that an e commerce site should mainly focus and develop their search bars and customise it according to the consumer's preference, to give them a hassle free experience.

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