

Analysis of Delivery Issues that Customer Face Upon E-Commerce Shopping

Prateek Gupta,

Scholar,
Institute of Management, CHRIST (Deemed
to be University), Bengaluru, India.

Rishabh Ranjan,

Scholar,
Institute of Management, CHRIST (Deemed
to be University), Bengaluru, India.

Dr. Sreedhara Raman,

Associate Professor,
Institute of Management, CHRIST (Deemed
to be University), Bengaluru, India.

Soumya Singh,

Scholar,
Institute of Management, CHRIST (Deemed
to be University), Bengaluru, India.

Gaurav Kharayat,

Scholar,
Institute of Management, CHRIST (Deemed
to be University), Bengaluru, India.

Dr. Vedha Balaji,

Associate Professor, Institute of
Management, CHRIST (Deemed to be
University), Bengaluru, India.

ABSTRACT

The highly competitive ecommerce sector relies heavily upon its delivery services for the final product to reach a customer. A failure at any step of the delivery process leads to customer dissatisfaction and failure of customer retention. This study tries to understand which of the commonly faced delivery issues are the most regular and how likely they are to occur when a customer often shops online. Review of literature yielded the significance of efficient delivery systems for such companies. The study recorded 154 responses on an objectively prepared questionnaire and studied the results statistically. Four major factors were identified that influence the types of issues a customer is likely to experience. Ecommerce companies can utilize these results in order to understand at what points of the process delivery issues occur and can be avoided.

Keywords: Online delivery, ecommerce, online shopping, service industry, delivery issues.

INTRODUCTION:

Online shopping is one of the most popular ways to make purchases, but it is not something that everyone is comfortable doing. Today's digital world is ruled by the internet. The growing use of internet provides a developing prospect for E-marketers. Internet is continuously changing, the ways in which customers procure goods and services and has rapidly evolved into a global phenomenon. With the increment in internet usage, online shopping is becoming more popular among people of different age groups. The reasons for choosing online over offline shopping by customers are convenience, speed and availability of more variety of products. Online shopping is developing into a well-accepted habit for customers to purchase a wide variety of products and service.

Online buying behaviour is a process that refers to different products and services that are purchased online. The process of online buying behaviour consists of various steps and is quite similar to traditional shopping behaviour. Customers first recognize their needs and wants for buying a particular product or service and similar to traditional buying behaviour, look for alternatives and therefore they refer to the internet to get re or

required information for the product they want to purchase and finally they purchase a particular product that best fit for their needs.

Before making purchase decisions, customers encounter different factors that influences and limits their final decision while shopping online. It is very important for businesses to understand customer satisfaction and loyalty for their well being, profit and long term growth of their organizations. Hence, the theme of this study is to analyze different problems faced by customers during online shopping.

LITERATURE REVIEW:

In a recent study by Yazdanifard, Agodi, & Alizadeh, (2011) it is observed that delivery is the most important part of ecommerce and the future of ecommerce relies on improved and satisfactory delivery services. Customers have become increasingly reluctant to order products. The authors have emphasized that without delivery services being reliable customers question if online shopping is even worth the effort. Hence one must focus upon these issues and find solutions to have them resolved in the long run.

Huang (2006) has studied how ecommerce is affected by various factors in grocery delivery services. This study analysed four situational factors that influence customers to either prefer buying groceries online or from the store. It was found that people prefer that the groceries be delivered on time and this was the most influential factor that pushed the customers towards the online shopping portal. Another important result was that delivery fee did not matter to customers as compared to delivery time preferences. They would be alright with paying a fee for getting their groceries early or at a specified time.

Bhattacharya (2015) found that e commerce is showing tremendous growth rate fuelled by boom in telecom and internet connections. Industries like travelling, banking, media, advertising, retailing have utilized the benefits being provided by E-commerce. This paper explained the different trends in the E-commerce industry, the factors of its boom and lastly the challenges underlying-commerce has given birth to one great revolution which is changing the traditional business models of companies. New methodologies have been created and both time and distance are acting as very minor factors now.

In the paper by Averbakh & Baysan (2012) it is stated that around 50% of the people have purchased or services online, and around 28% of the online purchases have actually failed and around one out of five customers had bad experience over online purchases. These failures have occurred because of technical problems that the customers have encountered with the sites, difficulty in finding the products, and logistics and delivery problems after the sale.

Zeithaml et al (2002) have analysed various sources of literature to conclude that the delivery service of any ecommerce business is one of the most crucial aspects to its success, in comparison to web-based presence and low prices. This aspect of ecommerce can only be improved upon analysis of customer perception of online service.

In the work of Sabou et al (2017) there has been a study on the behaviour of consumers in ecommerce which resulted in the findings that there are a group of customers who show deterrent behaviour post an unsatisfactory delivery experience. Such consumers may not order online again. However there are also groups which continue to place orders despite having faced difficulties in the online shopping experience. In, general it was found that despite a group of people avoiding online shopping due to trust issues the number of new customers continues to grow at a rapid pace and it seems to show that the benefits of online shopping are better than its drawbacks.

In their work, Xanthidis & Nicholas (2007) have assessed the preferences of customers in Greece with regard to ecommerce. They found that people did not prefer to pay online and regretted having done it even once. They disliked local brands over international brands even though they were not comfortable with English, which was the language used in most ecommerce websites. This was a further deterrent of ecommerce.

Punakivi & Sarannen (2001) have explored the differences between manned and unmanned e-commerce deliveries for groceries in their work. They observed that grocery shopping online was 40% cheaper than people themselves going to stores and buying groceries. Also delivery where there was simply a drop-off of the groceries instead of customer delivery was observed to be 2.5 times cheaper. This led to customers preferring online shopping to offline modes. However a key factor that acted as a deterrent in their case was that if unmanned delivery options were not available they preferred going to stores themselves.

In a cross-cultural study conducted by Choi & Lee (2003) regarding consumer behaviour in ecommerce, it was found that USA consumers were relatively less influenced by risk factors and especially did not worry about customer service at all. They had a very positive and encouraging attitude towards buying apparel and even cosmetics online. Their Korean counterparts, however, were not as trusting of the ecommerce sector and preferred to buy only standardized products such as books and CDs, online. They were also quite mistrustful of the customer service and delivery. This may due to the fact that the ecommerce industry is still developing in

Korea and the consumers are wary of the potential risks.

In a study conducted to determine the preferred method of service after an order is not delivered to consumers, Chang & Wang (2012) were able to identify that consumers expected four major mediums for these services: compensation, response speed, apologies, and contact channels. Of these four, compensation was the most satisfactory to customers and they were satisfied upon receiving discount coupons. The expected time for customer service to resolve the situation was within 24 hours and any delay over this time limit elicited negative responses from customers. These findings are applicable to any ecommerce service provider to be used for resolving issues regarding delivery failure.

In the work done by McKinnon (2003) unattended delivery to homes and its security threats have been discussed. With a rise in ecommerce all over the world and the desire for an unrestricted lifestyle it is easy to say that customers in the future will prefer un-attended deliveries in the future. This leads to an evaluation of security and threat of theft which is a problem even currently. In case of unattended deliveries one can also expect that the pay-on-delivery feature may not be available. In the future RFID chips for tracking could eliminate this issue.

Liao et al (2011) have discussed a method of clustering customers and bundling of fresh and non-fresh products in order to optimise hypermarket home delivery process and to take advantage of the growing base of customers available online. The design analyses each clusters' consumption preferences and designs a model catering to their needs. However online shopping is a deterrent for potential customers due to trust issues and that is considered one of the major factors to be overcome.

Park and Regan (2004) have evaluated potential methods to improve home delivery services in the ecommerce sector and how to develop a sustainable logistics (freight) system that is supported by these improved delivery methods. They have made a suggestion that even though ecommerce is not a large portion of total sales that today's businesses encounter, it is still growing at a rapid pace. Thus we must develop a system of logistics that aids the continuous growth of ecommerce.

Chanana & Goele (2012) discussed about the factors affecting the growth of e commerce in emerging markets like India. Various opportunities present for retailers, producers and consumers were also identified. It was found out that the e-commerce will grow exponentially in the coming years. It was also being identified that the things like replacement guarantee, M-Commerce services, location based services, multiple payment option, right content, shipment option, legal requirement of generating invoices for online transactions, quick service, T & C should be clear & realistic, the product quality should be same as shown on the portal, dedicated 24/7 customer care centre will give a positive boost to the e commerce.

Kaur & Joshi (2012) discuss the structure of electronic commerce, the advantages of it along with the challenges. It was found that with the introduction of e-commerce there is a lot of control over the production process, more focus can be put on customers and internal management process, like training, can be enhanced to a great extent. It was clearly interpreted with the analysis that with the development of 3G and 4G wireless communication technologies, the e commerce will continue to grow robustly. These technologies will prove to be a catalyst in the growth of E-commerce and internet users would buy more products and buy more frequently online; both new and established companies will lead to more profits online.

It was found that that there are significant differences between American and Indian consumers with regards to their willingness to disclose personal information (WDPI), and their intentions and actions for privacy and security protection (Gupta et al, 2010). We find that Indian consumers are more willing to disclose potentially sensitive personal information, and U.S. consumers intend to and engage in higher passive privacy protection actions compared to Indians. Thus, cultural differences influence consumers' WDPI and their online privacy protection behaviour. These findings have implications for companies to consider cultural differences when conducting global e-commerce, indicating a need for a localization approach. According to the literature review by Liu (2012), service quality is an important instrument of developing a competitive advantage in e-business. It is one of the most critical factors for maintaining long-term relationships with customers, building customer loyalty, and encouraging customers for purchasing. Therefore, service quality has become a significant factor in determining the success or failure of an online business by influencing online customer shopping experiences and has a greatly effects both online customer satisfaction and customer loyalty. No empirical studies have explored the relationship between e-service quality and online repurchase intentions. In other words, this research investigated the potential for future online purchases by the customers.

A study by Lee & Park (2010) talks about service failure refers to a service performance that falls below a customer's expectations. This psychological study tells us that based upon experience; online channels tend to weigh negative memories than the good ones. Any service failure is a negative experience from a customer's

perspective at the moment it occurs, and therefore contains a potential to damage the firm's long-term profitability if not properly managed. A company's recovery efforts often do fail as well, reinforcing customers' negative attitudes towards the organization. Double deviation refers to a situation where a customer perceives a company's inappropriate and/or inadequate response to initial failures in a service delivery system. After recovery failures, regaining a customer's high-level satisfaction and good emotion might not be possible, even if a company provides extensive recovery efforts. A shopping environment in a cyber-retail space is basically characterized with some unique, online-specific qualities like intangibility, distance, and a lack of human warmth while a service encounter is mostly physical and interpersonal. Service encounter is a period of time during which a consumer directly interacts with a service (Shostack, 1985) or a process with a series of events, where a customer may experience one or more service failures with a seller.

An article by Dellarocas (2003) identifies new possibilities and challenges addressing brand building, customer acquisition and retention, product development, and quality assurance. It talks about the core differences between Internet-based versus traditional word-of-mouth feedback mechanism. It has been observed that online feedback mechanisms create a unified platform between isolated smaller markets which is more rugged than conventional and informal word-of-mouth networks. One of the key findings suggests that online feedback mechanism comes with private assessments or monitoring which encourages customers to provide honest feedbacks. Online feedback mechanisms have the ability to collect information at a very high scale and address larger set of audience at low cost as compared to informal word-of-mouth networks. One of the major cons of digitalized feedback mechanism is the degree of interdependencies in between customers, firms, competitors and the partner ecosystem.

Service quality through web might be a critical strategy to get a competitive advantage, possibly more important than pricing and web presence (Zeithaml, 2002). It is important to understand that how customers perceive online service delivery. A few criteria that customers use in evaluating service quality delivery through Web sites namely: information availability, ease of use, privacy/security, interface, and fulfilment were analysed. Personalization is identified to be another attribute on which desires vary across customers. Customers are asked to provide preference information to personalize the look and feel of the site. To this end, customers are typically asked to provide detailed shipping, billing, and credit card information.

The study by Hansen et al. (2010) aimed: to examine complaint management among retailers, in order to develop a typology of their strategic management system and to develop a profile of each of the retailer group based on relevant variables that include company size, customer dissatisfactions etc. and state of complaint management across different retailers. Using the self-administered questionnaires data collected from the online survey they came to know there are two clusters of retailers one of them belong to non-active complaint handlers and medium active complaint handlers. The medium-active complaint handlers are better in perceiving the customer dissatisfaction and they make appropriate strategic plans for the customers complaint while the non-active complaint handlers are not that pro-active in handling the customer complaints. While the majority of consumers never complain to the source, they are likely to convey the dissatisfaction to their family, friends and co-workers. Richens (1987) found that dissatisfied customers spread negative WOM (word of mouth). The ratio of positive to negative WOM suggests consumers engage in about twice as much WOM when they are dissatisfied compared to when they are satisfied. It can also be concluded here that customer feedback is very valuable information about the offerings of the company and might be regarded as a strategic asset. Utilitarian and hedonic dimensions play a major role in engaging buyers in retail shopping (Childers, 2000). Online shopping in B2C space provides companies with opportunities to create a more cognitive and rich shopping experience. The article aims at addressing determinants of consumer behaviour in the online setup. Navigation, substitutability and convenience came out to be the major determinants of buyer engagement. In goal-driven e-commerce environments, like grocery, user-interactive menus, recipes, and product-oriented videos acts as a catalyst to increase the shopping experience and create a differentiated value proposition as compared to the counter-part i.e. physical retail stores. One of the major findings suggests that relative importance of instrumental characteristics and immersive/hedonic aspects likely to vary across use cases. Limitations of the research include focused determinants to understand the full depth and breadth of shopping behaviour. There might be other important considerations in determining the motivations for retail shopping behaviour.

In the study by Averbakh & Baysan (2012) they have considered a two-level supply chain scheduling problems where customers used to release the jobs to the manufacturer and it is processed and delivered back to the customers. The objective of the paper is to minimize the total cost which is the sum of the total flow time and the total delivery time. So the problems are addressed both for online where the future job is not known and the offline where the future job is known. The problem is considered as in the semi online environment so assuming a lower bound P some algorithm is considered with a competitive ratio that $2D/D+P$, where D is the cost of the delivery.

The direction of the research is to improve the bound and thus reducing the cost and time needed for delivery.

A study was conducted in order to identify the awareness and perception of college students towards online shopping (Vigil Joseph, 2017). The study found that some of the students have awareness about online shopping and its opportunities. As of today, customers can shop online using a range of different domestic appliances, crockery, books, canned food computers and devices. The study is limited to college students. Due to busy schedule of the respondents some of them were reluctant to answer the questionnaire. Hence the data gathered could not express the perception of entire consumers towards online shopping. Further this study does not deal with the people other than college students.

A research found that the impact of perceived social media marketing activities (SMMA) on customer loyalty via customer equity drivers (CEDs) in an e-commerce context help e-commerce managers to boost customer loyalty toward the e-commerce sites through perceived SMMA (Yadav, 2018). It suggested enhancing customers' loyalty in order to retain the existing ones and attract the prospects. The findings of this research will help to attain the objective and customer loyalty e-commerce site could be enhanced by focusing on effective SMMA comprising of all the five major dimensions. Bellamkonda (2014) found that the service quality of online shops is validating the tool in an Indian context. Also, the study examines the mediating role of service value on the relationship between service quality and customer satisfaction in the context of online services. Even though the penetration rate of the internet is very low in India the flexibility, ease of use, convenience and privacy of online shopping has resulted in an unpredictable level of growth. Customer value plays a major role in understanding customers' purchasing patterns.

Achuthan (2011) expressed that certain factors that can build continued intention to use the same website in an online buying situation. The results suggest that perceived usefulness and trust features of a website have a positive impact on continued intention factor in electronic buying. This study has implications for website developers to improve the site as per browser and user requirements, and also for web retailers to improve customer intentions for repeated use of the same site in an online buying situation. The limitation of this study is that it focuses only on planned buying behaviour. 8. Eid (2011) expressed that the managing customer trust, satisfaction, and loyalty attitudes of ecommerce services is very important for the long-term growth of many businesses. He studied ecommerce customers in the eastern province of Saudi Arabia using a structured self-administered questionnaire. The findings of this study show that B2C e-commerce customer loyalty in Saudi Arabia is strongly influenced by customer satisfaction but weakly influenced by customer trust. It was also found that both perceived security risk and perceived privacy are strongly related to customer trust, but weakly related to customer satisfaction.

Tandon (2017) has founded the ease of use and saw helpfulness against the causative job of their sub-factors in understanding consumer loyalty towards web based shopping in India. The study also refined the scale of customer satisfaction by including COD mode of payment as a new dimension of customer satisfaction befitting Indian environment. A weak relationship of customer satisfaction and factors influencing customer satisfaction was identified. Desai (2016) had an opinion that with the growth of information on e-commerce websites, overload may lead to cognitive limitations of users in decision making and information processing. Personalization has become one of the important strategies in the current competitive market. This study explains the importance of paying close attention to personalized e-commerce website portal and the delivery services of an ecommerce company.

Morganti et al (2014) have explored the delivery services in the European region and found that home deliveries are often inefficient and dissatisfactory. Transport operators are developing a number of ways of avoiding deliveries which fail on the first attempt. Thus an alternative solution was provided where pick up points and automated parcel stations were developed by retailers. It reduced the delivery charges significantly and the chance of missing a delivery was also highly reduced, hence there was an increase in quality of service.

As found by Lawal & Ogbu (2015) many companies, organizations and communities in Nigeria are beginning to take advantages of the opportunities offered by e – commerce. However critical challenges must be overcome before e – commerce can be used widely by common people in Nigeria. There exist challenges like consumers' apprehension and risk of loss which need to be understood and acted upon accordingly.

A study was conducted to analyse the preference of different categories of customers for different types of products through online and offline channels (Levin, Levin, & Weller, 2005). The study was conducted with students and adults who were both male and female. The results showed that different consumers had varied preferences based on their gender and whether they were computer-savvy. People who were comfortable with using a computer preferred online channels and did not require a hands-on feel of the shopping experience. The findings implied that a mix of offline and online shopping would be a good option for expanding businesses. However, it was indicated

that businesses must alleviate the mistrust of online shopping by good delivery and customer service.

Wilkins et. Al. have discussed how the method of development of an ecommerce platform is as important as the products offered on it. The delivery of service must be analysed and optimised in order to foster growth on any ecommerce platform. In some cases, if a sense of community is established with the customers it can lead to growth for the platform. Thus the paper proposed a sustainable model for ecommerce growth by developing a freight and logistics system that would support the delivery function and thus help the business grow to its best potential.

A study by Gangeshwer (2013) discussed top motivator factors of shopping online namely, cash back guarantee, cash back delivery, fast delivery, substantial discounts compared to retail and access to branded products. Challenges that were discussed in e-Marketing are dependability on technology, Security, privacy issues, Maintenance costs due to a constantly evolving environment, higher transparency of pricing and increased price competition, and worldwide competition through globalization.

In the work done by Zhang & Song (2016) a study was conducted to evaluate the customer's perception of delivery speed as a differentiating factor for ecommerce sales in China. The study yielded results that suggested that most customers were not sensitive to one-day or 7-day delivery, but instead they showed preference for post-sale services and even petty benefits instead. Thus the conclusion was that China's ecommerce businesses could differentiate themselves to the customers by incorporating more value – added services instead of focusing on fast delivery.

Mingyao (2015) found that online customer complaint behaviour influences not only customer loyalty, but also other customers purchase intentions, it is important to examine the antecedents of customer complaint behaviour. The outcomes from this information show that signal credibility impacts online client objection goals. Moreover, signal credibility can direct the connection between consumer loyalty with post-buy administrations and online client objection goals.

A study by Simona (2017) enquired the behaviour of customers in the online environment. Also analysis was done on the evolution, characteristics, advantages and disadvantages of this type of commerce, and its implications on the consumers. E-commerce intensifies competition and generates advantages for the consumers, who can get lower prices due to having several options. The issues regarding security and the legal framework are the most recent problems which prevent companies from joining e-commerce. One reason why consumers do not buy online, which is often mentioned, is the lack of trust. A limitation of this study is the impossibility of conducting these analyses at the level of each European country as there is insufficient data collected.

METHODOLOGY:

Need for the study:

This study examines the attitudes of customers and different problems faced by them towards online shopping. The study attempts to identify the factors that influence customers to shop online so as to help marketers to formulate suitable strategies towards online marketing.

Objectives of the study:

- (i) To understand the demographic profile of customers who shop online,
- (ii) To extract the factors pertaining to delivery problems faced by customers who shop online.

Research design and methodology:

The research has been designed to give a descriptive analysis of the issues that customers face majorly while having products delivered to them when they shop online. It has been undertaken to analyse the different factors affecting delivery problems that customers face.

Instrument:

A questionnaire was designed to capture relevant data for this purpose. The study contained a total of 12 questions which aimed to capture the demographic data as well as online shopping patterns, payment modes preferred, delivery issues faced, customer behaviour after facing delivery problems, time preferences for delivery services and communication preferences for delivery services.

Sampling method and size:

Random sampling method was used in order to get an understanding of issues faced by customers from a variety of backgrounds. However, the population that was included in the study had subjects residing majorly in urban and suburban areas of the city. The sample size taken was 153 in order to obtain statistically relevant

results. The questionnaire was distributed to the subjects of the study in hardcopy form and a total of 5 minutes were given to them to fill in their responses.

FINDINGS AND DISCUSSION:

The demographic profile of the respondents was obtained by using five parameters namely gender, age, occupation, monthly income and their geographic area of residence. The same is presented in table 1. Table 1 shows that out of the total responses that are considered for online shopping, the male population contributes to 59% which indicates that males are more in number as compared to females which in turn will affect the results as they would be skewed more towards male way of thinking. Majority of the respondents lie in the age range of 20 - 40 years which states that not many people below 20 years and above 60 years prefer online shopping. This is because teenagers may have to consult their parents/guardians before spending money online. The age group of people more than 60 years old contributes only 1.9% of the total which indicates that old people are usually not tech savvy or may have inhibitions regarding online shopping.

It is also observed that students contribute to 54.5% of the total respondents who shop online and employed people have a contribution of 38.3%. This indicates that in the age group of 20-40 year olds, who contribute to 75% of the total respondents, there is a high percentage of students who are more exposed to the fashion and have more trust on shopping online. Also, a lesser number of employed people prefer more offline shopping with a physical touch and hence, their share under the age category of 20-40 is less as compared to the students. Analysing the data from table 1 it is observed that the majority of the test subjects earn less than a lakh per month. This could be the group of young people who are either students or are freshly employed and hence do not have a big salary.

Table 1: Demographic profile of Respondents

Descriptive Statistics		Frequency	Percentage
Gender	Female	63	40.9
	Male	91	59.1
	Total	154	100.0
Age	less than 20	15	9.7
	between 20-40	116	75.3
	between 40-60	20	13.0
	Greater than 60	3	1.9
	Total	154	100.0
Occupation	Student	84	54.5
	Employed	59	38.3
	Unemployed	11	7.1
	Total	154	100.0
Monthly Income	Less than 1 lakh	91	59.1
	Between 1 -2 lakh	25	16.2
	Between 2 -3 lakh	15	9.7
	Between 3 -4 lakh	9	5.8
	Greater than 4 lakh	14	9.1
	Total	154	100
Geographic Area	City	127	82.5
	Suburb	19	12.3
	Rural	8	5.2
	Total	154	100.0

Source: Primary Data

Factor Analysis:

is a data reduction tool. The main objective of using factor analysis is to determine the minimum number of common factors from the observed variables.

Table 2: Reliability Statistics

Cronbach's Alpha	N of Items
.900	20

Source: SPSS Output

A Reliability test was run as a preliminary test for factor analysis in order to analyse which of the issue statements that were given for rating to the test subjects was reliable for the test to be conducted. It can be observed from Table 2 that Cronbach’s Alpha value is 0.9 (greater than 0.5) which indicates that all the statements are highly reliable for factor analysis. Usually, a value of 0.6 or above is considered preferable.

Table 3: Item-Total Statistics for Reliability

Issues faced during delivery	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Not available at home when delivery person arrived	56.41	212.047	.277	.901
Delivery person was not carrying card swiping machine.	56.55	205.386	.420	.898
Delivery person did not have change money.	56.47	208.996	.318	.901
Delivery person did not contact me and confirm time of delivery, hence delivery failed.	56.60	205.523	.446	.897
Delivery person asked for a tip after delivery	57.52	200.761	.538	.895
Delivery person could not find my delivery location.	56.68	200.809	.574	.894
Delivery person arrived at a different time than agreed and it was inconvenient to me.	56.58	203.212	.531	.895
Delivery person marked the product as 'rejected by customer' without attempting delivery to me.	57.06	196.584	.643	.892
Delivery person marked the product 'delivered' even though he did not deliver the product.	56.99	197.065	.630	.892
Delivery person refused to come to my location	56.85	197.330	.669	.891
A damaged product packaging was received and the delivery person refused to return it	57.05	199.108	.634	.892
I was not able to understand the language of the delivery person	56.89	200.190	.560	.894
Delivery person delivered my package to a someone else and I did not receive my package	57.32	202.715	.498	.896
The product delivered was different from the picture shown online	56.30	206.982	.420	.898
The product was damaged when delivered	56.73	201.961	.536	.895
There is no delivery service in my area of residence.	57.14	200.145	.544	.895
I was not able to track my Package	56.99	199.908	.579	.894
The delivery time was much longer than expected	56.45	201.883	.557	.894
The wrong product was delivered	56.89	200.426	.602	.893
The card payment failed during Delivery	56.95	201.148	.556	.894

Source: SPSS Output

From table 3 it can be observed that the results indicate removal of statements ‘Not available at home when delivery person arrived’ or ‘Delivery person did not have change money’ would shift the value of Cronbach’s

Alpha value from 0.900 to 0.901. This is highlighted in green in the table. It means that this statement is the most unreliable of the given 20 statements. But since the difference in the Cronbach’s Alpha value is very slight we can forego the removal of either of these statements. Also we observe that the statement ‘Delivery person refused to come to my location’ is the most reliable in this study as its removal would cause the value of Cronbach’s Alpha to decrease to 0.891. This is indicated in blue in the table.

Table 4: KMO and Bartlett’s Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.892
Bartlett's Test of Sphericity	Approx. Chi-Square	1160.746
	Df	190
	Sig.	.000

Source: SPSS Output

Bartlett’s test: was conducted to analyse if there is a correlation between the statements. The hypotheses for Bartlett’s test are as follows:

H0 (Null hypothesis): The correlation matrix of the delivery issue statements is an identity matrix

Ha (Alternate hypothesis): The correlation matrix of the delivery issue statements is not an identity matrix.

The value of significance for Bartlett’s test is $p = 0.000$, which is less than 0.05 (α value), and hence we can reject the null hypothesis (H0). This implies that the correlation matrix is not an identity matrix and the selected factors have a strong relationship.

Table 5: KMO and Bartlett’s Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.892
Bartlett's Test of Sphericity	Approx. Chi-Square	1160.746
	Df	190
	Sig.	.000

Source: SPSS Output

From the above table it is observed that The KMO factor value is representative of how appropriate and adequate the factors chosen for analysis are. If it is greater than 0.5 it is considered acceptable. In our case, we observe that the KMO factor value is 0.892. This has been highlighted in table. Thus, all the selected factors are acceptable for analysis.

Table 6: Rotated Component Matrix

	Component			
	1	2	3	4
The card payment failed during delivery	.729			
Delivery person delivered my package to a someone else and I did not receive my package	.695			
Delivery person asked for a tip after delivery	.651			
I was not able to understand the language of the delivery person	.622			
The wrong product was delivered	.541			
I was not able to track my package	.531			
A damaged product packaging was received and the delivery person refused to return it				
Delivery person could not find my delivery location.		.688		
Delivery person arrived at a different time than agreed and it was inconvenient to me.		.685		
Delivery person refused to come to my Location		.643		
Delivery person marked the product 'delivered' even though he did not deliver the product.		.620		
Delivery person marked the product as 'rejected by customer' without attempting		.588		

	Component			
	1	2	3	4
delivery to me.				
There is no delivery service in my area of residence.				
The product delivered was different from the picture shown online			.775	
The product was damaged when delivered			.650	
The delivery time was much longer than Expected			.633	
Delivery person did not have change money.				.786
Delivery person was not carrying card swiping machine.				.768
Not available at home when delivery person Arrived				.626
Delivery person did not contact me and confirm time of delivery, hence delivery failed.				
Total	3.862	2.902	2.355	2.202
% of Variance	19.310	14.508	11.774	11.011
Cumulative %	19.310	33.818	45.593	56.603

Source: SPSS Output

The rotated components matrix table displays factor loadings assigned to each of the four factors extracted component wise. The higher the absolute value of each loading, the higher is its effect on the respective component. The gaps in the table represent the points where the loading value is less than 0.5 representing low effect of that factor on its component, since we have compressed the values less than 0.5. Since we have extracted 4 variables, the 20 factors are divided into 4 variables according to importance.

Thus, the first component has 6 issues that influence component 1 the most (marked in light orange colour). The second component has 5 issue statements that influenced only component 2 (marked in green colour). The third component has 3 issues that influence component 3 (marked in blue). Finally, the fourth component has 3 factors that influence it (marked in light brown).

It can also be observed that the variances have been shown at the bottom of the table 6. The 'Total' row represents the Eigen values for each extracted component and it shows the number of extracted factors (statements). Observing the variance and cumulative variance rows we see that Component 1 has accounted for 19.3% of the total influence of shopping issues that customers face. Component 2 represents 14.5% of the total variance, Component 3 represents 11.8% and component 4 only represents 11% of the variance. Together Component 1 and 2 have a major cumulative influence on the issues faced by customers during delivery that is at 33% of the total.

Table 7: Naming of the factors

S.NO.	Factors	Issues	Loadings
1	Final-step failure	The card payment failed during delivery	.729
		Delivery person delivered my package to a someone else and I did not receive my package	.695
		Delivery person asked for a tip after delivery	.651
		I was not able to understand the language of the delivery person	.622
2	Inept delivery person	The wrong product was delivered	.541
		I was not able to track my package	.531
		Delivery person could not find my delivery location.	.688
		Delivery person arrived at a different time than agreed and it was inconvenient to me.	.685
		Delivery person refused to come to my location	.643
		Delivery person marked the product 'delivered' even though he did not deliver the product.	.620
3	Product Problem	Delivery person marked the product as 'rejected by customer' without attempting delivery to me.	.588
		The product delivered was different from the picture shown online	.775
		The product was damaged when delivered	.650
		The delivery time was much longer than expected	.633

S.NO.	Factors	Issues	Loadings
4	Payment failure	Delivery person did not have change money.	.786
		Delivery person was not carrying card swiping machine.	.768
		Not available at home when delivery person arrived	.626

Source: SPSS output

FACTOR ANALYSIS RESULTS:

Analysing the rotated component matrix table 4.18 we observe that the first six factors that fall under the category of ‘Final step failure’ are all related to problems with the delivery process failing at the last moment when the package was to be received. Among these six factors, the factor ‘The card payment failed during delivery’ is the most influential of the lot and has the highest significance of all the six issues mentioned.

For the next category, we observe that all the statements under this category are related to the inefficiency of the delivery person. The likelihood of a customer experiencing an issue of this category is highest with issue being ‘Delivery person could not find my delivery location’, as it has a factor loading of 6.88, highest in the classification. The third category is the ‘product problem’ category, wherein all the issues are related to there being some sort of defect in the product. The issue ‘The product delivered was different from the picture shown online’ has the highest influence in this category of problems and has a factor loading value of 7.75. This makes sense as many ecommerce sites send duplicate or false items as they are not well-regulated.

Finally, the fourth category is that of ‘payment failure’, wherein all the three issues that are categorised in this subheading are related to failure of payment and hence a problem with the delivery of the product. Here the most significant issue is that ‘Delivery person did not have change money’. It has a factor loading value of 0.786. This is a common issue as people often order products with ‘cash on delivery’ as their payment option. In such a case, if the delivery person does not have change it may create an issue for the customer.

CONCLUSION:

The ecommerce sector has seen unprecedented expansion in the last decade and a crucial part of this industry is the delivery process. There have been multiple studies assessing how issues in the delivery process have an effect on the consumer’s behaviour. They all concur that delivery is the most crucial part of an ecommerce business model and must be made as efficient as possible. In this study we will discuss some common issues that customers often face when they shop online. We will analyse which of these problems has a higher influence on customers and which group of customers are majorly affected.

A study was conducted with 154 participants on a hard-copy based questionnaire that captured data regarding general information of the participant and their ratings were taken for twenty listed problems that are commonly faced during the delivery process. The subjects were randomly chosen so as to avoid any kind of bias and to gather holistic data. The data was then analysed using statistical methods and factor analysis was performed upon the twenty listed problems that customers face. The findings indicate that there are four different categories of problems being faced by the customers: ‘payment failure’ based, ‘delivery person’s inefficiency’ based, ‘product defect based’ and ‘final step of delivery process’ based.

Through the research, we have found that there is no significant difference between the problems faced by men or women during the delivery of products from online shopping. It is quite evident from the mean table that the most common issue faced by the customers is that they are dissatisfied with the actual product delivered as it was not a true replica of what was shown on the website. It is also observed through ANOVA analysis that the time taken to deliver the product strongly dependent on the area where it has been delivered and thus affects the customer satisfaction. The longer the customer wait for the product to be delivered, the lower the satisfaction goes. There has always been an issue of non-availability of the customer at the location during delivery of the product. Through research we have found out that the 4pm-8pm is the most appropriate time to deliver the products which in turn helps in increasing the service quality of the company.

Service company are now looking to provide a delight experience through the service. To achieve the same service quality and the issues among customers are thoroughly studied and analysed. With the research done on identifying the issues which affects a company having online delivery facility, future scope of the research lies in improving on the identified issues and to see which one is most efficient,

With the fast worldwide development in electronic trade (e-commerce), business are endeavouring to pick up an upper hand by using e-commerce to connect with customers. These days , online shopping is a fast growing

phenomenon . Growing numbers of shoppers shop online to buy merchandise and enterprises, accumulate item data or even browse for enjoyment . Online shopping playing an important role in the overall relationships between consumers and marketers . With this comes the problem faced by the customer on various issues when buying products online and some of recommendations are:

- Cash on delivery is most liked method of paying but cash spending has its own restriction and limitations. Customer spend more while paying via card but still didn't trust the online payment authenticity and frauds that comes with it. E-retailers need to discover an answer for this issue to build a customer friendly environment.
- An Indian e-customer still has a propensity for checking the item physically before obtaining it, which makes a psychological obstacle for him to shop on the web. So, e-retailers selling customized products should stress more on providing this facility with better communication to the customers through telephone or through product clear images and videos on their website.
- On a normal, 1 out of 10 orders sent are returned by the buyers because of various reasons. In some cases, there are genuine returns yet there are fake buyers as well. Additionally, return logistics has not yet completely advanced in India which is an issue for the both clients and online retailers. To minimize the product return ratio, sellers should work to ensure offering the best quality products, timely delivery, safe packaging and great customer service.
- Many customers face problem of no service in their areas, the e-commerce giants should make sure to expand their reach and not just focus in city areas.
- Delay in delivery is the most common problem. Sometimes its sellers mistake, due to unavailability of products. This happen mostly during big sales by the company. The company could state the problem to the customer or the waiting time related to it so he knows the reason and is updated about the same.
- Damaged products – This happens due to bad packaging or bad handling of the product , the company should increase the replacement time and also compensate , refund the customer on time.
- When customer are not available at home ,they should give an alternative address option mostly of their neighbour ,so that the delivery boy can give the product to the other address rather than taking it back.
- Product delivered was different from the picture shown online, for this the customer should get more time to return the product and the company should make sure the pictures added by online sellers are authentic and clear for better customer shopping experience.
- Multiple order delivery of single e-consumer is not delivered by single person, it is delivered by different delivery boys. Proper planning should be done in order to save time and cost of delivery.

REFERENCES:

- Achuthan, D. J. (2011). 1E-commerce Buying Behavior in India:The Role of Website Featuresin E-loyalty Deepal, *International Journal Of scientific research*, 57-87.
- Averbakh, I., & Baysan, M. (2012). Semi-online two-level supply chain scheduling problems, *Journal of Scheduling*, 15(3), 381-390.
- Bellamkonda, S. K. (2014). E-service quality: a study of online shoppers in India, *American Journal of Business*, 178-188.
- Chanana, N., & Goele, S. (2012). Future of E-commerce in India, *International Journal of computing and business research*.
- Chang, D.S., & Wang, T.H. (2012). Consumer Preferences for Service Recovery Options After Delivery Delay When Shopping Online, *Social Behavior and Personality: An International Journal*, 40(6), 1033–1043. <https://doi.org/10.2224/sbp.2012.40.6.1033>
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behaviour, *Journal of retailing*, 77(4), 511-535.
- Choi, J., & Lee, K. (2003). Risk perception and e-shopping: a cross-cultural study, *Journal of Fashion Marketing and Management: An International Journal*, 7(1), 49–64. <https://doi.org/10.1108/13612020310464368>
- Dellarocas, C. (2003). The digitization of word of mouth: Promise and challenges of online feedback mechanisms, *Management science*, 49(10), 1407-1424.
- Desai, D. (2016). A Study on satisfaction with E- Commerce Websites, *Journal of management and research*, 51-62.
- Eid, M. I. (2011). Determinants of e-commerce customer satisfaction, trust, and loyalty, *Journal of Electronic Commerce Research*, 76-89.
- Gangeshwer, D. K. (2013). E-commerce or Internet Marketing: A business Review from Indian context, *International Journal of u-and e-Service, Science and Technology*, 6(6), 187-194.

- Gupta, B., Iyer, L. S., & Weisskirch, R. S. (2010). Facilitating global e- Commerce: a comparison of consumers'willingness to disclose personal information online in the us and in india, *Journal of electronic commerce research*, 11(1).
- Hansen, T., Wilke, R., & Zaichkowsky, J. (2010). Managing consumer complaints: differences and similarities among heterogeneous retailers, *International Journal of Retail & Distribution Management*, 38(1), 6-23.
- Huang, Y., & Oppewal, H. (2006). Why consumers hesitate to shop online: An experimental choice analysis of grocery shopping and the role of delivery fees, *International Journal of Retail & Distribution Management*, 34(4/5), 334–353.
- Kaur, P., & Joshi, M. M. (2012). E-Commerce in India: A Review, *IJCST*, 3(1), 802-804.
- Lawal, A., & Ogbu, R. C. (2015). E-commerce, problems and prospect in nigeria, 1(3), 7.
- Lee, E. J., & Park, J. (2010). Service failures in online double deviation scenarios: justice theory approach, *Managing Service Quality: An International Journal*, 20(1), 46-69.
- Levin, A. M., Levin, I. P., & Weller, J. A. (2005). A multi-attribute analysis of preferences for online and offline shopping: differences across products, consumers, and shopping stages, 6, 10.
- Liao, S., Chen, Y., & Lin, Y. (2011). Mining customer knowledge to implement online shopping and home delivery for hypermarkets, *Expert Systems with Applications*, 38(4), 3982–3991.
- Liu, T. H. (2012). Effect of e-service quality on customer online repurchase intentions. Lynn University.
- Mayank Yadav, Z. R. (2018). The influence of social media marketing activities on customer loyalty, *Benchmarking An International journal*, 25.
- McKinnon, A. C., & Tallam, D. (2003). Unattended delivery to the home: an assessment of the security implications, *International Journal of Retail & Distribution Management*, 31(1), 30–41.
- Mingyao Hu, E. R. (2015). Customers complaints in online shopping, the role of signal credibility, *Journal of Electronic Commerce Research*, 95-108.
- Morganti, E., Seidel, S., Blanquart, C., Dablanc, L., & Lenz, B. (2014). The Impact of E-commerce on Final Deliveries: Alternative Parcel Delivery Services in France and Germany. *Transportation Research Procedia*, 4, 178–190. <https://doi.org/10.1016/j.trpro.2014.11.014>
- Park, M., & Regan, A. (n.d.). Issues in emerging home delivery operations, 14.
- Punakivi, M., & Saranen, J. (2001). Identifying the success factors in e-grocery home delivery, *International Journal of Retail & Distribution Management*, 29(4), 156–163. <https://doi.org/10.1108/09590550110387953>
- Sabou, S., Avram-Pop, B., & Zima, L. A. (2017). The Impact of the Problems Faced by Online Customers on Ecommerce. *Studia Universitatis Babeş-Bolyai Oeconomica*, 62(2), 77–88. <https://doi.org/10.1515/subboec-2017-0010>
- Simona Sabou, B. A. (2017). The impact of the problems faced by Online customers on ecommerce. *Studia universitatis babeş-bolyai oeconomica*.
- Sourabh Bhattacharya, B. B. (2015). Evolution, Growth and Challenges in E-commerce, *SUMEDHA Journal of Management*, 45-58.
- Urvashi Tandon, R. K. (2017). Analyzing customer satisfaction: users perspective towards online shopping, *Nankai Business Review International*, 266-288.
- Vigil Joseph, J. J. (2017). A Study on Consumer's Perception towards Online Shopping among College Students, *Splint International Journal of Professionals*.
- Wilkins, L., Swatman, P. M. C., & Castleman, T. (n.d.). Electronic Markets and Service Delivery: requisite competencies for virtual environments, 13.
- Xanthidis, D., & Nicholas, D. (2007). Consumer preferences and attitudes towards eCommerce activities. Case study: Greece, 6.
- Yazdanifard, R., Agodi, T., & Alizadeh, S. (2011). How Unreliable Delivery System Affects E-marketing Effectiveness, 10–14.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service Quality Delivery through Web Sites: A Critical Review of Extant Knowledge, *Journal of the Academy of Marketing Science*, 30(4), 362–375.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: a critical review of extant knowledge, *Journal of the academy of marketing science*, 30(4), 362
- Zhang, F., & Song, G. (2016). Can delivery speed affect sale in ecommerce: Evidence from household appliance. In 2016 International Conference on Logistics, Informatics and Service Sciences (LISS) (pp. 1–5). Sydney, Australia: IEEE.
