

# A Conjoint Analysis Approach To E-Service Attributes Of Online Shopping Websites To Generate An Optimised Unique Selling Proposition

\*Ms. Pooja , Research Scholar<sup>1</sup>,  
Prof. (Dr.) Pranay Verma<sup>2</sup>,  
Dr. Jasbir Singh<sup>3</sup>

<sup>1</sup>Amity University, Amity Rd, Sector 125, Noida, Uttar Pradesh 201301

E-Mail- [poojadabas112@gmail.com](mailto:poojadabas112@gmail.com), Phone No. -9650414243

<sup>2</sup>Professor Amity University, Amity Rd, Sector 125, Noida, Uttar Pradesh 201301

E-Mail- [pverma2@amity.edu](mailto:pverma2@amity.edu)

<sup>3</sup>Associate Professor, Maharaja Surajmal Institute, C-4 MARKET,

Fire Station Rd, Janakpuri, New Delhi, Delhi 110058

E-Mail- [jasbirsingh@msijanakpuri.com](mailto:jasbirsingh@msijanakpuri.com),

Corresponding Author:

Correspondence concerning this article should be addressed to

Ms. Pooja, <https://orcid.org/0000-0002-9446-8274>

E-Mail- [poojadabas112@gmail.com](mailto:poojadabas112@gmail.com)

Address: A-158, Surajmal Vihar, Delhi -110092 ,India.

## Abstract

This research seeks to determine how certain service attributes of e-commerce might be integrated by partitioning those attributes into distinct components. Prior studies solely focused on the cognitive elements of utilizing the service features of an online store. This is the first study of its sort to quantify the utility of each service attribute. A focus group method is employed to examine the crucial e-service qualities and classify them into desired levels. This is a prototype combination of e-service attributes using orthogonal design with SPSS software, this gives a heuristic combination of e-service qualities. Conjoint Analysis, a practical method for identifying the underlying set of features that the user values most, is used for further analysis. Businesses that are able to combine the variety of available e-service features will enhance website usability and, as a result, offer a more satisfying client experience, giving them a competitive advantage. The latest research provides valuable input in designing and altering existing websites. The choice-based conjoint analysis is used to create the optimum value proposition for the service characteristics of online stores. Our findings demonstrate that the respondents considered Payment

Option, Shipping option, and convenient exploring as the three most important attributes (in the descending order of the range of part-worth value). Within the attribute of Payment Option, the shipping option of COD is considered the most important feature. The customer choice set, which includes generating shopping categories, guest checkout, free shipping, and cash-on-delivery option, delivers the maximum value, according to the findings.

Keywords: E-Service attributes, Online shopping experience, Utility Value, Positive Customer Experience, Convenient Exploring.

**Introduction:** Brand Equity Foundations estimates that the Indian E-Commerce market has the potential to develop to US\$16–20 billion in FY25. Due to the widespread usage of smartphones, the internet, and the rapid upsurge brought on by the pandemic scenario, shopping online has become a common chore even for obtaining necessities in the context of Indian consumerism. E-commerce has been prevailing during the COVID-19 pandemic, and retailers have strived to build, ameliorate, and promote their online stores. Materialistic constructivism could force every retailer to embrace an omnichannel ecosystem and converge the operations of virtual and physical stores. The quality of the services offered by an e-website retailer is a key factor in separating it from other subpar websites.(Wijaya et.al., 2021). Evidence suggests that even when making a purchase offline, customers gather data from a variety of sources to support their choice before making the purchase. (S. L. Huang & Lin, 2021). As a result, by leveraging coordination between physical and non-physical channels, omnichannel organizations offer merchants unparalleled synchronization actions with clients across various touchpoints. (Lee et al., 2019) It's crucial to comprehend decisional aspects and their significance to online customers while choosing marketplaces.(Jameel et al., 2021) The following are the contributions made by this study. First, it starts off by emphasizing the value of e-shop platform attributes from the perspective of users, individualizing the attributes, and identifying the proper levels associated with each attribute. Improving the functionality of websites requires an understanding of the significance of e-service aspects of online commerce platforms. This study also emphasizes the significance of precisely assessing customer value proposition by quantifying the utility associated with each attribute. However the majority of research have concentrated on

the factors like Ease of use and convenient exploring(Yau et al., 2021), Security & Privacy,(Jameel et al., 2021) Information quality (Wijaya et al., 2021),efficiency (Et. al., 2021)(Jameel et al., 2021),Site Aesthetic(Yau et al., 2021) etc. effect on customer satisfaction , without going into depth about the elements of the e-shops that are precursors to these constructions from the perspective of users, which eventually influence customer purchase intention. Second, it offers a set of qualities that will provide the user the ideal website flow, ultimately prompting action. The possibility to evaluate offerings and the e-websites that are ultimately supplying those offerings to the customer is enormous in the dynamic virtual world. Due to the plethora of options, the complexities of making comparisons across multiple dimensions, lack of time, and a restricted ability to process the information, users are forced to use an optimal solution rather than make key decisions. (De Bruyn et al., 2008). Customers' opinions on product features differ greatly from their preferences for those products. (De Bruyn et al., 2008) The goal of measurement and estimation of total utility is to comprehend and predict consumer preference by observing service attributes e.g convenience, ease of use, Product Presentation, Checkout information, Shipping Information, Payment Option available while choosing an online shop. By examining the perceived utility of each element from the perspective of the customer, this research offers recommendations for sellers delivering offerings on an e-commerce platform and optimizes sellers' efforts in technology investment.(Lanka, 2020)

Third, By evaluating the utility of each attribute separately as well as the combined usefulness of the different combinations of attribute levels, it quantifies the attributes and their levels. It provides clear insights into the utility value of each individual attribute for the customer and then digs even deeper by figuring out the utility connected to each level(Chen et al., 2010; Ding, 2007).The study's management implications include valuable information input for huge online merchants to revamp their websites, as well as tiny enterprises that can't compete with big players on economies of scale to differentiate their product and thereby gain a customer base. Through the use of qualitative analysis, this study aims to uncover the true significance of the website's features (Focus group). It was further filtered using conjoint analysis. The rest of this paper is structured as follows. The service attributes of e-commerce platforms and existing studies on E-SQUAL are examined in Section 2. The research questions are presented in Section 3. Section 4 offers

characteristics and information for examination. Section 5 offers potential analytical findings. Section 6 concludes by outlining the study's findings and its limitations.

## **2. Literature Review:**

### **2.1 Background**

With the emergence of social commerce, there is a lot of competition on the virtual platform to attract customers, more than 63% of managers contend that social commerce is important for their business.(Kiron et al., 2012) Researchers employed behavioral components to gauge the user's experience with the shopping website while researching the E-SQUAL literature. Efficiency, fulfilment, System availability, privacy (Parasuraman et al., 2005) Responsiveness, Compensation & Contact (Kalia & Paul, 2021) are some of the previous E-SQUAL constructs that have been empirically tested by academics. The underpinning website elements and their interactions that lead to this behaviour all qualities need to be measured from the customer's perspective. Previous researches were conducted to identify various dimensions of e-service quality of online websites .Three dimensions of e-service quality, namely website design, security/privacy and fulfilment were identified as the attributes which effects the overall e-service quality.(Kalia & Paul, 2021).Further studies revealed that E-commerce success is determined on good system quality, information quality, and electronic service quality (Yin & Xu, 2021). Risk, advantages of online shopping, service quality, and trust are an e-top shop's five differentiating characteristics. The second category is website and product features, which covers risk management strategies, site elements, and product traits; the final category is consumer attributes. Strong determinants of online buying satisfaction include information quality, product qualities, website design, transactional ability, payment, security/privacy, delivery, self-consciousness, state of mind, consumer time perception, and customer service. (Chang.et al, 2005 ). It was concluded that enjoyment during scrolling through the e-shops can increase the desire of the customer to spend time on a particular e-shopping platform.(Chen et al., 2010) The results of empirical analysis by researchers summarized that website quality can be as a mixture of navigation, ease of understanding, information usefulness, website design, ease of use, security and privacy, ease of ordering, and customization. “cash-on-delivery” (COD) mode of payment as a new dimension to inculcate confidence for online shopping in emerging economies.(Management, 2014) Researchers employed

behavioural components to gauge the user's experience with the shopping website while researching the E-SQUAL literature.

## **2.2 Attributes under consideration for the study:**

The perception of Indian consumers as being more cost-conscious and favouring websites that offer inexpensive goods is evolving, and users are increasingly choosing websites that offer high-quality service. In view of the fact of multitasking, time constraints, virtual mode of shopping owing to pandemic, and the availability of many options with inclination to opt for online buying, convenience has become a highly valued trait. The starting to completion of a purchase, comprising of information seeking, website navigation, ordering, interactions, delivery, and satisfaction with the bought product are all of what Kim et al. (2009) described as "e-retail quality. Users place a premium on convenience, prompting retailers to rethink their shop operating systems and stress the efficiency of the services they deliver.

Four focus groups with eight to twelve participants each, were conducted on the sample led by moderator. Participants were selected based on how frequently and how well-versed they were in e-commerce platforms. NVIVO software is used to map out the themes in transcripts. The study's finalised qualities and respective levels are chosen in accordance with the theme mapping. For the current investigation, the following characteristics are taken into consideration

**Convenient Exploring:** The first step in online buying is to browse the product catalogue for new items. To guide the user through the search process, the online website should develop several shopping categories. Duarte et al.) Filtering options based on different product attributes helps to cut down search results and save time while looking for a certain product. (2021, Kalia & Paul). Nevertheless, Infinite scrolling and load-on-demand are two further features that make exploring more convenient.

**Ease of Use:** Ease that leads to individual belief in the system's utilization does not require a great deal of effort. The layout of an online store should be able to assist and guide customers through the navigation process. (Rachmawati et.al, 2020) (2018, Suhardi & Taufik) The website, which follows a well-defined institutional flow, performs admirably. In online retail, navigation and search tools are critical. The search bar should be placed in a clutter-free manner or in keeping the overall design of the site. Online customers should be able to get suggestions for what they're seeking for using search functionality. (2020, Li et al.)

**Product Presentation:** The visual of the product on the website should be appealing enough to entice online shoppers to make a buy. Product descriptions, photo clarity, and image alternatives such as viewing angles, zoom, and numerous photographs are all important in bridging the gap between offline and online buying. 2022 (Kinzinger et al.) Images and descriptions should not be unnecessarily enhanced or exaggerated in order to deceive customers, as trust is a key factor in repeat purchases. 2021 (Kim et al.) When purchasing a product for the first time or from a new site, people check for reviews, thus reviews for the product should be included on the site so that they are immediately accessible to customers. (Augustine & Adnan, 2020)

**Checkout Option:** Customers may not always desire to register prior to making a purchase. Retailers' decisions to provide customers a flexible or restricted checkout option are influenced by a number of factors. (Sajeesh et al., 2021) Customers like purchasing online since it allows them to bypass long queues and checkout lines. Registration on the site is necessary for obtaining client information, but it significantly delays the checkout process. When a consumer visits a website in pursuit of a product, he or she may not be interested in going through the hassle of filling out a registration form. Though it is critical to grow the customer base, this should not come at the expense of losing a customer. The phrase "cart and checkout abandonment" was recently coined. (Kapoor & Vij, 2021)

**Shipping Information:** Free shipping has been identified as a consistent feature in attracting clients in earlier studies. (Vasi et al., 2019) It is concluded that free shipping is the most significant aspect of shopping online. Barring free shipping, providing an estimated shipping total for fast delivery is also preferred by online customers. (Wang & Bae, 2020). Some studies also pointed out that Scheduling and Tracking of shipment is relevant to e-service quality and constitute e-fulfilment. (Jain et al., 2021)

**Payment Option:** The most critical element of the purchasing process is payment. Any friction in this area can easily lead to cart abandonment. 2021 (Jain et al.) COD payment is generally associated with a website's trust factor; hence it is a recommended choice for new websites. Due to the numerous advantages of cashless transactions, a new era of cashless transactions is emerging. Customers who have the choice to choose their preferred payment method are more likely to complete a purchase. (2018, Suhardi & Taufik) Customers should be able to buy locally on the website using their preferred payment method, resulting in a higher conversion rate.

### 3. Research Questions:

This study validates the customers' perspective on the e-commerce platform's utility scale order. Then, in order to determine the utility value of the specific attributes and the cumulative utility of the combination of attributes at various levels given by e-commerce platforms, we develop the following research questions.

**Research Question 1:** What is the utility value associated with each attribute under consideration of e-commerce website.

**Research Question 2:** What is the combined utility value that the set of attributes, at various levels, holds?

### 4. Methodology:

**4.1 Focus group discussion as a qualitative approach:** Four Focus group Discussions are conducted as part of the preparation for executing a choice-based conjoint analysis, with each group including 8 to 12 people. The conversation began with a brief introduction to the issue under consideration and an explanation of the focus group's aim to the participants. For the purpose of thematic analysis and gaining analytical insights, audio recordings are manually transcribed into written transcripts using NVIVO software. As a result, the pertinent characteristics and levels are constrained. Attributes and levels are identified and summarized based on the results of this focus group discussion analysis. The qualities of e-services are divided into six categories in this study. Customers evaluate the convenience of exploring, product display, checkout option, payment option, and shipping option. Table 1 specifically explains Each attribute at different levels.

**Table 1**

<b>If you are scrolling through an e-shops in are the attribute of the website, which combination of the attributes gives you the most pleasurable experience.</b>					
Convenient Exploring	Creating Shopping Categories	Filter Options	Infinite Scroll	Load on Demand	
Ease of Use	Ease of Navigation	Clutter Free Design	Search Functionality		
Product Presentation	Detailed Product Description	Superior photos of Product	Image Options	Customer Reviews	
Checkout Option	Compulsory Registration	Guest Checkout			
Shipping Information	Free Shipping	Shipping Charges on Fast Delivery	Delivery Date and Time Information		

Payment Option	COD	Credit Card	Debit Card	Paytm/UPI	
----------------	-----	-------------	------------	-----------	--

**4.2 Conjoint Analysis:** As the E-Commerce platform service is rapidly changing and there isn't enough data to make forecasts, it is difficult to accurately measure the economic worth of particular attribute as a result, researchers that study markets or services that are enduring rapid shift use surveys to assess the utility of platforms or services. This paper is the result of our first attempt to use conjoint analysis for performing discriminant analysis to zero down at combination of E-SQ attributes that constitutes the decision regarding purchase from an e-shop. This is an exploratory study in which qualitative analysis was used to address the research question. The underlying concept of Conjoint Analysis is that consumers values are constructed on the utility offered by products or service attributes. "Conjoint analysis is a main-effects analysis meant to estimate the joint effect of a set of independent variables measuring the attributes of a product or service on a dependent variable measuring the preferences of consumers. Preferences are the left hand-side, ordinally – scaled variable. Attributes are used as independent variables. Both continuous and categorical variables can be employed for measuring attributes"(Aurelia & Laszlo, 2021). Conjoint analysis enables quantification of metaphysical choice intention of online sellers in numerical by presenting a union of e-service attributes further classified to different levels that online marketplaces can offer. Therefore, we adopted conjoint analysis as a suitable methodological approach. Conjoint analysis is a multivariate technique to arbitrage in decision-making. This analysis consists of conglomerate of interrelated steps which can be broadly classified into four steps. .(1) To identify befitting attributes and levels as motivators for consumers choice.(2) Preparation of instrument by using Orthogonal Design Option using SPSS (3) To select an appropriate configuration model and evaluating consumer part-worth utilities.(Oyatoye et al., 2016)

#### **1) Identifying decisional Service Attributes of Online Shopping websites and Levels :**

**Focus Group Approach :** E-service traits are based on a comprehensive literature search, yet the usefulness of these attributes in today's dynamic world is contentious. With all of the features described in the literature evaluation, the user does not have the same positive experience. When we wish to challenge preconceived conceptions, find unmet needs, and explore adjutant concerns in the decision-making process, qualitative research methods like Focus Group Approach are most effective. The Focus



Group method is used to gain a better knowledge of how people think and how different website qualities and dimensions to assess those attributes are perceived.

**2) Instrument Preparation:** Each of the six criteria has between three and four levels. Investigating how key features affect a great customer experience is one of the goals as a result. We should change a single attribute just once for the entire factorial experiments. However, it is not practical to use every combination. Generating an Orthogonal Design generates a data file containing an orthogonal main-effects design that permits the statistical testing of several factors without testing every combination of factor levels. Minimum no. of cases that can be generated for 6 factors with 3 to 4 levels are 25 (Fan et al., 2014). So 25 profiles were constructed using the SPSS software orthogonal design option to compare the efficiency of several intervention components of E-service the qualities of a shopping website. The respondents were given an organised questionnaire with an explanation of the attributes. The process for providing responses for various profiles were explained to the respondents. The survey was carried out in Physical Mode to account for the intricacy of the process.

#### **5. Sample and Data Collection:**

Sample is a component of the Population that accurately depicts the populace. One can extrapolate the results of data analysis on a sample to the complete population. A customised survey is used to conduct choice-based conjoint analysis, and respondents are asked to rank the importance of the many attributes that need to be examined. Each combination can be given a value based on a statistical analysis of the survey data. To generalise the results for the public, individuals in the age range of 18 to 34 who frequently purchase online but prefer to buy locally are chosen using a judgmental sampling technique.

**Analytical Strategy:** This study used choice-based conjoint analysis to examine the relative preferences for each attribute and its corresponding levels in order to determine which elements influence positive customer response and the relative importance of these factors. Choice based Conjoint analysis is a decompositional method for determining a consumer preference structure based on an overall evaluation of a set of profile description. It uses an overall evaluation of a set of profile descriptions by arriving at a configuration of the respondents' overall preferences. (Ding, 2007). Result is derived as a lay down of part-worths for the discrete attribute levels by arriving at a configuration of the respondents' overall preferences. A vector and parameter coalescences of service attributes of e-shops is

constructed and further evaluation comprises of breaking down the respondents' assessment of the profiles into congenial measure of utility. The analysis can better be equipped with an ability to make judgments or can be used to reconstitute the new emerged combination of attributes and levels.(Choi, 2005)

**Partworth Model Analysis :** Partworth Model worth type of decompositional method in which predilection or stated choice data are further segregated to arrive at attribute specific functions. (Dayar, 2012). Function and assumptions of part worth function.(Choi, 2005)

$$t_j \sum_{p=1}^P f_p(y_{jp})$$

$t_j$  = Respondents preference for jth stimulus

$f_p$  =  $f_p$  = function denoting the partworth of different levels of  $y_{jp}$  for the pth attribute.

Each profile in the orthogonal design created with the assistance of SPSS software represents a different combination of respondent's choice. As per the individual respondent's preference for the E-SQUAL attributes the 25 profiles are ranked from 1 to 25. (1= Not at all preferred,25= Most preferred) .

The outcome of the Part Worth Analysis Model confers a Utility Score, Part -Worth for each factor level. Quantitative measure of the respondent's preference for respective factor level is divulged by utility scores corresponding to the regression coefficients.(Choi, 2005) Larger values reflect considerable Preference. Part worth for the respective profile is expressed in identical units which allows to use the additive property to arrive at total utility. The part-worth model provides the preference of the service attributes of the shopping website by the actual user by modelling and visualization.

**6. Results:** The following table represents the respective Total Utility of all the profile cards (Orthogonal combinations) used for the study.

**Table : 2**

Card No.	Total Utility
1	10.212
2	13.038
3	9.428
4	11.381

5	10.831
6	11.024
7	11.499
8	11.392
9	10.239
10	13.154
11	9.635
12	10.733
13	10.216
14	12.021
15	14.232
16	10.168
17	10.797
18	10.104
19	9.247
20	10.149
21	9.924
22	12.957
23	14.29
24	11.858
25	2.193

According to the above data, the respondents' highest total utility is 14.29 for the combination of traits indicated in Card No. 23, i.e followed by 14.232 for the combination reflected in Card No. 15. Card No. 25 holds the least total utility value of 2.193.

The percentage utility of the six traits studied for the study, as well as the Part-Worth Utility Value of each level of corresponding attributes, are shown in the table below.

**Table :3**

Service Attributes	Percentage % (Avg. Importance Score)	Levels	Part-Worth/ Utility Value	Std. Error
--------------------	--	--------	------------------------------	------------

<b>Convenient Exploring</b>	20.592%	Creating Shopping Categories	.840	.607
			-.351	.550
			.018	.718
		Filter Options	-.507	.550
		Infinite Scroll Load on Demand		
<b>Ease of Use</b>	3.238%	Ease of Navigation	.020	.547
		Clutter Free Design	.096	.456
		Search Functionality	-.116	.655
<b>Product Presentation</b>	13.011%	Customer Reviews	-.501	.557
		Superior Photos of Product	.216	.628
		Image Options	.350	.557
		Detailed Product Description	-.065	.814
<b>Checkout Option</b>	.613%	Guest Checkout	-.020	.350
		Registration with the site	.020	.350
<b>Shipping Information</b>	29.487%	Free Shipping	1.016	.507
		Shipping Charges on Fast Delivery	-.102	.503
		Delivery Date and Time	-.913	.567
		Information		
<b>Payment Option</b>	33.057%	Paytm/UPI	-.512	.641
		Cash on Delivery	1.564	.511
		Credit Card	-.453	.551
		Debit Card	-.599	.639
<b>Constant</b>			10.520	.403

An array of the utility values represented in the second column of the table shows the relative significance of the respective part to the overall preference. In comparison to attributes with lower utility ranges, those with higher utility ranges have a significant impact. Since each number in the column is represented as a percentage of 100, the total of all the individual percentages equals 100. It is determined by dividing the sum of the utility ranges for all factors by the utility ranges for each individual characteristic. The calculations

are done for each respondent individually, and the result is then averaged out.

According to the aforementioned data, The website's payment option has the highest utility percentage among all the attributes presented, followed by the shipping options that are available and ease of use as measured by Average importance Value of the attributes shown in second column of the Table 2. The most popular option, Cash on Delivery, has a maximum utility of 1.564 with in the category of payment Option available with the website. Free shipping is the most popular option and has a value of 1.016, giving shipping information a considerably higher utility value of 29.487 percent. The Shopping Categories on the e-commerce website have the best usability in terms of features that make it simple to browse. (Utility Value = .840) The utility of a clutter-free design is highest (.096) when compared to other levels within the criterion under "Ease of Use," although search functionality alternatives have a negative utility rating (-.116). The usefulness of the many picture options available is positive (.350) in terms of product display, but the utility value in customer feedback is poor (-.501). The website's checkout option has the lowest utility value of all the stated features of the e-commerce website (.613).

**Comparative Significance:** An array of the utility values gives the relative significance of the respective part to the overall preference. Attributes with greater utility ranges have considerable effect as compared to the lower ranges. The table below reflects the comparative scores of the respective attributes known as importance score.

The table values are represented as a part of 100, so the sum total of all individual percentages summed up to 100. It is calculated by dividing the utility range for individual attributes and dividing it with the sum of utility ranges for all factors. The calculation is performed for individual respondents and then it is averaged out to arrive at the given figure.

Pearson's  $r$ -To measures the degree of correlation between the levels within the attributes.

Kendall's tau-c , is a nonparametric measure of strength and direction of association that exists between the observed and the expected preferences of the rank- order profiles to examine the validity of the utilities.

Table 4: Reflects underling Statistics :

	Value	p-values
<b>Pearson's R</b>	.881	.000
<b>Kendall's tau -c</b>	.667	.000
<b>Kendall's tau for Holdouts</b>	.333	.248

The high correlation value shows the existence of a strong positive relationship. The test statistics show high overall correlations, signifies very strong positive relationship as correlation coefficient  $r$  is .881 and .667 Kendall's tau-c value of for all the conjoint models. Four holdout cards are selected at random and the value of Kendall's tau-c statistics (.333) confirms the general picture of the model's reliability. A cross-validity test of the model's ability to predict the ranking of the hold out profiles is shown in the table. The values reflecting an adequate model fit, indicates replicability and validity of the study.

The test statistic p-values of (.000) presented in the table indicates internal consistency among the presented attribute levels. The values are less than the level of significance of .05, hence we have enough evidences to reject the null hypothesis of inconsistency among the attribute level and we can finally conclude that the factors under consideration are internally consistent, confirms good reliability of the model.

## **7. Discussion and Managerial Implications:**

The respondents considered Payment Option, Shipping option and convenient Exploring as the three most important attributes (in the descending order of the range of part-worth value). Within the attribute of Payment Option, Option of COD considered the most important feature. Poor credit card adoption, a lack of trust in digital transactions, and cultural norms in India make consumers prefer to pay cash on delivery (Jain et al., 2021). COD payment option also enhances trust factor with the website. (Karunarathna, 2021) which is a crucial factor while choosing the online shopping platform. The most popular payment method in developing nations is still Pay at Delivery, according to the most recent findings, which are completely in line with those of earlier studies. (Karunarathna, 2021) Within the Shipping option, Free shipping is preferred option in Indian Market. (W. H. Huang & Cheng, 2015) There are incidence of free shipping losses its Importance as a main motivator to make a purchase from the e-shop in developed countries. (W. H. Huang et al., 2019) but in developing nations it still holds its importance as motivator to make a purchase. (Kapoor & Vij, 2021) (W. H. Huang et al., 2019) One of the main factors influencing customers' propensity to use online shopping is convenience, Results reflects the same

(Duarte et al., 2018) creating shopping Categories is reflected as most important that adds to the convenient exploring in online shopping. The online shopping experience will be improved if the product is presented on the website to provide a realistic experience.(Meißner et al., 2020) Various image options and good picture quality possess good utility value contribution within the product presentation category, with a value contribution of 13.01, when compared to other levels of possibilities. This is supported by other studies, which also show that 3D product presentations let customers enlarge, zoom in or out on, rotate, and look at the features of simulated objects they may view online.(Meißner et al., 2020) Therefore, it's crucial to consider this factor when displaying a product on the website. Additional research that takes into account behavioural components demonstrates that customers' ability to touch, feel, and try out products on electronic websites is typically improved by high quality 3D product presentations.(Algharabat et al., 2017)The results also shows that Checkout Option attribute hold comparatively uninfluenced values. Hence registration with the website or doing a guest checkout does not matter much to the customer in online shopping. Although it takes time and effort to register with the website, the advantages of doing so outweigh these costs.(Sajeesh et al., 2021)

## **8. Conclusion:**

Three attributes of e-shops that acts as stimulator for positive customer experience are payment options available, Shipping information's and Convenient exploring. Value of correlation coefficient .881 shows conjoint analysis as a valid estimator. We may infer that the consumer choice set, which includes Creating Shopping Categories, Guest Checkout, Free Shipping, and Cash on Delivery Option, provides the most value. Conjoint analysis gives the real perception of consumer while using an e-shops websites and hence provide a valuable input for designing e-shops websites and modifying the already existing websites.

We are able to contribute both theoretically and practically. Theoretically, this work adds to the body of knowledge about importance of each online platform attributes by ranking and disintegrating each attribute. While recent study has increasingly explored digital platform infrastructures or strategies, it also provides an aggregation of e-service attributes that a new local website should have to attract client base as each feature entails cost. Practically speaking, this study contributes to the literature on telecommunications by outlining the concerns platform providers should pay attention to in order to properly run e-commerce

platforms. Despite these achievements, this study has some limitations. Data collection for this study's initial phase was limited to readily accessible samples. The results of this experiment may not be easily generalised as an outcome of all online shoppers in India. Second, the elements of the platform's platform may be more or less valuable depending on the characteristics of specific vendors (sale, Product showcased, Technology used, etc.). Further empirical research can be carried out in this area because conjoint analysis operates on a choice set.

Three attributes of e-shops that acts as stimulator for positive customer experience are payment options available, Shipping information convenient exploring. Value of correlation coefficient .881 shows conjoint analysis as a valid estimator. We may infer that the consumer choice set, which includes Creating Shopping Categories, Guest Checkout, Free Shipping, and Cash on Delivery Option, provides the most value. Conjoint The conjoint gives the real perception of consumer while using a -shops websites and hence provide a valuable input for designing e-shops websites and modifying the already existing websites.

#### References:

- Algharabat, R., Abdallah Alalwan, A., Rana, N. P., & Dwivedi, Y. K. (2017). Three dimensional product presentation quality antecedents and their consequences for online retailers: The moderating role of virtual product experience. *Journal of Retailing and Consumer Services*, 36(December 2016), 203–217.  
<https://doi.org/10.1016/j.jretconser.2017.02.007>
- Augustine, A. A., & Adnan, W. H. (2020). The Effects of Perceived Price , Website Trust and Online Reviews on Online Hotel Booking Intention in Kuala Lumpur The Effects of Perceived Price , Website Trust and Online Reviews on Online Hotel Booking Intention in Kuala Lumpur. *Global Scientific Journals*, 8(6), 374–388.
- Aurelia, B. S., & Laszlo, F. G. (2021). Conjoint Analysis in Marketing Research Conjoint Analysis in Marketing Research. June.
- Chen, Y. H., Hsu, I. C., & Lin, C. C. (2010). Website attributes that increase consumer purchase intention: A conjoint analysis. *Journal of Business Research*, 63(9–10), 1007–1014.  
<https://doi.org/10.1016/j.jbusres.2009.01.023>
- Choi, P. (2005). Conjoint Analysis : Data Quality Control Conjoint Analysis : Data Quality Control. April.
- Dayar, T. (2012). Decompositional Methods. 37–56.  
[https://doi.org/10.1007/978-1-4614-4190-8\\_4](https://doi.org/10.1007/978-1-4614-4190-8_4)
- De Bruyn, A., Liechty, J. C., Huizingh, E. K. R. E., & Lilien, G. L. (2008). Offering online recommendations with minimum customer input through conjoint-based decision aids. *Marketing Science*, 27(3), 443–460.  
<https://doi.org/10.1287/mksc.1070.0306>
- Ding, M. (2007). An incentive-aligned mechanism for conjoint analysis.



Journal of Marketing Research, 44(2), 214–223.

<https://doi.org/10.1509/jmkr.44.2.214>

Duarte, P., Costa e Silva, S., & Ferreira, M. B. (2018). How convenient is it?

Delivering online shopping convenience to enhance customer satisfaction and encourage e-WOM. *Journal of Retailing and Consumer Services*, 44(June), 161–169.

<https://doi.org/10.1016/j.jretconser.2018.06.007>

Et. al., R. M. ., (2021). Analysis of Mediating Effect of Customer Perception in Relation to Service Quality and Customer's Satisfaction in Online Banking Services. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(2), 2421–2427.

<https://doi.org/10.17762/turcomat.v12i2.2055>

Fan, Y., Cai, Y., Li, X., Yin, H., Yu, N., Zhang, R., & Zhao, W. (2014). Rape straw as a source of bio-oil via vacuum pyrolysis: Optimization of bio-oil yield using orthogonal design method and characterization of bio-oil. *Journal of Analytical and Applied Pyrolysis*, 106, 63–70. <https://doi.org/10.1016/j.jaap.2013.12.011>

Huang, S. L., & Lin, Y. H. (2021). Exploring consumer online purchase and search behavior: An FCB grid perspective. *Asia Pacific Management Review*, xxxx. <https://doi.org/10.1016/j.apmr.2021.10.003>

Huang, W. H., & Cheng, Y. C. (2015). Threshold free shipping policies for internet shoppers. *Transportation Research Part A: Policy and Practice*, 82, 193–203. <https://doi.org/10.1016/j.tra.2015.09.015>

Huang, W. H., Shen, G. C., & Liang, C. L. (2019). The effect of threshold free shipping policies on online shoppers' willingness to pay for shipping. *Journal of Retailing and Consumer Services*, 48(January), 105–112. <https://doi.org/10.1016/j.jretconser.2019.01.015>

Jain, N. K., Gajjar, H., & Shah, B. J. (2021). Electronic logistics service quality and repurchase intention in e-tailing: Catalytic role of shopping satisfaction, payment options, gender and returning experience. *Journal of Retailing and Consumer Services*, 59(October), 102360. <https://doi.org/10.1016/j.jretconser.2020.102360>

Jameel, A. S., Hamdi, S. S., Karem, M. A., Raewf, M. B., & Ahmad, A. R. (2021). E-Satisfaction based on E-service Quality among university students. *Journal of Physics: Conference Series*, 1804(1). <https://doi.org/10.1088/1742-6596/1804/1/012039>

Kalia, P., & Paul, J. (2021). E-service quality and e-retailers: Attribute-based multi-dimensional scaling. *Computers in Human Behavior*, 115, 106608. <https://doi.org/10.1016/j.chb.2020.106608>

Kapoor, A. P., & Vij, M. (2021). Following you wherever you go: Mobile shopping 'cart-checkout' abandonment. *Journal of Retailing and Consumer Services*, 61(April), 102553.

<https://doi.org/10.1016/j.jretconser.2021.102553>

Karunaratna, N. (2021). Critical factors influencing online consumer preference towards cash on delivery method in Sri Lanka. *Journal of Research in Emerging Markets*, 3(1), 66–80.

<https://doi.org/10.30585/jrems.v3i1.566>

Kiron, B. D., Palmer, D., Phillips, A. N., & Kruschwitz, N. (2012). *Social Business : What Are Companies Really Doing ?* MIT Sloan Management

Review, 31.

- Lanka, S. (2020). Pr ep rin t n ot pe er r iew Pr ep rin t n ot pe ed.
- Lee, S., Lee, S. Y., & Ryu, M. H. (2019). How much are sellers willing to pay for the features offered by their e-commerce platform? *Telecommunications Policy*, 43(10), 101832. <https://doi.org/10.1016/j.telpol.2019.101832>
- Management, R. (2014). In chief.
- Meißner, M., Pfeiffer, J., Peukert, C., Dietrich, H., & Pfeiffer, T. (2020). How virtual reality affects consumer choice. *Journal of Business Research*, 117(May 2019), 219–231. <https://doi.org/10.1016/j.jbusres.2020.06.004>
- Oyatoye, B. E. O., Otike-obaro, A. E., & Nkeiruka, G. (2016). Using conjoint analysis to study the factors important to university students in Nigeria when they select a laptop computer. Peer Reviewed, University of Lagos, Nigeria, 1–16.
- Sajeesh, S., Singh, A., & Bhardwaj, P. (2021). Optimal checkout strategies for online retailers. *Journal of Retailing*, xxxx. <https://doi.org/10.1016/j.jretai.2021.06.001>
- Wang, L., & Bae, S. M. (2020). How to avoid the free shipping pitfall? Changing consumer attitudes from the perspective of information interaction. *Electronic Commerce Research and Applications*, 42, 100996. <https://doi.org/10.1016/j.elerap.2020.100996>
- Wijaya, I. G. N. S., Triandini, E., Kabnani, E. T. G., & Arifin, S. (2021). E-commerce website service quality and customer loyalty using WebQual 4.0 with importance performances analysis, and structural equation model: An empirical study in shopee. *Register: Jurnal Ilmiah Teknologi Sistem Informasi*, 7(2), 107–124. <https://doi.org/10.26594/register.v7i2.2266>
- Yau, H. K., Siu, M. K., & Tang, H. Y. (2021). Effects of e-service Quality Dimensions on Overall e-banking Service Quality , Customer Satisfaction and Customer Loyalty in Hong Kong Banking Sector. *Proceedings of the International MultiConference of Engineers and Computer Scientists 2021 IMECS 2021 October 20-22, 2021, Hong Kong*, 0958, 20–23.