

# An empirical study on employee satisfaction with AI and Technology-enabled features in online fashion companies using SEM and WEBQUAL

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## Keywords

ICT, e-retailing, customer satisfaction, AI-enabled features, SEM, WEBQUAL, TAM, UTAUT, usability, information quality, service interaction quality, virtual try-ons, chatbots, e-satisfaction, online fashion companies, India.

## Abstract

The advent of Information and Communication Technology (ICT) has significantly transformed e-business and e-retailing, necessitating continuous improvement in business processes and innovative business models for differentiation and competitive advantage. In the online fashion sector, technology and AI-enabled features on websites are crucial in enhancing customer satisfaction (e-satisfaction) by addressing customer needs and fostering personalized relationships. This empirical study investigates the impact of AI and technology-enabled website features on employee satisfaction within online fashion companies in India, utilizing Structural Equation Modeling (SEM) and the WEBQUAL framework. The literature review highlights the growing importance of e-retailing, particularly post-pandemic, with AI interventions like virtual fit, chatbots, and recommendation systems enhancing user experience. The Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) underpin the theoretical framework, emphasizing the influence of website usability, information quality, and service interaction quality on e-satisfaction. Despite extensive research on customer satisfaction in traditional retail, its determinants in e-commerce, particularly in the Indian context, remain underexplored. This study addresses this gap by examining how AI-enabled technologies, such as virtual try-ons, rotation and zoom features, product reviews, and personalized services via chatbots, impact e-satisfaction. The findings aim to provide valuable insights for online fashion retailers to enhance their website design and improve overall customer satisfaction.

## Introduction

With the Information and Communication Technology (ICT) revolution and evolution of internet, the way customers shop and buy products is drastically changing. E-business and e-retailing is bringing about a paradigm shift in online shopping and companies are challenged to continuously improve their business processes and invent new business models to achieve differentiation and competitive advantage in the market. One of the key areas of change and evolution is design of the websites. The rapid advancements in technology and AI (artificial intelligence) interventions in e-retailing have made the retailers realise that the features and services to be provided have to be customer centric. Hence understanding the customer needs and developing a one-on-one customised relationship is crucial for e-commerce success of an organization. Satisfied customers are what drives the business and builds long term relationships (Anderson, 1996; Hallowel, 1996). Rehman & Khattak (2010) opine that satisfied customers are the biggest asset to any company and form a strategic part of any organization. This becomes e-satisfaction in the online realm and it has the same significance there as well.

## Review of Literature

### Technology Enabled Retail in India

The growth of ecommerce in the last decade especially with the arrival of the pandemic has brought about a paradigm shift in consumers and retailers both. E-retailing in Apparel and fashion is on a boom and it is expected that the total revenue from this sector will achieve a stable yearly growth rate from \$481.2 billion in 2018 to \$712.9 billion by 2022 (Orendorff, 2018). The retail industry has seen a transformation with technology making a big foray in terms of the digitalization of the industry. Smartphones and smart devices have empowered the customers to have high expectations in terms of the service and satisfaction. Bhagat et

al. (2022), attempt to explore the factors influencing practical implementation of AI and its impact on consumers' online purchase intention (OPI).

In her blog on the future of fashion, Johnson (2019) explains why AI interventions have become a critical factor in providing the service. Augmented features such as (i) virtual fit with mix and match, and (ii) 24 hours, 365 days customer support and personalization features with chatbots. This increases efficiency and can help in facilitating purchasing, product returns. Websites which deploy the usage of technology and AI, allow consumers to not only save time during product searches, but also give them a superior shopping experience thereby increasing the faith of the consumers toward e-tailing organizations. AI-enabled technology on the websites makes many tasks for the consumers simpler such as, searching for the exact products, instantly comparing features, seeking in-depth know-how about the products and so on.

Agarwal et al. (2022) study the impact of adopting emerging technologies like AI in the post-Covid19 world and how these smart technologies are transforming businesses. The authors study 127 empirical articles across businesses such as healthcare, manufacturing, retail, food services, education, media, entertainment, banking and insurance, and travel and tourism. The authors identify 39 types of smart technologies ranging from AI to computer vision technology. On the whole, AI today influences online retailing all along the value chain of the company. AI is still a novel phenomenon here and so most of the studies related to AI are focused on the technological aspects, not its applications and its impact on business processes.

### **TAM and UTAUT**

TAM is the theory to explain user acceptance of technology with respect to information systems (Gefen, Karahanna & Straub, 2003) and also online purchase intention. Unified Theory of Acceptance and Use of Technology (UTAUT, Venkatesh et al. 2003), also known as TAM2 extends the theory to the technology behind the features used on a website. UTAUT relates to the individual characteristics such as personality traits like technology readiness and technology acceptance that influences purchase intention and behaviour.

While studying the factors that influence the usage level and usage rate of websites in Netherlands, van der Heijden (2003) observes that purchase behaviour of Dutch online shoppers was influenced by their evaluation of the website where they were shopping. Hence usability features and design of a website is very crucial and it is imperative that the vendors' should pay specific attention to this. Wixom & Todd (2005) propose that user satisfaction and TAM can and should be integrated. While studying the existing variables based on prior research done on TAM, Moon & Kim (2001) empirically introduce a new variable which they call as 'perceived playfulness' which will further help us with an understanding of an individual world-wide web's acceptance behavior. This is related to the hedonic aspect or the "Fun of Browsing" which can also influence OPI (online purchase intention) and e-satisfaction.

### **E-satisfaction**

Anderson & Srinivasan (2003) suggest a definition for e-satisfaction as "the satisfaction or contentment of the customers with reference to his or her previous purchase experience with an online shopping site". OCE is the complete end to end journey of a customer on a website (Zomerdijk & Voss, 2010).

E-satisfaction is the combination of information quality satisfaction and satisfaction with the website features and usability. This implies that e-satisfaction is a summation of system satisfaction and information satisfaction. The system satisfaction component is derived from features such as speed of page loading, Telepresence on a website (technology), navigability, security features and personalization. A system which cannot help a customer to get accurate, timely and well-organized information does not provide system satisfaction (Kim, Kishore and Sanders, 2005). Hence, the physical structure of a website is the primary determinant of the usability of a website. Information Satisfaction is dependent on Information Quality. This relates to providing useful information to the prospective customer. A relationship exists between information satisfaction and performance expectancy, and also between system satisfaction and effort expectancy (Wixom and Todd, 2005). The information that an e-commerce website provides assists a user in product comparisons before purchases and is the crucial factor behind the satisfaction towards a website. Information satisfaction consists of relevancy, understandability and consistency. Online shopping also

provides personalization that gives customers' an individualized interface with one-on-one interaction (Murthi & Sarkar, 2003). This personalized service is usually rendered today by technology called chatbots. Telepresence is creation of "touch and feel" reality in virtual environment. Today several AI interventions such as recommendation systems, augmented reality, virtual size-fit features, virtual try-ons, 3D images and chatbots are used on websites which increases the usability and interactivity of a website.

## **WEBQUAL**

WebQual is a technique of quantifying the dimensions and features of a website's quality aspects based on a user's attitude towards it. WebQual 4.0 constructs can be used to measure e-satisfaction towards an online website. The technology enabled on the website will also influence the service quality and satisfaction. The three primary constructs of WebQual 4.0 as developed by Barnes & Vidgen (2003) are: Usability Quality, Information Quality and Service Interaction Quality.

### ***Usability Quality***

Usability Quality relates to the design and features of a website, in a sense it should be easy to use. Services like shorter product search period and different payment gateways can reduce the efforts that customers make and increase online buying intention. It deals with the system characteristics and is based on research from telemetrics and HCI (Human Computer Interaction) which is nothing but understanding the ease of website usability (Barnes & Vidgen, 2003). Positive perceptions regarding the website and its content increase the level of online satisfaction (e.g., Polites et al., 2012; Rodgers, Negash, & Suk, 2005).

### ***Information Quality***

Muslimin et al. (2017) state that the information quality construct provides relevant and timely information to customers while they are shopping online. The increased content on the web results in customers who are aware and are then able to make better decisions and will experience more satisfaction with their purchase.

### ***Service Interaction Quality***

Service Interaction Quality comes from service quality with respect to e-retailing and its impact on customer satisfaction. The quality of interaction on a website translates directly into trust and empathy shown for a customer in the virtual online space. Overall, a website can be considered as a system that provides information and TAM is a suitable underlying theory to provide information to its users (Gefen et al. 2003).

## **User Personalization**

Service personalization is highly useful in online shopping situation since the user is not in direct contact with the store personnel. User personalization relates to the personalized shopping lists created based on past purchases, customer service interaction with chatbots and other tailored services, that can actually reduce perceived risk and create emotional trust toward online retailers (Ball et al., 2004; Rajamma et al., 2007). This "service personalization" is what online retailer strive for helps create enhanced e-satisfaction.

## **Need and Relevance of the Study**

Based on the literature review we can identify the need and relevance of this study. In recent times technology and AI is in the background of every website which promotes online retailing. Technology enabled websites provide increased value to the e-retailer, however very little research has been done to link website design and its impact on customer satisfaction. Though measurement of customer satisfaction in the traditional retailing literature has been discussed extensively, Evanschitzky et al (2004) argue that while it comes to the context of e-commerce, the exploration of dimensions and determinants of customer satisfaction is still in its nascent stage.

The review of literature has shown that e-satisfaction is very important dimension which has to be studied in the context of technology. This study focuses on the combination of technology features on a website and its impact on customer satisfaction. Almost all e-retailers small and big are using some form of

AI enabled technologies in order to improve their value chain. Today, companies' success depends on their ability to include website design elements on their webpages, in terms of product displays which mimic the offline store experience. This will evoke positive experiences for the customer and improve OPI and OCE. This helps them to provide information and stay relevant in the market. The research gap focuses on the marketing relevance of technology in the online retail space in the Indian context. Especially in the Indian context, very few studies are available on impact of technology features such as rotation and zoom features, product reviews, size and fit features, ratings, virtual try-ons, and its impact on e-satisfaction. Also, the effect of personalization and personalized service using chatbots and their impact e-satisfaction has not been studied much and this is the gap.

### Research Methodology

Based on the need for the study, the following research questions have been proposed for the study:

**RQ1:** How does the different technology enabled factors influence e-satisfaction

**RQ2:** What are the effects of different website features and AI interventions on e-satisfaction?

### Research Objectives and Hypotheses

Based on these research questions, the following objectives have been framed.

#### Objectives of the Study

**RO1:** To assess the impact of **usability quality** features of a website on E-satisfaction

Usability Quality of the website such as ease of navigation, easy to operate, good appearance are sufficient conditions but what provides customer satisfaction are features on the website which let you do fast product comparisons, sizing tools for fashion clothing which helps the online shopping a positive experience.

**RO2:** To assess the impact of **Information quality** features of a website on E-satisfaction

Product reviews which are a part of Information Quality construct have become a major source of information for not only for customers but also for retailers and manufacturers. Website information content and its level of detail translate into the level of trust that the customers place on the information provided there.

**RO3:** To assess the impact of **Service Interaction quality** of a website on E-satisfaction

This construct refers to the service provided by the website and customer's perception of the level of service provided i.e., e-service quality. E-S-QUAL was devised by Parasuraman et al. (2005). The result of the current study shows that the service quality variable significantly influences the e-satisfaction, which is e-commerce website's customer satisfaction. The respondents of this study feel that chatbots provide good service interaction and are easy to communicate.

**RO4:** To assess the impact of **Personalization Features** on E-satisfaction

This construct has items related to personalization aspect of the products one purchases and how this influences the satisfaction levels. This construct has items about product reviews, online chats and product recommendations all of which are nowadays powered by AI based ML algorithms that which reduce the response time of operations on a website. Personalized product recommendations are crucial for user satisfaction.

**RO5:** To assess the impact of **Fun of Browsing** on E-satisfaction

This construct is related to the emotional experience of online shopping rather the practical one of convenience and efficiency. The hedonic value of online shopping is related to enjoyment of the experience itself (Kim & Forsythe, 2008b). The technology underlying the website is what powers these personalized experiences. Research studies show that the customers then share these experiences via social networks. This produces positive word of mouth (WOM) for the products.

**RO6:** To assess the impact of **Site Security Features** on E-satisfaction

The construct is related to extent to which site security impacts the consumers' online buying behaviour. The security features on the website such as payment options and privacy of financial information.

### **Hypothesis Construction**

As reiterated in the review of literature WEBQUAL 4.0 scale and constructs have been used along with some of the other constructs which have emerged after the pilot study and exploratory study done before the main study. To test the relationship between these variables and the dependent variable e-satisfaction, the following hypotheses have been framed and tested in this study.

**H1:** There exists is a positive relationship between website technology features and e-satisfaction.

Satisfaction towards an e-retailer's website will have a positive effect on OPI. This will lead to several sub hypotheses such as:

**Hypothesis H1a:** "Usability Quality of the websites is significantly influencing the User E Satisfaction."

**Hypothesis H1b:** "Information Quality" of the websites significantly influencing the User E Satisfaction."

**Hypothesis H1c:** "Service Interaction Quality with the users in the website significantly influencing the User E satisfaction."

**Hypothesis H1d:** "Personalization Features in the websites significantly influencing the User E satisfaction."

**Hypothesis H1e:** "Fun of Browsing the websites is significantly influencing the User E satisfaction."

**Hypothesis H1f:** "Website Security Features significantly influencing the User E satisfaction."

### **Research Design**

Since this is a new area of study and the constructs and the independent variables to be used were not very clear, a pilot study with 30 respondents was conducted and were administered the questionnaire, along with pictures of websites they frequently used and were familiar with. An in-depth interview was conducted to get their reactions to the websites along with some questions. This group of respondents had people from the various demographic profiles and this would help in choosing respondents for the main study. The pilot survey was personally administered in an interview format to check the face validity of the questionnaire. After this, the researcher discussed the questionnaire with some data science experts who provide algorithms for online fashion websites to optimize their performance and based on their inputs and comments from academic advisors, WEBQUAL constructs were used for the main study. For the purpose of the research sample was selected keeping in mind that it is a true representation of the population in question. . Considering that respondents will have been people who have exposure to internet and who shop online for fashion products and also should be representative of different age groups, income groups as well as geographical locations, judgment sampling was applied. The judgement used was that the respondents should be shopping for fashion products online and have recently shopped online. A survey containing 10 direct closed ended questions (including demographic questions) and 41 rating statements (on a 5-point Likert scale) was administered to the respondents. The Likert Scale used was: 5 for Strongly Agree and 1 for Strongly Disagree to evaluate the level of agreement of the respondents towards different items.

The sample size formula for large population used in this study is adapted from Cochran (1963). Estimated required sample size for 5% precision levels where confidence level is 95% and p=0.5 is 384. The formula used for calculating the sample was:

$$\text{Sample Size} = \frac{z^2 \cdot p(1-p)}{1 + \left( \frac{z^2 \cdot p(1-p)}{e^2 N} \right)}$$

Where N= Size of the population; e = Margin of Error (Confidence Interval); z=Z - Score of Confidence Interval; p = standard error (0.5)

Google form was used to collect survey data via email and Whatsapp from about 450 respondents. Some hard copy paper questionnaires were also circulated among some respondents. This resulted in 450 filled up questionnaires from Bangalore, Chennai, Hyderabad, and some from Calicut and Cochin in Kerala.

The collected data was then edited, coded, tabulated and grouped for data analysis. The final valid responses received were 419 on which the data analysis was performed.

### Final Model of the Study

Based on the critical literature review to identify the gaps leading up to e-Satisfaction in the online retail fashion industry, we identify the variables such as Usability Quality, Information Quality, Service Interaction Quality, Personalization, Fun of Browsing and Site Security Features. This is shown in Figure 1 below:

#### Model of the Study

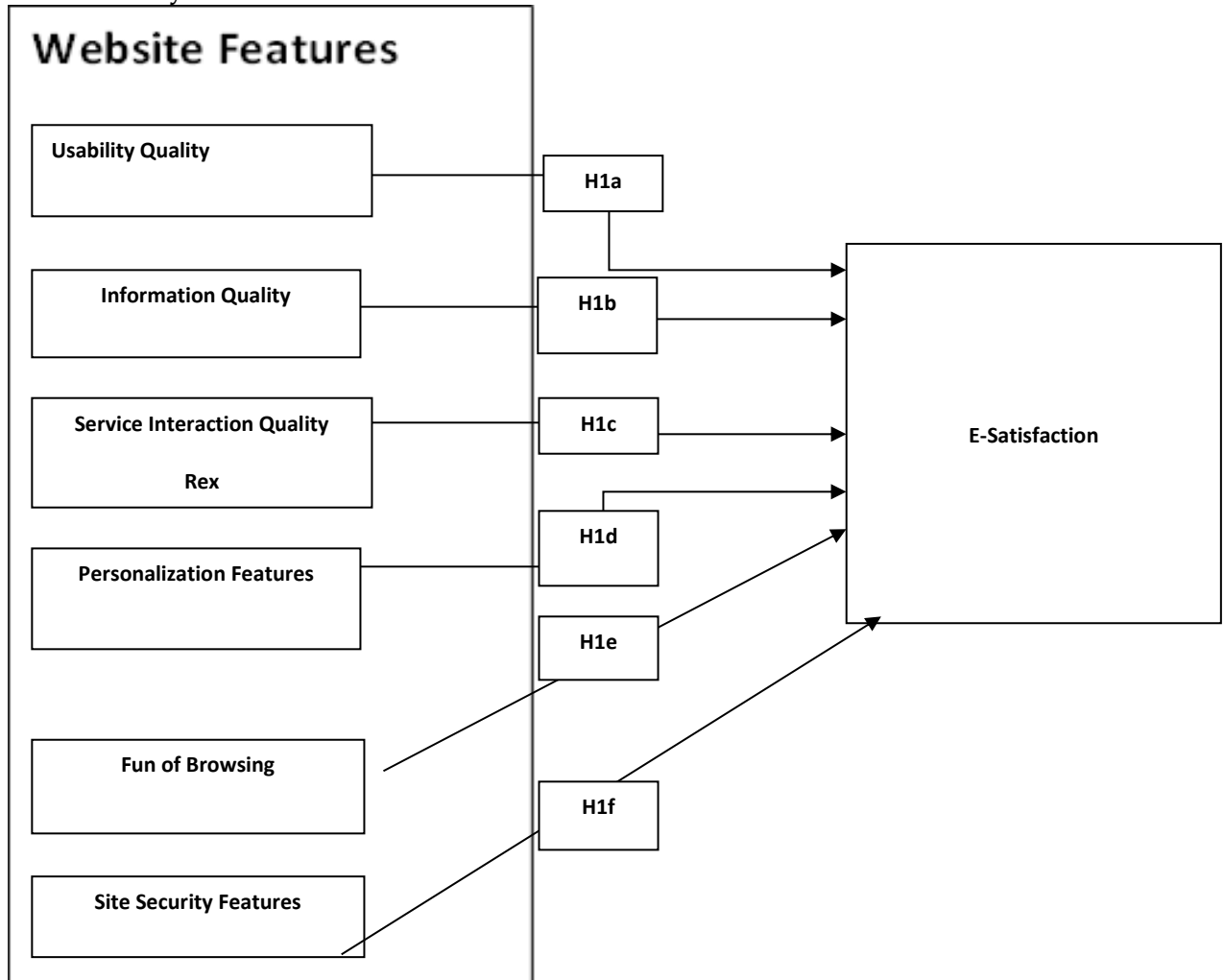


Fig 1 Variables of the study affecting e-Satisfaction

### Data Analysis and Results

This section provides a brief description of the sample and also elaborates the various statistical tests performed and the results obtained. Data analysis was conducted using confirmatory factor analysis (CFA) (Hair & Black, 2010). Once the fit between the model and the data was ascertained, structural analysis (SEM analysis) was performed.

#### Sample Description

The demographic profile of the sample is shown in Annexure 1. Of the 419 respondents, 55% are male and 45% are female. 47% of the respondents have a professional technology degree while 22% of the

respondents have a post graduate degree which implies that the majority of the sample is highly literate. All the respondents have shopped online, specifically for fashion products online.

### Data Analysis

SPSS 22 along with AMOS software is used for data analysis and structural equation modelling (SEM). Confirmatory factor analysis (CFA) was conducted to estimate the measurement model, followed by testing the structural model and research hypotheses.

As we can see from the figure above the model consists of six exogenous variables (Usability Quality, Information Quality, Service Interaction Quality, Personalization Features, Fun of Browsing, Site Security Features) and the endogenous variable is e-satisfaction. The six hypotheses proposed in the model ( as shown in Figure 1) were tested. The validity and reliability of the model was tested with CFA and the Table 1 below shows the results of the CFA. The effectiveness of the measurement model is that it specifies how the observed variables relate to the latent construct (unobserved variables) in the study. The results obtained from the CFA are presented below:

**Table 1: Model (CFA)**

	Construct Name	Construct Loadings	Composite Reliability	Average Variance Extracted	Maximum Shared Variance
UQ7	Usability Quality	.732	0.904	0.576	0.391
UQ6		.653			
UQ5		.779			
UQ4		.752			
UQ3		.755			
UQ2		.802			
UQ1		.826			
IQ8	Information Quality	.782	0.914	0.571	0.539
IQ7		.753			
IQ6		.741			
IQ5		.740			
IQ4		.774			
IQ3		.758			
IQ2		.692			
IQ1		.800			
SIQ6	Service Interaction Quality	.794	0.903	0.610	0.594
SIQ5		.773			
SIQ4		.768			
SIQ3		.844			
SIQ2		.675			
SIQ1		.822			
PF4	Personalization Features	.861	0.905	0.704	0.594
PF3		.840			
PF2		.828			
PF1		.826			
FBF5	Fun of Browsing	.773	0.916	0.686	0.576
FBF4		.867			
FBF3		.836			
FBF2		.862			
FBF1		.799			
SSF4	Site Security Features	.803	0.878	0.646	0.506

	Construct Name	Construct Loadings	Composite Reliability	Average Variance Extracted	Maximum Shared Variance
SSF3		.852			
SSF2		.669			
SSF1		.875			

The CFA table above reports the estimated values of construct loadings for all the statements of different dimensions of the website quality are greater than 0.7. The CR for the factors measuring the website quality is found to be greater than 0.7. From the table 4.11, we can see the values for the different constructs: (Site Security Features: CR=0.878, AVE = 0.646, Usability Quality: CR = 0.904, AVE = 0.576, Information Quality: CR= 0.914, AVE=0.571, Service Interaction Quality: CR= 0.903, AVE=0.610, Personalization Features: CR = 0.905, AVE=0.704 and Fun of Browsing: CR= 0.916, AVE =0.686).

Thus, it can be concluded that the measurement scale ensures the presence of convergent validity in the scale. Also, the construct loading shows which items have the maximum influence.

**Table 2: Fornell Lacker Criteria**

	Site Security Features	Usability Quality	Information Quality	Service Interaction Quality	Personalization Features	Fun Of Browsing
<b>Site Security Features</b>	<b>0.804</b>					
<b>Usability Quality</b>	0.390	<b>0.759</b>				
<b>Information Quality</b>	0.562	0.625	<b>0.756</b>			
<b>Service Interaction Quality</b>	0.693	0.597	0.718	<b>0.781</b>		
<b>Personalization Features</b>	0.711	0.587	0.734	0.771	<b>0.839</b>	
<b>Fun of Browsing</b>	0.655	0.465	0.675	0.725	0.759	<b>0.828</b>

The discriminant validity of the measurement scale is examined with the help of Fornell Lacker Criteria (1981) which is used to assess the degree of shared variance between the latent variables of the model. According to this criterion, the convergent validity of the measurement model can be assessed by comparing the AVE and CR. It also compares the AVE of each dimension of website quality with the Maximum Shared Variance (MSV) values.

The result of discriminant validity is reported in the Table 2 above. The results reported that the diagonal value of the table (representing the square root of the AVE for each factor of website quality) is found to be greater than the correlation value as represented by the other values in the column. The AVE estimate of each construct is also found to be greater than the MSV estimate. Thus, it can be concluded that the measurement scale (website quality) is valid with respect to convergent and discriminant validity.

**Statistical Fitness Indices:** After ensuring the presence of convergent and discriminant validity of the measurement scale, the statistical fitness of the model is also examined. The result of the statistical fitness of the model is shown in Table 3 below:

**Table 3: Statistical Fitness Indices**

Statistical Fitness Indices	CMIN/Df	Goodness of Fit Index (GFI)	Augmented Goodness of Fit Index (AGFI)	Comparative Fit Index (CFI)	Tucker Levis Fitness Index (TLI)	Normative Fit Index (NFI)	Root Mean Squared Error Approximation (RMSEA)

Estimated Value	2.644	0.830	0.803	0.918	0.911	0.876	0.063
Required Value	Less than 3	Greater than 0.8	Greater than 0.8	Greater than 0.9	Greater than 0.9	Greater than 0.8	Less than 0.08
Remark	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory

Table 3 above shows that the CMIN/Df index is 2.644 which is less than the required threshold value of 3. This value also known chi-square goodness.

**SEM MODEL**

The SEM approach was used to validate the research model. This approach was chosen because of its ability to test the causal relationship between constructs with multiple measurement items particularly related to technology and AI. The result of SEM analysis is shown in figure 2 below and discussed further.

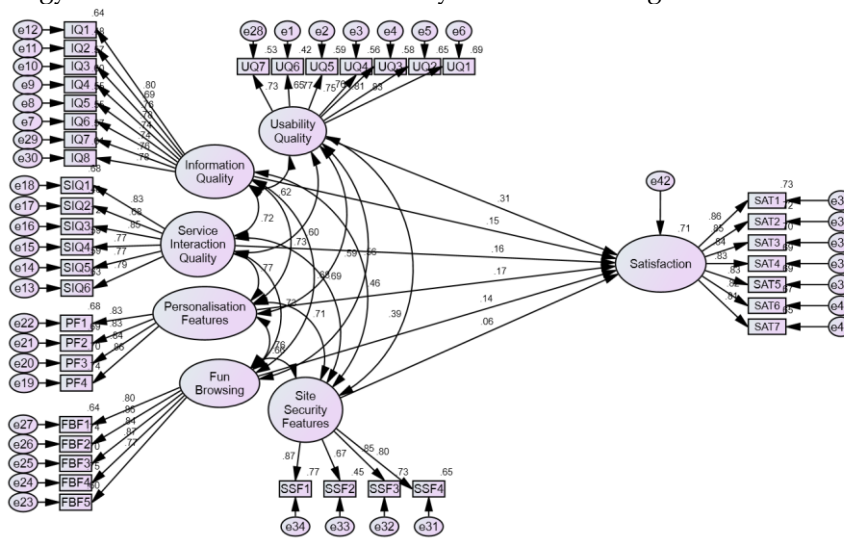


Figure 2

Table 4: Structural Model Results

Hypothesis	Endogenous Construct	Exogenous constructs	Path Coefficient	S.E.	T stats	P	R Square	Remark
H <sub>1a</sub>	User E-Satisfaction	Usability Quality	.307	.062	6.159	***	71%	Supported
H <sub>1b</sub>		Information Quality	.150	.068	2.576	.010		Supported
H <sub>1c</sub>		Service Interaction Quality	.162	.066	2.421	.015		Supported
H <sub>1d</sub>		Personalization Features	.175	.068	2.397	.017		Supported
H <sub>1e</sub>		Fun of Browsing	.142	.062	2.421	.015		Supported
H <sub>1f</sub>		Site Security Features	.064	.064	1.195	.232		Not Supported

The results shown in the table supported the hypothesis “Usability Quality of the websites significantly influencing the User E Satisfaction,” (path coefficient = 0.307, t stats=6.159). The path coefficient indicating the impact of usability quality of the websites is found to be positive and significant and has the highest impact at 5% significance. The covariance values in the SEM show that usability quality of the website is influencing information quality of the website. It can be inferred that items related to technology such as

product comparisons and sizing and fit tools used on the website enhances the usability and hence impacts the E-satisfaction of the online shoppers. We can see from the table 4 above that all the hypotheses from H1a – H1e are supported at 5% significance and only H1f of the Site Security Features is not statistically supported.

### **Discussion and Managerial Implications**

This study investigated the role of website design and technology aspects on satisfaction of online customers. Despite the explosion of e-retailing in India, not much attention has been given by researchers on understanding the online shopping behavior. This study contributes to the body of knowledge on shopping and consumer buying behavior in the online context. Based on the results of the study using SEM method the factors that impact the customer e-satisfaction of the e-commerce websites are the variables: usability quality, information quality and Service Interaction Quality. Further to this the constructs of personalization features and fun of browsing impact the OCE and e-satisfaction. All the hypotheses except the site security features is statistically supported according to the results of the study. The study has shown that website features and the technology which empowers it not only makes it easy for customers to choose and shop for products they like but also provides them with a hedonic value of fun of shopping and browsing the website.

In the online retail world, building e-satisfaction is a challenge and that is important for online firms to differentiate themselves in a crowd. E-satisfaction brings reduced costs and customer retention and repeat purchases. E-retailers going forward must provide website features, information and excellent service on their website in order to stay relevant in today's competitive world. The performance indicators that influence the overall quality are the usability features on the website that provide a positive experience (Usability). Secondly the features that provide customers with detailed information (Information Quality) in order to increase the comfort level of the customers. Findings from the study also show that the hedonic aspect of "fun of browsing" is important to customers since enjoyment of browsing increases the time spent on the website and has direct impact of sales. Website features not only make it easy for consumers to shop but also provide them with a basic hedonic value of joy through convenient shopping.

### **Limitations and Future Scope**

The study was limited to Bangalore city and some surrounding states, so the sample may not be representative of the whole population of online shoppers in India. This study only considered the B2C aspect of the online shopping and results may differ in other formats such as B2B and C2C. The future scope of study is two pronged one the impact of AI and its sustainability in online fashion retail. Discussions with industry fashion experts and data scientists has reinforced that online retailers are showing increasing interest in AI and technology interventions in online retail to provide increased utilitarian and hedonic value to their customers. Right now, Indian websites do not offer very sophisticated technologies but with the advent of 5G this will rapidly change. A future area of research could be on impact of technologies such as AR, Avatars, and VR on e-satisfaction which have not been explored in this research.

Also, with respect to website design and WebQual 4.0 constructs research can be done via longitudinal studies of popular websites such as Amazon, Flipkart/Walmart or Myntra to study the effect of technology on delivery, after sales service and customer relationship methods powering the website. WebQual constructs can also be tested in different domains such as e-government, online tax filing and education.

Further this study was done in urban cities of Bangalore, Chennai, and Cochin but further research can be done in rural areas and a comparison model can be developed between online buying behavior of urban and rural customers.

### **Conclusion**

This study has developed and tested a theoretical model and using SEM analysis. The study also highlights that consumers who are more familiar with the technology aspects of the website have higher levels of enjoyment while shopping online. The results of the analysis which has been built around the WEBQUAL 4.0 scale highlights the more satisfied the customers are with the features and usability of the online retail site, the higher their e-satisfaction score and they will have higher purchase intention. Hence,

online retailers should incorporate different elements into their sites based on their target audience. It should be informative, easy to navigate at the same time be stimulating and entertaining. The e-retailers should also provide product visualization techniques, models, visual images, and videos in the website to increase the “Visualize and Feel” aspect of the site.

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**Annexures**  
**Customer Profile Table**

Components	Types of Components	No. of Respondents	Percentage
Gender	Male	231	55.2%
	Female	188	44.8%
	Total	<b>419</b>	
Age	14-19 yrs.	2	0.5%
	20-25 yrs.	21	5%
	26-34 yrs.	130	31%
	35-44 yrs.	195	46.5%
	45-54 yrs.	71	17%
	Total	<b>419</b>	
Education	High School/PU student	5	1.2%
	Under Graduate/Graduate	26	6.2%
	Post Graduate	93	22.2%
	Professional Degree (Tech)	197	47%
	Other/PhD	98	23.4%
	Total	<b>419</b>	
Profession	Student	8	1.9%
	Salaried Employee (any sector)	29	6.9%
	Businessman/Entrepreneur	75	17.9%
	Housewife	202	48.2%
	Retired	105	25.1%
	Total	<b>419</b>	

**Table 4.1** Customer Profile Table

Components	Types of Components	No. of Respondents	Percentage
Gender	Male	231	55.2%
	Female	188	44.8%
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