

Relevance of trust and satisfaction as mediators to behavioural intention of consumers towards online apparel shopping

DOI: 10.35530/IT.074.04.2022147

VIDYA BAI G.
RAMONA BIRAU
IQBAL THONSE HAWALDAR
DANIEL FRANK

PETRE VALERIU NINULESCU
R. VIJAYA ARJUNAN
IULIANA CARMEN BĂRBĂCIORU

ABSTRACT – REZUMAT

Relevance of trust and satisfaction as mediators to behavioural intention of consumers towards online apparel shopping

The Internet is an integral part of every individual and is a means of business transaction, leading to the immense growth of e-commerce in all sectors. This research study evaluates the significance of attitude as a mediating variable between behavioural intention and overall satisfaction in apparel shopping using Partial Least Square – Structural Equation Modelling with a bootstrapping approach for evaluating the hypothesis. A total of 227 consumers were surveyed using a structured questionnaire and convenient sampling method with a cross-sectional method for collecting data. The hypothesis states that there is a significant relationship between overall satisfaction effect & attitude, reputation & trust, attitude & behavioural intention and trust & behavioural intention. Evidence of the partial mediation effect of attitude between overall satisfaction and behavioural intention is also identified. The findings indicate that the model is valid and has a good fit. Therefore, improved customer service and delivery service will help the corporate to uplift the endogenous latent variable of Behavioural Intention.

Keywords: e-commerce, online shopping attitude, behavioural intention, overall satisfaction, consumers, apparel, textile industry, artificial intelligence

Relevanța încrederii și a satisfacției ca mediatori asupra intenției comportamentale a consumatorilor față de achiziția online de îmbrăcăminte

Internetul reprezintă o parte integrantă a fiecărui individ și este un mijloc de tranzacție comercială, ceea ce conduce la creșterea semnificativă a comerțului electronic în toate sectoarele de activitate. Acest studiu de cercetare evaluează semnificația atitudinii ca variabilă de mediere între intenția comportamentală și satisfacția generală în cumpărăturile de îmbrăcăminte folosind metodologia Partial Least Square – Structural Equation Modelling cu o abordare bootstrapping pentru evaluarea ipotezei. Un total de 227 de consumatori au fost chestionați folosind un chestionar structurat și o metodă convenabilă de eșantionare bazată pe o metodă de tipul cross-sectional pentru colectarea datelor. Ipoteza presupune că există o relație semnificativă între efectul de satisfacție generală și atitudine, reputație și încredere, atitudine și intenție comportamentală, precum și încredere și intenție comportamentală. De asemenea, sunt identificate dovezi empirice ale efectului de mediere parțială a atitudinii între satisfacția generală și intenția comportamentală. Constatările indică faptul că modelul este valid și se potrivește bine. Prin urmare, serviciul îmbunătățit pentru clienți și serviciul de livrare vor ajuta compania să ajusteze ascendent variabila latentă endogenă a intenției comportamentale.

Cuvinte cheie: comerț electronic, atitudinea privind cumpărăturile online, intenție comportamentală, satisfacție generală, consumatori, îmbrăcăminte, industria textilă, inteligență artificială

INTRODUCTION

Extensive growth in e-commerce and the adoption of new technologies like quick response code, Blockchain, artificial intelligence, and reverse logistics help the consumer to be well-informed and are most likely to be more of a B2C business. The imperative factor to the business is to have a wide range of products in addition to factors like competitive prices and services. The apparel industry has gained huge popularity among other industries and e-commerce makes the consumer's life easier by providing them with the liberty to choose the time and place to shop

and saves their time. The retail industry in India has grown considerably due to the surge in internet facilities which in turn had encouraged digital payment technologies. The requirement of e-commerce retailers in the logistics sector is getting reformed by the increase in demand which is expected to unceasingly adapt to the changes, trends, and developments. E-commerce is a transition influencer for both marketers and customers where it enhances the existing business practices [1] with the aid of the internet. The steady growth of e-commerce has taken the business up to the next level and has endorsed customers to decide on and research, the product, and the seller,

and indicate the probable delivery time of the product. It also provides an information-based business process wherein the customer can interact directly with the vendor for online advertisement, marketing, and customer services giving their specification for the product in case of customization. Technological advancement is an important driving force in logistics and e-commerce and has transformed and improved the way of living. One of the foremost apprehensions of logistics is the fulfilment of the end-user requirements that is the customer. The supply chain lets business build their online presence enabling them to reach a global market by collaborating with a wide arena of allied services like transportation, warehouse management, and marketing around the globe. This transformation has enabled positive growth and consumers have accepted e-commerce stores which are expected to gain prominence due to the ease and flexibility it provides.

Apparel shopping is gaining popularity on social media platforms like Facebook and Instagram which is helping a lot of new entrepreneurs. Anthropologists have dated the prominence of wearing back to 70,000–100,000 years according to an article (published by thoughtco.com) primarily to protect their bodies from harsh weather and unpredictable climate. Before the industrial revolution, most of the garments and textiles were limited to home production and predominantly from the cottage industry. Post-industrial revolution, materials of different fabrics were mass-produced and the development of the apparel industry thus began. Import and export of clothing spread globally, and it became a huge success. Apparel reached the status symbol of fashion,

class, and culture. Clothing trends and fashion changed in the twentieth century allowing various brands to open up and occupy the market. According to the statistics provided by bigcommerce.com, 59% of US shoppers purchased clothing online, between 2018–2019. Online apparel shopping has gained tremendous popularity as compared to other products which are sold online. Numerous sites are offering a wide range of international brand clothing which was difficult to access before. With huge discounts and with a wide range of options to choose from, online shopping for apparel has come a long way. New marketing strategies and improved technologies have given customers a whole new shopping experience.

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Online shoppers are sensitive to net factors that offer pricing information [2] and notably, the degree of sensitivity varies depending on price and product categories. The success of E-Bay and Amazon depends on the extensive advertisement of competitive lower price for products which is potentially sold at a higher price by local businesses. This demonstrates the importance of pricing as consumers like to shop around for the best deal [3]. The Internet allows consumers to explore alternates and comparison matrices with in-depth evaluation [4] facilitating a quick price, quality, and technological comparison [5]. The constructs pertaining to the research are presented below in the form of a conceptual framework (figure 1).

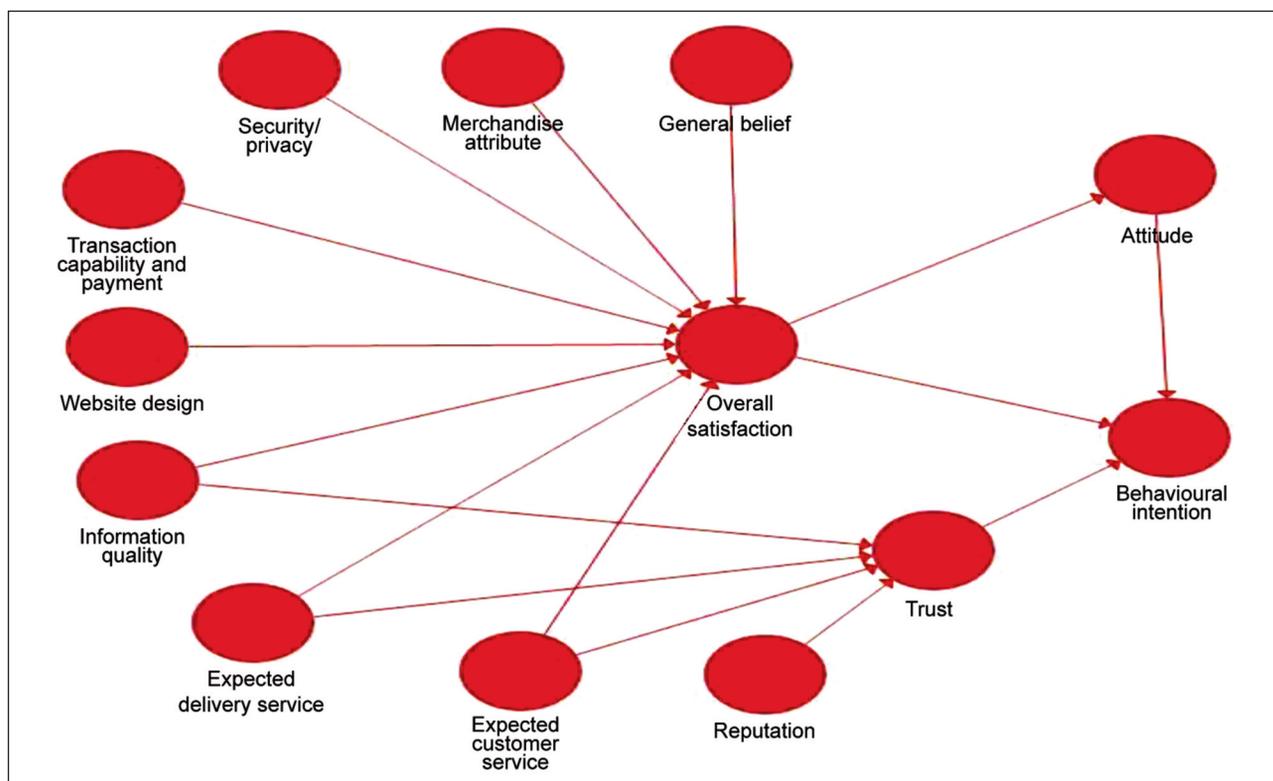


Fig. 1. Association of attitude, overall satisfaction and behavioural intention in apparel shopping

General belief

Belief is an attitude associated with a consumer's favourable or unfavourable assessment of an object [6]. A person, an institution, a group of individuals or an event can be the object of belief, and the associated attribute can be any object, quality, property, characteristic, or event. It is the perception of a given component that is related to their self-awareness and situation which influences attitude, intention, and behaviour [7]. Perceived efficacy and simplicity are two perceptions that influence the likelihood of online purchases. Individuals' subjective evaluations of a given e-store or online shopping experience are well-defined as beliefs about an e-store or online shopping experience [8, 9].

Merchandise attribute

The generally held belief is that a consumer's estimate of product utility is based on a set of benefits purchased by each product attribute [10, 11] as a product is a collection of components and characteristics. Customers' shopping preferences are based on nine labels: appearance/fashion-conscious, brand-conscious, convenience and time-conscious, local store-oriented, shopping mall-oriented, impartial, and credit-oriented, and economy/price-conscious [12, 13]. Further, consumers most frequently utilise cost and brand in evaluating clothes [14].

Security and privacy

Security and privacy concerns such as data theft, hacking, and malware have made security and privacy a major problem for electronic commerce. Privacy is considered a commercial commodity, while it is a fundamental right. Potential hazards, such as targeted attacks, network vulnerability, unintended content modification, unnecessary infrastructure and maintenance costs, and productivity loss [15, 16].

The e-commerce websites can easily provide vast amounts of personal data such as customer preferences, search patterns, shopping patterns and other data in real-time through data mining. This might be used to provide a better quality of services but it can also be used to send unwanted e-mails, selling customer's information to others, that the customers would not like to share [17].

Transaction capability and payment

India's use of smartphones and the internet has surged and payments via cell phones have become the most popular method of payment [18] due to the impacts of social [19] and cultural factors. Government initiatives such as Digital India are having a positive impact on the expansion of digital payments. India is on the verge of a tremendous digital transformation and m-Payment could be the best option for cashless transactions because of its high wireless density [20]. Cashless transactions will drive the future economy, which will be feasible only through the digitization of payment.

Website design

A good website design is linked to increased e-commerce response [21]. Consumers identify websites not only as a source of information but also as a virtual store that facilitates the complete purchasing experience [22]. The website has to be attractive and vivid in terms of descriptive images and graphics to give a real shopping experience to consumers, save time and provide convenience to the consumers thus gaining customer satisfaction comfort and trust [23]. Further, extensive use of business intelligence enables businesses to recognise the behaviour of the customer and predict their purchase pattern for business improvement and environmental sustainability [24].

Information quality

Information quality is significant to online sales as inaccurate information leads to a loss of brand equity [25]. Consumers focus more on product information for merchandising features and tend to concentrate on information quality rather than other attributes [26, 27]. Reliable information leads to a positive impact on customer satisfaction with the online retail experience and results in purchases [28]. Superfluous information about the product may not impact purchase decisions but will burden the consumer. Shoppers use the brand name as the source of information for evaluating the product, which reduces the perceived risk and helps in purchase decisions [29].

Expected Service Delivery (ESD)&Expected Customer Service (ECS)

In our research, ESD and ECS differ from SD and CS in the post-purchase phase which implies that these constituents have different roles at different stages. When consumers place orders, the EDS and predicted ECS are calculated. On the other hand, SD and CS occur post the purchase stage, which is after consumers have received their products. At the ESD stage, the researcher believes that if consumers are offered a variety of SD approaches to try, they will be satisfied. Based on the choices of consumers for how the product should be delivered, the e-retailer can offer express delivery. In addition, the sum mentioned for delivery charges must be reasonable and free of any hidden fees[30]. The most important factor that satisfied consumers was fast delivery at a reasonable price with no hidden fees.

Reputation

Reputation determines if a company is "good" or "bad" [31]. Reputation is highly important especially for service companies because it contributes to performance as a valuable intangible asset [32]. The impact of identification fit may be decreased when customers perceive a negative reputation [33]. An organization's ability to sustain a strong reputation over time builds 'reputational capital' that can protect the organization from failure in times of crisis or

threat [34] and thereby administer a directional framework, and contribute to task control [35].

Trust

Trust is the most relevant factor among the young generation towards online shopping. Creating trust among the consumers is a primary benefit that connects to technical attributes towards the website's usefulness [36]. Consumers feel more confident about online purchasing when they buy from a company they trust [37]. While consumer trust may not have a direct impact on consumer behavioural intentions, it is indirectly influenced by product information searches and perceived internet confidence [38]. Trust influences consumer perception such as perceived risk and perceived ease in purchase intention [39]. Brand experience significantly affects brand trust and businesses should aim at increasing brand trust, which improves brand loyalty [40]. Trusting a customer is a high level of brand preference, which ultimately leads to converting a trusting customer into a loyal customer [41].

Overall satisfaction

Overall satisfaction builds long-term consumer relationships [42], and it is the result of experiences throughout the purchasing process; needing something, gathering information, evaluating alternatives, making a purchase decision, and post-purchase behaviour [43]. Satisfaction is achieved when the expectation of the consumer is met. Ease of website handling, convenience in ordering, variety and cost help in deciding the satisfaction level. Customer satisfaction is the result of merchandising (product factor), privacy (technology factor) and convenience (shopping factor) as the primary factors followed by trust, delivery, usability, product quality and customization [44]. Once the consumer is satisfied they will repeat the purchase if the service has been to their expectation [22].

Behavioural intention

Behavioural Intention is the customer's desire to return or repurchase the same item or items within the same brand, resulting in increased brand loyalty and, as a result, helping the business expand its market and save costs [45]. The amount of satisfaction or dissatisfaction is a direct effect of consumer experience [46]. In apparel shopping, prior experience of shopping is an important type of internal information that will increase purchase intention and condenses the perceived risk [47]. Behavioural intention helps managers point out if a consumer will remain with or hop to an alternate brand [37, 46].

Attitude

Consumer attitude towards online shopping is a prominent factor affecting actual buying behaviour. Consumers' attitude towards online shopping is a prominent factor affecting actual buying behaviour [48]. Attitude towards specific web base stores, in which perceptions of the store's reputation and size

affect consumer trust in the retailer [49]. On the web, shopping enjoyment is positively and significantly related both to attitudes and intentions toward shopping on the web [50] and satisfaction significantly affected customers' attitudes and their intention to purchase. A high level of trust by buyers has been found to stimulate favourable attitudes and behaviour [51, 52].

EMPIRICAL SETTING AND TESTING PROCEDURES

Sample and data collection

This research is focused on evaluating the relevance of attitude as a mediating variable between overall satisfaction and behavioural intention in apparel shopping. The data is gathered using a questionnaire which is formed according to the constructs using a "Seven-point Likert scale" with options varying from "Strongly disagree" to "Strongly agree". The responses collected were analysed using SMART PLS 3 software. The population is a collection of totals of all the subjects, objects, or members that conform to a set of terms [53]. The study is confined to people who are involved in buying apparel online. The sampling element for the current research endeavour consists of people who are buying apparel online and sampling units consist of people who are purchasing apparel online from one year and above in the Karnataka state of India.

Scales used

The general belief construct scale is developed by Hirst and Ashwin [54], Rajamma & Neeley [55] and Swinyard and Smith [56]. Information quality questions are based on the scale propounded by Muiyalea et al. [57] and Jeong et al. [58]. Web design construct is developed by using the scale suggested by section Kim and Stoel [59], Jeong et al. [58] and Muiyalea et al. [57]. The merchandise attributes scale of Liu et al. [60] and Szymanski and Hise [61] are taken for this research survey. Kim and Stoel [59] and Liu et al. [60] scale used to measure Transaction capability & payment. Similarly, Security/privacy is measured by using a scale of Wolfenbarger and Gilly [62]. Furthermore, expected delivery service is measured by using the Rossiter scale. The expected customer service construct is measured by Wolfenbarger and Gilly [62]. Reputation has four questions measured by Kim and Park's [63] scale. Three more questions on Overall Satisfaction are based on Liu et al. [60] scale. All four questions of trust are measured with Kim and Park's [63] scale. Attitude is measured by using a scale propounded by Jarvenpaa et al. [49] and Chen et al. [64]. Finally, the behavioural intention constructs are measured by a scale initiated by Parasuraman et al. [65].

Determining sampling size

The Partial Least Square-Structural Equation Modelling (PLS-SEM) has two ways of determining sampling size.

- (1) The use of the rule of thumb [66], where the sample size should be the number which is highest amongst the 'structural paths' that point towards only one construct in the 'structural model', multiplied by 10. So the sample size is $3 \times 10 = 30$.
- (2) The statistical power analysis [67], where, the sample size is also determined by considering the desired R^2 level.

Accordingly, the number of arrows that point towards a construct, significance level, and minimum desired R^2 level are considered for obtaining a statistical power of 80% while determining the sample size. The current study has three maximum arrows that point towards the dependent construct of the model of the study. The minimum desired R^2 level would be 0.25 at a 5% level of significance. Considering these requirements, the sample size would be 59. The maximum number of arrows directing at a construct is 3 with a 5% level of significance, making the minimum number of samples to be 59. In this research endeavour, the total sample size is 227. The formula used to derive sample size is as follows:

$$n = \frac{Z_{\alpha}^2 \times pq}{E^2} = \frac{(1.96)^2 \times (0.5)(0.5)}{0.05 \times 13} = 227 \quad (1)$$

where Z_{α} is 95% confidence level with its value as 1.96, p – proportion to online apparels buyer, $q = 1-p$, $E = 10$ percent of error (90% power) with 10% non-response. So the total sample size is 227.

EMPIRICAL RESULTS

Measurement model assessment

The measurement model involves path coefficient values, outer loadings, R square, construct reliability, construct validity through Average Variance Extracted (AVE), discriminant validity, collinearity and model fit (figure 2).

According to previous research [68], R^2 cut-off values of 0.25, 0.50, and 0.75 for endogenous constructs are considered as weak, moderate, and high in other investigations. All five exogenous constructs namely, General Belief (GB), Merchandise Attribute (MA), Security and Privacy (SP), Transaction Capability and Payment (TCP), Website Design (WD), Information Quality (IQ), Expected Delivery Service (EDS), Expected Customer Service (ECS) and Reputation (REP) explain 60.4% of Overall Satisfaction (OS) ($R^2=0.604$), 68.6 of Trust (TR) ($R^2=0.686$), 62.1% of Attitude (ATT) ($R^2=0.621$), and 54.1% of Behavioural Intention (BI) ($R^2=0.541$). The SRMR criteria fit is used to assess model fitness [69]. When the SRMR value is zero, the best fit occurs. Less than 0.08 is a decent fitness threshold value [70]. The SRMR score of 0.071 in this study indicates that the

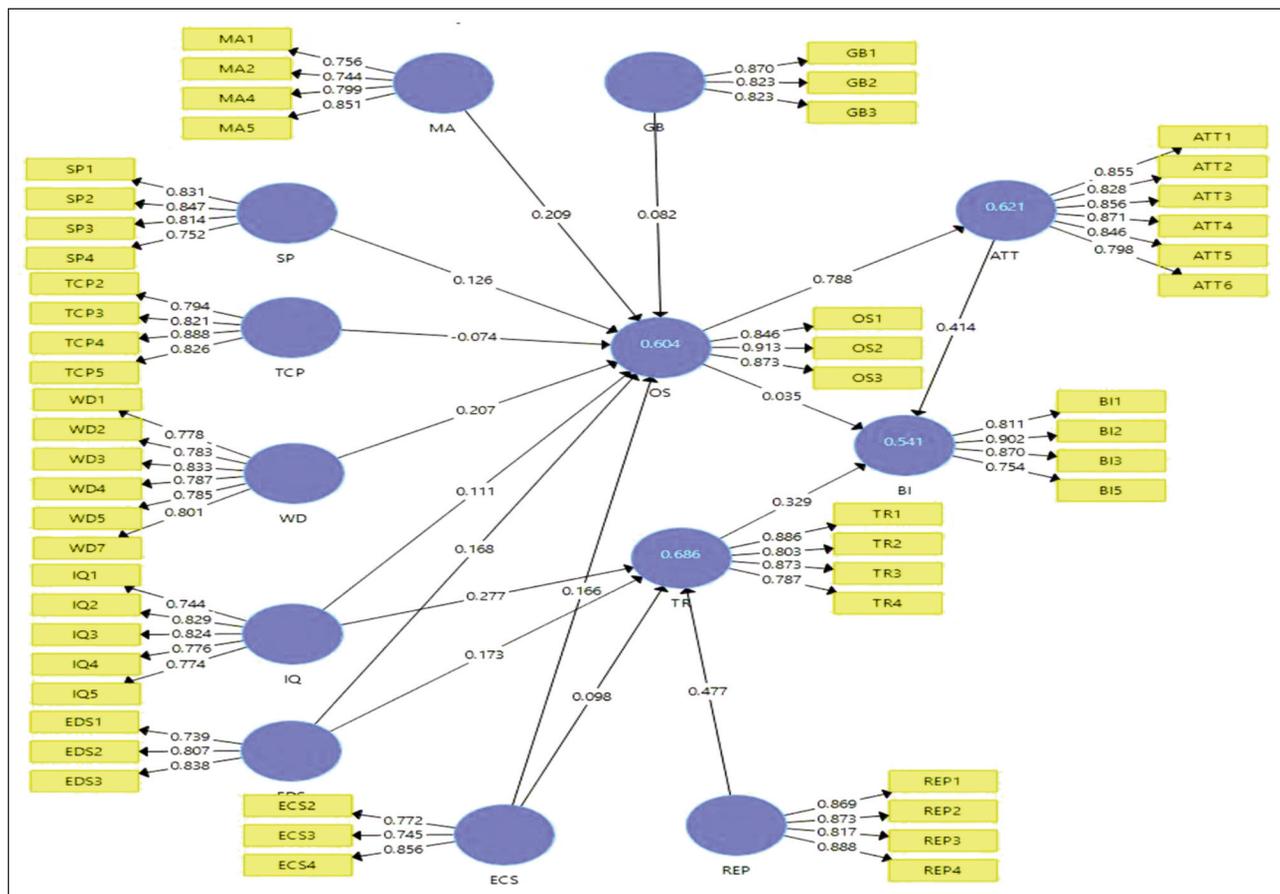


Fig. 2. Measurement model assessment

model is fit. From the reflective model, it is very clear that the value for the construct is 0.541 indicating the model is moderate in nature.

Structural model assessment

The study explored the impact of exogenous constructs Merchandise Attribute (MA), Website Design (WD), Expected Delivery Service (EDS) and Expected Customer Service (ECS) on Overall Satisfaction (OS) and our investigation indicate a significant effect the path-coefficient level (figure 2) and the empirical t value (figure 3) was also found to be more than 1.96 at 5% level of significance. Therefore hypotheses 2, hypotheses 5, hypotheses 7 and hypotheses 8 justify the positive direct effect on Overall Satisfaction (OS). In the case of hypotheses 1, hypotheses 3, hypotheses 4 and hypotheses 6 i.e., the direct effect of General Belief (GB), Security and Privacy (SP), Transaction Capability and Payment (TCP) and Information Quality (IQ), the path-coefficient level and the empirical t value were below the threshold value and therefore cannot be validated to have had a direct effect on Overall Satisfaction (OS). The direct effect of Information Quality (IQ), Expected Delivery Service (EDS) and Reputation (REP) on Trust (TR) was investigated and found to be significant ($p < 0.05$) at the path-coefficient value (figure 2) and the empirical t value (figure 3) was more than 1.96 at 5% level of significance. Therefore, these

values prove that hypotheses 9, hypotheses 10, and hypotheses 12 justify the positive direct effect on Trust (TR). But in the case of Expected Customer Service (ECS), the direct effect on Trust (TR) is not significant ($p < 0.05$) at the path-coefficient value of 0.098 (figure 2) and the empirical t value is 1.443 (figure 3) which is lesser than 1.96. Therefore, these values do not verify the hypotheses 11.

The direct effect of endogenous latent variable Overall Satisfaction (OS) on Attitude (ATT) was investigated at the path-coefficient value of 0.788 (figure 2) and the empirical t value of 19.580 (figure 3) and these values verify the hypotheses 13 and justify the direct effect of Overall Satisfaction (OS) on Attitude (ATT). Further, the direct effect of Attitude (ATT) and Trust (TR) on Behavioural Intention (BI) was investigated and it was found that the path-coefficient value and the empirical t value verify hypotheses 15 and hypotheses 16 thus justifying the positive direct effect on Behavioural Intention (BI). However, hypothesis 14 does not justify and therefore it is clear that there is no positive direct effect of Overall Satisfaction (OS) on Behavioural Intention (BI).

Mediator analysis

There is no mediating impact if the Variance Average For (VAF) values are less than 0.20. If the value is between 0.2 and 0.8, we conclude that partial mediation exists. For a complete mediating effect, the

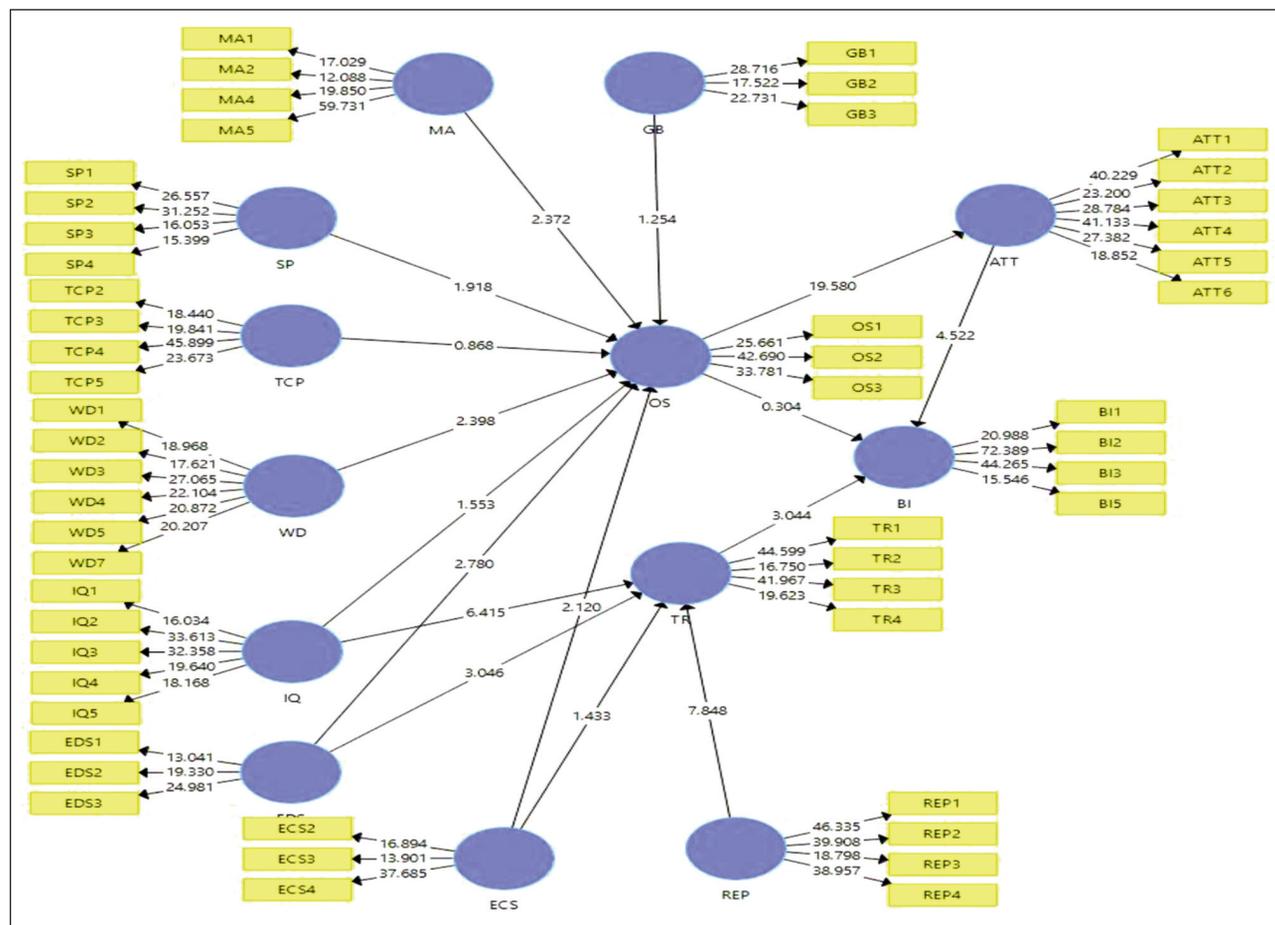


Fig. 3. Structural model assessment

value should be more than 0.8. The following formula is used to calculate the mediating effect:

$$\begin{aligned}
 \text{VAF} &= \frac{\text{IndirectEffect}}{\text{IndirectEffect} + \text{DirectEffect}} = \quad (2) \\
 &= \frac{0.788 \times 0.557}{(0.788 \times 0.557) + 0.190} = \frac{0.4389}{0.6289} = 0.6978
 \end{aligned}$$

The VAF is greater than 0.20 but less than 0.80. As a result, it's reasonable to argue that the Attitude (ATT) construct has a partly mediating influence in the relationship between Overall Satisfaction (OS) and Behavioural Intention (BI). The Bootstrap values of paths between OS and BI are 2.258, OS and ATT are 19.925 and ATT and BI are 7.876 which is above 1.96 substantiates hypothesis 17 states that attitude mediates between OS and BI (figure 4).

Construct reliability and validity

The ideal composite reliability value is equal to or greater than 0.80 [71]. The exogenous latent variables of the measurement models, in the present study, demonstrate high levels of internal consistency reliability. This is illustrated by the values of composite reliability of exogenous latent variables constructs value which are higher than 0.80 (table 1). To measure the convergent validity the average variance extracted (AVE) is a strongly recommended test [72]. Convergent validity is measured with an AVE threshold value that should be more than 0.50 [73, 74]. AVE values of all exogenous and endogenous latent variables constructs are above the threshold value of 0.50 (table 1). Therefore, there exists convergent validity in all exogenous and endogenous latent variables constructs of all measurement models.

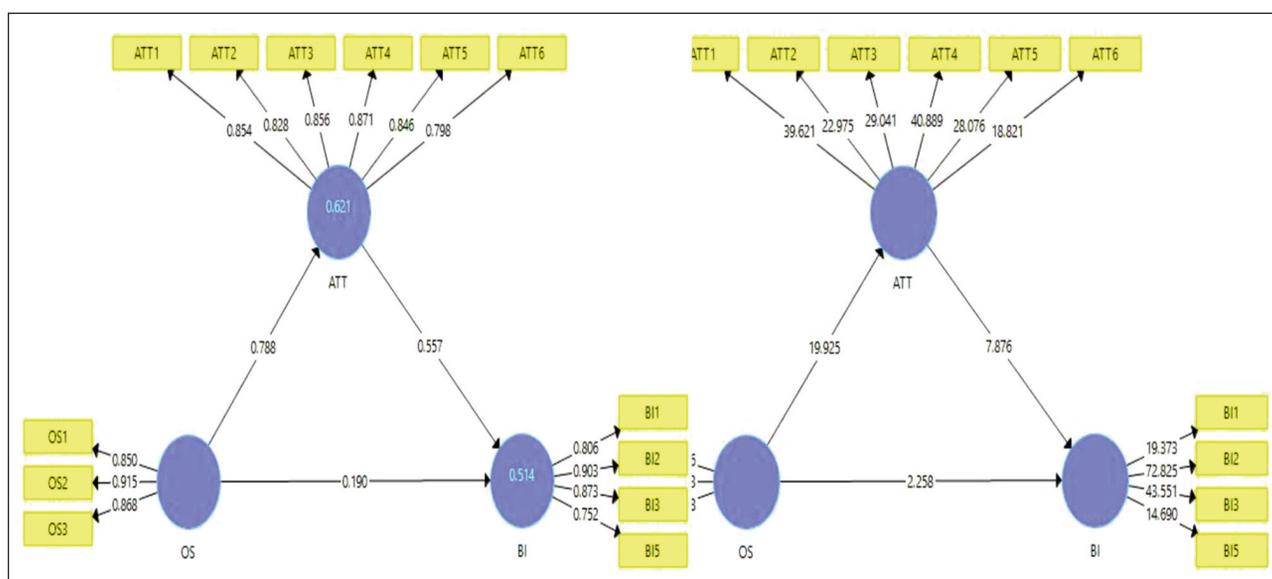


Fig. 4. Mediating effect of attitude between overall satisfaction and behavioural intention

Table 1

| COMPOSITE RELIABILITY AND AVERAGE VARIANCE EXTRACTED | | | | |
|--|------------------|-------|-----------------------|----------------------------------|
| Variables | Cronbach's Alpha | rho_A | Composite reliability | Average Variance Extracted (AVE) |
| ATT | 0.918 | 0.920 | 0.936 | 0.710 |
| BI | 0.857 | 0.883 | 0.902 | 0.699 |
| ECS | 0.708 | 0.740 | 0.835 | 0.628 |
| EDS | 0.709 | 0.717 | 0.838 | 0.633 |
| GB | 0.790 | 0.795 | 0.877 | 0.704 |
| IQ | 0.851 | 0.868 | 0.892 | 0.624 |
| MA | 0.803 | 0.856 | 0.868 | 0.622 |
| OS | 0.851 | 0.858 | 0.910 | 0.771 |
| REP | 0.885 | 0.886 | 0.920 | 0.743 |
| SP | 0.828 | 0.840 | 0.885 | 0.659 |
| TCP | 0.853 | 0.863 | 0.901 | 0.694 |
| TR | 0.858 | 0.862 | 0.904 | 0.703 |
| WD | 0.883 | 0.885 | 0.911 | 0.632 |

Discriminant validity

PLS is a better way to assure the degree to which a given construct of the model is distinct from other constructs for measuring the discriminant validity [73]. Discriminant validity can be assessed using the Fornell-Lacker (1981) criterion [75, 76] which is a comparison between the square root of AVE and other latent variables. Therefore, discriminant validity is a measure of the uniqueness of a given construct. Table 2 demonstrates how the square root of AVE of every latent variable exceeds its correlation with other latent variables which indicates that this model has established discriminant validity.

Importance-Performance Matrix Analysis (IPMA)

The IPMA contrasts the overall effects, which show the importance of the previous constructs in forming

a given target construct (figure 5), with their average latent variable scores, which indicate their performance [77, 78].

A one-unit increase in construct General Belief from 68.804 to 69.804 will raise the performance of Behavioural Intention by 0.030 points from 72.191 to 72.221. A one-unit increase in construct Merchandise Attitude from 68.508 to 69.508 will raise the performance of Behavioural Intention by 0.076 points from 72.191 to 72.267. A one-unit increase in construct Security and Payment from 69.558 to 70.558 will increase the performance of Behavioural Intention by 0.046 points from 72.191 to 72.237. A one-unit increase in construct Transaction Capability and Payment from 74.779 to 75.779 will raise the performance of Behavioural Intention by -0.027 points from 72.191 to 72.164. A one-unit increase in construct

Table 5

| DISCRIMINANT VALIDITY THROUGH FORNELL-LARCKER CRITERION | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Variables | ATT | BI | ECS | EDS | GB | IQ | MA | OS | REP | SP | TCP | TR | WD |
| ATT | 0.843 | | | | | | | | | | | | |
| BI | 0.705 | 0.836 | | | | | | | | | | | |
| ECS | 0.589 | 0.581 | 0.793 | | | | | | | | | | |
| EDS | 0.618 | 0.519 | 0.629 | 0.796 | | | | | | | | | |
| GB | 0.542 | 0.447 | 0.404 | 0.400 | 0.839 | | | | | | | | |
| IQ | 0.503 | 0.467 | 0.404 | 0.300 | 0.503 | 0.790 | | | | | | | |
| MA | 0.670 | 0.532 | 0.558 | 0.518 | 0.612 | 0.504 | 0.789 | | | | | | |
| OS | 0.788 | 0.629 | 0.613 | 0.588 | 0.518 | 0.507 | 0.659 | 0.878 | | | | | |
| REP | 0.720 | 0.599 | 0.673 | 0.620 | 0.506 | 0.394 | 0.593 | 0.817 | 0.862 | | | | |
| SP | 0.624 | 0.617 | 0.630 | 0.615 | 0.379 | 0.455 | 0.518 | 0.591 | 0.621 | 0.812 | | | |
| TCP | 0.621 | 0.605 | 0.683 | 0.638 | 0.504 | 0.423 | 0.668 | 0.599 | 0.689 | 0.652 | 0.833 | | |
| TR | 0.798 | 0.689 | 0.640 | 0.614 | 0.461 | 0.557 | 0.614 | 0.811 | 0.760 | 0.665 | 0.673 | 0.838 | |
| WD | 0.624 | 0.513 | 0.572 | 0.537 | 0.523 | 0.512 | 0.718 | 0.661 | 0.638 | 0.562 | 0.691 | 0.668 | 0.795 |

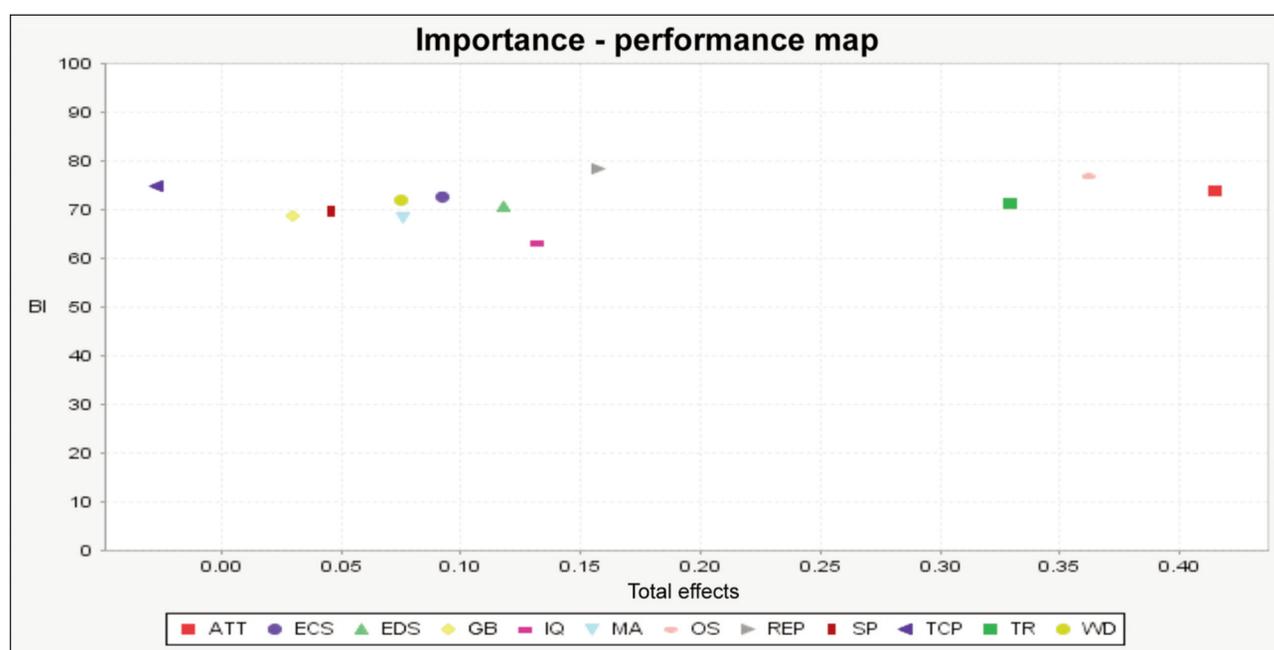


Fig. 5. Importance Performance Matrix Analysis (Chart)

Website Design from 71.954 to 72.954 will raise the performance of Behavioural Intention by 0.075 points from 72.191 to 72.266. A one-unit increase in construct Information Quality from 63.019 to 64.019 will raise the performance of Behavioural Intention by 0.131 points from 72.191 to 72.322. A one-unit increase in construct Expected Delivery Service from 70.803 to 71.803 will raise the performance of Behavioural Intention by 0.118 points from 72.191 to 72.309. A one-unit increase in construct Expected Customer Service from 72.731 to 73.731 will raise the performance of Behavioural Intention by 0.092 points from 72.191 to 72.283. A one-unit increase in construct Reputation from 78.421 to 79.421 will raise the performance of Behavioural Intention by 0.157 points from 72.191 to 72.348. A one-unit increase in construct Overall Satisfaction from 76.806 to 77.806 will raise the performance of Behavioural Intention by 0.362 points from 72.191 to 72.553. A one-unit increase in construct Attitude from 73.906 to 74.906 will raise the performance of Behavioural Intention by 0.414 points from 72.191 to 72.605. A one-unit increase in construct Trust from 71.430 to 72.430 will raise the performance of Behavioural Intention by 0.329 points from 72.191 to 72.52.

CONCLUSION

This research has empirically shown from the measurement model that the exogenous latent variable attitude has a high level of influence on behavioural intention followed by trust. The growing importance of Artificial Intelligence in services industry in India [79] represents a major challenge and a research topic of great current interest. Furthermore, this result is supported by the empirical t value. Since attitude and behavioural intentions as well as trust and behavioural intentions are complimentary to each other, it calls for the need to pay attention towards improving indicators of attitude and trust. This can be

done by paying attention to manifest indicators of attitude, (i) "I have a positive attitude towards the website" and (ii) "This is a nice website". There is a need for improving trust constructs indicators like (i) "This website would like to be known as a website which will keep the promises and commitments made by them" and (ii) "The website is trustworthy for apparel shopping".

The importance-performance matrix analysis showed that construct attitude has the highest performance and construct general belief has the lowest performance compared to other constructs. Therefore, there is no need to improve the construct attitude because it's already performing better compared to all other constructs. With regards to the construct general belief the performance is very low and improving this construct will not make much difference for the construct's Behavioural Intention. The construct which is average and stands between all constructs ECS and EDS with average performance of 72.283 and 72.309 respectively. Therefore, the constructs ECS and EDS manifest indicators need improvement which will improve endogenous latent variable Behavioural Intention. Therefore, the corporate need to concentrate on the following indicators of expected customer service constructs: (i) "Sales staff are willing to respond to customer needs"; (ii) "If I am not satisfied with my purchases, this website guarantees me a refund" and (iii) "The website provides online tracking for products". There is also a need for corporates to concentrate on the following indicators of expected delivery service constructs i.e., (i) "This particular website offers a common fee for the delivery service"; (ii) "The website provides clear T&C for delivery service"; (iii) "This particular website offers various options for the delivery service such as standard post, express shipment and home delivery".

REFERENCES

- [1] Bhat, S.A., Kansana, K., Khan, J.M., *A review paper on e-commerce*, In: Asian Journal of Technology & Management Research, ISSN: 2249-0892, 2016, 6, 1
- [2] Ba, S., Pavlou, P.A., *Evidence of the effect of trust building technology in electronic markets: Price premiums and buyer behaviour*, In: MIS Quarterly, 2002, 26, 3, 243-268, <https://doi.org/10.2307/4132332>
- [3] Anderson, R.E., Srinivasan, S.S., *E-satisfaction and e-loyalty: A contingency framework*, In: Psychology & Marketing, 2003, 20, 2, 123-138, <https://doi.org/10.1002/mar.10063>
- [4] Häubl, G., Trifts, V., *Consumer decision making in online shopping environments: The effects of interactive decision aids*, In: Marketing Science, 2000, 19, 1, 4-21, <https://doi.org/10.1287/mksc.19.1.4.15178>
- [5] Chiu, C.M., Chang, C.C., Cheng, H.L., Fang, Y.H., *Determinants of customer repurchase intention in online shopping*, In: Online Information Review, 2009, 33, 4, 761-784, <https://doi.org/10.1108/14684520910985710>
- [6] Ajzen, I., Fishbein, M., *A Bayesian analysis of attribution processes*. Psychological Bulletin, 1975, 82, 2, 261-277, <https://doi.org/10.1037/h0076477>
- [7] Li, R., Kim, J., Park, J., *The effects of internet shoppers' trust on their purchasing intention in China*, In: JISTEM- Journal of Information Systems and Technology Management, 2007, 4, 3, 269-286
- [8] McKinney, V., Yoon, K., Zahedi, F.M., *The measurement of web-customer satisfaction: An expectation and disconfirmation approach*, In: Information Systems Research, 2002, 13, 3, 296-315, <https://doi.org/10.1287/isre.13.3.296.76>
- [9] Vijayasathy, L.R., *Predicting consumer intentions to use on-line shopping: the case for an augmented technology acceptance model*, In: Information & Management, 2004, 41, 6, 747-762, <https://doi.org/10.1016/j.im.2003.08.011>

- [10] Alam, S.S., Ali, M.H., Omar, N.A., Hussain, W.M.H.W., *Customer satisfaction in online shopping in growing markets: An empirical study*, Research Anthology on E-Commerce Adoption, Models, and Applications for Modern Business, IGI Global, 2021, 1878–1892
- [11] Satpathy, D.S., Karumuri, D.V., Susanta, D., Satpathy, K., *Analysing the impact of retail store attributes on unplanned buying intention with mediating role of shopping enjoyment and store perception: An Empirical study*, In: Journal of Contemporary Issues in Business and Government, 2021, 27, 2, 2157
- [12] Shim, S., Kotsiopoulos, A., *Patronage behaviour of apparel shopping: Part I. Shopping orientations, store attributes, information sources, and personal characteristics*, In: Clothing and Textiles Research Journal, 1992, 10, 2, 48–57, <https://doi.org/10.1177/0887302X9201000208>
- [13] Yoon, S.H., Song, S.Y., Kang, M.S., *Factors influencing the attractiveness of cosmetics distribution channels*, In: Journal of Distribution Science, 2021, 19, 7, 75–85, <https://doi.org/10.15722/jds.19.7.202107.75>
- [14] Eckman, M., Damhorst, M.L., Kadolph, S.J., *Toward a model of the in-store purchase decision process: Consumer use of criteria for evaluating women's apparel*, In: Clothing and Textiles Research Journal, 1990, 8, 2, 13–22, <https://doi.org/10.1177/0887302X9000800202>
- [15] Chen, R., Kim, D.J., Rao, H.R., *A study of social networking site use from a three-pronged security and privacy threat assessment perspective*, In: Information & Management, 2021, 58, 5, 103486, <https://doi.org/10.1016/j.im.2021.103486>
- [16] Dumitru, B., *The Risks of Social Networking and the Corporate Network*, IT Business Edge, 2009
- [17] Malik, S.A., Wood-Harper, T., *On the Use of Customer Relationship Management (CRM) in the Banking Industry: A Qualitative Cross-case Analysis Between the Banks in Pakistan and the UK*, University of Manchester, 2010
- [18] Dahlberg, T., Mallat, N., Ondrus, J., Zmijewska, A., *Past, present and future of mobile payments research: A literature review*, In: Electronic Commerce Research and Applications, 2008, 7, 2, 165–181, <https://doi.org/10.1016/j.elerap.2007.02.001>
- [19] Singh, A.K., Singh, M.P., *Exploring Influencing Factors for M-payment Apps Uses in the Indian Context*, Innovations in Information and Communication Technologies (IICT-2020), Springer, Cham., 2021, 171–180
- [20] Shankar, A., Datta, B., *Factors affecting mobile payment adoption intention: An Indian perspective*, In: Global Business Review, 2018, 19, 3_suppl, S72–S89, <https://doi.org/10.1177/0972150918757870>
- [21] Yim, M. Y. C., Chu, S.C., Sauer, P.L., *Is augmented reality technology an effective tool for e-commerce? An interactivity and vividness perspective*, In: Journal of Interactive Marketing, 2017, 39, 89–103, <https://doi.org/10.1016/j.intmar.2017.04.001>
- [22] Ahn, T., Ryu, S., Han, I., *The impact of the online and offline features on the user acceptance of Internet shopping malls*, In: Electronic Commerce Research and Applications, 2004, 3, 4, 405–420, <https://doi.org/10.1016/j.elerap.2004.05.001>
- [23] Agrawal, M., Sandhir, V., Gupta, G., *Emerging Profile of Online Shoppers in India: an Empirical Investigation and Implications*, In: AP – Asia-Pacific Advances in Consumer Research, 2009, 8, 6–15
- [24] Nethravathi, R., Sathyanarayana, P., Vidya Bai, G., Spulbar, C., Suhan, M., Birau, R., Ejaz, A., *Business intelligence appraisal based on customer behaviour profile by using hobby based opinion mining in India: a case study*, In: Economic Research-Ekonomska istraživanja, 2020, 33, 1, 1889–1908
- [25] Al-Mamary, Y.H., Shamsuddin, A., Aziati, N., *The relationship between system quality, information quality, and organizational performance*, In: International Journal of Knowledge and Research in Management & E-Commerce, 2014, 4, 3, 7–10
- [26] Degeratu, A.M., Rangaswamy, A., Wu, J., *Consumer choice behaviour in online and traditional supermarkets: The effects of brand name, price, and other search attributes*, In: International Journal of Research in Marketing, 2000, 17, 1, 55–78, [https://doi.org/10.1016/S0167-8116\(00\)00005-7](https://doi.org/10.1016/S0167-8116(00)00005-7)
- [27] Lim, H., Dubinsky, A.J., *Consumers' perceptions of e-shopping characteristics: an expectancy value approach*, In: Journal of Services Marketing, 2004, 18, 7, 500–513, <https://doi.org/10.1108/08876040410561839>
- [28] Janda, S., Trocchia, P.J., Gwinner, K.P., *Consumer perceptions of Internet retail service quality*, In: International Journal of Service Industry Management, 2002, 13, 5, 412–431, <https://doi.org/10.1108/09564230210447913>
- [29] Park, J., Lennon, S.J., Stoel, L., *On-line product presentation: Effects on mood, perceived risk, and purchase intention*, In: Psychology & Marketing, 2005, 22, 9, 695–719, <https://doi.org/10.1002/mar.20080>
- [30] Wang, M., Huarng, A.S., *An empirical study of internet store customer post-shopping satisfaction*, In: Special Issues of Information Systems, 2002, 3, 5, 632–638
- [31] Keh, H.T., Xie, Y., *Corporate reputation and customer behavioural intentions: The roles of trust, identification and commitment*, In: Industrial Marketing Management, 2009, 38, 7, 732–742, <https://doi.org/10.1016/j.indmarman.2008.02.005>
- [32] Vidaver-Cohen, D., *Reputation beyond the rankings: A conceptual framework for business school research*, In: Corporate Reputation Review, 2007, 10, 278–304, <https://doi.org/10.1057/palgrave.crr.1550055>
- [33] Ahn, J., Shamim, A., Park, J., *Impacts of cruise industry corporate social responsibility reputation on customers' loyalty: Mediating role of trust and identification*, International Journal of Hospitality Management, 2021, 92, 102706, <https://doi.org/10.1016/j.ijhm.2020.102706>
- [34] Jackson, K.T., *Building reputational capital: Strategies for integrity and fair play that improve the bottom line*, Oxford University Press, 2004
- [35] Bai Gokarna, V., Mendon, S., ThonseHawaldar, I., Spulbar, C., Birau, R., Nayak, S., & Manohar, M., *Exploring the antecedents of institutional effectiveness: a case study of higher education universities in India*, In: Economic Research-Ekonomska istraživanja, 2021, <https://doi.org/10.1080/1331677X.2021.1959367>

- [36] Gefen, D., Karahanna, E., Straub, D.W., *Inexperience and experience with online stores: The importance of TAM and trust*, In: IEEE Transactions on Engineering Management, 2003, 50, 3, 307–321, <https://doi.org/10.1109/TEM.2003.817277>
- [37] Suhan, M., Nayak, S., Nayak, R., Spulbar, C., Bai Gokarna, V., Birau, R., Anghel, L.C., Stanciu, C.V., *Exploring the sustainable effect of mediational role of brand commitment and brand trust on brand loyalty: an empirical study*, In: Economic Research-Ekonomskalstraživanja, 2022, <https://doi.org/10.1080/1331677X.2022.2048202>.
- [38] Hahn, K.H., Kim, J., *The effect of offline brand trust and perceived internet confidence on online shopping intention in the integrated multi-channel context*, In: International Journal of Retail & Distribution Management, 2009, 37, 2, 126–141, <https://doi.org/10.1108/09590550910934272>
- [39] Li, R., Kim, J., Park, J., *The effects of internet shoppers' trust on their purchasing intention in China*, In: JISTEM – Journal of Information Systems and Technology Management, 2007, 4, 3, 269–286
- [40] Ehsanifar, M., Dekamini, F., Spulbar, C., Birau, R., Bajelan, M., Ghadbeykloo, D., Mendon, S., Calotă, A.M., *Analysing the nexus between artificial neural networks and ARIMA models in predicting customer lifetime value (CLV) for complex development of society and industrial activities*, In: Industria Textila, 2022, 73, 3, 249–258, <http://doi.org/10.35530/IT.073.03.202142>
- [41] Ha, H.Y., Perks, H., *Effects of consumer perceptions of brand experience on the web: Brand familiarity, satisfaction and brand trust*, In: Journal of Consumer Behaviour: An International Research Review, 2005, 4, 6, 438–452, <https://doi.org/10.1002/cb.29>
- [42] Patterson, P.G., Spreng, R.A., *Modelling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: an empirical examination*, In: International Journal of Service Industry Management, 1997, 8, 5, 414–434, <https://doi.org/10.1108/09564239710189835>
- [43] Kotler, P., Turner, R.E., *Marketing management: Analysis, planning, implementation, and control*, Upper Saddle River, NJ: Prentice Hall., 1997, 9
- [44] Schaupp, L.C., Bélanger, F., *A conjoint analysis of online consumer satisfaction*, In: Journal of Electronic Commerce Research, 2005, 6, 2, 95–111
- [45] Murphy, P.E., Pritchard, M., *Destination price-value perceptions: an examination of origin and seasonal influences*, In: Journal of Travel Research, 1997, 35, 3, 16–22, <https://doi.org/10.1177/004728759703500303>
- [46] Zeithaml, V.A., Berry, L.L., Parasuraman, A., *The behavioural consequences of service quality*, In: Journal of Marketing, 1996, 60, 2, 31–46, <https://doi.org/10.1177/002224299606000203>
- [47] Park, J., Stoel, L., *Effect of brand familiarity, experience and information on online apparel purchase*, In: International Journal of Retail & Distribution Management, 2005, 33, 2, 148–160, <https://doi.org/10.1108/09590550510581476>
- [48] Shergill, G.S., Chen, Z., *Web-Based Shopping: Consumers' attitude towards online shopping in New Zealand*, Journal of Electronic Commerce Research, 2005, 6, 2, 78–94
- [49] Jarvenpaa, S.L., Todd, P.A., *Consumer reactions to electronic shopping on the World Wide Web*, In: International Journal of Electronic Commerce, 1996, 1, 2, 59–88, <https://doi.org/10.1080/10864415.1996.11518283>
- [50] Eighmey, J., *Profiling user responses to commercial web sites*, In: Journal of Advertising Research, 1997, 37, 3, 59–67
- [51] Anderson, J.C., Narus, J.A., *A model of distributor firm and manufacturer firm working partnerships*, In: Journal of Marketing, 1990, 54, 1, 42–58, <https://doi.org/10.1177/002224299005400103>
- [52] Schurr, P.H., Ozanne, J.L., *Influences on exchange processes: Buyers' preconceptions of a seller's trustworthiness and bargaining toughness*, In: Journal of Consumer Research, 1985, 11, 4, 939–953, <https://doi.org/10.1086/209028>
- [53] Polit, D.F., Hungler, B.P., *Nursing Research: Principles and Methods*, (6th ed), JB Philadelphia, 1999
- [54] Hirst, A., Ashwin, M., *Cross cultural difference between online shoppers in London and Bangkok*, In: International Review of Business Research Papers, 2009, 5, 4, 167–191
- [55] Rajamma, R.K., Neeley, C.R., *Antecedents to shopping online: A shopping preference perspective*, In: Journal of Internet Commerce, 2005, 4, 1, 63–78
- [56] Swinyard, W.R., Smith, S.M., *Why people (don't) shop online: A lifestyle study of the internet consumer*, In: Psychology & Marketing, 2003, 20, 7, 567–597
- [57] Muylle, S., Moenaert, R., Despontin, M., *The conceptualization and empirical validation of website user satisfaction*, In: Information & Management, 2004, 41, 5, 543–560
- [58] Jeong, M., Oh, H., Gregoire, M., *Conceptualizing web site quality and its consequences in the lodging industry*, In: International Journal of Hospitality Management, 2003, 22, 2, 161–175
- [59] Kim, S., Stoel, L., *Apparel retailers: website quality dimensions and satisfaction*, In: Journal of Retailing and Consumer Services, 2004, 11, 2, 109–117
- [60] Liu, X., He, M., Gao, F., Xie, P., *An empirical study of online shopping customer satisfaction in China: a holistic perspective*, In: International Journal of Retail & Distribution Management, 2008
- [61] Szymanski, D.M., Hise, R.T., *E-satisfaction: an initial examination*, In: Journal of Retailing, 2000, 76, 3, 309–322
- [62] Wolfinger, M., Gilly, M.C., *eTailQ: dimensionalizing, measuring and predicting retail quality*, In: Journal of Retailing, 2003, 79, 3, 183–198
- [63] Kim, S., Park, H., *Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance*, In: International Journal of Information Management, 2013, 33, 2, 318–332
- [64] Chen, Q., Clifford, S.J., Wells, W.D., *Attitude toward the site II: New information*, In: Journal of Advertising Research, 2002, 42, 2, 33–45
- [65] Parasuraman, A., Zeithaml, V.A., Berry, L., *SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality*, 1988, 64, 1, 12–40

- [66] Barclay, D., Higgins, C., Thompson, R., *The partial least squares (PLS) approach to casual modeling: personal computer adoption and use as an illustration*, 1995
- [67] Cohen, J., *Quantitative methods in psychology: A power primer*, In: Psychological Bulletin, 1992
- [68] Hair Jr, J.F., Sarstedt, M., Hopkins, L., Kuppelwieser, V.G., *Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research*, In: European Business Review, 2014
- [69] Henseler, J., Dijkstra, T.K., Sarstedt, M., Ringle, C.M., Diamantopoulos, A., Straub, D.W., Calantone, R.J., *Common beliefs and reality about PLS: Comments on Rönkkö and Evermann (2013)*, In: Organizational Research Methods, 2014, 17, 2, 182–209
- [70] Hu, L.T., Bentler, P.M., *Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives*, In: Structural Equation Modeling: A Multidisciplinary Journal, 1999, 6, 1, 1–55
- [71] Daskalakis, S., Katharaki, M., Mantas, J., *The use of data envelopment analysis to measure the efficiency and interoperability of information technology in Greek public healthcare organisations*, In: J. Inf. Technol. Healthc., 2008, 6, 3, 188–196
- [72] Naylor, R.W., Lamberton, C.P., West, P.M., *Beyond the “like” button: The impact of mere virtual presence on brand evaluations and purchase intentions in social media settings*, In: Journal of Marketing, 2012, 76, 6, 105–120
- [73] Wasko, M.M., Faraj, S., *Why should I share? Examining social capital and knowledge contribution in electronic networks of practice*, In: MIS Quarterly, 2005, 35–57
- [74] Wixom, B.H., Watson, H.J., *An empirical investigation of the factors affecting data warehousing success*, In: MIS Quarterly, 2001, 17–41
- [75] Fornell, C., Larcker, D.F., *Structural equation models with unobservable variables and measurement error: Algebra and statistics*, 1981
- [76] Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J., Bryant, B.E., *The American customer satisfaction index: nature, purpose, and findings*, In: Journal of Marketing, 1996, 60, 4, 7–18
- [77] Martilla, J.A., James, J.C., *Importance-performance analysis*, In: Journal of Marketing, 1977, 41, 1, 77–79
- [78] Slack, N., *The importance-performance matrix as a determinant of improvement priority*, In: International Journal of Operations & Production Management, 1994
- [79] Ullal, M.S., Nayak, P.M., Dais, R.T., Spulbar, C., Birau, R., *Investigating the nexus between Artificial Intelligence and machine learning technologies in the case of Indian services industry*, In: Business: Theory and Practice, 2022, 23, 2, 323–333, <https://doi.org/10.3846/btp.2022.15366>

Authors:

VIDYA BAI G.¹, RAMONA BIRAU², IQBAL THONSE HAWALDAR³, DANIEL FRANK¹,
PETRE VALERIU NINULESCU⁴, R. VIJAYA ARJUNAN⁵, IULIANA CARMEN BĂRBĂCIORU⁶

¹Department of Commerce, Manipal Academy of Higher Education, Manipal. Karnataka, 576104, India
e-mail: vidhya.g@manipal.edu, daniel.frank@manipal.edu

²“Constantin Brâncuși” University of Târgu Jiu, Faculty of Economic Science, Târgu Jiu, Gorj, Romania

³Department of Accounting & Finance College of Business Administration, Kingdom University, Bahrain
e-mail: thiqbal34@gmail.com

⁴University of Craiova, Doctoral School of Economic Sciences, Craiova, Romania
e-mail: petre.pregi@yahoo.it

⁵Department of Computer Science and Engineering, Manipal Institute of Technology, MAHE,
Manipal, Karnataka, 576104, India
e-mail: vijay.arjun@manipal.edu

⁶“Constantin Brâncuși” University of Târgu Jiu, Faculty of Engineering, Târgu Jiu, Gorj, Romania
e-mail: cbarbacioru@gmail.com

Corresponding author:

RAMONA BIRAU
e-mail: ramona.f.birau@gmail.com