Original Article

# Impact Of Value Perception, And Atmospheric Cues On User E-Satisfaction And E-Loyalty: A Study Of Online Shopping Websites In Saudi Arabia

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## Abstract

This study employed both quantitative and deductive approaches based on a modified framework of Technology Acceptance Model (TAM). A total of 384 samples were collected using Quota sampling (with an online survey distributed to online shopping customers as targeted respondents), and data were scientifically analysed using Partial Least Square - Structural Equation Modelling (PLS-SEM) approach. The research problem showed reasons such as perceived lack of usefulness and profitability and the poor design quality of online shopping websites. State Institutions and private organization must consider enforcing adequate website qualities practices to increase E-satisfaction and E-loyalty. As determined by previous studies Website quality defined as a feature of a website that gives value to its visitors, Users perceive the quality of a website because of the value of using a site, On the other hand, Speed, navigability, and content quality as the main factors for website quality. Navigation refers to the ease of use and usability of utilities that the company offers in its website design. Atmosphere cues indicates the deliberate design of Web. It is measured through the design/layout of an online shopping website. The results showed a significant relationship with E-satisfaction and E-loyalty, as well as with partial mediation relationship.

**Keywords:** E-satisfaction, Technology Acceptance Model (TAM), E-customers, e-commerce,

## 1. Introduction

In increasingly competitive marketplaces, cultivating consumer loyalty is critical to gaining market share and establishing a long-term competitive advantage. Internet-based businesses have skyrocketed over the last decade directly creating massive competitiveness among businesses. Hence, along with the evolution of recent application of technology, businesses remain competitive (Khan et al., 2019). The acquisition of most consumers and improved customer retention are two strategies to modify competitive advantage (Lie et al., 2017). Furthermore, the advancement of the Internet and technology, as well as changes in corporate competition policies and financial transactions conducted through electronic means, has drawn the attention of most people to the question of how they can profit in the e-commerce world of technology and communications. Because customers are a company's most valuable asset, customer retention leads to increased profitability, and buyers can easily compare global goods via the Internet at low or no cost. The subject of loyalty in the Internet space, or e-loyalty, has attracted many parts in marketing and management studies. Customer loyalty is key to maintaining a competitive advantage in growing commercial rivalry (Khan et al., 2019; Lie et al., 2017).

The exponential growth of online users and transactions shows that the Internet is now at the center of today's business environment. A website is unquestionably a valuable tool for companies to sell their goods and services to generate revenue from prospective customers (Susmitha, 2021). Given the competitive nature of the sector, E-commerce strives to establish its website as a dynamic marketing tool that can influence consumers' purchase choices (Dubey & Balaji, 2021). Despite studies attempting to develop the relationships between customer E-loyalty and effective e-commerce operations (Lie et al., 2017), nothing is known about the development of client e-loyalty (Al-Adwan & Al-Horani, 2019). Consequently, extensive research into the impact of several factors on consumer e-loyalty is needed (Faraoni et al., 2019; Khan et al., 2019).

The COVID-19 epidemic has altered the global e-commerce environment. e-commerce has emerged as one of the most significant benefactors of the global blockades implemented since 2019. Despite the global popularity of online shopping due to the impact of pandemic, people in Saudi Arabia are most concerned about internal navigation within a webpage; such as inconsistency in language interfaces, website layout, icon labelling, missing contact information, website updates, speed of the Website, clarity of Website, the effectiveness of the Website, easy navigation, and ease of use; to provide more user E-satisfaction. Enhancements in these areas may help to attract more customers to these web portals, resulting in increased income via improved client acquisition, extension, and retention. This research became necessary to objectively analyse the effect of improved usability on customer behaviour (Inkesar, Saqib 2019).

### 1.1 Research Objectives

This study aims to detect and better explore the link between Website technical antecedents, customer E-satisfaction, and customer E-loyalty regarding shopping websites in Saudi Arabia. Based on the problem statement, the following objectives will guide the research process:

1.To examine the impact of atmospherics cues on E-satisfaction as well as the impact of atmospherics cues on E-loyalty, and then the impact of E-satisfaction is considered a mediator.

2.To analyze the impact of value perception on E-satisfaction as well as the impact of value perception on E-loyalty, and then the impact of E-satisfaction is considered a mediator.

3.To analyse the impact of E-satisfaction on E-loyalty.

### 1.2 Literature Review

Nowadays maintaining a good well atmospheric online environment became popular, website atmospheric cues can increase clients preferable feedbacks toward online shopping site ,the cues factors it can be highlighted as website design , colour, sound, layout style, size, font and much more. Atmospheric cues help customers to memorize the web portals and make a repetitive purchase behaviour and would assist in providing a facilitate shopping experience for goods and services, customers appreciate web portals which contained of accurate, relevant and easy access that can save time and energy consumption for information hunting. (Albarq, A. N. 2021).

Value perception has played a significant role in predicting purchase and impact relationship management, value perception in online shopping experience determined by the overall point of view of what is received and what is given based on derived products usefulness. The site value reflect with helping companies to win a sustained online environment which is suitable in achieving a long term competitive advantage. Products or services given should be

matched with customers' preferences, needs and requirements, online shopping site perceived value is the values shaped by consumers after experiencing a particular use of the service or product provided on the wither hand, the first impression about the website play an important role in determining the value perceived and either encourage further action for customers or not .( Riorini, S. V., Yaputra, H., & Pakpahan, A. K. 2022).

According to Anderson and Srinivasan's (2003) definition, e-satisfaction is the state of a consumer's satisfaction with regard to past purchase experiences with a particular online shopping-oriented website. IS and marketing scholars are interested in re-examining consumer happiness in the context of e-commerce. But even in this situation, the fundamental value of customer happiness and its effects seem to hold true (Evanschitzky, Iyer, Hesse and Ahlert, 2004). In the satisfaction literature, researchers frequently acknowledge satisfaction as a quasi-attitudinal construct and frequently view it as an attitude (Bagozzi and Gopinath, 1999). (Fournier and Mick, 1999). Consequently, it has been determined that e-satisfaction is a prerequisite for the ongoing intention of e-commerce services in technology adoption (Bhattacherjee 2001; Azam, A., Qiang, F., & Abdullah, 2012).

E-loyalty is the desire to return and visit the website or to have the intention of considering buying from it in the future (Cyr et al, 2005). According to Li et al. (2015), loyal clients continually dedicate to repeat purchasing goods and services from the same online shop as well as participating in positive recommendations for their circle of friends or relatives and that's would help companies with gaining so many benefits for generating sales and have good reputation. Loyal clients are passionate and sincere to keep repurchasing the same products and taking the same services over and over again regardless of the situations. On the other hand, this dedication would benefit the online shopping companies with so many advantages. (Hendrawan & Agustini, 2021)

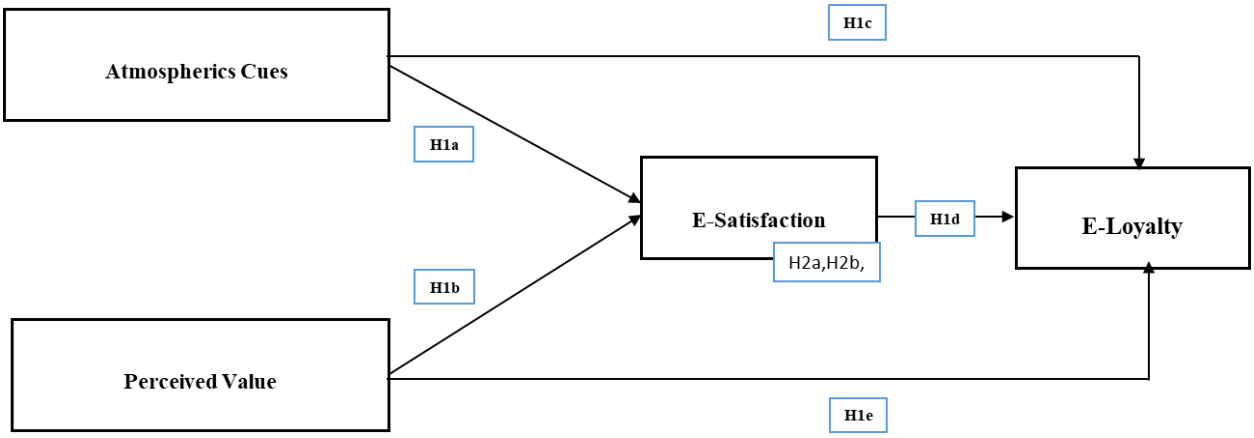
## 2. Theoretical Framework

This research is a diverse discipline between loyalty as a consumer behaviour matter and website qualities as a technology matter; therefore, Technology Acceptance Model (TAM) contribute significantly to the proposed model design. Most loyalty research applied motivational theories to assess customer loyalty. However, few theories-based models explain the concept of customer loyalty. Davis (1986) established the Technology Acceptance Model (TAM), TAM is a modified version of the Theory of Reasonable Action used to describe how people effectively use information systems and technology.

Davis et al. (1989) makes the TAM a technique of detailing the determinants of actions associated with technology approval throughout a wide assortment of populations and strategies. The main intention behind TAM is to supply researchers with a framework for determining the outcome of outside variables on viewed usefulness, regarded ease of use, intention, and actual behavior relevant to innovation approval. These extra components will undoubtedly be the constructs of viewed usefulness and considered simplicity of usage, which is put right into the TPB, constructs of the way of thinking, subjective norms, and regarded behavior command to construct the TAM. Venkatesh and Davis (1996) developed the final output of the Technology Acceptance Model after discovering that perceived usefulness and ease of use directly impacted an individual's behavior intention, removing the necessity for the attitude component. The study of Venkatesh and Davis (2000) suggested the second form of TAM. Here, users' mental assessments of the fit between important work objectives and the consequences of using the system to accomplish job tasks serve as a foundation for making judgements about the system's usefulness, according to TAM (version 2.0). Sam and Sharma (2015) employed TAM components to analyze customers' online shopping preferences and the impact of product type on adoption. The researchers discovered that product availability and ease of use are the most compelling reasons to shop online. In addition, the TAM direction was utilized in multiple research projects to investigate the various aspects that influence female shoppers' attitudes or thinking patterns regarding online buying (Raman, 2014).

### 2.1 Hypothesis Development:

Figure 2.1 shows the proposed model with its associated hypotheses.




#### 2.1.1 Atmospheric Cues and E-satisfaction

Sarah et al. (2021) found a link between the atmosphere of a website and buyers' psychological motives such as enjoyment, arousal, and dominance in another study. These incentives influenced shoppers' views and interaction with e-online shopping' websites, varied products, and purchase intents. Furthermore, Sai Vijay et al. (2019) emphasized that several factors such as information richness, visual aspects, colour, are stimuli that affect E-satisfaction states during online shopping. As a result, the study anticipates that appropriate atmospheric signals on a website would increase client E-satisfaction with the website's offerings. as this idea is consistent with the findings of other research, such as (Prashar , 2017).

- H1a: There is a relationship between atmospheric web cues and consumer E-satisfaction.

#### 2.1.2 Value Perception and E-satisfaction

Wang and Prompanyo's (2020) findings based on perceived values and E-satisfaction, confirm that except for emotional value, perceived functional value, procedural value, and social value all significantly influence E-loyalty through E-satisfaction. A study by Aditi et al. (2021) on examining Indonesian SMEs' customers' perceived value and E-satisfaction reveal that there is a positive and substantial association between E-satisfaction level and perceived value. The study anticipates that consumers will be happier if they have a good perception of a website's worth. as this idea is consistent with the findings of other research, such as (Berraies et al., 2017; Sai et al., 2019; Wang & Prompanyo, 2020).

- H1b: There is a relationship between value perception and customer E-satisfaction.

#### 2.1.3 Atmospheric Cues and E-loyalty

Due to the explosive increase in e-commerce sales and the fierce rivalry, many companies have turned to online atmospherics as a strategic approach to distinction. Albarq (2021) investigates the impact of ambient web signals on

Jordanian buyers' purchasing decisions. the result reveal that loyalty component effectively mitigates the influence of website cues on purchase intent. Furthermore, the buy intention results from the loyalty engendered by these pre-existing characteristics. Another study by (Jeon & Jeong, 2017) also shows that appropriate atmospheric signals on a website would increase client E-satisfaction with the website's offerings. Since this concept is consistent with previous research findings (Sastry & Rao, 2017; Sreejesh & Abhilash, 2017).

- H1c: There is a relationship between atmospheric web cues and consumer E-loyalty.

### 2.1.4 Value Perception and E-loyalty

As indicated in the preceding paragraph, customer perceived value is the belief that a product or service's success is primarily driven by whether customers believe it can match their needs and requirements (Zheng et al., 2017). Fuentes-Blasco et al. (2017) findings support the notion that consumer perceptions of e-service quality and value significantly impact e-loyalty. According to recent studies (Allen, 2020; Shamdasani et al., 2008) exploring this link, the perceived quality of e-services has a direct and positive influence on perceived value.

- H1e: There is a relationship between customer value perception and customer E-loyalty.

### 2.1.5 E-satisfaction – E-Loyalty Relationships

The relationship management concept is an essential axiom for the positive relationship between customer E-satisfaction and customer E- loyalty Because, satisfied customers are more likely to be motivated to repeat purchases (Thakur, 2019). Pandey (2016) argued that satisfied customers show different behavior to support their preferred company, such as introducing the brand or website, encouraging others to try the product or service, providing word-of-mouth communication feedback to the firm, and being willing to repurchase. According to empirical studies, the type of E-satisfaction has a major impact on consumer E- loyalty. According to Mittal (2016), the positive influence of apparent E-satisfaction on customer E-loyalty is larger than that of latent contentment. Other recent studies (Jeon et al., 2017, Das et al., 2019, Chang & Chen, 2015) also confirmed the relationship between customer E-satisfaction and E-loyalty. Revealing that e-store E-satisfaction is positively associated with e-store loyalty.

- H1d: There is a relationship between E-satisfaction and E-loyalty

### 2.1.6 The Mediating Role of E-satisfaction

Wong et al. (2019) tested their hypothesized customer loyalty, and they found that customer perceived value, and customer happiness influenced customer loyalty directly and indirectly through customer E-satisfaction. This is because, when customer perceived value of a product is aligned with the actual value of the products customer satisfaction is fulfilled. Therefore, E-satisfaction successfully mediates the impact of perceived value on customer e-loyalty (Ferreira et al. 2019). On the other hand, the Researcher has discussed in detail the positive impact of E-satisfaction on the relationship of Atmospheric Website Cues and consumers' loyalty (Ferreira et al., 2019).

According to Swaminathan, et al. (2018), the findings suggest that E-satisfaction is linked to e-loyalty because a variety of interpersonal and organizational factors influence the impact of E-satisfaction on loyalty. Wang et al. (2018) study examine the link between E-satisfaction and several forms of loyalty performance by combining empirical data from diverse literature domains. The findings reveal that E-satisfaction significantly impacts attitudinal loyalty (e.g.,

trust, word-of-mouth, commitment), behavioral loyalty (e.g., repurchase intention, continuation intention), and composite loyalty. On the contrary, the study also finds that industry characteristics (high-monopoly vs. highly competitive), object E-satisfaction (product/service E-satisfaction vs. brand E-satisfaction), and questionnaire type (paper vs. online questionnaire) moderate the E-satisfaction-loyalty relationship in e-commerce.

- H2a: There is a mediating effect of customer E-satisfaction between Website Atmospheric Cues and customer e-loyalty

- H2b: There is a mediating effect of customer E-satisfaction between Website Value Perception and customer e-loyalty

## 3. Methods

Based on the scope of the study which focuses on the customers/online shopping in Saudi Arabia. The research procedure includes the application of original data from the self-directed survey. The current study takes an extensive scientific perspective; hence a, quantitative and deductive methods are used. The proposed design has two constructs as antecedents: Value Perception, and Atmospheric Cues; and two constructs as an outcome: E- loyalty and E-satisfaction. The population of this analysis is all adults (18 years and above) living in Saudi Arabia. The chosen adult population is because they can conduct an online shopping transaction. Based on different sources, the total population in KSA by December 2020 will be 34,5 million (worldometers.info, 2020). Adults are 68.7% of the people, meaning they are 23.7 million.

The population is distributed into 13 administrative regions. Based on Kerjcie and Morgan's (1970) formula of sample size calculation, the targeted sample size is 384 subjects that respect the minimum sample size for PLS analysis (90) and the effective size (166). The researcher collected more than the target sample size to secure a correct size after cleaning the data. For this particular study, non-probability sampling is chosen, and the techniques followed are quota sampling. The target sample size of 384 is chosen from the five main districts (the main city in every district) based on the population distribution. Therefore, a quota sample is the suitable data collection technique for this study. Five cities are chosen from the 13 main regions/ 5 main districts. The chosen process is judgmental based on the distribution and population size. Within social media such as Twitter and facebook, sampling is taking place from the available citizens. Data collection occurred during November 2020, December 2020, January 2021, and February-2021. For statically data analysis, the tools used in SmartPLS 3

### 1.2 Method of Analysis

This study used a variance-based approach to data analysis called Partial Least Square-based Structural Equation Modeling (PLS-SEM). The Partial Least Square PLS is a well-known multivariate data analysis tool for academic researchers and practitioners. The partial least squares method is used in the PLS, based on the principal component principle (which is appropriate for model development) estimator (Hair, Ringle, & Sarstedt, 2012). SEM with PLS is frequently used in business management research, including operations management, information management system, marketing management, organisational performance, and HR management (Lowry & Gaskin, 2014; Hair, Ringle, & Sarstedt, 2012). The partial least squares include several strategies for evaluating formative and reflective models without inflating the t-statistics. PLS is also appropriate for model development research and investigating complicated cause-effect-relationship models (Hair, Ringle, & Sarstedt, 2012)

SmartPLS 3 software is used to test the hypothesis. This study evaluated the measurement and structural models using a Partial Least Square-based SEM technique. The Partial Least Square algorithm testing enables every indicator to vary in the limit to which it contributes to the composite score of the construct. This is crucial as it guarantees that fixed-scale construction issues are prevented and avoided (Sarstedt et al., 2016). For models that reflect latent order constructs, PLS is important. It also demonstrates the importance of an alternative hypothesis by displaying a significant t-value and high R2, which permits the null hypothesis to be rejected (Lowry & Gaskin, 2014).

### 3.1.1 Measurement Model Analysis

The measurement model is performed by examining the constructs' reliability and validity (includes Cronbach's alpha and Composite reliability), convergent validity (CV), and discriminant validity (DV) on all constructs. The construct reliability will be evaluated by examining the Cronbach's alpha and Composite reliability, while the CV will be evaluated by examining the average variance extracted (AVE), respectively. The measurement model (which also referred to as the Outer model in PLS) reports the significance of each loading items to determine the t-statistic value which should be $\geq 1.98$, to be considered significance. The process includes the application of PLS algorithm, convergent validity and Discriminant Validity analysis (Ringle, & Sarstedt, 2016; Hair et al. 2019).

### 3.1.2 Structural Model

The structural model is performed after the validity of the measurement model. It can be regarded as the theory of the research. According to Schumacker and Lomax (2004a), an outline specification entails building a theoretical model based on all applicable theory, research, and knowledge. In other words, an existing theory is utilised to determine which variables to include in the theoretical model (and, indirectly, which variables to exclude from the model) and how they are connected. The goal is to create a parsimonious model (i.e., one with a small number of variables) with high explanatory and predictive power. The structural model implies fitting theory in sampling data.

## 4. Analysis & Discussion

Table 7 (in appendix) shows the indicator outer loading assessment for the items with proper loading after deleting all the weak items. The Cronbach's Alpha and Composite Reliability in this study are above 0.7, which also indicates high internal consistency. Therefore, the dataset is reliable. For Convergent Validity, all values are higher than the minimum threshold (see Table 1), which is a high level and widely acceptable, indicating that the dataset is free of convergent problems and suitable for further study.

Table 1: shows the quality criterion summary of the different constructs of the model.

| | AVE | Composite Reliability | Cronbach's Alpha | Communality |
|---|---|---|---|---|
| AC | 0.75274 | 0.923835 | 0.888979 | 0.75274 |
| EL | 0.647134 | 0.88003 | 0.818253 | 0.647134 |
| ES | 0.710746 | 0.906809 | 0.860773 | 0.710746 |
| PV | 0.719951 | 0.911031 | 0.879235 | 0.719952 |

Table 2: Discriminant Validity Assessment of Research Variables

| | AC | EL | ES | PV |
|---|---|---|---|---|
| AC | 0.868 | | | |
| EL | 0.752 | 0.804 | | |
| ES | 0.811 | 0.692 | 0.843 | |
| PV | 0.130 | 0.106 | 0.134 | 0.848 |

The Fornell & Larcker criteria matrix is shown in Table 2. The matrix is a refined matrix of the correlations of the latent variable. The test is successful since the value in the diagonal is greater than any other number in the crossing column and raw. Table 4.32 reveals that the minimum VIF level between IQ and ES is 1.016, while the maximum VIF level between ES and EL is 1.435. As a result, all VIF values are within an acceptable range, and multicollinearity has been established (see Table 3).

Table 3: Multicollinearity Validity Assessment of Research Variables

| | EL | ES |
|---|---|---|
| AC | 1.360 | 1.270 |
| ES | 1.435 | |
| PV | 1.095 | 1.072 |

Table 4: Predictive Power and Predictive Relevance of Proposed Model

| | Predictive Power | | Predictive Relevance | |
|---|---|---|---|---|
| | R Square | Status | Q Square | Status |
| EL | 0.580 | moderate | 0.365 | large |
| ES | 0.303 | satisfactory | 0.208 | medium |

The main dependent variable's effectiveness of loyalty (EL) results illustrate a moderate predictive power and a large predictive relevance. The table shows that the corresponding R square value is 0.580 (a power of 58.0%), and the related Q square is 0.365 (a relevance of 36.5%) (see Table 4). The prediction constructs related to the variable can explain more than 58.0% of the market effectiveness of loyalty (EL) variance. Results of the main dependent variable, E-satisfaction (ES), illustrate a satisfactory predictive power and a medium predictive relevance. The table shows that

the corresponding R square value is 0.303 (a power of 30.3%), and the related Q square is 0.208 (a relevance of 20.8%). The prediction constructs related to the variable can explain more than 30.3% of E-satisfaction (ES) variance.

Table 5: Relation between independent and dependent constructs

| Hypothesis | Relation | Status | Sign | Path Coefficient | T Statistics | P-Value | Effective Size |
|---|---|---|---|---|---|---|---|
| H1a | AC -> ES | Accepted | Positive | 0.250 | 4.549 | 0.000 | 0.055 |
| Hb | PV -> ES | Accepted | Positive | 0.126 | 2.756 | 0.003 | 0.046 |
| H1c | AC -> EL | Accepted | Positive | 0.221 | 4.476 | 0.0000 | 0.049 |
| H1d | ES -> EL | Accepted | Positive | 0.425 | 0.057 | 7.448 | 0.000 |
| He | PV -> EL | Accepted | Positive | 0.089 | 2.312 | 0.011 | 0.038 |

The study hypothesis was tested and the outcome of the analysis indicated that the relationship between atmospheric cues (AC) and E-satisfaction (ES) is significant and positive as the (P-Value = 0.000) with a T statistics score of 4.549 (see Table 5). on the other hand, the path coefficient for this relation is 0.250, and the small effective size score is 0.055. Based on that, and regarding the values viewed, the relationship is considered a significant and positive impact. The relationship between atmospheric cues (AC) and e_loyalty (EL) is significant and positive as the (P-Value = 0.0000) with a T statistics score of 4.476. on the other hand, the path coefficient for this relation is 0.221, and the small effective size score is 0.049.

The mediation relationship states that E-satisfaction is a mediator between atmospherics cues and E-loyalty among customers of Saudi online shopping. Based on that, and regarding the values viewed, the relationship is considered a significant and positive impact. After analysing the data, the researcher found that the direct impact shows that the p-value is 0.000 and the Path Coefficient is 0.218, indicating a significant effect. In contrast, the indirect effect shows that the p-value is 0.000 and the Path Coefficient is 0.107, indicating a significant effect. This relationship's total effect shows a p-value of 0.000, and the Path Coefficient is 0.324 (see Table 6). Based on that, we can conclude that E-satisfaction's role as a mediator between atmospheric cues and E-satisfaction among customers of Saudi online shopping is significant, and there is a partial mediation relationship.

These findings are consistent with previous research (Savelli, Cioppi, & Tombari, 2017; Wu, Lee, Fu, & Wang, 2014; Massicotte et al., 2011). This shows that if the website effectively communicates the format's experience content, particularly if it enables consumers to interact with the shopping centre's workers, they are more likely to stay loyal. Additionally, the data indicate that customer E-satisfaction improves the relationship between website environment and e-loyalty, implying that website atmosphere has a greater influence on the frequency of consumers' visits to the

format (E-loyalty). Consumers who value an engaging and social purchasing experience are more susceptible to environmental cues. According to the above studies, a website's layout design and mood substantially impact its users' E-satisfaction and e-loyalty. A well-designed layout and a pleasant setting influence an individual's emotional arousal and consumer attitude. The atmosphere of a business is more likely to entice clients to make an online purchase than the firm's layout design (Wu, Lee, Fu, & Wang, 2014; Davis, Lang, & San Diego, 2014).

This objective is supported and achieved by showing the impact of website atmospheric cues on electronic loyalty, with electronic E-satisfaction considered a mediator for customers of online shopping in Saudi Arabia. All three relationships were supported and accepted.

Table 6: The mediation impact of E-satisfaction on the Constructs

| | **Direct Effect** | | | **Indirect Effect** | | | **Total Effect** | | **Status** |
|---|---|---|---|---|---|---|---|---|---|
| | Path Coeff | P-Value | Status | Path Coeff | P-Value | Status | Path Coeff | P-Value | **(Mediation)** |
| **AC -> ES -> EL** | 0.218 | 0.000 | Sig | 0.107 | 0.000 | Sig | 0.324 | 0.000 | Partial mediation |
| **PV -> ES -> EL** | 0.087 | 0.011 | Sig | 0.055 | 0.007 | Sig | 0.141 | 0.000 | Partial mediation |

Table 6 above shows that the relationship between perceived value (PV) and E-satisfaction (ES) is significant and positive as the (P-Value = 0.003) with a T statistics score of 2.756. On the other hand, the path coefficient for this relation is 0.126, and the small effective size score is 0.046. Based on that, and regarding the values viewed, the relationship is considered a significant and positive impact. The relationship between perceived value (PV) and e_loyalty (EL) is significant and positive as the (P-Value = 0.011) with a T statistics score of 2.312.

On the other hand, the path coefficient for this relation is 0.089, and the small effective size score is 0.038. Based on that, and regarding the values viewed, the relationship is considered a significant and positive impact. This is in line with Ahmed, Al Asheq, Ahmed, Chowdhury, Sufi, and Mostofa (2022); Ahmed, Choudhury, Ahmed, Chowdhury, and Al Asheq (2020); Slack and Singh (2020) and Serhan and Serhan (2019). This indicates that customers can have varying perceptions of the website's value. It is possible that when a service fails to meet a customer's expectations, the website's perceived value is low; on the other hand, the website's perceived value may be high when the service meets the customer's expectations. It is essential for online companies to continuously enhance the quality of their websites to compete and prosper.

The mediation relationship states that E-satisfaction is a mediator between value perception and E-loyalty among customers of Saudi online shopping. After analyzing the data, the researcher found out that the direct impact shows that the p-value is 0.011 and the Path Coefficient is 0.087, indicating a significant effect. At the same time, the indirect effect shows that the p-value is 0.007 and the Path Coefficient is 0.055, indicating a significant effect. This relationship's total effect shows a p-value of 0.000, and the Path Coefficient is 0.141 (see Table 6).

Based on that, we can conclude that E-satisfaction's role as a mediator between value perception and E-loyalty among customers of Saudi online shopping is significant, and there is a partial mediation relationship. According to Malik et al. (2020), customer E-satisfaction in the hospitality business functions as a mediator between perceived value and customer loyalty. Atmaja and Yasa (2020) and Mahato et al. (2020) have shown that the mediating effect of customer E-satisfaction has a significant indirect influence on customer loyalty in terms of perceived value. This objective is supported and achieved by showing the impact of website perceived value on electronic loyalty, with electronic E-satisfaction considered a mediator for customers of online shopping in Saudi Arabia.

Table Indicator :7Outer Loading Assessment for All Items (Proper Loading)

| | AC | EL | ES | PV |
|---|---|---|---|---|
| AC1 | 0.81479 | | | |
| AC2 | 0.847913 | | | |
| AC3 | 0.957589 | | | |
| AC4 | 0.843293 | | | |
| EL1 | | 0.799458 | | |
| EL2 | | 0.806309 | | |
| EL3 | | 0.8001 | | |
| EL4 | | 0.811853 | | |
| ES1 | | | 0.880865 | |
| ES2 | | | 0.938516 | |
| ES4 | | | 0.825436 | |
| ES5 | | | 0.710566 | |
| PV1 | | | | 0.922762 |
| PV2 | | | | 0.845305 |
| PV3 | | | | 0.85163 |
| PV4 | | | | 0.767138 |

## 5. Conclusion:

Based on the studied objective emphasizing on providing insights into understanding the impact of (atmospheric cues (AC), and perceived value (PV).) on the E-satisfaction (ES), and E- loyalty (EL). It showed that customer E-satisfaction in the e-commerce industry functions as a mediator between perceived value and customer E-loyalty. Hence, it is concluded that E-satisfaction influence the link between value perception and E-loyalty among customers of Saudi online shopping. The results showed reasons such as perceived lack of usefulness and profitability and the poor quality of online shopping websites. As a result, this study showed that customers are not satisfied with the quality of service they perceive during the online shopping experience. In addition, the relationship between

atmospheric cues (AC) and E-satisfaction (ES) is significant and positive, with also a significant mediating impact of ES between AC and e-loyalty. Our study disclose that Web atmospheric cues are important; therefore, firms should have put more time into considering that to make a better E-loyalty of customers. Perceived value is also found to be influential on E-loyalty; therefore, there is a need to improve the tools and practices that might improve the customers perceived values to increase E-loyalty.

As part of the contribution, Online Business owners and developers can be benefited from the results in a better understanding of the customer's options, which may also affect E-loyalty, which has become essential in developed countries. Maybe companies must consider enforcing good qualities practices to increase E-satisfaction and E-loyalty. From a strategic standpoint, the findings of this study will enable managers to understand how e-loyalty is developed among e-commerce customers, as well as the significance of each of the elements involved.

From the quantitative analysis, the service quality variable is not a direct determinate of customer's loyalty in online shopping in Saudi Arabia. Still, it must go indirect through E-satisfaction. In contrast, this finding is a logical result considering that good disclosure must be carried out following some standards clarifying the methods and method of disclosure. Still, more qualitative research studies can be made using interviews to explain this result. Recommendations are extended to test the model, the instrument in other sectors, or whether this model can be suitable for other industrial sectors. Simply, the proposal is for testing the model in different scenarios and conditions to enhance the generalization of the theory.

## 6. Limitations

Data collection of closed questions can limit the respondents' perceptions of the pre-defined questions. While this approach is common in the deductive approach but adding open-end questions can provide insight for further inductive results, which may be useful for extra investigation. This study used closed-end questions, and there were no open-end questions. This study employed cross-sectional analysis approach, due to the evolution of industry and technology, future researchers should consider to use longitudinal data analysis to trace consumer behavior changes. The scope of this study is confined to the online shopping industry in Saudi Arabian. Due to such fact, the results are limited and only reflect a subset of online shopping companies and their customers.

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