

Is Online Store Atmosphere a Determinant of Online Store Revisit Intention?

Naglaa Mohamed Diaa

Assistant Professor of Business Administration

Department of Business Administration

Faculty of Commerce and Business Administration

Helwan University, Egypt

Abstract

Online purchase has increased dramatically over the previous ten years. The growing demand increased the competition among online stores and hence, the ability to attract visitors' attention leading to actual purchase become critical for business success. This research aims at analyzing the determinants of online store revisit intention namely online store atmosphere and its dimensions including virtual layout and design, virtual atmospherics, virtual theatrics, and virtual social presence. A thorough literature review was conducted whereby research hypotheses were developed. Structured questionnaires were distributed among a sample of 384 users of Souq.com electronically via Google forms. Statistical analysis was employed where appropriate statistical techniques were adopted to analyze the gathered data. Results revealed a significant positive effect between virtual layout and design and virtual social presence on online store revisit intention. Moreover, an insignificant effect was reported between virtual atmospherics

and virtual theatrics on online store revisit intention. Discussion of results and managerial implications were explored.

Keywords: Online store atmosphere – Revisit intention – Virtual layout – Virtual social presence

1. Introduction

Global business trends have experienced a substantial alteration since the advent of the internet. Consumers today have a variety of purchasing alternatives, with shopping online being one of the most prominent (Abrar, Shujaat, & Satti, 2017). Online shopping has allowed consumers to search, compare, and select products while sitting at home or at work, saving time and money compared to traditional shopping in physical storefronts (Abrar, Shujaat, & Satti, 2017). The trend has triggered many businesses to offer the same products at their online stores (Adnan, 2014). Since online shopping is one of the inevitable and persistently important sales channels today, e-retailers are striving to maintain customer interest and to avoid customers from purchasing other e-retailers product (Gökcek, Carikçioğlu, & Yuksel, 2019). Thus, it is not an easy task to maintain and retain consumers as research showed that customers are moving from one website to another. (Yun & Good, 2007; Bilgihal, 2016).

As competition intensifies, most e-retailers attempted to create a more appealing website atmosphere in order to attract customers (Loureiro, Koo, & Ribeiro, 2013; Disastra, Suryawardani, Widya, & Sastika, 2018). As a result, this attracted more research

interests in the online retail context (Kim, Kim, & Lennon, 2009). Attracting and retaining online customers, on the other hand, has never been more significant (Wang, Minor, & Wei, 2011). Successful e-retailers' strategies include attracting and maintaining customers on websites through improved website design (Vaiciukynaite & Gatautis, 2013).Undoubtedly the most vital feature of online business is its website.

Indeed, the website is the most important aspect of any online business; E- retailers try to make as much as an interface that not only represents their products and services in the best achievable manner but also satisfies the customers' perspective (Demangeot & Broderick, 2007).

With the continuous growth of online channels (Kim, Lee, & Lee, 2021). Customers are increasingly shopping online to buy goods or services, acquire product information, or simply explore for enjoyment. As a result, online shopping environments are becoming more important in the overall relationship between marketers and their customers. Moreover, they are frequently considered as the single source of cues for customers to form impressions and make decisions about their online retailers (Demangeot & Broderick, 2007).

The online store environment provides vital information about retailers, which visitors process and use to portray acceptance or avoidance behavior (Abrar, Shujaat, & Satti, 2017). Purchase outcomes and intent to revisit are heavily influenced by the

impression vendors convey their customers through the presentation of their website. Consequently, the online store environment is frequently the only source of cues that customers have when forming impressions and making decisions about their future connection with a retailer. For marketing planning purposes, it is vital to assess the influence of this online shopping environment on consumer response. Thus, e-tailers make efforts to provide an atmosphere like physical store through website that has positive impact on buyers perceived image of the store and their experience while shopping (Floh & Madlberger, 2013).

The purpose of this study is to analyze the determinants of online store revisit intentions by examining the online store atmosphere variables which include virtual layout and design, virtual atmosphere, virtual theatrics, and virtual social presence.

2. Literature review:

2.1 Online Store Environment

Kotler (1973-1974) was the first to define store atmosphere as “conscious designing of the space to create specific impacts on buyer” (Kotler, 1973, p. 50). A customer would love to spend time in places where they would feel satisfied with the suitable surrounding (Donovan , Rossiter, & Marcoolyn, 1994).According to Kotler (1973-1974), designing the suitable shopping atmosphere that will directly impact the emotional sensors of the buyer are atmospherics (Kotler, 1973).There are

four main atmospheric factors that comes under them the variables of each factor. These four atmospheric dimensions are:

- 1) Visual – Shape, Size, Brightness and Color.
- 2) Aural – Tempo, Volume and Pitch.
- 3) Olfactory – Scent and smell.
- 4) Tactile – Temperature, touch and Softness.

Many customers look for similarities in a store and its relatively online store, and this was a result of a research by (Vrechopoulos, M O’Keefe, Doukidis, & George , 2004). Nonetheless, the atmospheric qualities classifications used in traditional stores do not apply simply to the online environment (Eroglu, Machleit, & Davis, 2000). Vrechopoulos, M O’Keefe, Doukidis, & George (2004) matched the components of a traditional retail environment to the corresponding settings of a virtual retail environment by using Lewison (1994) framework. (Vrechopoulos, M O’Keefe, Doukidis, & George , 2004). Specifically, they introduced the Virtual Component Presentation Framework (VCPF), which consists of three components (1) Virtual Layout and Design. (2) Virtual Atmospheric. (3) Virtual Theatrics. (Manganari, George, & Verchopoulos, 2009)

The Online Store Environment Framework (OSEF) was developed by Manganari, George, and Verchopoulos (2009) with the goal of providing a full typology of the online interface. (Manganari, George, & Verchopoulos, 2009). They suggested that the online store environment is made up of four components:

(1) Virtual layout and design; (2) Virtual atmospherics; (3) Virtual theatrics; (4) Virtual social presence. Then additional elements were added

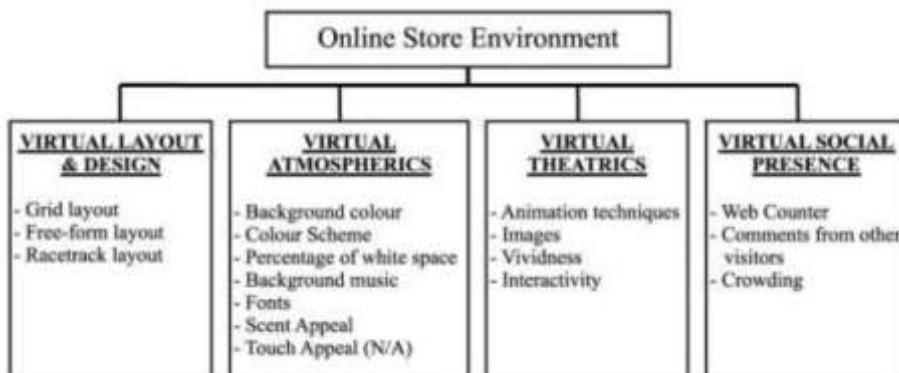


Figure (1) Online Store Environment Framework (OSEF)

Source : Manganari, E. E., Siomkos, G. J., & Vrechopoulos, A. P. (2009). Store atmosphere in web retailing. *European Journal of Marketing*.

That is, the framework developed by Vrechopoulos et al. (2004) was expanded by including the Virtual Social Presence component, because, while physical presence and interaction with other shoppers are not directly applicable via the Internet, it is indirectly indicated by the web counter and visitors' comments (Eroglu, Machleit, & Davis, 2001). As a result, the social presence component includes a web counter, visitor comments, and crowding. The online store environment includes four components: Virtual layout and design, virtual atmospherics,

virtual theatrics, and virtual social presence (Manganari, George, & Verchopoulos, 2009 ; Sia, et al., 2018)

2.1.1 Virtual layout and design

There are three major types of layout in virtual layout and design components: grid, free-form, and racetrack (Manganari, George, & Verchopoulos, 2009). According to Taylor, England, (2006) The website may include navigation elements such as bars, individual hyperlinks, image maps, drop-down menus/collapsible menus, and search options (Vaiciukynaite & Gatautis, 2013) logical menu hierarchies and organization of information all these functions are considered as navigational cues (Koo & Park, 2017).

The design of website navigation is a critical element to keep consumers on the website (Allagui & Lemoine, 2008) to help consumers easily find the desired information and for e-retailers, it is necessary to make their website simple or they may lose potential customers. Taylor, England (2006) demonstrated how website content ranking and grouping can ensure easy access to website content. Another research revealed that consumers' internal states and behavior are influenced by the perceived ease of use of the website layout (Manganari & Vrechopouls, 2011) Conversely, Navigation elements, such as convenient links to move from page to page, have an impact on consumer emotions and behavior (Gatautis & Vaiciukynaite, 2013). Baker (2001) reported that design is a dominant factor, particularly for the virtual store. Appearance and layout of the store may affect online shoppers perceived mental costs

substantially and henceforth their tendency to shop at those stores (Bojei & Shahaudin, 2005).

2.1.2 Virtual atmospherics

Virtual atmospherics are composed of background color, color scheme, white space proportion, background music, fonts, olfactory appeal, and other components.

Information content and structure. Prior studies have revealed that availability of information on websites denotes an improvement of the website atmosphere. Björk (2010) showed that the most essential website elements are information content; structure, and pictures based on the felt level of excitement, happiness, pleasure, satisfaction, relaxation, stimulation, arousal, attention, and charm. Furthermore, the study of Kim and Lennon (2012) revealed a significant effect of information and music on website which influences consumers' affective and cognitive responses, which in turn may influence consumer behavior (Gatautis & Vaiciukynaite, 2013).

Color is the most obvious element of the online store atmosphere on the website. The combination of attractive colors and appropriate colors on the website can attract the attention of consumers because they have many choices when applying to online stores. The effect of color on the website will affect the shoppers' response. Color can make consumers feel more relaxed (that is, with cool colors), and can inspire consumers more motivation to make a purchase. (Singh, 2006) Color

also affects the evaluation of websites, because consumers can recommend websites that other people have visited and serve as consumers' evaluation of the online store's personality. For example, when selling expensive products in an online store and then matching them with interesting background colors, respondents will indicate that their awareness of the products. In addition, the color scheme and the highlighting of the text view also affect the visual preference of allowing customers to read the content. Color, graphics, and design portray a significant role in enhancing the consumer's shopping experience (Wahyu, Achmad, & Zainul, 2017). Furthermore, Color Scheme is one of the most significant factors in web stores, and a retail store should have different variations in the color scheme throughout the website and options available (Manganari, George, & Verchopoulos, 2009). Color has a direct impact on consumer buying behavior. According to Wu & Yuan (2003), the contrast between the background and foreground colors, as well as the highlighting of the text, increased the consumer's reading performance and visual preferences (Wu & Yuan, 2003). It has also been proven that color also impacts the time perception, as colors could increase the sense of time and make it slower because of the calmness, which caused the download time seem to be diminished (Milliman, 1982).

2.1.3 Virtual theatrics

Virtual theatrics is the third element of the online environment. E-tailers are urged to employ images, graphics, animations, and icons to make the website appear like a theatre. It consists of images, animation techniques, interactivity, and vividness.

Interactivity refers to the degree to which users participate in adjusting the form and content of the real-time intermediate environment (Steuer, 1992). Lee, Fiore & Kim (2006) studied the image interactivity and revealed different levels of image interactivity technology: low image interactivity technology (IIT) level and high image interactivity technology (IIT) level. Low image interactivity level denotes that image can be opened to enlarged product pictures when clicked. High IIT level included a virtual model for testing on several product combinations. An empirical study confirmed prior findings that a higher level of IIT improves consumer responses to e-retailers (Lee, Fiore, & Kim, 2006).

Vividness refers to the richness of the media in an intermediate environment (Steuer, 1992). Coyle & Thorson (2001) reported that more vivid websites make more information available to their consumers through direct product contact (Fiore, Jin, & Kim, 2005) and lead to more positive attitudes towards the website than less vivid websites (Coyle & Thorson, 2001). The duration of total search and brand examination in a 3D interface is longer than in a 2D interface. 3D interfaces are extremely vivid, whereas 2D interfaces

are extremely interactive (Mazursky & Vinitzky, 2005). Along with these studies, (Fortin & Dholakia, 2005), believes that increasing the message's vividness through colors, graphics, and animations is more likely to produce a positive effect than comparable interaction levels (Fortin & Dholakia, 2005). The use of 3D rotation is also widely used to view all dimensions of the product and reduce perceived risk, and it also improves the website's interactivity (Dennis, Merrilees, Chanaka, & Wright, 2009).

Park, Stoel, & Lennon (2008) reported that product rotation (three-dimensional (3D) provides better experiences for potential website visitors (Park, Stoel, & Lennon, 2008). Moreover, Line, Shim & Lee (2011) revealed that, in comparison to 2D photographs, the 3D virtual model considerably reduces perceived risk about four apparel qualities: silhouette, color, texture, and fit (Gatautis & Vaiciukynaite, 2013).

2.1.4 Virtual social presence

Social presence has been defined by Hassanein & Head (2014) as "a sense of human warmth or sociability" (Hassanein & Head, 2014, p. 1) in the online shopping experience the virtual social presence is considered an important link between the website's visitors and the e-retailers. It is a replacement of the salesmen in the traditional store. Many websites use a live chat technique where staff can support the customers through chats in a real-time conversation, live customer supports, telephone, emails, and online forms (Elmorshidy, 2013). This component has recently

been enhanced by the addition of a virtual community, avatars, recommendations, and communication in recent studies. (Gatautis & Vaiciukynaite, 2013) Avatars are a crucial aspect of the website atmosphere, according to recent literature. Avatars on a website can serve as a source of virtual social presence (Mimoun, 2013) making the site more "socially warm" (Allagui & Lemoine, 2008), and influencing consumer behavior (Wang & Fodness, 2010; Gatautis & Vaiciukynaite, 2013).

Virtual Communities where consumers may interact with others who share similar preferences and interests, as well as social media profiles where they can share products (Koo & Park, 2017). Previous study has shown that active online communities can boost consumers' emotions, which in turn influence their purchasing decisions (Gatautis & Vaiciukynaite, 2013).

Additionally, the recommendation based on web-based systems or other website visitors is another extended element of virtual social presence. According to Lo, Lin (2006), Adaptive Web-based systems, are particularly useful for users who do not understand their actual needs and/or do not know how to identify them. When compared to non-personalized information sources (such as other consumers), recommendation systems should have a greater influence. Customer recommendation systems, in particular, can aid in identifying, predicting, and meeting customer needs (Alves & Soares, 2013).

Koo and Park (2017) believe that social cues have been overlooked in many studies that looked at online store websites. Also, the study found that both social and atmospheric cues are conveyed as a cause of pleasure and can attract consumers to online stores' websites. Atmospheric cues include visual, information and navigation cues. The study proved that Visual cues alone are insufficient to elicit pleasure in customers, and they must be supplemented with social cues (Koo & Park, 2017).

2.2 Revisit Intention

Revisit intention strengthens a long-term relationship between consumers and brands by promoting acquisition and maintenance of consumers (Kim, Lee, & Lee, 2021). According to Wu et al., (2018) " It is the intention of the visitors to repeat their visit to their destination" (Lamai, Thavorn, & Klongt, 2020, p. 32) The researcher defines revisit intention as the willingness of customer to visit the online store as a result of a pleasant experience. A request by one individual on a single visit to the website can be used to determine the intention to visit or revisit (Turban, Lee, King , & Chung, 2000). When a visitor stops submitting requests to a website for an extended period, the next outcome is a new visit (Turban, Lee, King , & Chung, 2000 ; Limbu, Wolf, & lunsford, 2012) Previous research on intention to revisit was limited up to the knowledge of the researcher but a few studies suggested revisit intentions could depend on loyalty to the consumer brand (Supphellen & Nysveen, 2001) and flow, which is the overall creation of a pleasurable experience (Hausman

& Siekpe, 2009). Similarly, visitors' brand evaluation remains a predictive sign of desire to return to the website. This means that the more attractive a product or brand under evaluation, the more likely it is that it will return to the website (Limbu, Wolf, & lunsford, 2012). Since the attitude toward the brand does not capture website related aspects such as the value of entertainment, utility, or pleasure, Karson, E.J. and Fisher, J.R explored the cognitive impacts of the website and the brand of the website sponsored by the company on the intention to revisit a website (Karson & Fisher, 2005). They found a marked effect of the attitude towards websites and the intention to revisit websites independently of brand awareness or evaluation. This indicates that website attributes can have a direct impact on website intentions as well as traditional approaches across trademark attitudes (Limbu, Wolf, & lunsford, 2012). Additionally, Lamai Thavorn & Klongt (2020) showed that the intention to revisit is the expansion of satisfaction, which influences the client's desire and intention for the next purchase, regardless of whether the client has a positive opinion toward the service provider.

The online revisit intention is a significant outcome for marketers, while the internet is less marked than shopping malls and shopping streets, the possibility that online shoppers will return to a website impulsively are fewer than the possibility to return to a shopping mall that they used to visit regularly.

Therefore, in the case of no intention to revisit, impulsive revisits can be limited thus reducing the chances that marketers will get more purchases from specific shoppers (Demangeot & Broderick, 2007).

3. Research methodology

This section includes research objectives, research hypotheses, measures and scale, data collection and sample.

3.1 Research objectives

The research seeks to achieve the following objectives:

- Identifying the key determinants of online store revisit intention
- Analyzing the effect of online store atmosphere and its sub-dimensions as determinants of online store revisit intention.
- Suggest how the online store atmosphere can be developed to maintain online store revisit intention.

3.2 Hypotheses Development and Conceptual Model

Revisit intention is the willingness of customers to visit the online store as a result of a pleasant experience. Up to the best knowledge of the researcher, there is a literature gap regarding the determinants of online store revisit intentions. Based on the extant literature findings, and the analyses of the previous research studies, the researcher suggests that the virtual layout and design, virtual atmospherics, virtual theatrics, and virtual social presence as determinants to online revisit intentions. Moreover, previous studies gave attention to repurchase intentions as part of customer satisfaction and engagements (Rajput & Gahfoor, 2020) the researcher foresees revisit

intentions as the mirror of reflecting the repurchase intentions. Furthermore, there is a scarcity in the studies that considered online store revisit intentions; It has been studied in many fields, such as the tourism industry (Li, 2014; Nordin, Shuib, Abdullah, & Kunasekaran, 2018 ;Pai , Kang , & Liu , 2021), food services (Chau , Wang, & Yan , 2013;Lamai, Thavorn, & Klongt, 2020; Rajput & Gahfoor, 2020) (Anggraeni, Sulisty, & Affandy, 2020) hospital services (Harimukti Wandebori & P. Pidada, 2017; Sia, et al., 2018; Kusumawardani & Damayanti, 2020), retail business (Ayuni, 2017) etc. Most of the studies considered other constructs in relation to e-store atmospheres such as consumer behavior (Hunter & Mukerji, 2011; Manganari & Vrechopouls, 2011) purchase intentions (Bojei & Shahaudin, 2005; Wu, Lee, Fu, & Wang, 2014; Koo & Park, 2017), and customer satisfaction (Abrar, Shujaat, & Satti, 2017). Some studies have identified a relationship between color and revisit intention (Ettis, 2017; Ndengane, Mason , & Mutize, 2021) however, understanding only color perspective is not sufficient in the online atmosphere context. Other factors must be considered to enhance understanding of the online store atmosphere. The present study will emphasize some critical factors of the online store atmosphere and revisit intentions. Significant research work exists pertaining to online purchase intention however there is not yet to have a comprehensive understanding when it comes to online revisit intention (Lazaris, Vrechopoulos,& Doukidis

,2017; Chu, Wu, Wu, & Chen, 2016). The study attempts to fill this gap in the literature by analyzing the determinants of online revisit intention in Egypt. The growing need for online purchases has increased dramatically especially following COVID 19. This research contributes to the existing literature by exploring newly adopted construct namely (revisit intentions) and its determinants. Accordingly, the research conceptual framework is developed as follows in the following figure:

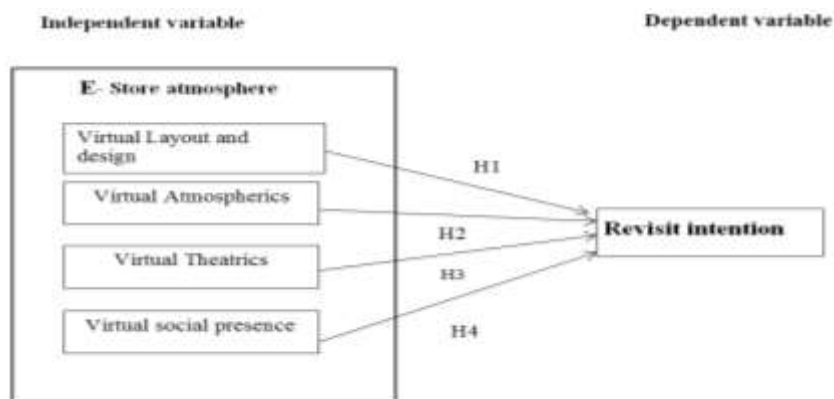


Figure (2) Conceptual Framework

Based on the above addressed findings and proposed model, the research hypotheses are developed as follows:

H 1: Virtual Layout and design is expected to be a determinant of online store revisit intention.

H2: Virtual Atmospheric is expected to be a determinant of online store revisit intention.

H3: Virtual Theatrics is expected to be a determinant of online store revisit intention.

H4: Virtual social presence is expected to be a determinant of online store revisit intention.

3.3 Study Sector and sample

Due to the growing importance of online purchase on the recent years, the researcher framed the selected domain around Souq.com. The reason for selecting this specific organization is its sound name, increased visibility among Egyptian customers, and is considered as a familiar brand name among the Egyptian community.

Souq.com is the most popular e-commerce site in the Middle East and North Africa. It has over 400000 products in many categories such as consumer electronics, fashion, health & beauty, household goods, books, and so on. It has tremendous numbers of customers on daily basis as per (www.souq.com, 2021). Accordingly, and due to the inability to reach the census; the researcher distributed the self-reported questionnaire via google form to a number of 384 respondents. All the questions were marked as required to assure that the entire collected questionnaire will be complete and valid for the statistical analysis.

3.4 Measurement and instruments

The researcher relied on sound and reliable published scales to measure the research constructs. The following table (1) shows the scales used for the purpose of the research.

Table (1) Scale Items

Construct	Scale items	Source	Sample item
Virtual Atmospheric	4 items	(Manganari et al.,2009	Souq.com uses appropriate background color.
Virtual Layout and design Virtual layout Navigation	11 items	(Koo et al., 2010)	Souq.com looks easy to navigate through. Souq.com provides clear layout.
Virtual social presence	2 items	(Manganari et al.,2009	Souq.com indicates the number of visitors.
Virtual Theatrics	4 items	(Manganari et al.,2009	Souq.com provides exciting animation techniques.
Revisit intention	5 items	(Demangeot & Broderick, 2007)	I am unlikely to use Souq.com again

Likert scale was adopted employing a range of 5 points (strongly agree, agree, neutral, disagree and strongly disagree). To comply with common method bias, most of the statements were positively stated to reduce respondents' apprehension. Few statements were reversed scored to ensure the accuracy and validity of the responses. Moreover, the participants were informed that their identity will remain confidential and that the collected data will only be used for the purpose of research.

The questionnaire included a question that stated if the participant is a souq.com customer or not. The link don't allow the customer who aren't users to proceed further in taking and following the survey. This was conducted to assure that all the respondents are actual customers of the selected online store.

4. RESULTS

4.1 Validity and Reliability

The internal consistency coefficient (Cronbach's Alpha) measures a scale's reliability. It measures the proportion of total variance shared by all items on the scale, which is presumed to correspond to the underlying construct being Cronbach's Alpha reflects that good reliability of questions as it ranged from (0.623 to 0.846) since they are all greater than 0.6.

Table (2): Reliability of questionnaire in each category

Variable	Cronbach's Alpha
Virtual Atmospheric	0.669
Virtual Layout and Design	0.797
Virtual Social Presence	0.623
Virtual Theatrics	0.786

4.2 Sample Characteristics

Table (3) provides descriptive statistics of the sample to give a general view of the demographic of respondents.

Table (3) Demographic characteristics of the respondents (N=384)

Demographic variables	Frequency	%
Age groups		
18-25	208	54.2
26-35	78	20.3
36-50	77	20.1
Above 50	21	5.5
Gender		
Female	225	58.6
Male	159	41.4

Demographic variables	Frequency	%
Average Monthly Income		
<5000 LE	163	42.4.
5000-10000 LE	127	33.1
10000+LE	94	24.5
Education		
Undergraduate	164	42.7
University graduate	124	32.3
postgraduate	96	25

4.4 Descriptive Statistics of variables of the study

Table (4): Descriptive statistics of the variables of the study

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Virtual Atmospherics	384	1.00	5.0	3.75	.599
Virtual Layout and Design	384	1.49	5.0	3.80	.573
Virtual Social Presence	384	1.5	5.0	3.45	.825
Virtual Theatrics	384	1.25	5.0	3.57	.749
Revisit Intention	384	1.6	5.0	3.77	.587

From the above table (4) it is concluded that the average of all variables range from 3.45 to 3.86 which mean that respondents tend to agree to most of the statement that measure these variables. The variable with highest agreement is Virtual Layout and design, while the variable with least agreement is Virtual social presence. Also, the homogeneous variable (the variable with least variation) is Virtual Layout and Design with S.D. = 0.573, while the variable with highest variability is Virtual Social Presence 0.825.

4.5 Correlation Analysis

The Correlation analysis of the variables of the study was conducted. In table (5) it is clear with 95% confidence level that there is a significant moderate positive correlation between Revisit intention and Virtual Layout and design since the value of Pearson correlation coefficient is 0.447 (positive and between 0.3 and 0.7) and as the p-value associated with it is less than 5%. For Virtual Atmospheric, there is a weak positive correlation between Revisit intention and Virtual Atmospherics since the value of Pearson correlation coefficient is 0.272 (positive and between 0 and 0.3) and as the p-value associated with it is less than 5%. There is also a relatively weak positive correlation between Revisit intention and Virtual theatrics since the value of Pearson correlation coefficient is 0.264 (positive and between 0 and 0.3) and as the p-value associated with it is less than 5%. It also shows that there is no significant correlation between Revisit intention and Virtual Social Presence since the p-value is greater than 5%.

Table (5): Pearson correlation between the variables of the study

		Revisit Intention	Virtual Layout and Design	Virtual Atmospherics	Virtual Social Presence	Virtual Theatrics
Revisit Intention	Pearson Correlation	1	.446**	.272**	-.007	.264**
	Sig. (2-tailed)		.000	.000	.896	.000
	N	384	384	384	384	384

4.6 Regression analysis

Multiple regression analysis was applied to check the extent to which dependent variable (online revisit intention) is influenced by the independent variables (E- store atmosphere). A stepwise multiple regression test was applied to categorize the independent variables according to their significance effect on the dependent variable. The following model was estimated:

Revisit intention

$$= \beta_0 + \beta_1 * \text{Virtual Layout and design} + \beta_2 * \text{Virtual Atmosphericics} + \beta_3 * \text{Virtual theatrics} + \beta_4 * \text{Virtual social presence} + \varepsilon$$

Where

β_0 : is the constant term

β_i : is the regression coefficient for independent variable I

ε : is the regression residual term

The normality was checked before estimating the regression model.

Table (6): Normality test of the dependent variable

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Revisit Intention	.133	384	.000	.967	384	.000

The tests results, shown in table (6), revealed that the Revisit intentions is not normally distributed because the significance value of this variable is below 0.05. However, since the valid collected sample is 384 responses hence, according to (Serkan, 2003), a research study sample size which is above 30 to 50 participants can

run parametric tests especially in multivariate research. Moreover, running a parametric test when the data variables are normally distributed can be violated if the study's sample size is large or moderate and results can still reflect precision and accuracy (Serkan, 2003). Therefore, the researcher uses stepwise multiple Linear Regression analysis to test the hypotheses in the study.

4.6.1 Regression Model Summary

As shown in Table (7), using a stepwise multiple regression on the collected sample resulted in the following:

- Only two predictors have significant effect on Revisit intentions which are (Virtual Layout and Design and Virtual social presence) and the other two predictors (Virtual Atmospherics and Virtual Theatrics) have no significant effect on revisit intentions.
- Adjusted R2 value of 0.225 indicates that the proposed model could infer 22.5% of the variation of the revisit intentions indicator.
- From the value of Durbin Watson it is clear that there is no serial autocorrelation between residuals, as the value is near to 2. No serial auto correlation is one of the assumptions of the regression model.

Table (7): summary of the stepwise regression model

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.478	.229	.225	.5172	1.779

4.6.2 ANOVA Test Results

The following tables summarize coefficients of the independent variables

- Virtual Layout and design has significant impact on Revisit intentions, this with confident 95%. The p value is 0.000 (less than 0.05) and β coefficient equals 0.523 Thus, there is a significant positive effect of virtual layout and design on Revisit intentions, and this support hypothesis (1).
- Virtual Social presence has significant impact on Revisit intentions, this with confident 95%. The p value is 0.000 (less than 0.05) and β coefficient equals 0.131 Thus, there is a significant Positive effect of virtual social presence on Revisit intentions, and this support hypothesis (4).
- VIF for the independent variables are less than 10 this mean that there is no multicollinearity problem.

Table (8) The Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.228	.185		12.023	.000		
Virtual Layout and Design	.523	.049	.510	10.634	.000	.880	1.137
Virtual Social Presence	.131	.034	.184	3.827	.000	.797	1.137

Excluded Variables:

The following table includes the insignificant variables excluded from the model:

- Virtual atmospherics has insignificant impact on Revisit intentions, this with confident 95%. The p value is 0.919 (greater than 0.05) and this is against hypothesis 2.
- Virtual theatrics has insignificant impact on Revisit intentions, this with confident 95%. The p value is 0.455 (greater than 0.05) and this is against hypothesis 3.

Table (9) Excluded variables

	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
					Tolerance	VIF	Minimum Tolerance
Virtual Atmospherics	.006	.102	.919	.005	.498	2.007	.498
Virtual Theatrics	.050	.748	.455	.038	.457	2.190	.457

To be sure that model results are reliable we must check the Linearity assumption, from the graph below it is clear that points are random then linearity satisfied.

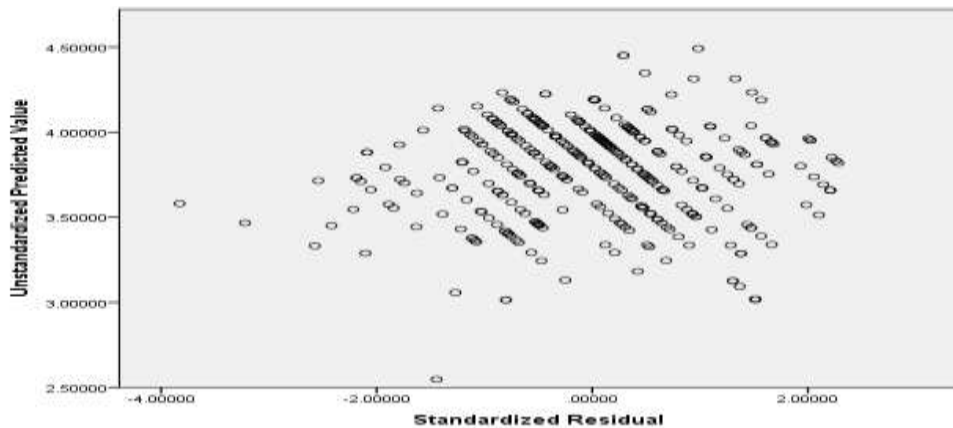


Figure (3) Scatter Diagram for the Standardized residual and unstandardized predicted value

According to the previous statistical analysis results, the following is concluded:

- *Accept that* Virtual Layout and design is a determinant of online store revisit intentions.
- *Reject that* Virtual Atmospheric is a determinant of online store revisit intention
- *Reject that* Virtual Theatrics is a determinant of online store revisit intention
- *Accept that* Virtual social presence is a determinant of online store revisit intention

5. Discussion

It is vital to develop a good e-store atmosphere to generate a pleasant experience for customers to revisit the online store. The present research aims to analyze the determinants of

online store revisit intention. The study has identified a significant and positive relationship between virtual layout and design, virtual social presence, and online store revisit intention thus filling the gap in literature since prior studies have primarily focused on consumer purchase intention only. Although not all the variables of the online store atmosphere have a significant effect on online store revisit intention.

The first hypothesis is supported, and the results revealed that virtual layout and design affect the online store revisit intention. This result may be explained by the fact that consumers are significantly impacted by what they see on a website, by the layout of the store, and by the presentation of the products for sale (Levy & Wetz, 2012) as well as the arrangement of product information content and the images on the website. According to a study conducted by Allagui & Lemoine (2008), online store environment influences the visitor's purchase intention indirectly through emotions, providing a sense of comfort for visitors to spend time in the online store. Similarly, Souq.com's online store atmosphere is designed to inspire visitors to make a purchase and revisit the store. As a virtual store is primarily a visual experience; a good design can lead to website preferences and drive sales, hence store revisit intention. The present finding supports previous studies (Abrar, Shujaat, & Satti, 2017) which showed that there is a relationship between website design and repurchase intention and it is in line with Wu, Wann-Yih, et al.

(2014) who examined the effects of online store design on consumers' purchase intention and the results showed that consumers' emotions and attitudes toward the website are aroused by a good layout combined with a pleasant and happy environment, boosting the possibility of purchase.

In contrast, with what was expected, no significant evidence was found that virtual atmospherics will have an effect on online store revisit intentions (second hypothesis). In addition, no effect was found of virtual theatrics on online store revisit intentions (third hypothesis). It can be interpreted as most of the websites and online retailers focused on virtual atmospherics: color, background music, fonts, and aesthetics design in order to attract and retain customers. Virtual atmospherics and virtual theatrics in this respect can be perceived to be granted, as nowadays they are commonly used by e-retailers hence will not affect their intention to revisit the store. The fact that this study's findings contradict those of earlier studies could be explained that the study sector is Souq.com, which is more targeted toward the site's functional aspects like product information and user reviews. As a result, visual cues in Souq.Com may be less significant to customers than other online store atmosphere variables. These results differ from Manganari, Vrechopoulos, and Siomkos (2009), who revealed that colors, visuals, and layouts in an online store are particularly crucial to enhance the consumer purchasing experience; the findings are also contrarily

to those of (Ettis, 2017) who linked color to revisit and Hall and Hanna's (2004) research on the impact of web page text-background color combinations on reading, retention, aesthetics, and behavioral intention (Hall & Hana, 2004). However, they are consistent with those of previous research of (Lorenzo, Constantinides, & Alarcon Del Amo, 2013) who found that a website featured by high aesthetics formality is not excellent for website design and that quality perceptions and buying intention are not affected by the first impression of the website.

In regard to the fourth hypothesis, the results highlighted the effect of virtual social presence on store revisit intention, in addition to the effect of virtual layout and design. This could be explained because, in the context of online shopping, social presence is critical while shopping is a social activity in which customers are aided by the opinions and feedback of employees, family, and friends on a variety of products and brands (Evans, Christiansen, & Gill, 1996). Because little interaction is available in such a virtual setting, the chance of obtaining this assistance decreases when purchasing online. Providing ways for genuine engagement with the retailer online may help to increase a sense of human warmth and friendliness (Hassanein & Head, 2007) so increasing the perceived social presence and, as a result, the trust in an online store (Hassanein & Head, 2007) which in turn enhance store revisit intention. The present findings seem to be consistent with other research (Wahyu,

Achmad, & Zainul, 2017) which found virtual social presence positively affects buying decision process.

Additionally, from a managerial perspective, these results suggest that E- retailers should focus on online store atmosphere as a determinant for online store revisit intention. By improving the online shopping experience by creating easy-to-use and navigate websites, particularly the virtual store layout, consumers' need for speed, comfort, and ease of use should be met.

6. Managerial implications

Besides the theoretical implications and based on the research findings, the following managerial implications are suggested:

First, careful consideration for the layout and navigation of the virtual store. Design should be eye-catching close to the real-life store to create a sense of live interaction and foster customer engagement. As well as the navigation design of the e-store is significant for online store revisit intention; an easy-to-use and navigate website should satisfy the consumers 'need for speed, comfort, and ease of use.

Second, marketers should conduct customer surveys to reflect their preferences for virtual atmospherics. Such atmospherics may vary from one country to another based on customer taste and general rituals as well as cultural trends.

Third, marketers should consider carefully the type of product when designing virtual theatrics. Customers who shop online will

perceive animation techniques, images, vividness, and interactivity differently depending on the type of product.

Fourth, age and gender are of significant consideration when it comes to virtual atmosphere and theatrics. Marketers should design the virtual stores taking into consideration the target age group and gender as different customer segments prefer different characteristics in terms of layout and design, virtual atmospherics, and virtual theatrics.

Fifth, customers have social identities prior to being virtual users. The sense of human interaction remains of key concern and of relative importance when purchasing any type of product. People seek opinions and guidance from others. Marketers should provide supporting personnel to create a sense of social connectivity with customers. And provide functions that enrich social features and social interactivity using technology such as the use of artificial intelligence (AI).

Sixth, testing the design of the virtual store among selected focus groups prior to the actual launch of the store could provide a better insight on the functionality of virtual Layout, atmospherics, virtual theatrics and social cues that in return supports in-store revisit intention.

Finally, seeking ongoing feedback from actual customers about the e-store and requesting suggestions for improvement will create a sense of belonging to the virtual store and accordingly improve the shopping experience hence the in-store revisit intention.

7. Future research and limitations

The research was subject to certain limitations. First, the survey was collected from Egyptian consumers with one specific online store, Souq.com. Therefore, Generalization of the results become inapplicable. Future studies can replicate this study in a variety of settings to investigate possible differences in the importance of critical online store atmospheric cues in different settings. Moreover, it is recommended that future studies should consider different array of products as well as other determinants of online store revisit intention. Furthermore, future research might investigate the use of technology such as Artificial intelligence and augmented reality on the store revisit intention.

8. Conclusion

The main objective was to analyze the determinants of Egyptian online consumers' revisit intentions. From a diversity of factors that were considered to be prominent determinants for revisit intention, only two elements were deemed to be more significant than the rest when it came to online store revisit intention. The key drivers of online revisit intention were found to be virtual layout and design, as well as virtual social presence. Virtual atmospheric and virtual theatrics do not have significant effects on online store revisit intention. Accordingly, these findings are critical for online retailers to help them encourage customers to revisit their websites. To increase consumer purchase and revisit intention, online businesses need obviously improve the visual design of their websites, including layout and atmosphere.

References

- Abrar, k., Shujaat, S., & Satti, Z. W. (2017). Impact of Online Store Atmosphere: Customized Information and customer Satisfaction on Online Repurchase Intention. *GMJACS*, 7(2), 22-34.
- Adnan, H. (2014). An analysis of the factors affecting online purchasing behavior of Pakistani consumers. *International Journal of Marketing Studies*, 6(5), 133-148.
- Allagui, A., & Lemoine, J. f. (2008). Web Interface and Consumers Buying Intention in E-Tailing: Results From an Online Experiment. *E - European Advances in Consumer Research*, 8, 24-30.
- Alves, A., & Soares, A. (2013, December). Evaluationg the use of Avatars in E- Commerce. *Revisita Portoguze de Marketing* , 1-17.
- Anggraeni, A., Sulisty, L. I., & Affandy, N. (2020, July-September). The Antecedents of Satisfaction and Revisit Intention for Full-Service Restaurants: An Empirical Study of the Food and Beverage Industry in Jakarta. *International Journal of Asian Business and Information Management*, 11(3), 101-118.
- Ayuni, R. F. (2017, June). Forecasting of Satisfaction And Revisit Intention of Indonesia Shoppers In Shopping Malls. *Jurnal Ilmiah Manajemen*, VII(2), 167-182.
- Bilgihal, A. (2016). Gen Y customer loyalty in online shopping: An integrated model of trust, user experience and branding. *Computers in Human Behavior*, 61, 103-113.
- Bojei, J., & Shahaudin, S. F. (2005). An Analysis of the Online Store Atmosphere: Influence on Consumer. *Proceedings of International Conference on E- Commerce*, (pp. 181-187).
- Coyle, J. R., & Thorson, E. (2001). The effects of progressive levels of interactivity and vividness in web marketing websites. *Journal of Advertising*, 30(3), 65-77.

- Chau , M., Wang, J., & Yan , X. (2013). Customer revisit intention to restaurants: Evidence from online reviews. *Inf syst front.*
- Chu, S. Y., Wu, C. M., Wu, K. I. F., & Chen, Y. F. (2016). Does an established offline store drive online purchase intention?. *International Journal of Business and Information*, 11(4), 432.
- Demangeot, C., & Broderick, A. J. (2007). Conceptualising consumer behaviour in online shopping environments. *International Journal of Retail & Distribution Management*, 35(11), 878-894.
- Dennis , C., Merrilees , B., Chanaka, J., & Wright, L. T. (2009). E-consumer behaviour. *European Journal of Marketing*, 43(9/10), 1121-1139.
- Disastra, G. M., Suryawardani, B., Widya , & Sastika, W. (2018). Website Atmosphere, Perceived Flow and Its Impact on Purchase Intention. *Advances in Economics, Business and Management Research*, 65.
- Donovan , R., Rossiter, J., & Marcoolyn, G. (1994). Store atmosphere and purchasing behavior. *Journal of Retailing*, 70(3), 283–294.
- Elmorshidy, A. (2013, March /April). Applying The Technology Acceptance And Service Quality Models To Live Customer Support Chat For E-Commerce Websites. *The Journal of Applied Business Research*, 589-596.
- Eroglu, S. A., Machleit, K. A., & Davis , L. M. (2001). "Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business Research*, 54(2), 177-184.
- Eroglu, S., Machleit, k., & Davis, L. (2000). Online retail atmospherics: empirical test of a cue typology", in Evans, J.R. and Berman, B. (Eds), Retailing. *Retailing* , pp. 144-150.
- Ettis, S. a. (2017). Examining the relationship between online store atmospheric color, flow experience and customer behavior. *Journal of Retailing and Consumer Behavior*, 37, 43-55.

- Evans, K. R., Christiansen, T., & Gill, J. D. (1996, June). The Impact of Social Influence and Role Expectations on Shopping Center Patronage Intentions. *Journal of the Academy of Marketing Science*, 24(3), 208-218.
- Fiore, A. m., Jin, H. J., & Kim, J. (2005, August). For Fun and Profit: Image Interactivity, Hedonic Value, and Responses Towards an Online Store. *Psychology and Marketing*, 22(8), 669-694.
- Floh, A., & Madlberger, M. (2013). The Role of Atmospheric cues in online impulsive buying behavior. *Electronic Commerce Research and Applications*, 12, 425-439.
- Fortin, D., & Dholakia, R. (2005). Interactivity and vividness effects on social presence and involvement with a web-based advertisement. *Journal of Business Research*, 58(3), 387-396.
- Gatautis, R., & Vaiciukynaite, E. (2013). Website Atmosphere: Towards Revisited Taxonomy of Website Elements. *Journal of Economics and Management* , 18(3), 537-544.
- Gökcek, H. A., Carikçioğlu, P. S., & Yuksel, C. A. (2019, November). the effect of consumer decision Making styles on cognitive dissonance along with the role of the perceived risk as a moderator in online shopping. *Journal of Academic research in Economics*(1), 118-129.
- Hall, R. H., & Hana, P. (2004). The Impact of Web Page Text-Background Colour Combinations on Readability, Retention, Aesthetics And Behavioural Intention. *Behavior and Information Technology*, 23(3), 183-195.
- Harimukti Wandebori, & P. Pidada, A. (2017, December). Revisit Intention to Hospital: Factors Unveiled From A Case Study of Balimed Hospital. *Jurnal Manajemen Teori dan Terapan*, 10(3), 205-217.
- Hassanein, K., & Head, M. (2007). Manipulating Social Presence through the Web Interface and its Impact on Attitude towards Online

- Shopping. 65(8). *International Journal of Human-Computer Studies*, 65(8), 689-708.
- Hassanein, K., & Head, M. (2014). Social Presence For Online Shopping Success: A Review And Agenda For Future Research. *WEI International Academic Conference Proceeding*. Budapest: West East Institute.
- Hausman, A., & Siekpe, J. (2009). The Effect of web interface features on consumer online purchase intentions. *Journal of Business Research*, 62, 5-13.
- Hunter , R., & Mukerji, B. (2011, May). The Role of Atmospherics in Influencing Consumer Behavior in the Online Environment. *International journal of buisness and scosil science*, 2(9), 118-125.
- Karson, E. a. (2005). Predicting intentions to return to the website: extending the dual mediation hypothesis. *Journal of Interactive Marketing*, 19(3), 2-14.
- Kim, J. H., Kim, M., & Lennon, S. J. (2009). Effects of web site atmospherics on consumer responses: music and product presentation. *Direct Marketing: An International Journal*, 3(1), 4-19.
- Kim, S., Lee, Y., & Lee, J. (2021). The Effects of Consumers'in-store Technology Experience on Percieved Interactivity , Retail Brand commitmentm and revisit Intention in Korean Beauty store. *International Journal of Human Computer Interaction*, 37(6), 534-546.
- Koo, W., & Park, H. (2017). Critical Atmospheric cues in Designing Online Stores : The case of Amazon .com. *International Journal of Marketing Studies*, 9(1), 37-45.
- Kotler, P. (1973). Atmospherics as a marketing tool. *Journal of Retailing*, 49(4), 48-64.
- Kusumawardani, K., & Damayanti, A. (2020). Predicting the Revisit Intention at Private Hospitals Mediated by Perceived Service Quality

- and Satisfaction. *The 1st International Congress on Regional Economic Development, Information Technology, and Sustainable Business*, (pp. 106-122).
- Lamai, G. H., Thavorn, J., & Klongt, W. (2020, 12 18). Critical Factors Influencing Revisit Intention of large Restaurant Chain in Myanmar. *Journal of Distribution Science*, 31-43.
- Lazaris, C., Vrechopoulos, A., & Doukidis, G. I. (2017). Physical web atmospherics: utilising internet of things to conceptualise store atmosphere in omnichannel retailing. *International Journal of Technology Marketing*, 12(4), 389-416.
- Lee, , H. H., Fiore, A. M., & Kim, J. (2006). The role of the technology acceptance model in explaining effects of image interactivity technology on consumer responses. *International Journal of Retail & Distribution Management*,, 34(8), 621-644.
- Levy, M., & Wetz, B. (2012). *Retailing Management*. New York: Mc Graw- Hill.
- Lewis, D.M. (1994). *Retailing. 5th ed., Macmillan College Publishing, New York, NY*.
- Li, H. (2014). Analysis of Formation Mechanism of Revisit Intention: Data From East China. *International Conference of global Economy, Commerce and services* (pp. 246-252). Atlantis Oress.
- Limbu, Y. B., Wolf, M., & lunsford, D. (2012). Percieved Ethics of online retailers and consumer beahavioral intentions. *journal of research in interactive Marketing*.
- Lorenzo, C., Constantinides, E., & Alarcon Del Amo, M. D. (2013, February). Web Aesthetics Effects on User Decisions : The Impact of Exposure Length on Website Quality Perceptions and Buying Intentions. *Journal of internet commerce*, 12(1), 76-105.
- Loureiro, S. M., Koo , D. M., & Ribeiro, L. (2013). Effects of atmospherics on emotions and intention with respect to involvement in different

- shopping environments. *Journal of Global Scholars of Marketing Science*, 23(4), 435-459.
- Manganari, E., & Vrechopoulos, A. (2011). Virtual Store Layout Effects on consumer Behaviour applying an environmental psychology approach in the online travel industry. *Internet Research*, 21(3), 326-346.
- Manganari, E., George, S., & Verchopoulos, A. (2009). Store atmosphere in web retailing. *European Journal of Marketing*, 43(9), 1140–1153.
- Mazursky, D., & Vinitzky, G. (2005). Modifying consumer search processes in enhanced on-line interfaces. *Journal of Business Research*, 58(10), 1299-1309.
- Milliman, R. E. (1982). Using background music to affect the behavior of supermarket shoppers. *Journal of Marketing*, 46(3), 86–91.
- Mimoun, M. S. (2013). ACA as E-Atmospherics: Is There an “Animation Predisposition” Effect?. *International Business Research*, 6(6), 45.
- Ndengane, R. M., Mason, R. B., & Mutize, M. (2021). The Influence Of Store Atmospherics on Customers’ satisfaction At Selected South African Retail Outlets. *Innovative Marketing*, 17(1) 26-39.
- Nordin, N., Shuib, A., Abdullah, N., & Kunasekaran, P. (2018). Determinants of Revisit Intention in Ecotourism at Tasik Kenyar Malisia. *International Journal of Current Research*, 10(2), 76688-76695.
- Pai, C., Kang, S., & Liu, Y. (2021). An Examination of Revisit Intention Based on Perceived Smart Tourism Technology Experience. *sustainability*, 13(1007).
- Park, J., Stoel, L., & Lennon, S. J. (2008). Cognitive, affective and conative responses to visual simulation: The effects of rotation in online product presentation. *Journal of Consumer Behaviour*, 7(1), 72-87.
- Rajput, A., & Gahfoor, R. Z. (2020). Satisfaction and revisit intentions at fast food restaurants. *Future Business Journal*, 6(1), 1-12.

- Raney, A. A. (2003). At the movies on the web: an investigation of the effects of entertaining and interactive web content on site and brand evaluations. *Journal of Interactive Marketing*, 17(4), 38-53.
- Serkan, U. (2003). *Research Methods for Business: A Skill-Building Approach*. (Vol. 4th Edition). New York: John Wiley & Sons.
- Sia, C. Y., Lai, K. P., Noor, M. N., Ismail, H. B., Tong, D. Y., & Yuen, Y. Y. (2018, September). The Influence of Hospital Service Credibility on Patients' Revisit Intention. *The Turkish Online Journal of Design, Art and Communication - TOJDAC*, 1315-1321.
- Singh, S. (2006). The Impact of Color on Marketing. *Management Decision*, 44(6), 783-789.
- Steuer, J. (1992). Defining virtual reality: dimensions determining telepresence. *Journal of Communication*, 42(4), 73-93.
- Supphellen, M., & Nysveen, H. (2001). Drivers of intention to revisit the websites of well-known companies. *International Journal of Market Research*, 43(3), 341-52.
- Turban, E., Lee, J., King, D. and Chung, H.M. (2000). *Electronic Commerce: A Managerial Perspective*, Prentice-Hall, Upper Saddle River, NJ.
- Vaiciukynaite, E., & Gatautis, R. (2013). Website Atmosphere: Towards Revisited Taxonomy Of Website Elements. *Economics and Management*, 18(3),537-544.
- Vrechopoulos, A. P., M O'Keefe, R., Doukidis, G., & George , J. (2004). Virtual store layout: an experimental comparison in the context of grocery retail. *Journal of retailing*, 80(1), 13-22.
- Wahyu, W. D., Achmad, F., & Zainul, A. (2017). The Effect of Online Store Atmosphere towards Emotion and its impact on purchase decision. *RJOAS*, 64(4), 4-18.

- Wang, L. C., & Fodness, D. (2010). Can avatars enhance consumer trust and emotion in online retail sales? *International Journal of Electronic Marketing and Retailing*, 3(4), 341-362.
- Wang, Y. J., Minor, M. S., & Wei, J. (2011). Aesthetics and the online shopping environment: Understanding consumer responses. *Journal of Retailing*, 87(1), 46-58.
- Wu, J.-H., & Yuan, Y. (2003, August). Improving searching and reading performance: the effect of highlighting and text color coding Author links open overlay panel. *Information and Management*, 40(7), 617-637.
- Wu, W. Y., Lee, C. L., Fu, S. C., & Wang, C. H. (2014). How can Online Store Layout design and atmosphere influence consumer shopping intention on a website. *International Journal of Retail and Distribution Management*, 42(1), 4-24.
- Yun, Z., & Good, L. (2007). Developing customer loyalty from e-tail store image attributes. *Managing Service Quality: An International Journal*, 17(1), 4-22.
- (2021, May 18). Retrieved from www.souq.com: <https://egypt.souq.com/eg-ar/souq-now-amazon.php?ref=SQEG-WEB-GT301>