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Effect of E-Servicescape on Emotional Response and Revisit Intention in an Internet Shopping Mall

Zeyu Li [1], Ana Belén Tulcanaza-Prieto [2] and Chang Won Lee [3,*]

[1] KDB Beijing Branch, Beijing 100025, China; lovermo777@163.com
[2] Grupo de Investigación Lugar Medio Sociedad (LMS), Escuela de Negocios, Universidad de Las Américas (UDLA), Vía a Nayón, Quito 170124, Ecuador; ana.tulcanaza@udla.edu.ec
[3] School of Business, Hanyang University, Seoul 04763, Republic of Korea
* Correspondence: leecw@hanyang.ac.kr

Abstract: This study aims to explore the effect of the e-servicescape on the emotional response and revisit intention of customers in an internet shopping mall (ISM) environment. The literature was reviewed on the e-servicescape, emotional response, and revisit intention in an internet shopping mall. A relevant model and hypothesis were established. For the empirical study, a survey form was developed and conducted on 150 customers with experience using a certain ISM. Reliability analysis and confirmatory factor analysis were performed using SPSS 27.0 and Amos 26.0 software, and the causal relationships were identified through structural equation modeling (SEM). Study results and implications were discussed and suggested. Among the factors of the e-servicescape in an ISM, aesthetics and surrounding elements did not have a significant effect on emotional responses, and spatial functionality showed a positive effect on emotional responses. Aesthetics had a weak negative effect on revisit intention. Surrounding elements and spatial functionality had no significant effect on revisit intention. The emotional response had a positive effect on revisit intention. This study identified the importance of the e-servicescape in the ISM environment and especially emphasized the importance of spatial functionality on the emotional response and aesthetics on revisit intention. This study presented several suggestions and implications to corporate managers regarding the development and management of the future ISM environment and other similar business settings.

Keywords: e-servicescape; emotional response; revisit intention; internet shopping mall

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1. Introduction

Recent internet shopping malls (ISMs) in general have intense pressures to sustain in a digital environment of a rapidly changing customer's emotional response and revisit intention, along with increasing financial pressures and utilizing efficient operational resources. Such internet shopping malls seeking a proper e-servicescape address the internet for the growing requirements for effective strategic planning for e-servicescape development. When customers purchase products and services in an ISM environment rather than an onsite shopping mall environment, the proper design of an e-servicescape in an ISM has become very important because customers obtain product information from ISMs only through limited text messages and videos [1,2].

While the potential for ISM companies to develop in the market increases, competition between companies may also become fiercer. Therefore, there is a point where ISM companies should pay attention to how they can secure their competitiveness and satisfy their customers, resulting in more revisits to their ISMs. In addition, the source of profit for all ISM companies is the customers, and if an ISM company wants to grow well, the first thing to consider is the customer's emotional response and revisit intention. Also, managers have faced how to better satisfy customer demands and maintain long-term customer relationships through identifying the causal relationship between the emotional response

and revisit intention [3–6]. However, most ISM companies tend to focus only on price and technological innovation to survive in a highly competitive market [7,8]. If ISM companies want to secure and retain customers, establishing a strategy based on price alone may not work in this marketplace. They can use the e-servicescapes that can influence the emotional response of customers and establish ways to differentiate themselves from other companies. Thus, it is necessary to recognize the relationship among the e-servicescape, the emotional response, and revisit intention in ISMs. Recent studies on the e-servicescape have explored booking intention [9], stimulus and response [10], shopping intention [11], shopper-based salient attributes [12], trust and purchase intention [13], and satisfaction [14]. These studies have explored the relationships between the e-servicescape and revisit intention, rather than between the e-servicescape and emotional responses, and between the emotional responses and revisit intention in an ISM context.

The purpose of this paper is to explore the effect of the e-servicescape on emotional responses and the revisit intention of customers with shopping experience in a certain ISM. Specifically, this study focuses on two aspects as follows: first, the effect of the e-servicescape of ISMs on the emotional response and revisit intention; second, the effect of the emotional response on revisit intention. The questions of this study to achieve the above study purpose were set as follows. Research question 1 is what effect can the e-servicescape have on emotional responses in a certain ISM? Research question 2 is what effect can the e-servicescape have on revisit intention in a certain ISM? Research question 3 is how can emotional response affect revisit intention in a certain ISM?

When consumers purchase products and services in an ISM environment, they obtain product information only through text messages, videos, and other relevant ways provided by the ISM. Therefore, the design of the site's e-servicescape is very important. It is very important to study the effect of the e-servicescape on the emotional response and revisit intention. While ISM companies' development opportunities in the market are increasing, competition among these companies may also become fiercer. Therefore, there is a point where ISM companies should pay attention to how they can secure their competitiveness. In addition, the source of profit for all ISM companies is their customers, and if these companies want to grow well, the first thing to consider is the customer response, perspective and intention, and what to do to better satisfy customer needs and maintain long-term customer relationships. Through this study's findings, this study will provide business decision-makers and corporate managers with important implications and insights for establishing e-servicescape planning strategies in the ISM environment and other similar business settings.

This paper is organized as follows. Section 1 introduces the current issues and study motivation in ISMs and presents the purpose of this study. Section 2 reviews the literature on the e-servicescape, emotional response, revisit intention, ISM, and pertinent topics. Section 3 provides research methodologies including hypotheses, the study model, and the operational definition of measures. Section 4 describes the study results with demographical analysis, reliability and validity analysis, and hypotheses tests. Section 5 concludes with a study summary, implications, limitations, and future directions.

2. Literature Review

2.1. E-Servicescape

In the digital era, the concept of an electronic servicescape, or e-servicescape, has risen due to the online environment. An e-servicescape refers to the digital atmosphere and virtual elements that influence (1) the customer's perception, (2) the customer's experience, and (3) the customer's purchase behavior. All these factors are influenced by theories of environmental psychology, consumption, and management. Bitner [15] and Ardiansyahmiraja et al. [16] mentioned that environmental psychology is affected by physical aspects, human behavior, knowledge, and experiences. This concept was improved using the actual context and virtuality, extending to the online environment, tendency of consumption, and customer preferences.

The e-servicescape involves several dimensions [17] such as (1) visual elements that influence user perceptions and engage their consumption and loyalty, which include website layout, aesthetic designs, color schemes, and imagery [18]; (2) functional elements that include a user-friendly interface and intuitive navigation, which also promote user satisfaction and seamless interaction through the easy website navigation, functionality, responsiveness, and usability [19]; (3) ambient elements to evoke emotions and past feelings in a virtual atmosphere, which enhance the overall user experience using background music, sounds, animations, and other sensory stimuli [20]; and (4) social elements linked to user reviewers, ratings, testimonials, feedbacks, and social media interaction to develop trust, credibility, loyalty, and social presence in the e-servicescape [21,22].

Basu and Mandal [23] mentioned that an e-servicescape influences positively on customer behavior given that it increases perceived service quality, degree of satisfaction, purchase intention (repeat usage and loyalty), and a brand's and firm's trust and credibility. All these factors include security features and social proof mechanisms, which act as user-friendly determinants and are perceived by customers as signals of professionalism and competence, enhancing a long-term relationship between firms and customers [24]. Therefore, an e-servicescape offers significant opportunities for enhancing customers' recognition and experiences by the correct identification of their perceptions, attitudes, and behavior in the digital marketplace. However, there are several challenges, including technological limitations, privacy concerns, legal statements, and diverse consistency in multiple digital channels (including features of virtual reality and augmented reality).

2.2. Emotional Response

Emotions refer to a customer's internal reactions to things, and these feelings are usually expressed as positive or negative emotions that occur inside. An emotional response refers to the emotions that customers subjectively feel that occur at specific times and situations, and these internal responses can affect customer's decisions and actions. Emotions can be viewed as internal complex emotional experiences that occur when customers receive external stimulation, and this emotional response can be viewed as a broader concept than feelings. An emotional response also refers to a type of emotional and psychological state that occurs naturally in a customer. The characteristics of emotional responses are emotions that can arise from a customer's internal causes or emotions that can arise from external stimulation. Expression can mainly be seen in the following two aspects: emotional responses and negative emotions. Emotions were said to include pride, accomplishment, gratitude, guilt, shame, and anger. Emotional responses are comprised of the following three primary statements: a set of specific emotions, the experience of such states of emotion, and the conceptual (re)organization [25–27].

As the importance of emotional responses is increasingly recognized, many studies are focused on the emotions felt by customers as an important factor in the shopping environment. Mehrabian and Russell [28] presented a representative model for emotional responses that can be measured by the following three dimensions: pleasure, arousal, and dominance. It has been said that environmental stimuli can affect customer's emotional responses and can further influence customer's behavior (approach and avoidance). Huang et al. [29] believed that emotional responses have a significant relationship with customers' behavioral intentions, and that the more emotional responses customers feel when shopping on the internet, the more enjoyably they can shop in the shopping environment. It is said that it can greatly increase the positive behavior of customers, and the likelihood of repurchase and return visits is higher. Yadav and Mahara [30] studied the role of e-servicescape dimensions on customer online shopping and showed that e-servicescape dimensions are a strong predictor of trust that strongly impacts customer purchase intention.

2.3. Revisit Intention

Revisit intention is associated with retained customers, repurchase intention, and repeat visit intention, which involves the probability or likelihood of a customer returning

to a particular business or service provider [31]. This intention of repetition is grounded on customer loyalty and the long-term success of firms given the customer's recognition of a firm's products and services. The theoretical literature of revisit intention includes concepts of marketing, customer behavior, psychology, and behavioral economics. Specifically, revisit intention involves the theory of planned behavior [32,33], which introduces the following three key factors of an individual's intention to revisit a business: the attitude of the customer, subjective norms regarding to social environment, and the degree of accessibility of revisiting (behavioral control). Moreover, the theory of planned behavior is aligned with expectation confirmation theory [34], which links the degree of satisfaction of a previous experience with the fulfillment of current expectations and the increase in revisit intentions.

The revisit intention is motivated by [35] (1) high service quality, (2) customer satisfaction associated with previous experiences and the short gap between an expected and received good or service [36], (3) customer recommendations or word-of-mouth, (4) perceived value (benefits over costs), (5) trust and credibility, (6) a brand's and firm's loyalty over competitive alternatives, (7) social influence and emotional attachment/connection [37], (8) convenience and easy accessibility of the business location or online platform, and (9) personalization and customization.

Practical implications of revisit intention are linked with fostering customer loyalty and retention, which positively impacts on the financial and nonfinancial variables in a firm in the short- and long term [38]. Moreover, the revisit intention reduces marketing and switching costs given that word-of-mouth and social influence replace both costs and drive the sustainable growth of the business, providing comfort, convenience, and personalization in the customer experience, which also increases their competitive advantage in the market or online environment.

2.4. Internet Shopping Mall

Internet shopping malls, also known as online marketplaces or e-commerce platforms, have been increasing in number and revolutionizing the way that customers buy and/or sell their products and services. Internet shopping malls refer to digital and virtual platforms that aggregate multiple sellers and offer a wide range of products and services to customers. This online environment provides easy access to customers given their functionality (user-friendly interfaces), secure transactions with diverse payment options, efficient logistics, and appropriate feedback to enhance site quality and the shopping experience with convenient, trusted, and satisfied buyers and sellers [39,40]. Internet shopping malls include personalized recommendations using users' profiles and preferences, given the deep study of customers using several algorithms of artificial intelligence, augmented reality for virtual try-on experiences, and developed blockchain for secure transactions and supply chain management [41]. Therefore, the current customers are adapted to internet shopping malls and this tendency has been steadily increasing, driven by factors such as convenience, variety, flexibility of time (24 h, 365 days), competitive pricing, and accessibility.

Internet shopping malls host a diverse range of sellers, including individual entrepreneurs and large corporations, which also compete in the online marketplace using strategies such as pricing, quality, promotion, branding, and customer service to increase their competitive advantage, retain current customers, and attract new clients. Moreover, internet shopping malls promote a transparent ecosystem and facilitate cross-border trade by connecting buyers and sellers across different regions and countries, which is the main benefit of globalization. They are also regulated by e-commerce laws and norms, including ethical guidelines for customer privacy, data security, counterfeit products, unfair competition, and taxation [42]. Therefore, the proliferation of internet shopping malls is guided by the reshaping of the retail landscape with unparalleled convenience, choice, and value to customers and sellers.

2.5. Effect of the E-Servicescape on Revisit Intention in an Internet Shopping Mall

The e-servicescape and its digital environment play a crucial role in shaping customers' perceptions and their purchase behavior in internet shopping malls, provoking the increase in their revisit intention given an integrated user experience, which involves both aesthetic and functional characteristics of their website, such as design, layout, practicality, utility, interactivity, and security features. All these aspects have been studied using the stimulus–organisms–response model and the expectation–confirmation model [34]. Mehrabian and Russell [43] argued that environmental stimuli (e-servicescape) affect internal customers' responses (perceptions, emotions, and preferences) leading to the recurrence behavior of revisit or repurchase intention while the second theory established that the degree of customer satisfaction is determined by the gap between the expectations and reality of a product or service, which is translated to future revisit intention according to customers' previous perception.

The e-servicescape involves characteristics such as visual design, functionality, usability, interactivity, security, and privacy. Specifically, visual design integrates the aesthetic appeal of website layout, color schemes, imagery, and typography. Peng et al. [44] found that visually appealing websites positively influence customers' revisit intention through perceived honesty, credibility, and professionalism. On the other hand, the dimensions of functionality and usability established the characteristics of easy access and navigation on the website, utility, simple and clear checkout process, and serviceability. The findings of Albshaier et al. [45] revealed that websites with intuitive navigation and seamless checkout processes are more likely to produce higher customer revisit intentions given their satisfaction with products, services, and their e-commerce environment.

Moreover, interactivity with users allows customers to believe in a brand, product, or service given that it comprises live chat support, personalized recommendations, and interactive product or service demonstrations that enhance the degree of user satisfaction and engagement, showing a positive effect on revisit intention [46,47]. Finally, security and privacy are considered signals of trust, credibility, safety, and transparency, which are aligned with national and international laws and norms and mitigate risks and concerns about online payments and regulations, generating a positive impact and fostering revisit intention in the online shopping context [48].

3. Research Methodology

3.1. Hypotheses Development and Research Model

For this study, the e-servicescape is classified into the following three factors: aesthetics, surrounding elements, and spatial functionality as independent variables; set emotional response and revisit intention as the dependent variable on e-servicescape; and emotional responses as a related variable to revisit intention.

3.1.1. Relationship between Components of the E-Servicescape and Emotional Responses

The greater the aesthetic appeal of the design of the e-servicescape for an internet shopping mall, the more likely it is to induce customer's feelings of enjoyment. Aesthetics have a significant effect on emotional responses such as enjoyment. Among the components of the e-servicescape, aesthetics and spatial functionality have a significant impact on emotional responses, if the overall attractiveness and convenience of the shopping mall site's design has a positive effect on emotional responses. The e-servicescape, which includes three factors (aesthetics, surrounding elements, and spatial functionality), has a positive (+) effect on emotional responses and the importance of the e-servicescape is explained [49–51].

Therefore, in this study, based on the theoretical results of previous studies, the following hypothesis was established to examine the influence of the relationship between the aesthetics, surrounding elements, and spatial functionality of the e-servicescape and the emotional responses of customers in an internet shopping mall.

Aesthetics will have an effect on emotional responses. It was analyzed that the aesthetics have a positive emotion, and is explained as revealing the importance and role of the e-servicescape [52,53]. Therefore, based on the previous studies, the following hypothesis was established. Recent studies elucidate the positive effect of aesthetics on emotional responses using different perspectives [54], such as neuroscientific, cross-sectional, virtual reality, and social media investigations. The results revealed a direct link between aesthetic appreciation and qualities (art, architectural design, and natural scenery) [55] and positive emotional responses and well-being, which influences mood and user engagement, highlighting the importance of digital aesthetics in online communication and the e-servicescape [56]. Therefore, our hypothesis is the following:

H1-1. *Aesthetics will have a positive (+) effect on emotional responses.*

Surrounding elements are linked positively to emotional responses given that urban landscapes, urban green spaces, serene natural settings, and environmental factors influence emotions, health, mood, and well-being [57]. Zhang et al. [58] found that spatial complexity and aesthetic richness produced more positive emotional responses. Similarly, Zhang et al. [59] suggested that the exposure to natural scenes elicited greater activation in brain regions associated with positive emotions, lower heart rates, cortisol levels, and stress, showing the restorative effects of nature, positive emotions, and overall quality of life. Therefore, the hypothesis is presented as follows:

H1-2. *Surrounding elements will have a positive (+) effect on emotional responses.*

The findings of Stefanucci [60] revealed that environments with open layouts and clear circulation pathways influence positively emotional responses compared to crowded or cluttered spaces. Moreover, Makhbul [61] suggested that well-designed workspaces with optimal lighting, temperature, and acoustics were associated with higher positive emotions and lower levels of stress, showing the importance of creating environments that prioritize user comfort to enhance emotional well-being. Therefore, our hypothesis is the following:

H1-3. *Spatial functionality will have a positive (+) effect on emotional responses.*

3.1.2. Relationship between the Components of the E-Servicescape and Revisit Intention

The components of the e-servicescape of an ISM can have a direct effect on customers' behavioral intention, and aesthetics and surrounding elements are important in a revisit intention. The components of the e-servicescape of online sites have a positive effect on customer's behavioral intentions. The more customers are satisfied with the online site structure environment, the more positive behavioral intentions can be induced by customers [62–64]. Therefore, based on the results of previous studies, the following hypothesis was established to examine the influence of the relationship between each factor of the e-servicescape and customers' revisit intention in an ISM.

Aesthetics influence shaping perceptions and the decision-making process, which is associated with the revisit intention in digital environments. Websites with attractive, well-designed, and pleasing aesthetic features (clean layouts, high-quality images, consistent branding, adequate color schemes, minimalist design, and typography) are more likely to elicit positive emotions and enhance user satisfaction, showing higher rates of revisit intention given that aesthetic consistency is perceived as more professional, user-friendly, and trustworthy [65,66]. Therefore, our hypothesis is presented as follows:

H2-1. *Aesthetics will have a positive (+) effect on revisit intention.*

Physical, virtual, cultural, and natural elements positively impact revisit intention [67] given that cultural immersion, pleasant environment, comfortable lighting, attractive

displays, greenery, natural textures, aesthetic pleasing design elements, and interactive features in websites [68] were more likely to influence customers' perceptions, enhance users' sense of connection with the environment, and attract repeat visits from clients [69]. Therefore, the hypothesis proposed is detailed as follows:

H2-2. *Surrounding elements will have a positive (+) effect on revisit intention.*

Spatial functionality involves the design and organization of physical or virtual environments to optimize usability and user experience, which also has a positive effect on customer engagement and retention [70,71]. This positive effect on revisit intention is grounded on features, such as ease of navigation, a user-friendly interface, clear wayfinding signage, interactive maps, efficient search functionalities, straightforward checkout processes, and overall shopping experience, which facilitate visitors' navigation and exploration and contribute to users' satisfaction and loyalty [72]. Therefore, the hypothesis is presented as follows:

H2-3. *Spatial functionality will have a positive (+) effect on revisit intention.*

3.1.3. Relationship between Emotional Responses and Revisit Intention

The e-servicescape can induce customer's pleasure, and that pleasure has a significant effect on revisit intention. Emotional responses have a significant relationship with customers' behavioral intentions. The more emotional responses customers feel when shopping on the internet, the more enjoyable they can shop in the shopping environment. It is said that it can greatly increase the positive behavior of customers, and the likelihood of repurchase and return visits is higher. Customers' emotional responses during the online shopping process have a significant effect on revisit intention [63,73,74]. Based on previous studies, this study proposes that the emotional responses felt by customers while shopping at an internet shopping mall can have a significant effect on revisit intention. Therefore, the following hypothesis was established:

H3. *Emotional responses will have a positive (+) effect on revisit intention.*

In addition, this study model was designed to investigate the effect of each factor of the e-servicescape on the emotional response and revisit intention, and the effect of the emotional response on revisit intention. The research model is shown in Figure 1.

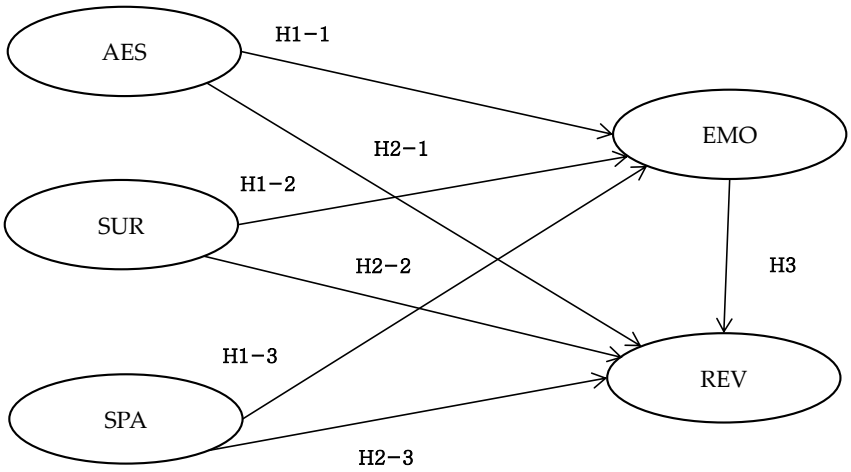

Figure 1. Research model. AES: aesthetics, SUR: surrounding elements, SPA: spatial functionality; EMO: emotional response, REV: revisit intention.

3.2. Operational Definitions of Measurements

Operational definitions of measurements were made for the e-servicescape (aesthetics, surrounding elements, spatial functionality), emotional responses, and revisit intention.

3.2.1. Aesthetics

Aesthetics is defined as whether the design of an internet shopping mall has its unique charm and the degree of attractiveness of the site's exterior. A total of four questions were measured on a 5-point Likert scale with 'sophistication', 'beauty', 'excellence', and 'design colors' of the site's design.

3.2.2. Surrounding Elements

Surrounding elements have characteristics that can stimulate customers' feelings through the presentation of videos and background music in an internet shopping environment. The surrounding elements are the shopping mall site's 'background music is excellent', 'sound effects are excellent', 'video presentation is excellent', and 'videos presented are vivid'. Four questions were measured on a 5-point Likert scale.

3.2.3. Spatial Functionality

Spatial functionality is defined as the ability to quickly find information for customers in an internet shopping mall and the level of convenience. Spatial functionality is 'ease of use', 'navigation speed', 'easy information search', and 'easy to browse' of the shopping mall site. A total of four questions were measured on a 5-point Likert scale.

3.2.4. Emotional Responses

Emotional responses are the good feelings that customers can feel while shopping at an online shopping mall. Emotional responses are a total of four questions asked about how customers felt with 'pleasure', 'satisfaction', 'comfort', and 'trust' while shopping at the shopping mall site. It was measured on a 5-point Likert scale.

3.2.5. Revisit Intention

Revisit intention is defined as customers' desire to visit and use an online shopping mall again. For the revisit intention measure, customers answered a total of three questions about the shopping mall site as follows: 'will use it again', 'will visit again', and 'will visit often'. It was measured on a 5-point Likert scale.

Table 1 shows the operational measurements and the related sources. The questionnaire for this study consisted of a total of 26 questions. First, general information (demographic characteristics and internet shopping experience) consisted of seven questions, and the measurements of the e-servicescape consisted of four questions each about aesthetics, surrounding elements, and spatial functionality. Additionally, it consisted of four questions to understand the emotional response felt by consumers. Lastly, revisit intention consisted of three questions.

Table 1. Operational measurements and related sources.

Variables	Items	Sources
AES	The design of this shopping mall site is sophisticated. The design of this shopping mall site is beautiful. The design of this shopping mall site is excellent. The design colors of this shopping mall site are attractive.	[2,18,51,62]
SUR	The background music on this shopping mall site is excellent. The sound effects of this shopping mall site are excellent. The video presentation on this shopping mall site is excellent. The videos presented on this shopping mall site are vivid.	[15,17,20,75]

Table 1. *Cont.*

Variables	Items	Sources
SPA	This shopping mall site is convenient to use. This shopping mall site has fast navigation. This shopping mall site is easy to search for information. This shopping mall site is easy to browse.	[2,17,19,76]
EMO	Happy while shopping at this mall site. Fulfilled while shopping at this shopping mall site. Comfortable while shopping at this mall site. Trustworthy while shopping on this shopping mall site.	[25,27,32,77]
REV	Like to use this shopping mall site again. Visit this shopping mall site again. Visit this shopping mall site often.	[1,34,37,72]

3.3. Sampling and Analysis

Previous research and theoretical basis were used to draw the relationship between the e-servicescape on emotional responses and revisit intention as well as the relationship of emotional responses on revisit intention in an internet shopping mall. A questionnaire was developed targeting customers with an experience of using an internet shopping mall who were expected to be able to understand and respond to the survey questions. The convenience sampling method and self-entry measurement method were utilized to collect data for this study. An issue at the research design stage is a common method bias (CMB) where an error occurs when the independent and dependent variables are measured using the same measurement tool and respondent. This can seriously affect the validity of the measurement. CMB can cause distortion in the correlation between independent variables and dependent variables, affect the results of hypothesis testing, cause errors in study results, and cause problems with the internal validity of the empirical study. In this empirical study, the independent and dependent variables measure cognition, attitude, and intention; thus, the self-entry method is a practical option to use. Therefore, to minimize the CMB, this study utilized the method of providing as much explanation as possible about concepts such as the e-servicescape, emotional response, and revisit intention and clarifying the questions in the survey form. Another bias in an empirical restudy is nonresponse bias (NRB) that refers to the convenience of respondents refusing to accept a given scenario, survey content, or the response unit itself. The convenience of refusing to respond to the survey item itself is called 'item nonresponse', and the convenience of not responding by not accepting the unit itself is called 'unit nonresponse'. To resolve this bias, a data substitution method can be used for item nonresponse, and a weight adjustment method can be used for unit nonresponse. Since it is difficult to completely solve the NRB problem, nonresponse data were excluded from this analysis.

The survey was conducted for a month by distributing an electronic questionnaire to Chinese shopping mall consumers. JingDong (JD) internet shopping mall in China was selected. JD is a representative company among Chinese internet shopping mall companies and has a good reputation from many consumers. Initially, a total of 558 questionnaires were collected in a given survey period. Among them, a total of 185 samples were filtered, excluding questionnaires from subjects who had no shopping experience at the JD internet shopping mall and those who gave insincere answers. Results from this sample set showed that most customers with shopping experience at JD internet shopping mall were in their twenties and thirties. There were 130 customers (64.9%) in their twenties and 30 customers (16.2%) in their thirties. All other age categories consisted of less than 15 customers as follows: 10 customers (5.4%) under 20 years old, 10 customers (5.4%) in their forties, and 15 customers (8.1%) aged 50 plus. To increase the homogeneity of the sample, customers in their twenties and thirties were selected for this study purpose. Thus, a final sample set for this study was 150. These age groups can be called MZ generations (consumers aged in

their twenties and thirties) that have a higher digital literacy and artistic motivation than other generations.

A sampling adequacy analysis was conducted in this study. The sampling adequacy was judged through the Kaiser–Meyer–Olkin (KMO) test and the Bartlett test. If the KMO sampling adequacy value is 0.8 or higher, the sampling is considered appropriate. The Bartlett test was used to check equal variance of samples. To justify a sample size adequacy, 385 is a minimum sample size for a 95% confidence interval with a margin of error of 5%, assuming a population proportion of 50%. Ninety-seven is a minimum sample size for a 95% confidence interval with a margin of error of 10%, assuming a population proportion of 50%. If a sample size falls between these two numbers, the sample size should be acceptable for a study test. As a result of the analysis in this study, the KMO value was 0.903, confirming that the sampling adequacy was justified. Its Chi-square value was 2722.175 (df = 171) and the p value was 0.000, confirming homogeneity of variances in samples for this study. The final sample size is 150. Thus, an initial sampling adequacy is secured.

In this study, the collected data were analyzed using SPSS 27.0 and Amos 26.0 statistical package programs. First, frequency analysis was conducted to determine the general demographic characteristics of the survey subjects. Second, reliability analysis was conducted to consider the consistency and reliability between measurement items and was measured using Cronbach's alpha coefficients. Third, confirmatory factor analysis was conducted to ensure the validity of the measurement questions. Fourth, Pearson's correlation analysis was performed to determine the correlation between variables. Fifth, structural equation modeling (SEM) analysis was conducted to verify the influence of the relationship between the variables presented in this research model. To examine the fit of the model, the absolute fit index was determined using CMIN (Chi-square value), CMIN/DF (minimum discrepancy), GFI (goodness-of-fit index), RMR (root-mean-square residual), and RMSEA (root-mean-square error of approximation). The relative fit index was determined using the NFI (normed fit index), TLI (Tucker–Lewis index), IFI (incremental fit index), and CFI (comparative fit index).

4. Results

4.1. Demographic Characteristics of the Sample

This study conducted a frequency analysis on 150 valid samples, and the demographic characteristics of the survey subjects are shown in Table 2. The details of the analysis results are as follows. First, regarding the gender of customers who had shopping experience at the internet shopping mall, there were 53 males (35.3%) and 97 females (64.7%), showing that the proportion of females was higher than that of males. In the age groups, there were 120 customers (80.0%) between the ages of 21 and 30 and 30 customers (20.0%) between the ages of 31 and 40. Customers aged 21 to 30 accounted for the highest percentage at 80.0%, showing that most customers using the internet shopping malls were in their twenties this study.

Regarding their educational background, 18 (12.0%) had a junior college degree or lower, 94 (62.7%) had a college graduate, and 38 (25.3%) had a graduate school degree or higher. Regarding customers' monthly living expenses, 45 customers (30.0%) earned USD 415 or less, 41 (27.3%) earned between USD 416 and USD 690, 27 (18.0%) earned between USD 691 and USD 970, and 21 (14.0%) earned between USD 971 and USD 1380. There were 16 people (10.7%) earning USD 1381 or higher.

Of the products that customers frequently purchased from the internet shopping mall, electronic products were the most purchased with 96 customers (64.0%). Next came daily necessities with 37 customers (24.7%), other products with 8 customers (5.3%), cosmetics with 6 customers (4.0%), and clothing with 3 customers (2.0%). Regarding the average amount spent each time at the internet shopping mall, 51 customers (34.0%) spent less than USD 27, 66 (44.0%) spent between USD 28 and USD 83, 12 (8%) spent between USD 84 and USD 138, and 21 (14.0%) spent more than USD 139.

Table 2. Results of demographic characteristics.

Variables	Categories	Frequencies	Percents
Gender	Male	53	35.3
	Female	97	64.7
Age	21–30	120	80.0
	31–40		3020.0
Education	Junior college degree or lower	18	12.0
	College degree	94	62.7
	Graduate school degree or higher	38	25.3
Monthly living expenes	USD 415 or less	45	30.0
	USD 416–690	41	27.3
	USD 691–970	27	18.0
	USD 971–1380	21	14.0
	USD 1381 or higher	16	10.7
Frequently purchased products	Electronic products	96	64.0
	Cosmetics	6	4.0
	Clothing	3	2.0
	Necessities	37	24.7
	Others	8	5.3
Average spending	USD 27 or less	51	34.0
	USD 28–83	66	44.0
	USD 84–138	12	8.0
	USD 139 or higher	21	14.0

4.2. Reliability and Validity

4.2.1. Reliability Analysis Results

Reliability means that the results of measuring the same concept should be similar and is said to be the degree of safety, consistency, and accuracy of the measurement values. In addition, there are methods for verifying reliability analysis, such as test–retest reliability. Composite reliability (or construct reliability) is a measure of internal consistency in scale items. Its reasonable threshold is 0.6 or higher. The most common method is Cronbach's alpha test, which can be used to evaluate internal consistency between measurement items. In this study, to ensure consistency and accuracy between measurement items in the questionnaire, reliability analysis was performed for internal consistency through Cronbach's alpha coefficients. In general, if Cronbach's alpha is lower than 0.6, reliability is insufficient; if it is between 0.6–0.8, it can be considered reliable; and if it is higher than 0.9, it can be judged to have high reliability.

As shown in Table 3, the results of the reliability test of the measurement items in this study are as follows. Looking at the structural factors of the e-servicescape of the internet shopping mall, the composite reliability (CR) values were 0.938 for aesthetics, 0.921 for surrounding elements, 0.926 for spatial functionality, 0.91 for positive emotions, and 0.91 for revisit intention, all of which were above 0.9. Cronbach's alpha coefficient of aesthetics is 0.936, the surrounding elements factor was 0.919, and the spatial functionality was 0.925. Emotional responses were 0.918 and revisit intention was 0.900. All Cronbach's alpha coefficients were above 0.8. The overall Cronbach's alpha coefficient of 0.949 is higher than all other individual variable's values. Therefore, it indicates high reliability and internal consistency between measurement items.

Table 3. Results of the reliability analyses.

Variables	Items	Composite Reliability	Cronbach's Alpha	Overall Cronbach's Alpha
AES	AES1 AES2 AES3 AES4	0.938	0.936	0.949
SUR	SUR1 SUR2 SUR3 SUR4	0.921	0.919	
SPA	SPA1 SPA2 SPA3 SPA4	0.926	0.925	
EMO	EMO1 EMO2 EMO3 EMO4	0.918	0.917	
REV	REV1 REV2 REV3	0.900	0.884	

4.2.2. Validity Analysis Results

The validity analysis using factory analysis is shown in Table 4. The validity analysis of the measurement items of the questionnaire can verify the convergent validity and discriminant validity. It is said that the better the results of convergent validity and discriminant validity, the better the validity of the questionnaire's construct concept can be secured. Therefore, this study was mainly examined to verify the validity of the measurement items to determine the accuracy of the collected survey data.

Table 4. Results of the validity analyses.

Variables	Items	Unstandardized λ	SE	CR	Standardized λ	AVE
AES	AES1	1			0.859	0.792
	AES2	0.992	0.061	16.361 ***	0.934	
	AES3	1.035	0.065	15.821 ***	0.918	
	AES4	0.915	0.068	13.544 ***	0.846	
SUR	SUR1	1			0.853	0.744
	SUR2	1.011	0.070	14.440 ***	0.895	
	SUR3	1.119	0.084	13.356 ***	0.855	
	SUR4	1.098	0.084	13.117 ***	0.846	
SPA	SPA1	1			0.855	0.759
	SPA2	1.030	0.074	13.848 ***	0.865	
	SPA3	1.072	0.070	15.424 ***	0.918	
	SPA4	1.055	0.079	13.280 ***	0.845	
EMO	EMO1	1			0.800	0.736
	EMO2	1.074	0.090	11.915 ***	0.845	
	EMO3	1.207	0.095	12.690 ***	0.883	
	EMO4	1.266	0.097	13.030 ***	0.900	
REV	REV1	1.000			0.918	0.749
	REV2	1.021	0.072	12.278 ***	0.880	
	REV3	1.160	0.090	12.903 ***	0.795	

*** $p < 0.01$, SE: standard error; CR: critical ratio; AVE: average variance extracted value.

Factor analysis is a technique used to examine the covariance or correlation coefficient structure between measured variables and to analyze the interrelationship between variables. Factor analysis can be divided into two methods depending on the different purposes. Exploratory factor analysis is generally conducted in SPSS when the theoretical background is somewhat lacking. Confirmatory factor analysis is to conduct using Amos when the theoretical background is sufficient. In this study, measurement questions for variables were set based on the theoretical basis of previous research, and confirmatory factor analysis was conducted using Amos 26.0 to measure survey questions corresponding to each variable.

Confirmatory factor analysis was conducted to verify the validity of the survey questions corresponding to each following variable of the constructed concept of the e-servicescape: aesthetics, surrounding elements, spatial functionality factors, emotional responses, and revisit intention. Additionally, to verify convergent validity, this study examined the following three measurement indices: standardized lambda (factor loading), critical ratio, and the value of the square root of the average variance extracted value (AVE). As shown in Table 4, the results of the confirmatory factor analysis of this study showed that the standardized lambda (factor loading) for aesthetics was 0.859, 0.934, 0.918, and 0.846. The surrounding elements factors were 0.853, 0.895, 0.855, and 0.846. Spatial functionality was 0.855, 0.865, 0.918, and 0.845. Emotional responses were 0.800, 0.845, 0.883, and 0.900, and revisit intention was 0.918, 0.880, and 0.795. The standardized lambda (factor loading) values of all measured variables were higher than 0.6 and met the criteria. Also, all critical ratio (CR) values were presented according to the corresponding items and significant at a p value of 0.01 in aesthetics of 16.361, 15.821, and 13.544; the surrounding elements of 14.440, 13.356, and 13.117; spatial functionality of 13.848, 15.424, and 13.280; emotional responses of 11.915, 12.690, and 13.030; and revisit intention of 12.278 and 12.903. The average variance extracted value (AVE) was 0.792 for aesthetics, 0.744 for surrounding elements, 0.759 for spatial functionality, 0.736 for positive emotions, and 0.749 for revisit intention, all of which were above 0.5.

Therefore, through Tables 3 and 4, internal consistency and convergent validity were secured because the measurement questions corresponding to each variable in this study all satisfied the threshold values.

4.2.3. Correlation Analysis Results

Correlation analysis mainly examines the degree and direction of correlation between two factors. In this study, Pearson's correlation analysis method was used to measure the correlation between constructs. Before proceeding with structural equation model (SEM) analysis, Pearson's correlation was used to identify the correlation among aesthetics, surrounding elements, spatial functionality (which are the components of the e-servicescape), along with emotional responses, and revisit intention of the internet shopping mall used in this study.

The results of the correlation are shown in Table 5. First, the correlation analysis results between each factor, the correlation coefficients between aesthetics, surrounding elements, spatial functionality, emotional responses, and revisit intention, were 0.559, 0.429, 0.387, and 0.233, respectively. The correlation coefficients between the surrounding factors, spatial functionality, emotional responses, and revisit intention were 0.546, 0.520, and 0.407, respectively. The correlation coefficients between spatial functionality and emotional responses and revisit intention were 0.751 and 0.619, respectively. The correlation coefficient between emotional responses and revisit intention was found to be 0.765. Therefore, the correlation coefficient between each factor was significant ($p < 0.01$) and there was a positive (+) correlation.

Table 5. Results of the correlation analysis.

Variables	AES	SUR	SPA	EMO	REV
AES	**0.890**				
SUR	0.634 ***	**0.863**			
SPA	0.486 ***	0.569 ***	**0.871**		
EMO	0.425 ***	0.526 ***	0.744 ***	**0.858**	
REV	0.298 ***	0.430 ***	0.632 ***	0.770 ***	**0.865**

*** $p < 0.01$. The bolded values presented on the diagonal are the square roots of the average variance extracted value (AVE).

Discriminant validity exists if the square root of the average variance extracted value (AVE) of each factor is greater than the correlation coefficient between the two factors. The AVE value must be higher than 0.5 to ensure validity. The results also showed that the square root of the average variance extracted value (AVE) of aesthetics was 0.890, which was greater than 0.634, 0.486, 0.425, and 0.298, which were the correlation coefficients between each variable. The square root of AVE of the surrounding elements was 0.863, which was greater than 0.569, 0.526, and 0.430. The square root of AVE of spatial functionality was 0.871, which was greater than 0.744 and 0.632. The square root of AVE of emotional responses was 0.858, which was greater than 0.770. Therefore, in this study, discriminant validity also was ensured because the square roots of the average variance extracted values (AVE) of the constructs were all larger than the correlation coefficients between variables. Table 6 shows the results of the heterotrait–monotrait ratio of correlations (HTMT) values, which are all below the 0.9 threshold. Thus, constructs are sufficiently distinct and discriminant validity is secured.

Table 6. Results of the heterotrait–monotrait ratio of correlations (HMTH) analysis.

Variables	AES	SUR	SPA	EMO
SUR	0.682			
SPA	0.521	0.620		
EMO	0.457	0.575	0.807	
REV	0.322	0.477	0.699	0.850

4.3. Verification of Research Hypothesis

The structural equation model (SEM) is an important analysis technique that has many advantages in that measurement errors can be controlled, and theoretical models constructed through goodness-of-fit indices can be evaluated. In this study, the influence relationship of aesthetics, surrounding elements, and spatial functionality, which are components of the e-servicescape on emotional responses and revisit intention, and the influence relationship of emotional responses on revisit intention in the internet shopping mall were used in this study. To verify the effect, SEM analysis was conducted using the Amos 26.0 statistical package program.

Before verifying the established hypothesis, the suitability of the SEM was examined. When evaluating the SEM, absolute fit indices include x^2, GFI, AGFI, RMSEA, and RMR, and incremental fit indices (relative fit indices) include CFI, TLI, NFI, and IFI. It is explained that it is good to comprehensively evaluate the model using several goodness-of-fit indices. Therefore, to examine the suitability of the model, the absolute fit index was mainly determined using x^2 (CMIN), CMIN/DF, GFI, RMR, and RMSEA, and the relative fit index was mainly determined using NFI, TLI, IFI, and CFI.

As shown in Table 7, the results of examining the suitability of the SEM of this study are x^2 = 305.814 (df = 142, p = 0.000), CMIN/DF = 2.154, GFI = 0.830, RMR = 0.027, RMSEA = 0.088, NFI = 0.893, TLI = 0.927, IFI = 0.940, and CFI = 0.939. When the results were compared with the recommended thresholds, the p value for x^2 = 0.000 and GFI was found to fall short of the recommended thresholds. Since all the results were found to

meet the recommended thresholds, the structural model of this study can be judged to be appropriate.

Table 7. Results of goodness of fit.

Goodness-of-Fit Index	Recommended Threshold	Model Fit Results
CMIN/DF	≤3	2.154
GFI	≥0.9	0.830
RMR	≤0.05	0.027
RMSEA	≤0.08	0.088
NFI	≥0.9	0.893
TLI	≥0.9	0.927
IFI	≥0.9	0.940
CFI	≥0.9	0.939

CMIN: relative chi-square index; DF: degree of freedom; GFI: goodness of fit; RMR: root mean square residual; RMSEA: root mean square error of approximation; NFI: normed fit index; TLI: Tucker–Lewis index; IFI: incremental fit index; CFI: comparative fit index.

4.3.1. Verification of Hypotheses H1-1, H1-2, and H1-3

To explore the impact relationships among the independent variables and dependent variables presented in the research model, the research hypotheses were examined. In this study, the internal consistency and validity of the measurement questions for each variable were secured. Additionally, the structural model of this study was judged to be appropriate. Therefore, the results of verifying the hypothesis for the research model were confirmed. The results of the hypothesis verification are shown in Table 8.

Table 8. Results of the hypothesis tests.

Hypotheses	Path			Standardized Coefficent	SE	t	Decision
H1-1	AES	→	EMO	−0.016	0.070	−0.228	Not supported
H1-2	SUR	→	EMO	0.127	0.089	1.437	Not supported
H1-3	SPA	→	EMO	0.681	0.091	7.480 ***	Supported
H2-1	AES	→	REV	−0.113	0.066	−1.703 *	Supported
H2-2	SUR	→	REV	0.042	0.084	0.497	Not supported
H2-3	SPA	→	REV	0.073	0.105	0.695	Not supported
H3	EMO	→	REV	0.825	0.119	6.958 ***	Supported

* $p < 0.1$, *** $p < 0.01$. SE: standard error

Regarding the impact relationship of the ISM's e-servicescape on emotional responses, since the path coefficient from aesthetics to emotional responses among the components of the e-servicescape is −0.016 (t = −0.228, $p = 0.820$), H-1 was statistically insignificant. Thus, hypothesis H1-1 was not supported. This result implied that it was difficult for customers to feel an emotional response about ISM through aesthetic factors such as 'sophistication' and 'beauty' of the site design.

Since the path coefficient from surrounding elements to emotional responses was 0.127 (t = 1.437, $p = 0.151$), H1-2 was statistically insignificant. Thus, hypothesis H1-2 was not supported. This result implied that surrounding elements were found to have no effect on emotional responses. This can be seen from the fact that customers did not have many feelings about the background music and video presentation of the internet shopping mall.

Since the path coefficient from spatial functionality to emotional responses was 0.681 (t = 7.480, $p < 0.01$), H1-3 was statistically significant. Thus, hypothesis H1-3 was supported. Spatial functionality was found to have a positive (+) effect on emotional responses. It implied that the higher the convenience of using the internet shopping mall and the ease of information search and browsing, the higher the emotional responses felt by customers.

Therefore, it was verified that among the components of the e-servicescape, aesthetics and surrounding elements did not have effects on emotional responses, but spatial func-

tionality had a positive effect on emotional responses. Hypotheses H1-1 and H1-2 were not supported, and H1-3 was supported.

4.3.2. Verification of Hypotheses H2-1, H2-2, and H2-3

In the impact relationship between the e-servicescape and revisit intention in the ISM, the path coefficient from aesthetics to revisit intention was −0.113 (t = −1.703, $p < 0.1$). It was found that hypothesis H2-1 was supported at the significant level of 0.1. This means that aesthetics had an effect on revisit intention, but it showed a negative effect. The reason for this negative effect could imply that excessive aesthetics in the e-servicescape can have a negative, rather than positive, impact on customers' intention to revisit.

The path coefficient from surrounding elements to revisit intention was 0.042 (t = 0.497, $p = 0.619$), which was insignificant, and hypothesis H2-2 was not supported. It means that surrounding factors did not appear to have a positive influence on revisit intention.

The path coefficient from spatial functionality to revisit intention was 0.073 (t = 0.695, $p = 0.487$), which was insignificant, and hypothesis H2-3 was not supported. It means that spatial functionality did not appear to influence revisit intention.

Therefore, it may imply that the aesthetics of the e-servicescape in the ISM did have a negative effect on customers' intention to revisit, even though the effect is weak. Surrounding elements and spatial functionality did not influence customers' intention to revisit.

4.3.3. Verification of Hypothesis H3

In the impact relationship between emotional responses and revisit intention, the path coefficient from emotional responses to revisit intention was significant at 0.825 (t = 6.958, $p < 0.01$), and hypothesis H3 was supported. Emotional responses were found to have a positive (+) effect on revisit intention. This result implied that the more emotional responses that customers feel, the higher their intention to revisit the ISM.

5. Conclusions

5.1. Study Summary

ISMs can promote the formation of business trade by providing a bridge between ISM stores and customers and are one of the representative models in B2C (business-to-consumer) e-commerce. It was recognized that designing the components of the e-servicescape of ISMs is very important if ISM companies want to maintain long-term customer relationships and increase their competitiveness. This study classified the components of the e-servicescape into three factors as follows: aesthetics, surrounding elements, and spatial functionality as independent variables; and revisit intention and emotional responses as the dependent variables. Also, this study examined the causal relationship between the emotional response and revisit intention. This study analyzed how the components of the e-servicescape affect customers' emotional responses and revisit intention, and how emotional responses affect revisit intention focusing on MZ generation consumers with purchasing experience in a certain ISM setting.

The research hypothesis was verified through empirical analysis, and the results are summarized as follows. First, as a result of examining how the components of the e-servicescape of an ISM affects customers' emotional responses, this study found that among the components of the e-servicescape, aesthetics and surrounding elements did not have a significant effect on customers' emotional responses. It was found that spatial functionality had a positive effect on customers' emotional responses. This is consistent with the results of previous studies showing that spatial functionality has a significant effect on customers' emotional responses [77,78]. These results mean that spatial functions such as convenience of use and ease of information search and browsing of ISM are very important. If customers can quickly and conveniently obtain information about the products that they want, they can feel more positive emotional responses.

Second, as a result of examining how the components of the e-servicescape of an ISM affects the intention to revisit, it was found that aesthetics did have a significant effect on the intention to revisit, while surrounding elements and spatial functionality did not have a significant effect on the intention to revisit. It was found that the components of the e-servicescape partially have a negative effect on customers' intention to revisit. This finding is controversial. Similar findings were proposed by previous studies showing that aesthetic features reflect positive emotions and improve users' satisfaction, which also reflects higher rates of revisit intention [65,66], while ref. [79] showed that users paid relatively less attention to spatial functionality and prefer the combination of new technologies and the analysis of users' perceptions on a large scale.

Third, as a result of examining how customers' emotional responses affect revisit intention, emotional responses were found to have a positive (+) effect on revisit intention. This is consistent with the argument by previous studies that addressed that enjoyment among customers' emotional responses has a significant effect on revisit intention, and that the more joy that customers feel, the more likely they are to revisit an ISM and increase their return visits [63,73,74].

5.2. Theoretical Implications

Based on the empirical analysis results, this study is to present the following theoretical implications. First, this study demonstrates the effects of the components of the e-servicescape on customers' emotional response and revisit intention, and the effect of customers' emotional reactions on revisit intentions. Through this empirical study, the theoretical foundation was established for the e-servicescape of an ISM industry. Thus, this study differentiates from previous research on emotional responses to the similar business environment by identifying that spatial functionality of the e-servicescape can affect consumers' emotional responses in an ISM environment. Among the components of the e-servicescape in an ISM, aesthetics and surrounding elements did not have a significant effect on emotional responses, and spatial functionality had a positive (+) effect on emotional responses.

Second, this study confirmed that the e-servicescape factors that affect consumers' emotional response and intention to revisit are different. By examining whether the emotional response affects revisit intention in an ISM environment, this study was able to identify the causal relationship between the two variables.

Third, in previous studies, there was little literature on the e-servicescape in an ISM environment. Therefore, this study is meaningful in that the study model provided an integrated research model on the relationship among the e-servicescape, emotional response, and purchase intention.

5.3. Managirial/Practical Implications

With the rapid development of the e-commerce industry and in combination with the ISM-based business environments, this study findings suggested the following managerial/practical implications. First, from a managerial and practical perspective, customer satisfaction can be increased by utilizing the e-servicescape factors that evoke emotional responses on the ISM. In particular, if the importance of spatial functionality is recognized and utilized more effectively, the customer's revisit to the ISM can be much more improved.

Second, by providing appropriate e-servicescape factors suited to consumer characteristics, such as age and region, it will be possible to maximize satisfaction and increase customer share by adjusting the ISM environment to suit the needs of the customized services. For example, since positive emotional responses to ISMs may differ depending on age and region, managers and decision-makers can create an ISM environment tailored to their needs. Therefore, it is important to build an e-servicescape environment that matches these characteristics.

Third, the analysis results of this study showed that designing the components of the e-servicescape, responding customers' emotion, and identifying revisit intention have

become very important and can improve user satisfaction as well as managerial competency. Therefore, it is necessary to recognize the importance of spatial functionality and establish effective measures to improve spatial functionality. Accordingly, to increase the emotional response of customers, a convenient ISM environment must be provided to customers, and efforts must be made to increase the ease of product information search and the speed of navigation. Business managers and decision-makers need to pay attention to the design and management of spatial functionality in ISMs.

5.4. Study Limiations and Future Study Directions

This study has several limitations. First, the questionnaire consisted of a total of 26 questions, and a total of 558 copies were collected. Statistical analysis was conducted on the final 150 valid samples of customers in their twenties and thirties, and there were many invalid samples. Additionally, this study only focused on a specific age of customers from a specific country. Also, there are limitations because the demographic characteristics of the sample are not appropriately balanced by gender and age group.

Second, in this study, the e-servicescape of a specific ISM was classified and studied into the following three dimensions: aesthetics, peripheral elements, and spatial functionality. However, considering previous studies, the components of the e-servicescape may be more diverse and subdivided. So, this study only on these three elements has its own limitation.

Third, in this study, only emotional responses were studied among customers' emotional reactions. In an ISM environment, in addition to emotional responses, customers may also feel other emotions.

Future research directions are as follows. First, future research can broaden the scope when selecting research subjects and conducting research targeting customers. Also, when conducting a survey, the universality of the research can be pursued by collecting more data. Second, future research needs to further increase and subdivide the components of the e-servicescape and consider the e-servicescape as a second-order construct, examining the relationship between the e-servicescape and emotional responses and between the e-servicescape and revisit intention. Third, future research needs to conduct additional research on the elements of emotional reactions that customers may experience in an internet shopping environment. In addition, there is a need for research into whether these emotional reactions affect customer behavior.

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