Factors Influencing Experiential Value Toward Using Cosmetic AR Try-on Feature in Thailand

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Abstract

Purpose: The objective of this research is to identify the core aspects of persuasive factors influencing consumer's experiential value towards using Augmented Reality (AR) try-on feature while shopping cosmetic products online. The conceptual framework of this study is adopted and integrated from the theoretical study on how narrative experience, media richness, and presence affect the formation of experiential value in the augmented reality interactive technology (ARIT) process. **Research design, data and methodology:** The sample (n = 550) were collected from online and offline questionnaires by using stratified random sampling and purposive sampling methods. Confirmatory Factor Analysis (CFA) and Structural Equation Model (SEM) were used to analyze the data to confirm goodness-of-fit of the model and hypothesis testing. **Results:** The results indicated that media richness induced higher experiential value (consumer ROI, playfulness, service excellence and aesthetics), followed by narrative experience and presence towards using AR try-on feature. **Conclusions:** Consumer's experiential value towards using AR try-on feature when shopping cosmetic products online rely on media richness, narrative experience and presence respectively. Therefore, marketing practitioners are recommended to develop the feature design and content to be more useful, authentic, user-friendly and entertaining to better connect and provide confidence to consumers when shopping cosmetics online.

Keywords : Augmented Reality, Retails, Cosmetic Products, Experiential Values, Online

JEL Classification Code : M10, M31, L81, O30

1. Introduction

In recent years, most Thais have their presence online and are expert in the use of digital technology, mobile, and e-commerce (ASEANUP, 2019). Recently statistics have shown that there is an approximately $908 Million spending in fashion and beauty on e-commerce (Rahman, Fauzia, & Pamungkas, 2020; Yang, Cho, & Lee, 2015)., and it has grown by 17% (Simon & Sarah, 2019). Moreover, Grace (2018) has mentioned that if the customers are divided into gender; then the groups who has highly purchased color-cosmetic online are female consumers,

followed by third gender consumers respectively. Retails have faced a great move because of the improvement of digital technology and online channels (Verhoef, Kannan, & Inman, 2015). Correspondingly, technological innovations have more impact on retails industry, that has forced many retailers to change and adapt to the marketing strategies to provide the best service to the customers (Puspaningrum, 2020; Varadarajan et al., 2010). Various companies not only sell their products in physical store, but also expand to focus more on online stores. However, the difficulty for retails especially in fashion and beauty industry is that consumers are necessary to try the products to see how it looks on their face or body. For instance, in 2016, Swiss watch company called Formex decided to shift their entire sales patterns online. Thereafter, they found that consumers refused to buy before they tried the products because they could not imagine how the watch may fit on their wrists (Hill-Duty, 2017).

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Because of the technological innovation, augmented reality (AR) interactive technologies are introduced to use in the retails industry (Patma, Wardana, Wibowo, & Narmaditya, 2020). It has transformed how consumers interact with products and services through online shopping experience (Song, Baek, & Choo, 2019). AR can increase consumers' sensory perception by adding virtual elements into the real environment (Yaoyuneyong, Foster, Johnson, & Johnson, 2016). Moreover, according to the widely used of smartphones and tablets, AR was adopted by retailers for creating immersive customer experience, and there is an argument that AR will become an important tool in the retail industries future (Grewal, Roggeveen, & Nordfält, 2017; Javornik, 2016a).

Many leading retailers have adopted AR technology to connect and engage with their consumers (Lakhwani, Dastane, Satar, & Johari, 2020; Skeldon, 2018) such as Loreal, IKEA, Sephora, Gucci, etc. By using AR, consumers can try on the products as well as they do in physical stores, and also, they can input their own characters such as face shape, hair color, and body shape and immediately see the look appears with given product they have tried on, as well as they can share the picture to friends in order to get the feedback in real time. This can also help consumers save more time and energy to buy products or services (Tang, Biocca, & Lim, 2004). Li, Daugherty, and Biocca (2001) defined that AR experience can tell about product attributes more than traditional online shopping. This feature helps reduce consumer anxiety over buying body-involvement products online (Cha & Seo, 2019), and increase consumer experience (Kim & Forsythe, 2008a, b). AR technology present reliable information to help consumers correctly make purchase decisions while receiving various experiential value (Byun & Kyung, 2020; Jeong, Fiore, Niehm, & Lorenz, 2009; Mathwick, Malhotra, & Rigdon, 2001).

However, there are limited research and understanding on how AR try-on feature may significantly shape the shopping experience (Shankar et al., 2016). Therefore, there is a continue need for future studies more on persuasive factors that effects to consumer experiential value by using AR try-on feature for online shopping in Thailand. As a result, this research investigated and examined the persuasive factors influencing consumer experiential value using AR try-on feature for shopping cosmetic products online. This research has divided the target groups by gender as male, female and a third gender; in which the third gender refers to people who do not want to identify their gender, in which they may or may not be male or female (Meaning of third gender, n.d.). The purpose of this research is to analyze the persuasive factors influencing consumer's experiential value by AR try-on feature to shop cosmetic products online in Thailand.

2. Literature Review

2.1. Experiential Value

Pine II and Gilmore (1998) defined that experience were formed when people have a pleasure feeling after their emotions, physical energy, mental or spiritual condition meet a certain level. The experience towards virtual products could stimulate mental imagery and also stimulating the use of products (Schlosser, 2003). When mental imagery is strongly increased, it raises consumer purchase intention. The AR allows consumers to interact smoothly with virtual products online (Kim & Forsythe, 2008a, b). Therefore, Huang and Liu (2014) emphasized that AR has persuasive effects to increase purchase intentions and consumers behavior by stimulating mental imagery.

The perception of experiential value from online shopping experience has significance to estimate future buying behavior and be popped up from the market (Poncin & Mimoun, 2014). Experiential value has been said to represent both extrinsic and intrinsic value (Babin & Darden, 1995; Batra & Ahtola, 1991; Crowley, Spangenberg, & Hughes, 1992; Mano & Oliver, 1993). Intrinsic values are emphasized on task, and extrinsic values are more in emphasizing on the feeling of joy derived from the shopping experience (Babin, Darden, & Griffin, 1994). According to Holbrook (1994), experiential value was broadly defined as active and reactive. Reactive happens when consumer's aware, respond, or appreciate to object or experience. On the other hand, active value implies an intensive participation between consumer and the marketing entity (Holbrook, 1994). Active experiential value comprising of consumer return on investment (ROI) and playfulness, and for reactive experiential value includes service excellence and aesthetics (Mathwick, Malhotra, & Rigdon, 2001).

Each dimension is further clarified as below:

Consumer Return on Investment (ROI): consumer (ROI) comprises of return on any investment consumer made such as financials, behavioral, mental or time investment to gain the advantage (Mathwick et al., 2001). Consumers may experience this return in terms of perceived service quality (Yadav & Monroe, 1993), along with the advantages received form efficiency of acquiring it (Holbrook, 1994; Zeithaml, 1988).

Playfulness: playfulness reflects on the intrinsic feeling of consumers' fun and enjoyment when they are engaged in activity, as well as the ability to escape from the routine life (Huizinga, 1955; Unger & Kernan, 1983). Day (1981) mentioned that playfulness can also work as the stimulant to create immediate significant consequences. Escapism is

the aspect of playfulness that allows the customer to temporarily get out of the reality, and often involves in fantasy (Huizinga, 1955). For instance, the enjoyment occurred when shoppers imagine how furniture fit in their home while using AR Try-on application.

Service Excellence: service excellence is one of the service management; Oliver (1999) defined that performance consequence has a moderate relationship between service excellence and service quality (Tjahjaningsih, Ningsih, & Utomo, 2020). Moreover, service excellence is considered by consumer satisfaction on product or service received as promised from the service provider (Zeithaml, 1988). Therefore, service excellence can only be found from consumer satisfaction and evaluation of product or service (Mathwick et al., 2001). For instance, to help customer in time of need, can reflect the service excellence performance (Huang & Liu, 2014).

Aesthetics: aesthetics refers to the visual portion in retail environment (Bellenger, Steinberg & Stanton 1976; Deighton & Grayson, 1995; Mano & Oliver, 1993). Picture, physical and beauty influenced the visual attractions (Holbrook, 1994). Correspondingly, aesthetics is determined and reflected by shade, VR and clearness (Mathwick et al., 2001).

2.2. Presence

Witmer and Singer (1998) defined presence as the perception experience when someone is present at one place but not present at that exact place physically. Sometimes it refers to concentrating on something (Nalbant & Boston, 2006). Presence also can be represented to sense of imagination in the simulation (Slater, Usoh, & Steed, 1994). Object simulations help to shape presence, for instance, presence can be formed by visually viewing how glasses fit in human faces (Gibson, 1979). Presence enables media to simulate actual environment and create reasonable linked virtual experience to the real product usage (Klein, 1998; Weisberg, Te'eni, & Arman, 2011). Therefore, the sense of consumer trust and attitude towards a product closely like physical product and go beyond those generated from traditional advertisements. (Huang & Liu, 2014).

AR shopping experience heighten the value of consumers trust towards product or service, and reduces perceived risk, as well as further affects and persuades consumers to purchase products or services based on presence motivated by visual sensory simulations (Li, Daugherty, & Biocca, 2001). Verhagen, Vonkeman, Feldberg, and Verhagen (2014) examined the difference between three different eyeglass presentation formats which is picture, 360-degree spin application, and AR try-on on the Ray-Ban website. They found that AR can make users

feels significantly more locally present as compared to another format. So, they have recommended to retailers who sell the products that involve try-on process before buying to be able to use AR technology. Presence especially in the form of object simulation is one of the persuasive factors influencing consumer's experiential value. Therefore, the researcher proposed the following hypotheses:

H1: Presence has significant influence on consumer's experiential value in terms of consumer ROI toward using AR try-on feature when shopping cosmetic products online.

H2: Presence has significant influence on consumer's experiential value in terms of playfulness toward using AR try-on feature when shopping cosmetic products online.

H3: Presence has significant influence on consumer's experiential value in terms of service excellence toward using AR try-on feature when shopping cosmetic products online.

H4: Presence has significant influence on consumer's experiential value in terms of aesthetics toward using AR try-on feature when shopping cosmetic products online.

2.3. Narrative Experience

Narrative experience is the story verbally explained through personal experience, and each story has its own purpose and focus point. The focus point of story controlled the effective expression of story. The narration content is placed in straight and ordered as causality and has clearly formed the narrative experience at the beginning until the end (Gergen & Gergen, 1988). Using the narrative experience to persuade and deliver experiences to consumer can increase the use of product (Escalas, 2004a, b). Cause and effect simulation in narrative experience allow consumers to fully understand the event structures, and lead to success in persuasion effect (Fiske, 1993). The reason why consumer believes in simulation experience because consumers link the event and casual effect together by their own perspective (Green & Brock, 2000). The suitable content provided to each individual consumer and how consumer interpret or respond to the engagement is determined by the outcome of persuasive effect (Green & Brock, 2000). Showing information content by narrative methods can enhance the persuasive effect because it decreases the volume of processed information consumers need for (Escalas, 1998, 2004a, b). Previous research has shown that cause and effect simulation have the correlation to create narrative effect (Bruner, 1990).

Klimmt, Roth, Vermeulen, Vorderer, and Roth (2012) identified that narrative experience is significantly an

effective persuasive factor that influence online interactive simulation technology because of information content of online simulation that allow consumers to create their own experience by customizing image in a sequential order of information and allow consumers to adapt with their individuals. Therefore, the level of consumer trust increases by creating their individual need through interactive technology from narrative experience. (Lee, Park, & Jin, 2006). However, cognitive load totally reduced consumer enjoyment of online simulation (Stratfold, 1994). In AR shopping experience, elements such as picture, design, movement molded by narrative experience are significantly important. Correspondingly, narrative experience helps consumers to find their personal need and simulate their involvement to explore online environment (Csikszentmihalyi, 1975; Escalas, 2004a, b). Therefore, the following hypotheses proposed as:

H5: Narrative experience has significant influence on consumer's experiential value in terms of consumer ROI toward using AR try-on feature when shopping cosmetic products online.
H6: Narrative experience has significant influence on consumer's experiential value in terms of playfulness toward using AR try-on feature when shopping cosmetic products online.
H7: Narrative experience has significant influence on consumer's experiential value in terms of service excellence toward using AR try-on feature when shopping cosmetic products online.
H8: Narrative experience has significant influence on consumer's experiential value in terms of aesthetics toward using AR try-on feature when shopping cosmetic products online.

2.4. Media Richness

The media richness theory stated that media richness is the vividness of medium's ability to deliver various simulations to consumers, depends on the uncertainty or equivocality of simulations. (Daft & Lengel, 1986). Media richness experience can be created by environment simulation, it increases task accomplishment and user's experience and feelings (Lo & Lie, 2008; Li, Dong & Chen, 2012; Pollach, 2008). Environment simulation create elements of persuasive technology (Huang & Liu, 2014). This simulative environment creates new experience through virtual reality, providing consumers the sense of present (Laurel, 1991; Steuer, 1992; Fogg, 2003).

Shopping experience created by media richness influences consumers to buy product or service from transmitting the experiential value in terms of aesthetics or service excellence. (Holbrook, 1994; Mathwick et al., 2001).

Media richness makes online simulation experience more reliable in various simulations, but do not highlight about cause and effect from narrative experience (Lee et al., 2006). On the other hand, vary simulations may cause cognitive load that makes consumer unwilling to actively involved in simulation experience (Tooby & Cosmides, 2001). Huang and Liu (2014) indicated that media richness has significant influence in reactive experiential value, rather than active experiential value. Therefore, the following hypotheses proposed as:

H9: Media richness has significant influence on consumer's experiential value in terms of consumer ROI toward using AR try-on feature when shopping cosmetic products online.
H10: Media richness has significant influence on consumer's experiential value in terms of playfulness toward using AR try-on feature when shopping cosmetic products online.
H11: Media richness has significant influence on consumer's experiential value in terms of service excellence toward using AR try-on feature when shopping cosmetic products online.
H12: Media richness has significant influence on consumer's experiential value in terms of aesthetics toward using AR try-on feature when shopping cosmetic products online.

3. Research Methods and Materials

3.1. Research Framework

The conceptual framework shown in Figure 1 is developed from studying the theoretical frameworks related to this research. It is adopted from the theoretical model of the study of formation of AR interactive technology's persuasive effects from the perspective of experiential value (Huang & Liu, 2014) which aim to study the scope to which factors; presence, media richness and narrative experiences yield the highest influence to experiential value by using AR interactive technology.

This study aims to study further on the persuasive factors influencing on Thai consumers' experiential value by Augmented Reality try-on feature for shopping cosmetic products online in various aspects such as Presence (P), Narrative experience (NE), Media richness (MR), Consumer ROI (CROI), Playfulness (PF), Service excellence (SE) and Aesthetics (A) in Thailand.

In addition, the research has studied on causal relationship between each variable to outline the influence of these persuasive factors influencing towards customer's experiential value.
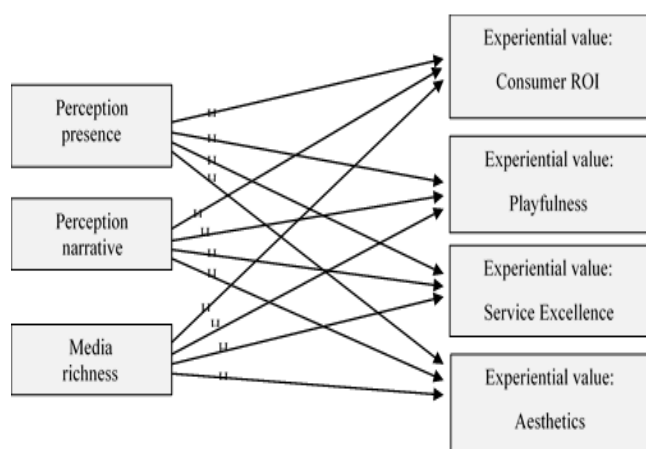
Figure 1: Conceptual Framework

3.2. Methodology

The researcher has adapted the quantitative method to conduct this research. The questionnaires were prepared and sent through online channels via Facebook, Line and Twitter. And, it was distributed in department stores. The target respondents were highlighted as Thais aged 18 years old and above, living in Thailand and have experience in using AR try-on feature when buying cosmetic products online. The collected data will be studied on the persuasive factors influencing consumer's experiential value by augmented reality try-on feature in shopping cosmetic products online. The questionnaire was divided into three parts. First part refers to the screening questions to select the relevant target respondents. The second part is a five-point Likert scale questions that represent to consumer perspective on experiencing AR try-on feature when shopping cosmetic products online, all variables will be measured by the range of 1 represents "strongly disagree" to 5 represents "strongly agree". The demographic information of target respondents will be analyzed in the third part of the questionnaire.

3.3. Population and Sample Size

The population for this research consists of Thais, who are 18 years old and above, living in Thailand and have experience in using AR try-on feature when buying cosmetic products online. The researcher has used A-priori Sample Size Calculator for Structural Equation Models (SEM) from danielsoper's website to refer the recommended minimum sample size (Soper, n.d.). There were set up as 7 latent variables and 43 observed variables with a probability level of 0.05. The minimum sample size as recommended is 425 respondents. After screening all the responses, the qualified respondents for the study was finalized at 550.

3.4. Sampling Technique

The researcher has used multi-stage sampling as there is no complete list of the target population (Shimizu, 2005). Multi-stage sampling involves selecting a sample size by two or more stages (Onwuegbuzie & Leech, 2007). The first stage sampling is probability sampling method of stratified random sampling and following by non-probability sampling method of purposive sampling. Stratification was used to frame the population into three gender groups of female, male and third-gender. Each group or stratum would represent the Thais who purchased beauty products online and living in Thailand. In order to select samples that allows representation of population, proportional stratified sampling technique was applied to calculate number of targeted respondents in each group. This technique enables representation on the sample for the group with vast population (Fottrell & Byass, 2008). Purposive sampling was then applied to select respondents based on the proportionate sample of each group that is aged 18 years old and above and happen to have experience in using AR try-on feature for cosmetic at the time of questionnaires distribution. Target respondents should be aged 18 years and above as it is legal age of Thailand that the individuals can open an e-commerce account for purchasing online (Choi & Yang, 2018).

Due to unavailability of a complete list of target population, the researcher has estimated the population size from number of Thailand internet users who purchased beauty products online (Commonwealth of Australia, 2018) with the ratio by gender (Grace, 2018) and market size of augmented reality in retail business (Juntiwasarakij, 2020).

Table 1: Population and Sample Size by Gender Group

Gender Group	Approximate Population Size	Proportionate Sample Size
Female	83,000	250
Male	33,000	100
Third-gender	68,000	200
Total	**184,000**	**550**

Source: ecommerceIQ E-Marketplace Survey Thailand 2018

The questionnaires were distributed online and offline. There were screening data to ensure that respondents meet the target group of Thais, aged 18 years old and above and are living in Thailand and have experience in using AR try-on feature when buying cosmetic products online. The questionnaires were given through online social networks via Facebook, Line and Twitter randomly and respondents may share the link of questionnaire to their friends who also meet the target group. And distributed the questionnaires

offline in the area of cosmetic departments in three department stores in Bangkok consisting of Central World, Central Chidlom and Siam Paragon having potential target group.

4. Results and Discussion

4.1. Demographic Factors

The questionnaire was competed when respondents provided the demographic information. As shown in table 2, the sample consists of 550 valid respondents, from which 45.5 percent (250) were women, 36.4 percent (200) representing third gender and 18.2 percent (100) were male.

Table 2: Demographic Profile

Demographic and Behavior Data (N=550)		Frequency	Percentage
Gender	Male	100	18.1%
	Female	250	45.5%
	Third gender	200	36.4%
Age	18 to 24 years old	98	17.8%
	25 to 30 years old	285	51.8%
	31 to 35 years old	113	20.5%
	36 to 40 years old	25	4.5%
	41 to 45 years old	12	2.2%
	Above 45 years old	17	3.2%
Income permonth	Below THB 30,000	229	41.6%
	THB30,001-60,000	192	34.9%
	THB60,001-90,000	96	17.5%
	THB90,001120,000	26	4.7%
	Above THB 120,000	7	1.3%
Occupation	Student	124	22.5%
	Employee	270	49.1%
	Self-employed	137	24.9%
	Unemployed	19	3.5%

The respondent's age ranged between 25 to 30 years old having the most percentage of respondents yield 51.8 percent. For monthly income level, the highest range was under 30,000 THB per month consisting of 41.6 percent, where most respondents were people who employed with the percentage of 49.1 percent.

4.2. Confirmatory Factor Analysis (CFA)

CFA was used prior for analyzing the measurement model with structural equation model (SEM). The result of CFA indicated that all items in each variable are significant and have factor loading to prove discriminant validity. Guidelines recommended by Hair, Black, Babin, Anderson, and Tatham (2006) are also employed in defining the significance of factor loading of each item and acceptable values in defining the goodness of fit. Factor loadings are higher than 0.50 and p-value of lower than 0.05. Furthermore, aligning with the recommendation from Fornell and Larcker (1981), the construct reliability is greater than the cut-off point of 0.7 and the average variance extracted was higher than the cut-off point of 0.5 in Table 3. All the estimates are positive.

The square root of average variance extracted in Table 4 indicated that all the correlations are greater than the corresponding correlation values for that variable. In addition, GFI, AGFI, CFI, NFI, and RMSEA are used as indicators for a good model fit in CFA testing. The convergent validity and discriminant validity are verified as the value of this study shown in Table 5 are greater than acceptable values. Therefore, the convergent validity and discriminant validity is assured. Moreover, these model measurement results formed discriminant validity and a validation to perform the validity of subsequent structural model estimation.

Table 3: Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source of Questionnaire (Measurement Indicator)	No. of Item	Cronbach's Alpha	Factors Loading	CR	AVE
Presence (P)	Tang et. al. (2004) and Lessiter et. al. (2001)	9	0.873	0.684 – 0.863	0.893	0.583
Narrative Experience (NE)	Montoya-Weiss et. al. (2003)	11	0.910	0.702 – 0.849	0.938	0.578
Media Richness (MR)	Lo and Lie (2008)	4	0.880	0.721 – 0.876	0.884	0.656
Consumer ROI (CR)	Mathwick et. al. (2001)	6	0.866	0.704 – 0.832	0.872	0.579
Playfulness (PF)	Mathwick et. al. (2001)	5	0.838	0.702 – 0.777	0.861	0.553
Service Excellence (SE)	Mathwick et. al. (2001)	2	0.709	0.754 – 0.766	0.732	0.578
Aesthetics (A)	Mathwick et. al. (2001)	6	0.787	0.677 – 0.826	0.877	0.544

Note: CR = Composite Reliability, AVE = Average Variance Extracted

Table 4: Discriminant Validity

Variables	Factor Correlations						
	P	**NE**	**MR**	**CROI**	**PF**	**SE**	**A**
P	0.764						
NE	0.293	0.760					
MR	0.319	0.621	0.810				
CROI	0.336	0.629	0.656	0.761			
PF	0.287	0.613	0.641	0.613	0.744		
SE	0.234	0.628	0.626	0.624	0.716	0.760	
A	0.303	0.664	0.601	0.672	0.596	0.628	0.738

Note: The diagonally listed value is the AVE square roots of the variables

Table 5: Goodness of Fit

Index	Acceptable Values	Values
CMIN/DF	< 3.00 (Hair. et al., 2006)	1.882
GFI	≥ 0.90 (Hair. et al., 2006)	0.901
AGFI	≥ 0.85 (Schermelleh-engal et al., 2003)	0.877
NFI	≥ 0.90 (Arbuckle, 1995)	0.909
CFI	≥ 0.90 (Hair et al., 2006)	0.955
TLI	≥ 0.90 (Hair et al., 2006)	0.947
RMSEA	< 0.05 (Browne & Cudeck, 1993)	0.040
RMR	< 0.05 (Hair et al., 2006)	0.025

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, NFI, normalized fit index, TLI = Tucker-Lewis index, CFI = comparative fit index, RMSEA = root mean square error of approximation, and RMR = root mean square residual
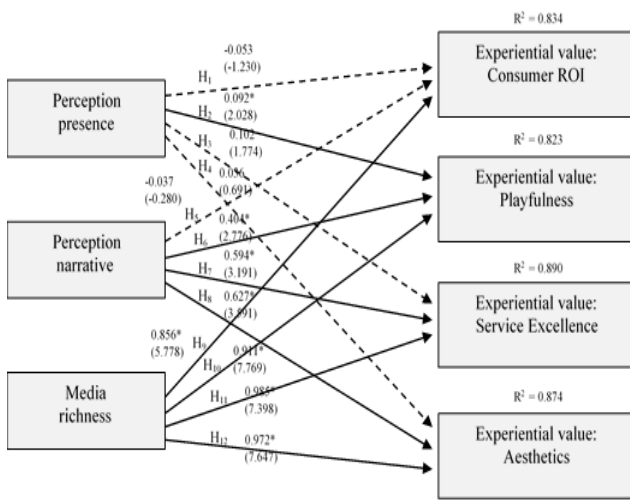
4.3. Structural Equation Model (SEM)

The researcher used SEM for testing the conceptual model fit as recommended by Kline (2005). The goodness of fit index is estimated (see Table 5) for demonstrating. The measurement for model fit should not be over than 3 for Chi-square/degrees-of-freedom (CMIN/DF) ratio and GFI and CFI should be higher than 0.9 as recommended by Hair et al. (2006). After running SEMs and modifying the model by using SPSS AMOS version 26, the goodness-of-fit index is CMIN/DF = 1.847, GFI = 0.904, AGFI = 0.882, NFI = 0.911, CFI = 0.957, TLI = 0.950, RMSEA = 0.039, RMR = 0.024 as measurable criteria referring in Table 4.

4.4. Research Hypothesis Testing Result

The relationship significance of each variable in the research model is then assessed from its regression weights and R^2 variances. The result from Table 6 shown that all hypotheses were supported with a significance at p = 0.05, excepting H1, H3, H4 and H5 were not supported. Media richness has the strongest influence toward experiential value in term of service excellence (β = 0.985), aesthetics (β = 0.972), playfulness (β = 0.911), and consumer ROI (β = 0.856), followed by narrative experience towards experiential value in terms of aesthetics (β = 0.627), service excellence (β = 0.594), and playfulness (β = 0.404), followed by presence toward experiential value in term of playfulness (β = 0.092). The model showed the variance of consumer's experiential value in term of consumer ROI (83 percent), playfulness (82 percent), service excellence (89 percent), and aesthetics (87 percent) toward using AR try-on when shopping cosmetic products online, as illustrated in Figure 2.

Table 6: Hypothesis Result of the Structural Model

Hypotheses	Paths	Standardized Path Coefficients (β)	S.E.	T-Value	Tests Result
H1	CROI <= P	-0.053	0.033	-1.230	Not Supported
H2	PF <= P	0.092	0.039	2.028*	Supported
H3	SE <= P	0.102	0.060	1.774	Not Supported
H4	A <= P	0.036	0.054	0.691	Not Supported
H5	CROI <= NE	-0.037	0.094	-0.280	Not Supported
H6	PF <= NE	0.404	0.116	2.776*	Supported
H7	SE <= NE	0.594	0.177	3.191*	Supported
H8	A <= NE	0.627	0.166	3.591*	Supported
H9	CROI <= MR	0.856	0.098	5.778*	Supported
H10	PF <= MR	0.911	0.126	7.769*	Supported
H11	SE <= MR	0.985	0.182	7.398*	Supported
H12	A <= MR	0.972	0.175	7.647*	Supported

Note: *p<0.05

Note: Dashed lines, not significant; solid lines, significant. *p<0.05
Figure 2: The Results of Structural Model

The result from Table 6 and Figure 2 can be explained that:

H1 has no significant influence of presence on consumer ROI result in the standard coefficient value of -0.053 in this structural pathway. From H2 the result supported the hypothesis from its significant factor influence of presence on playfulness with the standard coefficient value of 0.092. H3 has no significant influence on service excellence as the standard coefficient value of 0.102 and with the result of the standard coefficient value of 0.036, H4 has no significant influence of presence on aesthetics. Therefore, there is only a positive relationship between presence and experiential value in terms of playfulness towards using AR try-on feature when shopping cosmetic products online. In this sense, the entertainment formed with virtual assistance help persuade consumers to change their attitude and behavior. However, the results of these finding are different from previous studies conducted by Huang and Liu (2014). The previous researches outlined that presence has influence on aesthetics and service excellence.

H5 has no significant influence of narrative experience on consumer ROI as the standard coefficient value shown -0.037 in this structural pathway. From H6, the result supports the hypothesis from its significant factor influence of narrative experience on playfulness with coefficient value of 0.404. From H7, the factor of narrative experience towards using AR try-on feature when shopping cosmetic products online were hypothesized to have a positive relationship on experiential value in terms of service excellence, and it is supported with a coefficient value of 0.594. And H8 has shown a positive relationship between a narrative experience and aesthetics on using AR try-on

when shopping cosmetic products online, and it is supported with the standard coefficient value of 0.627. The results indicated that consumer's experiential value in terms of playfulness, service excellence and aesthetics towards using AR try-on when shopping product online has a probability of being influenced by narrative experience. Thus, narrative experience is important to persuade consumers to actively and reactively buy and receive value (Huang & Liu, 2014). Consumer can create their own apparel or accessories tried on without any cognitive loaded, so they can save time and have more efficient consumption experiences from the narrative experience (Lee et al., 2006). Huang and Liu (2014) also mentioned that cause and effect simulation should be considered by service providers when creating online simulative features to enhance purchase intension of online customers.

The standard coefficient value of H9 depicted the results of 0.856 in this structural pathway which indicated that media richness has a significant influence on consumer ROI towards using AR try-on feature when shopping cosmetic products online. H10 hypothesized on the significant influence between the persuasive factor of media richness and experiential value in terms of playfulness towards using AR try-on feature when shopping cosmetic products online, is also supported as the standard coefficient value of 0.911. H11, also stated that media richness has a significant relationship on consumer's experiential value in terms of service excellence toward using AR try-on feature when shopping cosmetic products online with the standard coefficient value of 0.985. Moreover, H12 has a significant influence of media richness on consumer's experiential value in terms of aesthetics toward using AR try-on feature when shopping cosmetic products online with the standard coefficient value of 0.972. Thus, media richness has significant influence on all experiential values toward using AR try-on when shopping cosmetic products online used in this research. The results indicated that the level of experiential value is significantly higher in media richness than in presence and narrative experience regardless to these experiential values referred in this research. Media richness may persuade experiential values that are higher than the other simulative experiences. Schmitt (1999) confirmed that sensory simulation is normally used when individuals perceived an interactive shopping experience or appreciated the simulations offered.

5. Conclusions and Recommendation

5.1. Conclusion

In this study, the researcher focuses more on investigating the influencing factors on consumer's

experiential value towards using AR try-on feature when shopping cosmetic products online. The hypotheses were developed as the conceptual framework to examine that between the persuasive factors of presence, narrative experience and media richness in which factors yield the highest influence on consumer experiential values in terms of consumer ROI, playfulness, service excellence and aesthetics towards using AR try-on feature when shopping cosmetic products online. The questionnaires were distributed to online shoppers in Thailand who have ever used AR try-on while shopping online who are aged 18 years old and above. Confirmatory Factor Analysis (CFA) were used to analyze the collected data for validity and reliability of the research model. Thus, the persuasive factors influencing on consumer's experiential value towards using AR try-on when shopping cosmetic products online were analyzed by using Structural Equation Model (SEM).

The research explained the following findings. Firstly, media richness has the highest significant influence on all consumer's experiential values (consumer ROI, playfulness, service excellence and aesthetics) towards using AR try-on feature when shopping cosmetic products online. If the environment simulation and object simulation can make online shopping experience seems more authentic, the experiential value of customer will be increased. In this sense, the shopping circumstance should match with shopping experience (Huang & Liu, 2004). AR can show full body shape and expressions of online users directly in front of the technology or communication device monitor (Huang & Liu, 2004). Due to the advancement, consumers are unnecessary to try on the real products to discover whether the products match their individual requirements. So, this feature allows searching cost reduction and also increases the opportunity to accelerate buying decisions. Restated, media richness increases convenience to participate in activities and makes stronger involvement and feelings of users (Lo & Lie, 2008; Li et al., 2012; Pollach, 2008).

Secondly, narrative experience has significant influence on consumer's experiential value in terms of playfulness, service excellence and aesthetics toward using AR try-on feature when shopping cosmetic products online. If online feature is user-friendly, beautiful design and easy to follow, have a clear instruction with displayed content to reduce informative workload, it can enhance the experiential value of consumers. Lee et al. (2006) mentioned that the interactive simulation created by narrative experience allows more involvement to consumers. The degree of consumer trust increases when simulated data is adapt to personal requirement (Lee et al., 2006) to reduce the cognitive load authorized consumers to stay happy with online shopping experience (Stratfold, 1994). Moreover,

narrative experience allows consumer to take out the meaningfulness and motivate them to engage and explore a virtual world (Csikszentmihalyi, 1975; Escalas, 2004a, b).

Thirdly, presence has a positive relationship on consumer's experiential value only in terms of playfulness. With AR try-on feature, consumers can experience the products trial and determine whether what products fit on their individual face character without appearing in real physical store. In this sense, Klein (1998) and Weisberg et al. (2011) mentioned that presence can create virtual experience similar to real product usage. This online feature make consumer enjoy and immerse in the environment and it can increase the level of consumer reliability and perception towards a product that lead to increase in purchase intension.

Therefore, according to the research results' explanations and justifications from the above, it clearly demonstrated that the results found in the research has met the objective on the persuasive factors influencing consumer's experiential value towards using AR try-on feature when shopping cosmetic products online.

5.2. Recommendation

The findings of this study shown that consumer's experiential value towards using AR try-on feature when shopping cosmetic products online rely on media richness, narrative experience and presence respectively. Therefore, the researcher recommended that to make AR try-on feature useful and be able to deliver product value before purchase to online customers, it is critically useful for feature designers and online retailers to create the feature that can be authentic, user-friendly, link with user's experience, and create enjoyable content. In terms of feature development, the digital technology innovation will help improve the media to appeal more realistically. For example, designers may combine all computer science and innovation technique such as artificial intelligent (AI) to measure the full body of users and know the perfect fit for each individual style (Park, 2019; He, 2018). Technology through media richness can enhance the user experience by creating the real time video connecting them with their product, for example, retailers dominate 'influencers', 'net idols', 'Youtubers' or 'presenters' to record for reviewing the cosmetic products then AR can appear to screen allowing consumers to try that product, and see how one particular consumer may look in the same exact product. Retailers can increase consumer enjoyment by making the feature that consumers can assess the screen with their friends, so they can discuss about how products look alike with their friend as well as they were together at the physical store. The features design and content should not

be complicated so that consumers can easily follow and enjoy using it. Otherwise consumers will get the cognitive load leading to confusion and may lose the interest to continue buying the products. Moreover, the products choice should be the same update as available in store or even faster to make consumers feel pleasure and enjoy shopping smoothly. This can increase the persuasion towards customer's experiential value. In addition, this can help retailers better connect with consumers and will allow consumers to make more informed and accurate buying decision, and can reduce consumer anxiety to purchase the product online.

5.3. Limitation and Further Study

This study has limitations that should be investigated more for future studies. This research is only focusing on Thai online consumers who live in Thailand and have experience using AR try-on feature when shopping cosmetic products online. The main respondents are mostly located in urban areas. Future research may explore consumers more in another geographical region and other product categories to investigate any similar or different findings. Further study can include the variables to investigate the actual shopper's behavior such as item(s) purchased and frequency. In addition, further study can also study on the attitude and behavior of online consumers when using interactive online experience, to make closer to the needs of them so that it could create a greater experience value for consumers and reach to greater return for retailers. In addition, to investigate the relationship of experiential value that links to customer satisfaction may create more opportunities to develop feature that have highly efficient value to influence on customer purchase decision (Yim, 2020).

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