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The Effect of Customer Experience Towards Engagement in Soco by Sociolla

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Abstract. *Though usage of m-commerce is increasing, the engagement for the platform is low. This research aims to optimize engagement through variable that influences customer experience. Data gathering is done through online survey and use PLS SEM method to analyze the final data. Based on the result of 407 respondents, customer experience has a significant effect towards engagement. Though, customer experience will have stronger effect towards engagement through satisfaction. The most influential antecedents in customer experience is Telepresence. The more immersed the customers in an app, the more it brings to positive customer experience. The findings provide managerial implications for marketers in multi-channel retail, specifically in beauty industry, who uses m-commerce as their channel to set strategy in optimizing customer experience and engagement in mobile application.*

Keywords: *Customer experience, engagement, satisfaction, m-commerce, mobile application*

Abstrak. *Meskipun penggunaan m-commerce meningkat, engagement untuk platform ini masih cukup rendah. Penelitian ini bertujuan untuk mengoptimalkan engagement melalui variabel yang mempengaruhi customer experience. Pengumpulan data dilakukan melalui survei online dan menggunakan metode PLS SEM untuk menganalisis data akhir. Berdasarkan hasil dari 407 responden, customer experience memiliki pengaruh yang signifikan terhadap engagement. Akan tetapi, pengalaman pelanggan akan memiliki efek yang lebih kuat terhadap keterlibatan melalui kepuasan. Faktor yang paling berpengaruh dalam pengalaman pelanggan adalah Telepresence. Semakin banyak pelanggan terikat dalam suatu aplikasi, semakin banyak membawa pengalaman pelanggan yang positif. Temuan ini memberikan implikasi manajerial bagi pemasar di multi-channel retail, khususnya di industri kecantikan, yang menggunakan m-commerce sebagai saluran mereka untuk mengatur strategi dalam mengoptimalkan pengalaman pelanggan dan keterlibatan dalam aplikasi mobile.*

Kata kunci: *Aplikasi seluler, customer experience, engagement, kepuasann, m-commerce*

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Introduction

As the online purchase keep growing, Information and Communications Technology Ministry of Indonesia predicted 50% increase of e-commerce growth in the country (ASEAN Briefing, 2019). Vincent Iswara also added that Indonesia would reach Rp 62.132 Billion in 2021 for e-commerce transactions with the highest population in Bandung and Jakarta (Pikiran Rakyat, 2019). Further, many retailers adopt mobile commerce (m-commerce) as one of the service delivery channel (Shankar et al., 2016). M-commerce give an extensions towards e-commerce (electronic commerce) benefits through adding unique services and more benefits (Tsalgatidou & Pitoura, 2001). The rise of m-commerce in Indonesia is proven when the country became the biggest m-commerce transactions contributor in South East Asia (Dailysocial.id, 2015).

One of beauty commerce in Indonesia, Sociolla, who has 1.2 Million users (Bisnis.com, 2019) decided to use m-commerce (mobile application commerce) as the new platform for the customers. The application is compatible with iOS (iPhone Operating System) and Android Operating System. Based on Apple Store, SOCO App has features such as; shop from sociolla.com, seeing relevant content from beautyjournal.com, writing reviews and articles, polling, daily horoscopes. The user will receive product recommendations and articles based on Beauty Profile the user must fill when signing up.

Although there are more features and benefits in mobile applications than on the website, from author's preliminary research, 31 out of 36 Sociolla customers still prefer to buy from the website version (e-commerce) instead of the mobile app. Moreover, the application has a bad rating in the app store. This reflects the lack of engagement in the application. In order to make the platform more useful to the customer, the aspect that influence customer experience should be analysed. However, research regarding engagement as the outcome of customer experience in m-commerce context is limited.

Stated by Rossmann & Ranjan (2016), engagement can be influenced by prior experience of the customer. Customer experience involves in different levels (rational, emotional, sensorial, physical and spiritual) (Nasution, Sembada, Miliani, Resti, & Prawono, 2014) which relates to the journey customer undergo where they accumulate perceptions (Swinyard, 1993). section describes three main components.

Previous research such as McLean, Al-Nabhani, & Wilson (2018) established a mobile application customer experience (MACE) to assess the customer experience in m-commerce context. However, the model does not emphasize on hedonic factors to drive customer experience. Instead, the model focus on utilitarian factors that drives customer experience. In contrary, Bilgihan, Kandampully, & Zhang (2016) argues that both hedonic and utilitarian values is important for customer experience. On the other hand, Rose, Clark, Samouel, & Hair (2012) proposes the antecedents which focus on both utilitarian and hedonic factors with flow theory (Novak, Hoffman, & Yung, 2000). The research proposed an online customer experience model in e-commerce context.

For the outcome, previous researches (Klaus & Nguyen, 2013; McLean et al., 2018; Rose et al., 2012) said customer experience will bring improvement to satisfaction, trust, and frequency of use. Besides, the previous researches never emphasize engagement as the outcome of customer experience in m-commerce environment. Therefore, this research aims to re-evaluate the OCE in m-commerce context and extends the outcome to engagement. Thus, to gain knowledge about the influence of customer experience towards engagement, the objectives of this research are:

1. Identify variables has the strongest effect in customer experience
2. Identify the relationship between customer experience towards engagement.
3. Know the strategy regarding the variables that influence customer experience to improve engagement.

By fulfilling the research objectives, this paper contributes to give better understanding regarding antecedents and the ourcome of customer experience in m-commerce. Understanding the factors influencing customer experience in m-commerce would help business practitioners who wants to use m-commerce as their new platform to enhance the experience of the user when using the application. In addition, this paper extends the outcome of customer experience to engagement, which give deeper understanding about the aspects of customer experience that might lead to engagement of the customer. Empirically, this research validates and extends the existing Online Customer Experience by Rose et al. (2012) in m-commerce context, which is a growing platform that is used globally.

Mobile Application Customer Experience

Digital transformation has changed the way customers make the purchase decision and how firms do the business (Klaus & Nguyen, 2013). As the result, appearance of online channels transforms the business environment. Hence, some researches (e.g., Bilgihan et al., 2016; Klaus & Nguyen, 2013; Rose et al., 2012) start to emphasize the Online Customer Experience since the digital transformation occurred.

Mobile application version of e-commerce (m-commerce) appears as a more advance and personal channel to browse and buy the product However, based on McLean et al. (2018), there are only a few studies about the customer experience in m-commerce context. McLean et al. (2018) also add since customer experience is subjective, the number of variables might have the ability to influence the cognitive and affective aspects of customer experience both in the offline and online channels. The early researches of customer experience (e.g: Parasuraman, Zeithaml, & Malhotra, 2005; Yoo, Yoo, & Donthu, 2001) proposed and evaluate customer experience by using ease of use, aesthetic design, processing speed, and security as the antecendents in online shopping environment.

While in e-commerce context, ——Pandey & Chawla, (2018) emphasize Online Customer Experience (OCE) through psychological and functionality dimension. Finally, after reviewing previous years finds of online customer experience McLean et al. (2018) conludes seven variables which influence customer experience: (1) ease of use, (2) customization, (3) convenience, (4) web aesthetics, (5) enjoyment, (6) telepresence, (7) time distortion, and (8) flow. Rose et al. (2012) suggested emphasizing cognitive and affective experiential states of online customer experience and use flow and other variables mentioned as antecedents for customer experience. The model emphasizes both utilitarian and hedonic values.

Cognitive Experiential States

Cognitive experiential states refers to everything that goes on the customer's mind in terms of perceiving, processing, memorize and retrieval of information (Rose et al., 2012). Whereas in terms of Online Shopping, cognitive states defined as the interpretation of customers about the information on the screen, choosing alternative stores and attitudes towards a specific store (Machleit & Davis, 2001).

The concept is developed by Csıkszentmihályi (1997) which refers to a cognitive state where an individual is absorbed into activity until they are fully engaged in the task while undergoing time distortion and a loss of self-consciousness. In the online environment context, Novak et al. (2000) stated flow could be referred to a state that customer encounters during online navigation. Thus, flow can be the construct that influences experience (McLean et al., 2018; Rose et al., 2012). Liu, Chu, Huang, & Chen (2016) also added that customer who experienced flow will most likely to makes purchase in an e-commerce site.

As Novak et al. (2000) stated, to reach the optimum online Flow State, there are four direct antecedents: Telepresence, Level of Challenge, Skill, and Speed of Interactivity.

However, research by Rose et al. (2012) proved that the interactivity speed is not significantly affected flow experience. As the advancement of technology occurs, the consistency of the interactive speed of a website/mobile application is superior. For skills, Rose et al. (2012) also add that along with the globalized use for internet or technology in general, the skill level of online shoppers becomes high, and skills are already measured in Level of Challenges.

Telepresence refers to the perception of the websites/application customer interact with is more real than the actual real-life environment and unconscious about the time spent (Novak et al., 2000). In contrast, some researchers (Klaus & Nguyen, 2013; McLean et al., 2018) argues that mobile application is usually used-on-the-go in terms of utilitarian perspectives, and the customer is time conscious. Faiola, Newlon, Pfaff, & Smyslova (2013) suggested when the customer shops at a mobile application or a website, they should engage in the shopping activity, and they will experience a distortion of time and have positive emotion afterwards. Hence, researcher hypothesized:
H1a. Telepresence has positive relationship with customer experience

Other than telepresence, Level of Challenge also affects the cognitive states in online shopping experience based on (Novak et al., 2000). Challenge refers to the way the internet tests and intensify the customers' capability with using the application/website as the way that the Internet tests and stretches a consumer's capacity with using the website. While in an online shopping context, the structure of the website/application, and the complexity of the product can lead the customer to feel challenged. However, Y. Liu, Pu, Guan, & Yang (2016) stated that only positive challenge will result the positive experience. Thus, the high challenge will disrupt the experience. From the literature review, researcher hypothesized:
H1b. Level of Challenge has a positive relationship with customer experience

Affective Experiential Aspects
From previous researches, online shopping customer experience is always related to the Cognitive and Affective States (Rose et al., 2012). Affective experiential states evolve around the customer experience of emotions, mood, or feelings in online navigations (J. Kim & Fiore, 2010; Rose et al., 2012). One of important antecedents of Affective Experiential States is Ease of Use. Previous researchers (Rose et al., 2012) adapt Ease of Use from Technology Acceptance Model by Davis (1989) as the antecedent of customer experience. In m-commerce context, ease of use refers to how the technology system helps the customer in performing tasks (Chi, 2018). The importance of ease of use is stated by Bilgihan et al. (2016), where the ease of use in a website or mobile application influences the feel in control of the system and will lead to improvement of customer experience. Thus, researcher hypothesized:
H2a. Ease of Use has positive relationship with Customer Experience

In service encounters, customization/personalization resulted in "good service" (McLean et al., 2018). The advance of technology still does not change the impact of customization. Mittal & Lassar (1996) defined customization as tailoring and making a recommendation of products and services according to customer characteristics/preferences before the customer begins to search. Though, the service providers should be able to personalize the content at the right person, the right time, and in proper manners (Kaptein & Parvinen, 2015). By letting the customer filter, favorite, and giving the content that suits the customer, customization will affect the customer's emotion and provide them with the feeling of in control of a platform (Rose et al., 2012) and will improve the user performance to finish a task in the application (Kalinic & Marinkovic, 2016). Therefore, such emotion and the feeling given by customization will also impact customer experience (Wang, Cho, & Denton, 2017). From the previous researches, author hypothesized:
H2b. Customization has positive relationship with customer Experience

For Online Customer Experience (OCE), Rose et al. (2012) also suggest using connectedness as antecedents that influence Affective Experiential State. Connectedness refers to the customer's ability to exchange information or share their knowledge (e.g. reviews) with other customers in a virtual community (Rose et al., 2012). Connectedness affects shopping preferences and makes the customer easier to decide to buy a product (Martin, Jillian, Mortimer, Gary, & Andrews, 2015). Huang & Benyoucef (2015) also argue that marketplace whom provides social interaction between its user will motivates the user to shop together and improve the shopping experience. Thus, author hypothesized:
H2c. Connectedness has positive relationship with Customer Experience

Other than connecting customers into a virtual community, Aesthetic also becomes an important variable when it comes to customer experience because the first impression of a website/application is the visual design (Pentina, Prybutok, & Zhang, 2014). In the sense of m-commerce or e-commerce, design aesthetics refers to the harmony, emotional connection or aesthetics of a platform conveyed through elements of color, shape, language, music, or animation (Bilgihan et al., 2016). In m-commerce context, visual appeal is important as it could lead to improve shopping efficiency (Zheng, Men, Yang, & Gong, 2019). Hence, researcher hypothesized:
H2d. Aesthetic has positive relationship with Customer Experience

Another variable that influences affective experiential state is Perceived Benefits. Martin et al. (2015) defined perceived benefits as something beneficial to customers, such as convenience, price transparency, and timesaving. Shaw & Sergueeva (2018) argues that m-commerce who has perceived value will most likely to be used by the user. MBAMA (2018) stated that Perceived Benefits positively influence the customer experience. Thus, researcher hypothesized:
H2e. Perceived Benefits has positive relationship with Customer Experience

Outcome of Customer Experience
As the outcome of customer experience, Verhoef et al. (2009) argue if customer experience ruined, the result will be lower in satisfaction and loyalty. Besides, Verhoef et al. (2009) propose a conceptual model for customer experience with Satisfaction, Trust, and Re-purchase Intention as the outcome. Satisfaction happened after the customer evaluation from the experiences, and the application/website performance "(Dužević, Delić, & Knežević, 2016) based on cumulative customer experience. A positive customer experience will lead to customer statisfaction (Deshwal, 2016). Thus, researcher hypothesized:
H3. Customer Experience has a positive relationship with satisfaction

Satisfaction also could stimulate engagement (e.g: Kim, Kim, & Wachter (2013), Thakur (2016), Zhang, Hu, Guo, & Liu (2017). A satisfied customer will feel the experience enjoyable and exciting and will lead to engagement (Vo, 2019). As a result, researcher hypothesized:
H4. Satisfaction has positive relationship with engagement

Other than satisfaction, Felita & Edwin Japarianto (2015) indicated that customer experience is the predictor of customer engagement. Bilgihan et al. (2016) also add that successful customer experience will lead to engagement and could fully engage the customer in the long run. The research also adds, the advancements in mobile technologies create opportunities for customers to enhance the online shopping experience, which in turn, the service providers/companies to create more opportunities to engage with the customers. Hence, researcher hypothesized:
H5. Customer experience has positive relationship with engagement

Based on literature review, researcher proposes the theoretical framework of the research which depicted in Figure 1

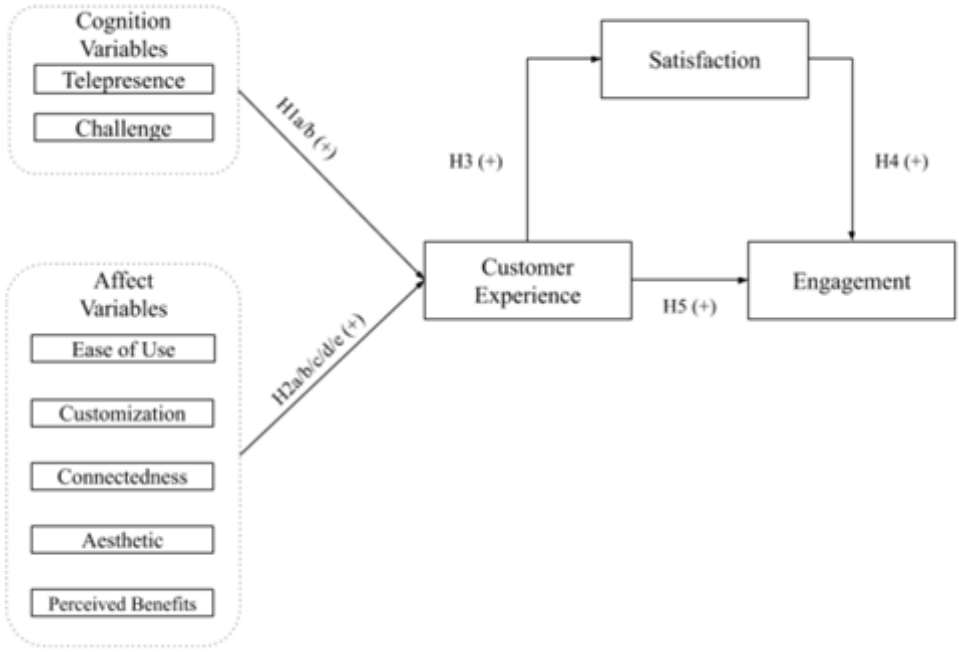

Figure 1.
Research Framework

Research Methodology

The quantitative research is done by distributing online questionnaire to obtain the data. The survey is targeted to 18 – 26 years old woman who lives in DKI Jakarta and West Java. Also, the research use purposive sampling that targets SOCO mobile app user who has used both mobile application and website. This age of group selected with the assumption of the highest population that has interest in beauty, as stated by previous research from Larasati, Amanda, & Se (2019). The author decided to set DKI Jakarta and West Java as the places of the study since the highest population of e-commerce consumers and 50% of Sociolla users are from Java.

The suggested sample size for Structural Equation Modelling (SEM) is 150-400 (Raoprasert & Islam, 2010). However, Joe F Hair, Ringle, & Sarstedt (2011) suggests the number of samples should be equal to or greater than: (1) ten times largest amount of formative indicator to measure one construct or (2) ten times largest number of reflective indicators towards a latent variable. Further, author targeted 400 respondents to create more normal distribution result.

After gathering the respondents, researcher also cleanse the data to ensure all respondents are qualified for the research. Total of 406 qualified responses are gathered from the original 434. To cleanse the nonqualified respondents, two filtering questions is applied in the survey. The number of samples are adequate for conducting Structural Equation Modeling Method (SEM) (Raoprasert & Islam, 2010).

The samples obtained shows that 58% respondents live in Jakarta, while 48% lives in West Java. For the age groups, the survey shows that 45% is 18 – 20 years old, 42% is 21 – 23 years old and the remaining 13% is 24 – 26 years old. Whereas for operating system, this survey is dominated by Android users (64%) while the rest is iOS user (36%). The preferred platform to buy product is from Sociolla, which has 287 responses. Table 1 shows the respondent profile in detail.

Table 1.
Respondent Profile

Question	Answers	Frequency (n)
Age	18 – 20 years old	183
	21 – 23 years old	172
	24 – 26 years old	51
Area of Living	DKI Jakarta	211
	West Java	194
Operating System		
	iOS	259
	Android	147
Preferred Platform	Sociolla.com (website)	287
	SOCO by Sociolla (application)	266
	Sociolla Offline store	82

Total of 43 items are applied for operational variables. Scale items for cognition variables are adapted from Novak et al. (2000). While for affective variables, the scale items are adapted from Davis (1989), Rose et al. (2012), Srinivasan, Anderson, & Ponnavolu (2002), and Sheng & Teo (2011). For customer experience, the cognitive and affective experiential states is measured by adapted scale from Novak et al. (2000) and Havlena & Holbrook (1986). As for the outcome, satisfaction is measured with scale adapted from (Khalifa & Liu, 2007) and engagement items are adapted from Kim, Kim, & Wachter (2013) and Hollebeek & Chen (2014). To measure each item, researcher applied 7 linkert scale. Table 2 provide the items used and the measurement for the research.

For this research, Partial Least Square Structural Equation Modeling (PLS SEM) with SmartPLS is used to analyse the data. The method is used to develop theories to find relationships and the strength of each variables. In this research, the researcher extends model of Online Customer Experience and predict the relationship with engagement.

Also, the proposed model's structural path only goes to one direction (recursive) without looping direction. Therefore, Variance Based SEM (PLS-SEM) is used for research that has many constructs and many indicators (Joe F. Hair, Ringle, & Sarstedt, 2011b). The method has to steps assessment for analysing the data, (1) Measurement Model, and (2) Structural Model.

Other than evaluating the relationships and strength of each variable. PLS-SEM is also used to evaluate the mediating effect. To conduct the analysis, bootstrapping procedure is conducted (Hair Jr, Hult, Ringle, & Sarstedt, 2016).

Table 2.
Outer Loadings and Reliability

Variable	Indicator	Outer Loadings
Aesthetic	AES1	0.867
	AES2	0.876
	AES3	0.779
Telepresence	TELE1	0.843
	TELE2	0.892
	TELE3	0.766
	TELE4	0.860
Challenge	CHAL1	0.924
	CHAL2	0.791
Connectedness	CON1	0.769
	CON2	0.778
	CON3	0.791
	CON4	0.791
Customization	CUST1	0.846
	CUST3	0.824
	CUST4	0.801
Ease of Use	EOU1	0.848
	EOU2	0.880
	EOU3	0.916
	EOU4	0.894
	EOU5	0.842
	EOU6	0.889
Perceived Benefits	PVB1	0.831
	PVB2	0.837
	PVB3	0.812
	PVB4	0.653
Customer Experience	AFS1	0.857
	AFS2	0.803
	CES1	0.638
	CES2	0.670
Satisfaction	SAT1	0.870
	SAT2	0.873
	SAT3	0.835
Engagement	ENG1	0.879
	ENG2	0.895
	ENG3	0.920
	ENG4	0.869

Results and Discussion

Pilot Test

Pilot test is conducted by taking 30 samples. The assessment aims to make sure the indicators are valid and reliable. To test the reliability and validity, researcher calculate Composite Reliability, Convergent Validity (using average variance Extracted), and Discriminant Validity (using Fornell-Larcker Criterion).

Based on the assessment, most of all variables are reliable and valid, except customer experience which indicates invalidity after the test. Therefore, researcher deleted some indicators which falls bellow 0.7, such as AFS3, AFS4, AFS5, CHAL3, and ENG5. Thus, to improve the validity of the data, researcher eliminated the non-reliable indicators mentioned. After eliminating the non-reliable indicator, all the variables are reliable and valid (as seen in Table 2).

As mentioned before, PLS SEM contains two steps assessment: (1) measurement model, and (2) structural model.

Measurement Model

For reflective model, composite reliability is required to assess the reliability of each variable. First, indicator reliability should be assessed. Urbach & Ahlemann (2010) defined indicator reliability as how accurate an indicator or set of indicators is in relation to what it aims to calculate (the latent variable). Minimum indicator loading of 0.70 is suggested by previous researchers (Hair Jr. et al., 2017; Urbach & Ahlemann, 2010). Futhermore, Hair et al. (2011) added that value between 0.40 and 0.70 should be considered for removal only if removal of this indicator results in an increase in composite reliability above the proposed threshold value and affects validity.

For this research there are two validity assessment: (1) Convergent Validity, and (2) Discriminant Validity. All of the constructs convergent validity is assessed by using Average Variance Extracted (AVE) and has value greater than 0.50 (Hair, Ringle, & Sarstedt, 2011). The value interpreted as all latent variables can explain more than half of the indicator's variance. Furthermore, discriminant validity is confirmed for all latent variables which shown Fornell-Larcker's Criterion. In Fornell-Larcker's Criterion, each of variable's AVE square root towards its construct is higher than other correlating latent variables' square roots. To avoid common method bias, , researcher evaluate the data by using collinearity test as suggested by Kock (2015). The assessment is evaluated by VIF value. All indicators' VIF do not exceed 5. This means that there is no multicollinearity problem among all indicators.

Structural Model

After evaluating the measurement model and ensure the data is reliable and valid, researcher conducted structural model analysis. The analysis includes evaluating the coefficient of determination, predictive relevance, f^2 effect size, T-test and path coefficient.

R^2 is a calculation of predictor constructs accuracy (Joseph F. Hair et al., 2019). By knowing the R^2, we know how accurate the indicators in terms of explaining the latent variables. Meanwhile, f^2 evaluate the effect size between variables (Chin, 1998). From all antecedents, telepresence has the strongest effect towards customer experience. The remaining variables has medium effect except challenge and connectedness, which has weak effect. Q^2 is also evaluated by conducting blindfolding procedure. If the Q^2 value exceeds zero, it depicts the predictive relevance of the exogenous constructs for the endogenous construct that is under consideration. Each of variable R^2, f^2, and Q^2 is provided in Table 3.

Table 3.
R^2, f^2, and Q^2 result

Endogenous Construct	R^2	f^2	Q^2*
Customer Experience	0.494		0.279
Aesthetics		0.016	
Challenge		0.001	
Connectedness		0.006	
Customization		0.025	
Ease of Use		0.026	
Perceived Benefits		0.038	
Telepresence		0.159	
Satisfaction	0.462		0.282
Customer Experience		0.639	
Engagement	0.573		0.499
Satisfaction		0.149	
Customer Experience		0.552	

** Q^2 calculated with d = 8*

Table 4.
Hypotheses and Path Coefficient

Hypotheses	Path Coefficient	T-Statistics*
H1a (+) Telepresence → Customer Experience	0.332	7.116
H1b (+) Challenge → Customer Experience	0.031	0.679
H2a (+) Ease of use → Customer Experience	0.150	3.119
H2b (+) Customization → Customer Experience	0.175	2.913
H2c (+) Connectedness → Customer Experience	-0.083	1.463
H2d (+) Aesthetic → Customer Experience	0.130	2.274
H2e (+) Perceived Benefits → Customer Experience	0.209	3.412
H3 (+) Customer Experience → Satisfaction	0.624	16.986
H4 (+) Satisfaction → Engagement	0.575	15.139
H5 (+) Customer Experience → Engagement	0.575	7.461

**T-Statistics calculated with 0.05 level of significance (critical value = 1.96)*

To predict the relationship between variables, researcher use bootstrapping procedure (with 5,000 as subsamples) with 0.05 level of significance. From the procedure, p-value and t-test evaluated. Table 4 shows that two out of ten hypotheses are rejected. The t-values of two hypotheses do not exceed critical value of 1.96).

Among all variables, telepresence has the biggest total effects on customer experience. Specifically, the most contributing indicator is SOCO app make the users feel like they forget their surrounding when using the application.

Mediating Effetcs

Other than to predict the relationship, bootstrapping procedure also done to evaluate the mediating effect of satisfaction. procedure is conducted to obtain specific indirect effects and direct effects (Hair Jr, Hult, Ringle, & Sarstedt, 2016). Figure 2 shows the mediating model of the research.

After conducting the bootstrapping procedure, both indirect effects (p1.p2) and the direct effects (p.3) are significant and point at the same directions (from the positive value of path coefficient in Table 5).

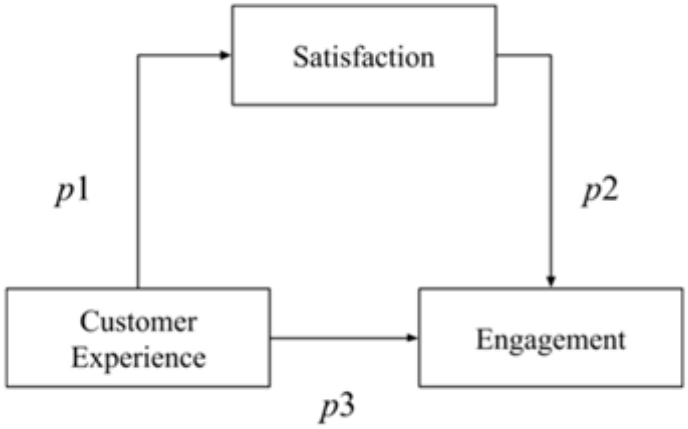

Figure 2.
Mediating Model

Table 5.
Mediating Effect Result

p	**Relationships**	**Path Coefficient**	**P-Value**	**Significance**
*p*1	CX -> SAT	0.624	0.000	Significant
*p*2	SAT->ENG	0.575	0.000	Significant
*p*3	CX -> ENG	0.299	0.000	Significant
p1. p2	CX ->SAT->ENG	0.359	0.000	Significant

Therefore, satisfaction has complementary mediation on customer experience towards engagement. The indirect effects have more significant impact rather than the direct effects between customer experience towards engagement. Thus, satisfaction is crucial to improve engagement.

After analysing the data and testing the hypostesis, the research proved that telepresence has the strongest impact on customer experience among all variables. Specifically, the most contributing indicator is SOCO app make the users feel like they forget their surrounding when using the application. Telepresence which is a situation where the user feel immersed into their world, creates a positive impact towards customer experience. Customer who feel immersed to the activity in the app, will most likely to make purchase and become frequent shopper (Jilian Martin, Mortimer, & Andrews, 2015).

While telepresence has the strongest impact towards customer experience, level of challenge does not significantly impact customer experience in SOCO mobile application. The users of the application becoming more familiar about technology, specifically an application on their mobile phone. Therefore, using an application is no more a challenge and does not impact the whole customer experience while using the application.

Other than level of challenge, connectedness also does not have any significant impact towards customer experience. This is because the customer feels interacting with other user is not as important as creating a purchase (Jillian Martin, Mortimer, & Andrews, 2015). Yet, the customer find it helpful to get product recommendation from other users' review in SOCO app. In addition, people tend to tell about a product through social media instead on the provider's platform (Michaud-Trévinal, Stenger, & Michaud Trevinal, 2014).

As for the outcome, customer experience and satisfaction will lead to engagement. However, satisfaction has stronger impact towards engagement rather than customer experience towards engagement. the user of SOCO app is satisfied with their experience in using and purchasing product through SOCO app. The finding proves that satisfaction strongly influences the users engagement and attitudinal commitment, which is align with Kim et al. (2013).

From the findings, author proposed theoretical and managerial implications for this research.

Theoretical Implications

The base of this study is mostly influenced by Online Customer Experience (OCE) model from Rose et al. (2012). The model is adapted to explore the relationship of customer experience towards engagement in m-commerce environment. Shown in the analysis, the exogenous variables have succeeded to measure endogenous variables from the moderate to strong coefficient of determination in the analysis. From the research findings, telepresence, perceived benefit, customization, ease of use, and aesthetic have been proved to give a positive influence on customer experience. The result is consistent with the model proposed by Rose et al. (2012), which implemented in e-commerce environment.

In contrary, some of the findings are not align with the model proposed. Exogenous variables such as challenge and connectedness does not have a significant relationship with customer experience in this study. Licence (2015) stated that challenge and connectedness does not have any influences in online customer experience in e-commerce environment. Challenge does not impact customer experience because nowadays people are more familiar in using the application. Whereas for connectedness, people tend to think purchasing process is more important rather than connect with other users in the application.

As for the outcome, this study extends the outcome from satisfaction to engagement. The analysis has shown that customer experience positively affects satisfaction. The finding is supported by the previous research such as C. Kim et al. (2008) and Rose et al. (2012). The main purpose of this study is to explore the effect of customer experience towards engagement. Result of the study shows that customer experience positively affects customer engagement. The finding aligns with previous research from Bilgihan et al. (2016) which study unified customer experience in e-commerce context. Then, satisfaction also positively influence engagement which also in line with previous research by Y. H. Kim et al. (2013) which study engagement in a mobile application. However, based on this research, satisfaction is more influential to engagement rather than customer experience. The findings might happen because in order to engage, customers need to use the app more frequently.

Managerial Implications

The implication for beauty or multi-channel retailer is to set the strategy to enhance the customer experience of the application since it could lead to satisfaction and engage the customers. Our findings show that improving the customer experience can be done through improving telepresence, perceived benefits, aesthetic, customization, and ease of use.

Based on the examination, SOCO app still lacks telepresence, which means that the users are not quite immersed to the activity that the app provided. Song, Fiore, & Park (2007) suggested for marketers to invest in technology to enhance telepresence. Providing feature such as Augmented Reality which let user to virtually try on the products (cosmetics) can help the customer to experience the products that fit them (Ruyter & Australasian Marketing Journal, 2020). Successful telepresence leads customer to recognize the information about the product and will feel positive emotions (Suh & Chang, 2006). Thus, successful telepresence will lead to purchase intention as the customer acquire product information for buying decision.

In contrary of telepresence, the user feels satisfied about the application interface (aesthetic). However, the experience can be enhanced by simplifying the interface. Moreover, the customization in SOCO app can be optimized by allowing customer to personalize their own experience (i.e.: filter content, customized search engine, etc.). Lastly, the improvement of the app should consider the convenience or ease of use for the users.

Limitations and Further Study

The sample for this study is 18 – 26 years old woman who lives in DKI Jakarta and West Java who uses SOCO app. Hence, the sample size in this study should not be generalized as the representative for generalized findings in mobile application customer experience. Also, the evaluation of the whole experience might be from the last experience they had encountered or remembered. The further study should consider the representative samples that is relevant for the research. Other than that, further studies should add more information such as frequency of use.

For this study, author use the Online Customer Experience model proposed by Rose et al. (2012) and extend the outcome to engagement, where the original model used satisfaction and re-purchase intention. The research found two rejected hypotheses from the proposed model. Further study could re-examine the extended model this current study proposed. Moreover, author recommends investing in Augmented Reality technology to enhance telepresence. Therefore, a further study towards the feature is needed before applying the recommendation.

Conclusion

The advancement of technology leads to retailers adopt mobile application as the new channel to sale product (m-commerce). Though, the engagement for the platform is lacking as some customer still prefer to buy through the website rather than the mobile application.

This paper extends the model from Rose et al. (2012) and use engagement as the outcome and provides several managerial implications for the retailer who manage multi-channel marketing. Unlike the previous findings, connectedness and challenge do not significantly impact customer experience. In addition, telepresence has the strongest effects towards customer experience. As for the outcome, a successful customer experience will lead to engagement. In m-commerce context, the provider should provide some activities that could enhance the telepresence and make the user feel immersed in the activity. Thus, from positive experience of telepresence, the user will most likely to engage to the m-commerce.

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