Investigating the Effect of Drivers of Customer Equity on Continuance Use Intention of Branded Apps: A Study of Instagram's App

Seyed Mehdi Mirmehdi, Malayer University, Iran*

ABSTRACT

Customer equity, which is one of the key factors in modern marketing, has been recognized as an influential factor in customer loyalty and their behavioral intention. To better understand and manage customers' or users' behavioral intentions, it is necessary to find out the effect of customer equity on them. Customer equity includes the three main drivers of value equity, brand equity and relationship equity. The present research also seeks to investigate the effect of customer equity drivers on customer continuance use intention, as well as the mediating role of brand loyalty in this regard. The statistical population of the research was the users of Instagram app in a public university in Tehran. The results of the data analysis showed that the brand equity affects the brand loyalty, the relationship equity influences brand loyalty, value equity impacts customer behavioral intention, relationship equity affects customer behavioral intention.

KEYWORDS

attitudinal loyalty, behavioral loyalty, brand equity, Brand loyalty, Branded apps, Continuance use intention, Customer value, Drivers, relationship equity, value equity

INTRODUCTION

With the incredible growth of mobile communication technology and then smartphones, all kinds of mobile applications have spread in all aspects of human life (Purcell, Entner, and Henderson 2010 & Kim, Lin, & Sung, 2013). The growth of mobile applications has helped marketers enjoy "branded apps". Marketers use these applications as a communication platform between the consumer and the brand because consumer interaction with branded apps leads to a more favorable attitude towards the brand. (Garg and Telang, 2013).

In the last decade, branded apps, along with other technologies in the digital age such as the Internet of Things, virtual reality have provided exciting opportunities for marketers (Wang, 2020). Also, social media has infiltrated everyday life and has led to a paradigm shift in the way people communicate and interact (Li, Yang, Zhang, & Zhang, 2019).

DOI: 10.4018/IJEBR.323211

*Corresponding Author

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

With the ubiquity of powerful mobile devices and high-speed wireless network infrastructure, the boundaries between a web and its mobile version are blurring, and most social media have become mobile-based (Humphreys, 2013; Molinillo, Aguilar-Illescas, Anaya- Sánchez, & Liébana-Cabanillas, 2021). Accordingly, the number of people using branded social media apps on their mobile phones has increased rapidly. These applications are software based on mobile devices (such as smartphones or tablets) with location-based services that enable people to continuously interact with others over wireless networks (Li, et al., 2019; Pang, & Ruan, 2023).

Such branded apps are very popular all over the world. Instagram, Wechat, TikTok and Weibo are among the popular media (Zhang, Xu, & Ye, 2022). TikTok is available in more than 150 countries by 2023, has more than 1 billion users, and has been downloaded more than 210 million times in the U.S. alone. Instagram is another social media that has at least 1.318 billion users worldwide until January 2023. (datareportal.com, 2023). There is heavy competition among these branded apps, and social media brand loyalty and continued use intent are critical for these apps. However, less research has been done specifically on branded apps in the context of social media.

The role of various factors such as customer value, brand features and marketing communication features are considered in behavioral intention (Bauer et al., 2008; Kwon et al., 2007 McDonald & Stavros, 2007). Customer equity, which is one of the key factors in today's business marketing, is recognized as an effective factor in customer loyalty and behavioral intention (Ramaseshan et al., 2013).

To better understand and manage customers or users' behavioral intentions, it is necessary to know the effect of customer equity on it. According to Rust et al. (2000), customer equity framework includes three main drivers of value equity, brand equity and relationship equity. In this research, the effect of these factors is discussed on the behavioral intention of the users of Instagram app in a public university in Tehran. In addition, in this research, the role of brand loyalty factor is also considered as a mediator. Therefore, the present research pursues the following objectives:

- 1- Investigating the effect of customer equity drivers on behavioral intention
- 2- Investigating the effect of customer equity drivers on brand loyalty
- 3- Investigating the effect of brand loyalty on behavioral intention
- 4- Investigating the effect of customer equity drivers on behavioral intention indirectly through brand loyalty

The current research is followed in the form of four main parts. At first, research literature is presented and past researches are explored. In the second part, the methodology of the research is presented. In the third part, research findings and statistical reports are presented. Finally, it includes discussion, conclusion and theoretical and practical applications.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Branded Apps

Branded apps are installed on mobile devices such as smartphones and tablets or downloaded from various software stores such as Google Play and Apple App Store (Hoehle and Venkatesh, 2015). Branded apps allow consumers to use functional features without time limits and can also be upgraded to higher versions (Zhao and Balague, 2015). They facilitates the attraction of consumer attention and are effective in increasing brand popularity, brand equity and behavioral intention (Vieceli and Shaw 2010; Baek & Yoo, 2018).

Branded apps have new features beyond websites due to the capabilities of smartphones such as camera, GPS, touch screen, and as a result, they create distinct value and a better experience for customers. The main difference between a branded app and a website is that in order to access information and use the app, customers must first download and install the app and then periodically update it and give their voluntary permission for this. This observation highlights the active role of customers when using a branded app (Fang, 2019).

The interactivity of most branded social media apps comes from the interactive character of these media, for example, feedback options or sharing buttons and the possibility of more control by the user in the communication process and personalization features lead to the high potential of app's interactivity. These branded apps are classified into two main categories of entertainment and information, which according to the nature of social media can have a different combination of entertainment and information for different branded apps (Van Noort & Van Reijmersdal, 2019).

Chakrabarti and Mondal (2021) have considered branded apps to include four different types, which are a product or technology, a media channel, an interactive marketing tool, and a type of service access tool. It has been shown that branded apps have an effect on attitudes towards brands, as well as strengthening other contact points such as websites and email, and the discussion of their continuous use is a critical issue after their adoption stage(Chakrabarti and Mondal, 2021).

Customer Equity and Its Drivers

Customer equity is defined as the total lifetime value on the part of potential and existing customers of a company (Rust, Zeithaml and Lemon, 2004). The idea of customer equity is a useful construct with mathematical models and conceptual frameworks (Rust et al., 2000 and Rust et al., 2004). Mathematical models allow companies to assess the effectiveness of the market through an analysis of the return on investment in marketing activities. On the other hand, the conceptual frameworks include three main drivers that lead to the growth of customer equity (Yoshida and Gordon, 2012). Lemon and Hackaran (2001) identified these three drivers as value equity, brand equity and relationship equity.

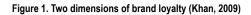
The value equity refers to customer's objective assessment of the perceived benefit of a brand from what it gives and receives (Vogel et al., 2008). The three key factors in the value equity are value, quality, price and convenience (Lemon et al., 2001). The second driver is the brand equity, which refers to the intrinsic and subjective assessment of the customer from a brand beyond its value (Kim et al., 2008 and Lemon et al., 2001). The importance of brand equity is emphasized in the literature; brand equity creates specific brand associations in the minds of the customer and it is a sign of brand credibility in the market (Erdem and Swait, 1998). The relationship equity also reflects the desire of customers to stay in touch with a brand and go beyond its subjective and objective evaluations. Usually loyalty programs under the control of the company may increase the relationship equity and the relationship equity is something that can effectively enhance customer relationship (Hyun, 2009).

Customer equity is a tool to stimulate high profitability and superior competitive advantages in the online market and mobile platforms (Lim et al., 2021). Customer equity is conceptualized as a strategic framework that links customers and businesses together and is recognized as an important measure of marketing performance. In today's competitive business environment, including e-commerce, where customer participation has become a norm in marketing processes, customer equity certainly plays an important role in determining a company's survival (Kim, Kim, & Hwang, 2020). Customer equity is a key strategic asset that is based on user interaction with mobile applications and affects users' behavioral intentions (Ho & Chung, 2020).

Brand Loyalty

Brand loyalty has been widely considered by the literary and has been known as a factor in increasing the profitability of the company. Brand loyalty is defined in terms of creating a deep commitment to repurchase or permanent support for a preferred product or service in the future (Oliver, 1999). Chaudhuri and Holbrook (2001) define brand loyalty as a relatively fanatical behavioral response to purchases that consumers show over time, which leads to re-purchase from that brand (Chaudhuri and Holbrook, 2001).

Brand loyalty leads to customers' word of mouth advertising for the brand and prevents competitors from entering the market; therefore, loyal customers to purchase are the main criterion for increasing brand value for the organization (Meller and Hansan, 2006). Brand loyalty is divided into two categories: attitudinal loyalty as a systematic interest to favor a brand or emotional reflection to a brand and behavioral loyalty that generally refers to behavioral responses that include re-purchase and word of mouth advertising (Morgan, 1999). In Figure 1, two dimensions of brand loyalty are specified.





Customer Behavioral Intention

The intention, which is defined as a program for a particular behavior, is an accepted factor and perhaps the most important factor in predicting behavior in a direct way (Ajzen, 1991). In marketing, the behavioral intention is an alternative to practical behaviors empowered in customers with reinforced intention to show a behavior (Kim et al., 2013). Research has shown that customer intention is determined by the desire to do a set of behaviors that reflect the customer's commitment to connect with the company (Cronin et al., 2000 and Sirdeshmukh et al., 2002).

Cronin et al. (2000) pointed to the positive effects of customer behavioral intention, which include re-purchase and the intention to make word of mouth purchase. Syrdashmakh et al. (2002) also defined the behavioral intention as a multi-dimensional design, including the intention to re-purchase, intention to make word of mouth purchase and the allocation of more wallet share to a particular company.

In the case of branded apps, it should be noted that by examining the data obtained from the continuous use of users, companies can comprehensively observe the behavior of consumers and users and do more accurate marketing, so the continuance use intention for the success of a brand is decisive (Li and Fang, 2019). Interactivity is the core of the success of branded apps. Appropriate interactivity is critical during app adoption and leads to the motivation to use the app and ultimately affects continuance using (Qing & Haiying, 2021).

THE RESEARCH FRAMEWORK AND THE DEVELOPMENT OF THE HYPOTHESES

Value Equity and Behavioral Intention

Value equity is defined as the customer's assessment of the consumption of the product based on his perception of the amount he has paid (such as money, quality, and benefits) (Rust et al., 2000). There are three key elements in acquiring value equity: quality, price and convenience, quality refers to the customer perception of overall product superiority (Zeithaml, 1988). On the other hand, the price refers to the monetary cost to buy a product and convenience is the cost of customer search (Rust et al., 2000).

The value equity reflects the trade-off between the quality of a product and the cost of the acquisition of that product. Based on previous studies, there is empirical evidence based on the positive effect of value quality on customer intention in the service sector including retail (Sweeney, Soutar and Johnson 1999) airlines (Sirdeshmukh et al., 2002) and sports (Cronin et al. 2000; Kwon et al., 2007). According to the above content, the hypothesis 1 is proposed as follows:

Hypothesis 1- The value quality has a positive effect on behavioral intention.

Brand Equity and Behavioral Intention

Brand equity refers to the value added to a product (product or service) by a brand name (Yoshida and Gordon, 2012). There is evidence in the literature that brand equity enhanced re-purchase and has a positive effect on word of mouth and a large contribution to customer retention over time (Cobb-Walgren et al., 1995; Johnson et al., 2006; Vogel et al., 2008). Marketing literature suggests that brand equity is a strong predictor of the behavioral intention of the fans (Bauer et al., 2008; Belen del Rio et al., 2001; Gladden & Milne, 1999, Ross, 2006).

Previous studies have shown that brand equity has a significant effect on brand preference and consumer purchase intention. Brands with higher equity are stronger and give customers confidence in purchasing decisions. Strong brands reduce the risk for users and help cognitively and emotionally in decision-making in order to use intention (Ho, Wu, Nguyen, & Chen, 2019). According to the above discussion, the hypothesis 2 is proposed as follows:

Hypothesis 2- Brand equity has a positive effect on behavioral intention

Relationship Equity and Behavioral Intention

The equity of the relationship is the customer's desire to connect and stick to a brand beyond objective and subjective evaluations of a brand (Lemon et al., 2001). Previous research has shown that customer perception of the communicative links with a company and the social benefits achieved by communicative marketing programs has a positive effect on behavioral actions such as the word of mouth advertising (De Wulf et al. 2001, Hennig-Thurau et al., 2002). Vogel et al. (2008) also showed that the relationship equity has a positive effect on the customer's behavioral goals. Accordingly, the hypothesis 3 is proposed as follows:

Hypothesis 3- Relationship equity has a positive effect on behavioral intention

Value Equity and Loyalty

Value is the basis for customer communication with a company (Ramaseshan et al., 2013). Ramaseshan et al., (2013) showed that value equity has a positive effect on customer loyalty. In another research conducted in the retail industry, it was found that the value equity had a positive effect on customer behavioral intention (Dwivedi et al., 2012). Therefore, the hypothesis 4 is proposed as follows:

Hypothesis 4- Value equity has a positive effect on brand loyalty.

Brand Equity and Loyalty

Customers like to choose the brands that give them a positive image (Ramaseshan et al., 2013). According to Claire (1993), customers who have more association with a particular brand, which actually refer to brand equity, are more likely to respond to brand marketing activities. In a research conducted in the retail industry, it was found that brand equity has a positive impact on customers' intention (Dwivedi et al., 2012).

Brand equity refers to the consumer's willingness to pay more for a valuable brand. Therefore, brand equity leads to behavioral loyalty as an outcome. There are two aspects of brand equity, one is a company-related perspective that emphasizes the financial value of the brand, and the other is consumer-based, which refers to brand perceptions and associations that influence behavioral intentions and loyalty (Ebrahim, 2020). Thus, the hypothesis 5 is proposed as follows:

Hypothesis 5- Brand equity has a positive effect on brand loyalty

Relationship Equity and Loyalty

The value and brand equities alone do not keep customer and companies need to invest in value-related relationships to maintain customers (and Jones, 2008 Richards). The effect of relationship equity on loyalty can be determined based on social exchange theory, which explains how customers are trying to maintain and enhance their relationship with brands (Dwivedi et al., 2012). The value equity plays a role in the prediction of customers' future loyalty (Gustafsson et al., 2005). Accordingly, the hypothesis 6 is proposed as follows:

Hypothesis 6- Relationship equity has a positive effect on brand loyalty

Brand Loyalty and Behavioral Intention

Brand loyalty has a decisive contribution to customers' future behavioral intention(s) (Yoshida and Gordon, 2012). Studies suggest a close relationship between customer loyalty and re-purchase intention (Kamariah and Salwani, 2005). Brand loyalty is associated with higher value perception and leads to behavioral intention such as repeat purchase, positive word of mouth and high engagement (Molinillo, Aguilar-Illescas, Anaya-Sánchez & Liébana-Cabanillas, 2021). According to Akbari et al. (2021), cognitive and behavioral brand loyalty is an essential factor for intention to use. Therefore, the hypothesis 7 is proposed as follows:

Hypothesis 7- Brand loyalty has a positive effect on behavioral intention

The Mediating Role of Brand Loyalty

By reviewing the literature, it seems that there has not been any research on the effect of customer equity drivers on behavioral intention through the mediating role of brand loyalty. According to the previous hypotheses in this study, the customer equity drivers lead to behavioral intention and on the other hand, brand loyalty provides behavioral intention. Therefore, it seems that customer equity drivers affect the behavioral intention indirectly through brand loyalty. Therefore, the following hypotheses are also suggested:

Hypothesis 8- The value equity affects the behavioral intention through brand loyalty indirectly. Hypothesis 9- The brand equity affects the behavioral intention through brand loyalty indirectly. Hypothesis 10- The relationship equity affects the behavioral intention through brand loyalty indirectly.

Accordingly, the conceptual framework of the research is shown in Fig. 2.

RESEARCH METHOD

This research is applied in terms of purpose and descriptive-correlational based on implementation. The data were obtained through the survey that conducted among student in a public university in Tehran. In order to determine the sample size, the formula used for structural equations, i.e. $5q \le n \le 15q$, was used, where q is the questionnaire items and n is the sample size (Kline, 2015). According to the number of questions in this research (24 questions), at least 120 and up to 360 samples are needed. In this regard, 400 questionnaires were distributed. A total of 265 questionnaires provided usable data.

The research questionnaire included the variables of customer equity drivers with 13 questions based on Vogel et al (2008) and Continuance use intention with 3 questions based on Wu (2015). Brand loyalty was also measured based on Sudhahar et al (2006) including 8 questions. The content validity of the questionnaires was verified by experts and academic elites and factor analysis was used to confirm the structure validity of the questionnaires. For reliability measurement, Cronbach's alpha was used, and the results obtained for stability are shown in Table 1.

Figure 2. conceptual framework

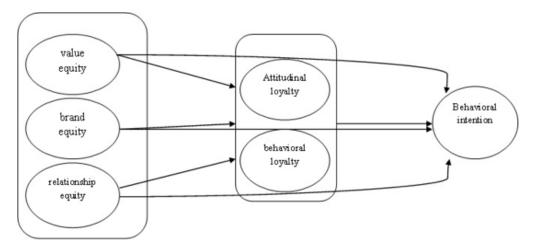


Table 1. Cronbach's alpha

reliability	construct	
0.81	value equity	
0.72	relationship equity	
0.79	brand equity	
0.88	Brand loyalty	
0.84	Behavioral intention	

Accordingly, the obtained values are above 70%, which indicates the reliability and validity of the research tool. In this research, the structural equations' modeling is used to analyze hypotheses and to examine the general fitness of the conceptual model. The fitting indicators for the model are CMIN / df, RMSEA, CFI, AGFI and GFI criteria. A model with appropriate fitness has CMIN to df ratio of less than 3, RMSEA of less than 10% and CFI, AGFI and GFI values greater than 90% (Ghasemi, 2010). The software programs used in this research is SPSS18 and Amos21.

RESULTS

The general indices of the fitting of the research model are presented are presented in Table 2. As can be seen, all indices have an acceptable value.

In Figure 3, the structural equation modeling of the research is shown along with the regression coefficients.

Accordingly, the value equity affects brand loyalty and customer behavioral intention with the values of 0.08 and 0.43. Brand equity affects brand loyalty and customer behavioral intention with

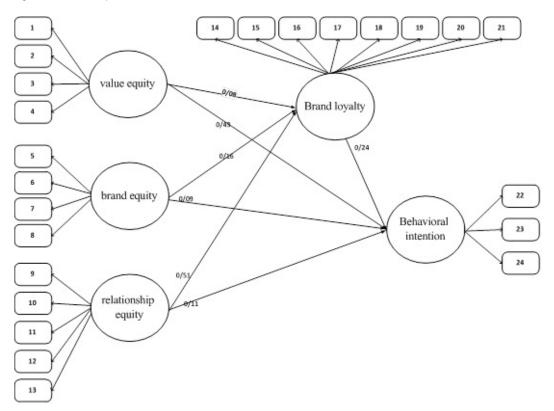
CMIN/df	GFI	AGFI	CFI	RMSEA
2.89	0.965	0.935	0.984	0.054

Table 2	. The	fitting	indicators
---------	-------	---------	------------

International Journal of E-Business Research

Volume 19 • Issue 1

Figure 3. Structural Equation Model



the values of 0.16 and 0.09. The relationship equity affects brand loyalty and customer behavioral intention with the values of 0.51 and 0.11 and brand loyalty influences customer behavioral intention with a value of 0.24.

To test the significance of the hypotheses, the two critical and P values are used. If the critical value is greater than 1.96, then the hypotheses are confirmed at a significance level of 0.05. Tables 3 and 4 show the results of testing the hypotheses.

As shown in Table 3, the second and fourth hypotheses were rejected and the first, third, fifth, sixth and seventh hypotheses were confirmed. That is, it can be claimed that brand equity - brand loyalty, relationship equity- brand loyalty, value equity- customer behavioral intention and brand

Direct path	р	Critical value	Path coefficient	Result
Value equity has a positive effect on brand loyalty	0.124	1.58	0.08	Reject
Brand equity has a positive effect on brand loyalty	0.02	2.327	0.16	Support
Relationship equity has a positive effect on brand loyalty	0.00	7.561	0.51	Support
The value quality has a positive effect on behavioral intention	0.00	8.815	0.43	Support
Brand equity has a positive effect on behavioral intention	0.068	1.824	0.09	Rejecrt
Relationship equity has a positive effect on behavioral intention	0.046	2.103	0.11	Support
Brand loyalty has a positive effect on behavioral intention	0.00	3.521	0.24	Support

Table 3. the results of testing the hypotheses(direct path)

Indirect path	Mediator	Path coefficient	Result
The value equity affects the behavioral intention	brand loyalty	0.01	Reject
The brand equity affects the behavioral intention	brand loyalty	0.03	Reject
The relationship equity affects the behavioral intention	brand loyalty	0.12	Support

Table 4. the results of testing the hypotheses(indirect path)

loyalty- customer behavioral intention affect each other with 0.95% confidence. In Table 4, in accordance with hypotheses 8, 9 and 10, the indirect effect of customer equity drivers on customer behavioral intention are investigated through brand loyalty, which is equal to the product of the direct effect of the customer equity drivers on brand loyalty due to direct effect of brand loyalty on customer behavioral intention that is equal to (Brown, 1997):

 $0.01=0.08 \times 0.03 \& 0.24 = 0.16 \times \& 0.24 \ 0.12 = 0.51 \times 0.24$

According to the results, the indirect path coefficient of the association between relationship equity and customer behavioral intention is higher than its direct path coefficient, which confirms the tenth hypothesis; however, the eighth and ninth hypotheses are rejected because the indirect path coefficient is less than the direct path coefficient. Therefore, the mediating effect of brand loyalty only applies to the influence of the relationship equity on customer behavioral intention.

DISCUSSION

The growth of technologies such as smartphones and social media platforms has led marketers recognize the potential of branded apps in this field as an effective communication tool. Social media providers such as Instagram must carefully monitor competing applications and identify the effective features in this field and should note that there are diverse users with different needs in this space and recognizing different needs of users and adapting the services provided to their needs leads to improving the position among competing apps.

One of the important issues raised in marketing literature is the role of the customer equity and its drivers. The present study also sought to investigate the effect of customer equity driver on behavioral intention of the users of Instagram app as well as the mediating role of brand loyalty. Based on the findings of the research, the value equity affects customer behavioral intention. This relationship was also studied in previous studies, such as Cronin et al. (2000) and Sirdeshmukh et al. (2002) and this effect was confirmed. Based on the results of another hypothesis test, it was found that brand equity does not affect the customer behavioral intention. In the case of the third customer equity driver, i.e. relationship equity, the relationship equity affects behavioral intention. Vogel et al. (2008) also showed that relationship equity has a positive effect on customer behavioral intentions.

A review of other research hypotheses has shown that among the customer equity drivers, the value equity does not have an effect on brand loyalty, but two other drivers, i.e. brand equity and relationship equity affect brand loyalty. In a study by Gastefson et al. (2005), it was also found that the relationship equity contributes to predicting customer's future loyalty. One of the other findings of the research was the confirmation of the effect of brand loyalty on behavioral intention, which was shown in various researches such as Kamariah and Salwani (2005). It was also proved that there is a close relationship between customer loyalty and their repurchase intention. Finally, the factor analysis of brand loyalty mediation in the effect of value drivers on behavioral intention showed that this mediation only exists in the relationship between value equity and behavioral intention and brand loyalty is not effective in the other drivers' influence i.e. value equity and brand equity.

CONCLUSION

The intention of continuous use of a technology by users has always been popular in marketing research. Today, social media providers have provided applications for better services to their users. The increasing expansion of these different social media applications has led to the competitive space of user attraction by them. The leading branded apps in this field are Facebook, Instagram, Twitter and Tik Tok. Due to the competitive atmosphere between them, these applications are seeking to maintain their position among their competitors. Therefore, for branded apps like Instagram app, it is very important that its users use its application continuously, because the continuous use of users leads to a competitive advantage and a source for more profitability. This issue was less investigated in previous researches, therefore, in this research, continuous use intention was studied from the point of view of customer equity and brand loyalty in the branded social media application.

It was shown that the customer equity, including three dimensions (value equity, brand equity and relationship equity), has an effect on the intention of continuous use. Brand loyalty is also one of the popular concepts in marketing literature that has always been emphasized. The effect of brand loyalty on customers' behavioral intention has been shown in past researches, therefore, one of the things that was paid attention to in this research was brand loyalty. According to the findings of the research, loyal users of Instagram app are more likely to use it continuously. Therefore, in order to remain in the competitive environment, branded apps such as Instagram app must increase the customer equity and brand loyalty of their users.

THEORETICAL IMPLICATIONS

This research provides several theoretical and practical implications. Branded apps has attracted the attention of marketing researchers in recent years, and the literature on the subject is expanding. This research will add a great contribution to this expanding literature. One of the contributions that exists is the use of customer equity in the field of brand apps. In this study, customer equity includes three main dimensions. Most of the research on customer equity is in different product and service areas (Chakrabarti and Mondal, 2021; Fang, 2019; Van Noort & Van Reijmersdal, 2019) And is very rare in the field of branded apps, but this research examined the study of branded apps in the context of social media.

In past research, branded apps have rarely been studied, especially in the context of social media. The concept of brand loyalty and behavioral intention are basic concepts in marketing that are examined in this research on branded social media apps. Behavioral intention in the marketing literature usually includes constructs such as wom and repeat purchase (Akdim et al., 2022; Huang, 2022), which was presented in our research model as the intention to continuously use branded apps. Another contribution of this research is to provide an integrated model of the effects of customer equity on loyalty and continuance use intention of branded apps.

PRACTICAL IMPLICATIONS

According to the competitive environment governing social media applications, the continuous use of branded apps by users is very important, and therefore, practitioners should not only focus on how to use social media applications. Rather, more attention should be paid to continuous use. Researches in the field of influencing factors on the intention to continuously use branded apps in the context of social media will help them. In order to improve loyalty to the social media brand and the intention to continuously use branded apps, attention should be paid to improving the dimensions of brand equity.

Considering the nature of social media such as Instagram, the improvement of entertainment and hedonic features is more important for the perception of value by the customer. Examining the user experience in the social media application leads to the improvement of the customer's special value and the intention of continuous use. Social media brand equity is a factor that must be considered by social media managers to remain in the competitive landscape of their brand apps. Creating a deep relationship of social media users with branded apps can make them loyal. A deep connection with users is created through improving the design of the application and providing the possibility of more personalization. Also, receiving feedback from users also helps in this matter. Another important issue to consider is that social media users are very diverse and have different needs. For this purpose, branded apps should segment users and create a match between different features of the app and different needs of users.

Volume 19 · Issue 1

REFERENCES

Akbari, M., Nazarian, A., Foroudi, P., Seyyed Amiri, N., & Ezatabadipoor, E. (2021). How corporate social responsibility contributes to strengthening brand loyalty, hotel positioning and intention to revisit? *Current Issues in Tourism*, 24(13), 1897–1917. doi:10.1080/13683500.2020.1800601

Akdim, K., Casaló, L. V., & Flavián, C. (2022). The role of utilitarian and hedonic aspects in the continuance intention to use social mobile apps. *Journal of Retailing and Consumer Services*, *66*, 102888. doi:10.1016/j. jretconser.2021.102888

Baek, T. H., & Yoo, C. Y. (2018). Branded app usability: Conceptualization, measurement, and prediction of consumer loyalty. *Journal of Advertising*, *47*(1), 70–82. doi:10.1080/00913367.2017.1405755

Bauer, H. H., Stokburger-Sauer, N. E., & Exler, S. (2008). Brand image and fan loyalty in professional teamsport: A refinedmodel and empirical assessment. *Journal of Sport Management*, 22(2), 205–226. doi:10.1123/jsm.22.2.205

Belen del Rio, A., Vazquez, R., & Iglesias, V. (2001). The effects of brand associations on consumer response. *Journal of Consumer Marketing*, *18*(5), 410–425. doi:10.1108/07363760110398808

Bellman, S., Potter, R. F., Treleaven-Hassard, S., Robinson, J. A., & Varan, D. (2011). The Effectiveness of Branded Mobile Phone Apps. *Journal of Interactive Marketing*, 25(4), 191–200. doi:10.1016/j.intmar.2011.06.001

Brown, R. L. (1997). Assessing Specific Mediational Effects in Complex Theoretical Models. *Structural Equation Modeling*, 4(2), 142–156. doi:10.1080/10705519709540067

Chaudhuri, A., & Holbrook, B. M. (2001). The Chain of Effects From Brand Trust and Brand Affects to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, 65(2), 81–93. doi:10.1509/jmkg.65.2.81.18255

Cobb-Walgren, C. J., Ruble, C. A., & Donthu, N. (1995). Brand equity, brand preference, and purchase intent. *Journal of Advertising*, 24(3), 25–37. doi:10.1080/00913367.1995.10673481

Cronin, J. J. Jr, Brady, M. K., & Hult, T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218. doi:10.1016/S0022-4359(00)00028-2

Datareportal. (2023), Top Digital Trends in 2023. Datareportal. https://datareportal.com/essential-instagram-stats

De Wulf, K., Odekerken-Schro"der, G., & Iacobucci, D. (2001). Investments in consumer relationships: A crosscountry and cross-industry exploration. *Journal of Marketing*, 65(4), 33–50. doi:10.1509/jmkg.65.4.33.18386

Dwivedi, A., Merrilees, B., Miller, D., & Herington, C. (2012). Brand, value and relationship equities and loyalty-intentions in the Australian supermarket industry. *Journal of Retailing and Consumer Services*, *19*(5), 526–536. doi:10.1016/j.jretconser.2012.06.009

Ebrahim, R. S. (2020). The role of trust in understanding the impact of social media marketing on brand equity and brand loyalty. *Journal of Relationship Marketing*, *19*(4), 287–308. doi:10.1080/15332667.2019.1705742

Erdem, T., & Swait, J. (1998). Brand equity as a signaling phenomenon. *Journal of Consumer Psychology*, 7(2), 131–158. doi:10.1207/s15327663jcp0702_02

Fang, Y. H. (2019). An app a day keeps a customer connected: Explicating loyalty to brands and branded applications through the lens of affordance and service-dominant logic. *Information & Management*, 56(3), 377–391. doi:10.1016/j.im.2018.07.011

Farahani, , J. (2012). The influence of selected marketing mix elements on brand equity in sport service. *Applied Research in Sport Management*, 2(2), 11–20.

Garg, R., & Telang, R. (2013). Inferring app demand from publicly available data. *Management Information Systems Quarterly*, *37*(4), 1253–1264. doi:10.25300/MISQ/2013/37.4.12

Gladden, J. M., & Milne, G. R. (1999). Examining the importance of brand equity in professional sport. *Sport Marketing Quarterly*, 8(1), 21–29.

Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing*, 69(4), 210–218. doi:10.1509/jmkg.2005.69.4.210

Hennig-Thurau, T., Gwinner, K. P., & Gremler, D. D. (2002). Understanding relationship marketing outcomes. *Journal of Service Research*, 4(3), 230–247. doi:10.1177/1094670502004003006

Ho, M. H. W., & Chung, H. F. (2020). Customer engagement, customer equity and repurchase intention in mobile apps. *Journal of Business Research*, 121, 13–21. doi:10.1016/j.jbusres.2020.07.046

Ho, T. N., Wu, W. Y., Nguyen, P. T., & Chen, H. C. (2019). The moderating effects for the relationships between green customer value, green brand equity and behavioral intention. *Academy of Strategic Management Journal*, 18(4), 1–21.

Hoehle, H., & Venkatesh, V. (2015). Mobile application usability: Conceptualization and instrument development. *Management Information Systems Quarterly*, *39*(2), 435–472. doi:10.25300/MISQ/2015/39.2.08

Huang, G.-H., & Korfiatis, N. (2015). Trying before buying: The moderating role of online reviews in trial attitude formation toward mobile applications. *International Journal of Electronic Commerce*, *19*(4), 77–111. doi:10.1080/10864415.2015.1029359

Huang, Y. C. (2022). How marketing strategy, perceived value and brand image influence WOM outcomes— The sharing economy perspective. *Journal of Retailing and Consumer Services*, 68, 103071. doi:10.1016/j. jretconser.2022.103071

Hyun, S. S. (2009). Creating a model of customer equity for chain restaurant brand formation. *International Journal of Hospitality Management*, 28(4), 529–539. doi:10.1016/j.ijhm.2009.02.006

Johnson, M. D., Herrmann, A., & Huber, F. (2006). The evolution of loyalty intentions. *Journal of Marketing*, 70(2), 122–132. doi:10.1509/jmkg.70.2.122

Kamariah, N., & Salwani, S. (2005). Determinants of online shopping intention. In *Proceedings of international conference on e-commerce*. CORE.

Kim, E., Ham, S., Yang, I., & Choi, J. G. (2013). The roles of attitude, subjective norm, and perceived behavioral control in the formation of consumers' behavioral intentions to read menu labels in the restaurant industry. *International Journal of Hospitality Management*, *35*, 203–213. doi:10.1016/j.ijhm.2013.06.008

Kim, E., Lin, J. S., & Sung, Y. (2013). To App or Not to App: Engaging Consumers via Branded Mobile Apps. *Journal of Interactive Advertising*, *13*(1), 53–65. doi:10.1080/15252019.2013.782780

Kim, K. H., Ko, E., Graham, H., Lee, D. H., Jung, H. S., & Jeon, B. J. (2008). Brand equity and purchase intention in fashion products: A cross-cultural study in Asia and Europe. *J Glob Acad Mark Sci*, 18(4), 245–276.

Kim, W., Kim, H., & Hwang, J. (2020). Sustainable growth for the self-employed in the retail industry based on customer equity, customer satisfaction, and loyalty. *Journal of Retailing and Consumer Services*, *53*, 101963. doi:10.1016/j.jretconser.2019.101963

Kim, W., Kim, H., & Hwang, J. (2020). Sustainable growth for the self-employed in the retail industry based on customer equity, customer satisfaction, and loyalty. *Journal of Retailing and Consumer Services*, 53, 101963. doi:10.1016/j.jretconser.2019.101963

Kline, R. B. (2015). Principles and practice of structural equation modeling. Guilford publications.

Kwon, H. H., Trail, G., & James, J. (2007). The mediating role of perceived value: Team identification and purchase intention of team-licensed apparel. *Journal of Sport Management*, 21(4), 540–554. doi:10.1123/jsm.21.4.540

Lemon, K. N., Rust, R. T., & Zeithaml, V. A. (2001). What drives customer equity? Mark Manage, 10(1), 20-25.

Li, Y., Yang, S., Zhang, S., & Zhang, W. (2019). Mobile social media use intention in emergencies among Gen Y in China: An integrative framework of gratifications, task-technology fit, and media dependency. *Telematics and Informatics*, *42*, 101244. doi:10.1016/j.tele.2019.101244

Li, Y., Yang, S., Zhang, S., & Zhang, W. (2019). Mobile social media use intention in emergencies among Gen Y in China: An integrative framework of gratifications, task-technology fit, and media dependency. *Telematics and Informatics*, *42*, 101244. doi:10.1016/j.tele.2019.101244

Volume 19 • Issue 1

Lim, X. J., Cheah, J. H., Ng, S. I., Basha, N. K., & Liu, Y. (2021). Are men from Mars, women from Venus? Examining gender differences towards continuous use intention of branded apps. *Journal of Retailing and Consumer Services*, 60, 102422. doi:10.1016/j.jretconser.2020.102422

McDonald, H., & Stavros, C. (2007). A defection analysis of lapsed season ticket holders: A consumer and organizational study. *Sport Marketing Quarterly*, *16*(4), 218–229.

Meller, J. J., & Hansan, T. (2006). An Empirical examination of brand loyalty. *Journal of Product and Brand Management*, 15(7), 442–449. doi:10.1108/10610420610712829

Molinillo, S., Aguilar-Illescas, R., Anaya-Sánchez, R., & Liébana-Cabanillas, F. (2021). Social commerce website design, perceived value and loyalty behavior intentions: The moderating roles of gender, age and frequency of use. *Journal of Retailing and Consumer Services*, 63, 102404. doi:10.1016/j.jretconser.2020.102404

Mondal, J., & Chakrabarti, S. (2021). The abandonment behaviour of the branded app consumer: A study using interpretive structural modelling approach. *Journal of Retailing and Consumer Services*, 63, 102695. doi:10.1016/j.jretconser.2021.102695

Mondal, J., & Chakrabarti, S. (2021). Insights and anatomy of brand experience in app based retailing (eRBX): Critical play of physical evidence and enjoyment. *Journal of Retailing and Consumer Services*, 60(May), 102484. doi:10.1016/j.jretconser.2021.102484

Morgan, R. P. (1999). A consumer-orientated framework of brand equity and loyalty. *International Journal of Market Research*, 42(1), 65–78.

Oliver, R. L. (1999). When consumer loyalty? *Journal of Marketing*, 63(4_suppl1), 33-44. doi:10.1177/00222429990634s105

Pang, H., & Ruan, Y. (2023). Determining influences of information irrelevance, information overload and communication overload on WeChat discontinuance intention: The moderating role of exhaustion. *Journal of Retailing and Consumer Services*, 72, 103289. doi:10.1016/j.jretconser.2023.103289

Purcell, K., Entner, R., & Henderson, N. (2010). The Rise of Apps Culture. *Pew Internet and American Life Project*. Pew Internet. https://www.pewinternet.org/Reports/2010/The-Rise-of-Apps-Culture.aspx

Qing, T., & Haiying, D. (2021). How to achieve consumer continuance intention toward branded apps—From the consumer–brand engagement perspective. *Journal of Retailing and Consumer Services*, 60, 102486. doi:10.1016/j.jretconser.2021.102486

Ramaseshan, B., Rabbanee, F. K., & Hui, L. H. (2013). Effects of customer equity drivers on customer loyalty in B2B context. *Journal of Business and Industrial Marketing*, 28(4), 335–346. doi:10.1108/08858621311313929

Richards, K. A., & Jones, E. (2008). Customer relationship management: FInding value drivers. *Industrial Marketing Management*, *37*(2), 120–130. doi:10.1016/j.indmarman.2006.08.005

Romaniuk, J., & Sharp, B. (2004). Conceptualizing and Measuring Brand Salience. *Marketing Theory*, 4(4), 327–342. doi:10.1177/1470593104047643

Ross, S. D. (2006). A conceptual framework for understanding spectator-based brand equity. *Journal of Sport Management*, 20(1), 22–38. doi:10.1123/jsm.20.1.22

Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on marketing: Using customer equity to focus marketing strategy. *Journal of Marketing*, 68(1), 109–127. doi:10.1509/jmkg.68.1.109.24030

Rust, R. T., Zeithaml, V. A., & Lemon, K. N. (2000). Driving customer equity: How customer lifetime value is reshaping corporate strategy. Free Press.

Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, 66(1), 15–37. doi:10.1509/jmkg.66.1.15.18449

Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value and loyalty in relational exchanges. *Journal of Marketing*, 66(1), 15–37. doi:10.1509/jmkg.66.1.15.18449

Sudhahar, J. C., Israel, D., Britto, A. P., & Selvam, M. (2006). Service loyalty measurement scale: A reliability assessment. *American Journal of Applied Sciences*, *3*(4), 1814–1818. doi:10.3844/ajassp.2006.1814.1818

Sweeney, J. C., Soutar, G. N., & Johnson, L. (1999). The role of perceived risk in the quality-value relationship: A study in a retail environment. *Journal of Retailing*, 75(1), 77–105. doi:10.1016/S0022-4359(99)80005-0

Van Noort, G., & Van Reijmersdal, E. A. (2019). Branded apps: Explaining effects of brands' mobile phone applications on brand responses. *Journal of Interactive Marketing*, 45(1), 16–26. doi:10.1016/j.intmar.2018.05.003

Vieceli, J., & Shaw, R. N. (2010). Brand Salience for Fast-Moving Consumer Goods: An Empirically Based Model. *Journal of Marketing Management*, 26(13–14), 1218–1238. doi:10.1080/0267257X.2010.523009

Vogel, V., Evanschitzky, H., & Ramaseshan, B. (2008). Customer equity drivers and future sales. *Journal of Marketing*, 72(6), 98–108. doi:10.1509/jmkg.72.6.098

Wang, R. J. H. (2020). (2020), "Branded mobile application adoption and customer engagement behavior. *Computers in Human Behavior*, *106*, 106245. doi:10.1016/j.chb.2020.106245

Wu, L. (2015), Factors of continually using branded mobile apps: the central role of app engagement. *Int. J. Internet Marketing and Advertising*, 9(4), 303-320.

Yoshida, M., & Gordon, B. (2012). Who is more influenced by customer equity drivers?: A moderator analysis in a professional soccer context. *Sport Management Review*, *15*(4), 389–403. doi:10.1016/j.smr.2012.03.001

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, *52*(3), 2–23. doi:10.1177/002224298805200302

Zhang, M., Xu, P., & Ye, Y. (2022). Trust in social media brands and perceived media values: A survey study in China. *Computers in Human Behavior*, *127*, 107024. doi:10.1016/j.chb.2021.107024

Zhao, Z., & Balague, C. (2015). Designing branded mobile apps: Fundamentals and re-commendations. *Business Horizons*, 58(3), 305–315. doi:10.1016/j.bushor.2015.01.004

APPENDIX

Table 5. the results of testing the hypotheses(indirect path)

Indirect path	Mediator	Path coefficient	Result
The value equity affects the behavioral intention	brand loyalty	0.01	Reject
The brand equity affects the behavioral intention	brand loyalty	0.03	Reject
The relationship equity affects the behavioral intention	brand loyalty	0.12	Support