Osmaniye Korkut Ata Üniversitesi
İktisadi ve İdari Bilimler Fakültesi Dergisi
Cilt: 4, Sayı: 2, Aralık 2020, ss. 1-18

Osmaniye Korkut Ata University
Journal of Economics and Administrative Sciences
Vol: 4, Issue: 2, December 2020, pp. 1-18

TRANSITION PROCESS FROM USING MEMBER CARDS TO MOBILE APPLICATIONS: AN APPLICATION ON THE STARBUCKS APP[1]

Geliş Tarihi: 03.09.2020
Kabul Tarihi: 20.11.2020
Makale Türü: Araştırma Makalesi

Ass. Prof. Dr. Murat GÜLMEZ[2]
Ass. Prof. Dr. Saadet SAĞTAŞ[3]

Abstract

The mobile applications offered by smart phones through the e-store, which are developed for functional and personal needs, have gone beyond simplifying daily life and have an important place in marketing. Purpose of the study, ın the context of push-pull-mooring theory, is to examine the consumer's intentions to change their behavior and the transition process from the using of member cards to using mobile applications of the brands. In line with this purpose, a survey was conducted with 237 university students who actively use the Starbucks member card and its mobile application. The quantitative data obtained were analyzed using SPSS 22 program. As a result of the study, it was found that there was a significant relationship between the transition process from member card usage to mobile application usage and pushing effect (poor aesthetic design), pulling effect (locatability, transaction convenience, economic benefit, gamification) and mooring effect (perceived substitutability, inertia). Furthermore, it was determined that the stagnation against change has a moderation role on the pushing effect and intention to change.

Key Words: Mobile Application, Push-Pull-Mooring, Member Cards.

JEL Code: M31.

ÜYE KARTLARI KULLANIMINDAN MOBİL UYGULAMALARA GEÇİŞ SÜRECİ: STARBUCKS APP ÜZERİNE BİR UYGULAMA

Özet

Akıllı telefonların kullanıcılarına e-mağaza aracılığıyla sunmuş oldukları, fonksiyenel ve kişinin ihtiyaçlarına yönelik olarak geliştirdikleri mobil uygulamalar, günlük hayatı kolaylaştırmanın ötesine geçerek pazarlama da önemli bir yer edinmiştir. Çalışmanın amacı; itme- çekme- bağlama (push-pull-mooring) teorisi çerçevesinde tüketicilerin üye kartı kullanımından, markaların mobil uygulamaları kullanımına geçiş sürecini ve davranış değiştirme niyetlerini incelemektir. Bu amaç doğrultusunda Starbucks kartını ve mobil uygulamasını aktif şekilde kullanan 237 üniversite öğrencisi ile anket uygulaması gerçekleştirilmiştir. Elde edilen nicel veriler SPPS 22 programından faydalanılarak analiz edilmiştir. Çalışmanın sonucunda üye kartı kullanımından mobil uygulama kullanımına geçiş süreci ile itme etkisi (zayıf estetik görünüm), çekme etkisi (yer belirleme, alışveriş kolaylığı, ekonomik fayda, oyunlaştırma) ve bağlama etkisi (algılanan yerine alabilirlik, değişime karşı durgunluk) arasında anlamlı bir ilişki olduğu tespit edilmiştir. Ayrıca değişime karşı durgunluğun, itme etkisi ve değiştirme niyeti üzerinde düzenleyici rolü olduğu belirlenmiştir.

Anahtar Kelimeler: Mobil Uygulama, İtme- Çekme- Bağlama, Üye Kartları.

JEL Kodu: M31.

[1] This study was presented as an abstract presentation at the 2nd International Multidisciplinary Studies Congress.

[2] Çağ University, Faculty of Economics and Administrative Sciences, International Trade and Logistics Department, mgulmez@cag.edu.tr, ORCID: 0000-0003-2584-785X

[3] Çağ University, Faculty of Economics and Administrative Sciences, International Trade and Logistics Department, saadetsagtas@cag.edu.tr, ORCID: 0000-0003-1834-2132

1. INTRODUCTION

Companies are more and more leaning towards the use of mobile marketing tools in order to respond to consumer requests and needs in the fastest way and to ensure continuous communication. Mobile marketing, with its broadest definition, is all marketing activities carried out to meet the needs and expectations of consumers through mobile phones, tablets, and other technological devices (Tarute et al., 2017). The mobile marketing tools that are becoming widespread nowadays are mobile applications offered by e-shops through the use of smart phones to their users.

Increasing competition has led businesses to turn to loyalty programs that will help them create long-term relationships with their consumers. The purpose of loyalty programs is to encourage consumers' repurchase behaviors with various rewards (Harris, 2000). Membership cards used in customer loyalty program applications are among the important tools used to profile the customer and reward their expenses. Consumers can benefit from various special discounts and gifts by collecting points for their expenses through the brand card (Turner and Wilson, 2006).

In recent years, companies have been turning to new strategies for marketing, promotion, and advertising activities with the developments in mobile technologies (Heo and Kim, 2017). Many firms show a trend moving from the use of traditional member cards to mobile applications with reward programs that positively affect consumer loyalty and repurchase behavior (Alnawas and Aburub, 2016). Despite this trend, it has not always been successful for consumers to switch from traditional member cards to brand mobile applications (Li, 2017).

Newly developing brand mobile applications are beginning to replace membership cards (Leenheer et al., 2007; Kumar and Shah, 2004), which are an important tool in ensuring customer loyalty. It is also known that these applications have a positive effect on creating customer loyalty (Agustin and Singh, 2005). Starbucks, which is among the successful companies using the mobile application, continues its activities successfully both in the world and in our country.

Lim (2015) states that mobile applications will fail when its consumers believe that the features are not functional or available. During the literature screening regarding brand applications that have been in development in recent years, it has been found that there has been a particular focus on areas like design (Kim et al., 2016), development (Zhao and Blague, 2015), ease of use (Dube and Helkkula, 2015), mobile payment and mobile trade (Tarute et al., 2017). Despite the existence of a limited number of foreign studies (Chen et al., 2013; Hsu & Lin, 2015; Hyeuk, 2016) investigating the causes and processes that affect the intentions of consumers to switch from member card use to mobile application use, the fact that no study in this field has yet to be conducted in our country has constituted to the existence of this study. It is important for companies to understand mobile applications (Hyeuk, 2016), which are known to have a positive effect on customer loyalty, and the factors affecting their intention to use. In this respect, it is thought that this study will contribute to the literature.

2. LITERATURE

2.1. Push, Pull and Mooring Framework (PPM)

The push-pull-mooring (PPM) theory is accepted in the literature as a common paradigm that explains why people migrated from one place to another (Bansal, Taylor and James, 2005). The basis of this paradigm is based on the determination of the seven factors that caused people's migration movements in 1881 in Britain, and then their research ended up

working those factors into their "Immigration Law". In 1938, Herberle explored the causes of immigration based on two factors: push and pull (Lewis, 1982). Accordingly, the push factor includes negative factors that push people to migrate from where they live. The pull factor includes positive factors that attract people to new living spaces and encourage migration (Bansal et al., 2005).

Moon (1995) argued that the evaluation of push and pull effects should be evaluated in conjunction with personal and social factors. Although the push and pull factors have a strong effect on the individual's immigration decision, he added that the mooring factor was included in the theory, stating that their situational restrictions and personality traits may affect this decision positively or negatively.

The mooring factor characterizes the link between push and pull factors. This consists of personal and social factors that have an encouraging or dissuasive effect on the migration process (Nimako and Winneba, 2012).

The theory of pushing, pulling and mooring used in the migration literature at first, was used later on in many different disciplines (Li and Ku, 2018). Recently, it has been observed that it is used in the field of marketing to examine the change in consumer behavior (Jung et al., 2017). As a result of the study in which the service expectations of the consumer were examined within the framework of push, pull and mooring factors (Bansal et al., 2005), it was determined that these variables had significant effects on the intention to change behavior. The transition of consumers from traditional marketing to multichannel marketing and their intention to change behavior have been examined within the framework of PPM (Choe et al., 2016). Likewise, Li and Ku (2018) used the push, pull and mooring framework to identify factors that affect the intent of e-commerce users to use social media e-commerce. In their study, Hou et al. (2011) examined the factors that affect why users of online virtual games switch to other virtual world games and their intention to change behavior within the framework of PPM.

In addition, PPM provides a theoretical model to understand changes in consumer behavior and predict its reasons. Beyond certain factors included in other technology acceptance models, such as ease of use, usefulness and behavioral intent, it allows the determination of push, pull and mooring factors for each work area. This feature allows the consumer behavior to be predicted correctly (Bansal et al., 2005).

The intent to change consumer behavior was examined within the framework of the PPM theory, and it was shown to have an effect on the intention to change behavior. In this context, the study focuses on the transition process from brand member card usage to mobile application within the push, pull and mooring framework. In this study, Hyeuk (2016) and Li (2017)’s studies were used to determine the push and pull effect factors. Accordingly, the study determined the characteristics of brand member cards and the perceptions of the consumers on the shortcomings of the member cards that makes them switch to mobile apps as its push effect factors. As the pulling factors, the features of mobile applications and the advantages they provide to users are taken as a basis. Personal and social factors that facilitate or make the transition to the use of mobile brand application were taken into account as mooring factors.

2.2. Push Effect

It is known that the appearance of the product has a positive effect on consumer perception and behavior (Wang and Li, 2017). It is stated that products with a good aesthetic appearance increase consumer loyalty to the product and the brand and encourage them to reuse (Orth and Malkewitz, 2008). It is seen that the logo, which is one of the visual design factors

especially for products, helps differentiate products, develop brand awareness, and influence product selection (Small et al., 2007).

Hyeuk (2016), in their study with consumers using the Starbucks mobile application, concluded that users find the external look of the Starbucks card aesthetic and that this feature has a positive effect on the use of the member card.

Consumers tend to evaluate products that have an aesthetically pleasing form in a more positive way. On the other hand, it is possible to state that products with weak aesthetic design do not provide effective value to consumers and have a negative effect on intention to use (Liu et al., 2016). For this reason, it can be considered as a pushing factor for users to find the aesthetic appearance of the Starbucks card inferior compared to the mobile application and this leads them to use the mobile application (Li, 2017). Similarly, in this study, a weak aesthetic appearance is taken as the push factor in the transition from using member cards to mobile applications.

2.3. Pull Effect

According to the PPM framework, if an alternative provides more benefits than what is currently used, consumers tend to change their behavior (Jung et al., 2015). Hyeuk's (2016) study summarizes important factors affecting brand loyalty of consumers as ease of use, cost savings, brand love, usefulness, and brand appeal. In addition, Li (2017) states that usefulness, convenience, entertainment and cost savings have a pulling effect on consumers' use of mobile applications. In this study, which focuses on the use of the brand mobile application, locatability (as a factor of usefulness) and gamification (as a factor of entertainment) are discussed as pulling effects. Ease of use and economic benefit are also included among the factors that lead consumers to switch from membership cards to mobile applications.

Especially with the developing mobile devices and GPS (Global Positioning System) technology, location-based applications have become an indispensable part of daily life. This application, which provides access to instant information such as traffic information, road information and weather, has become an important tool of digital marketing in recent years by enabling individuals to share places via their social media pages. Location-based applications enable the consumer to be quickly informed about the product and service and direct them to the nearest point of purchase (Heo and Kim, 2017). This application is provided by companies using specific rewarding and promotion techniques for the target audience (Özmen, 2015). Location-based applications provide many advantages to consumers as well as businesses. With the map feature offered by the application, consumers can find the store closest to their location and share their locations with others (Zhou, 2013). Similarly, consumers can access up-to-date news and innovations about the brand or place from their mobile phones through check-in provided by social media channels. The fact that brand mobile applications also include location-based services is a feature that increases its usefulness positively (Li, 2017). For this reason, in this study, locatability is analyzed under the pull effect that leads users to use mobile brand applications.

The other factor that is among pulling effects is gamification. Gamification is generally defined as the use of game elements in non-game activities in order to improve the user's experience (Deterding et al., 2011). Hamari and Koivisto (2015), on the other hand, narrowed the framework of gamification and emphasized its importance in terms of business administration. Accordingly, companies use the gamification strategy to increase their interactions with their current and future customers and to ensure strong customer loyalty.

Gamification in mobile applications makes the shopping process fun for consumers and increases purchases and customer loyalty (Hofacker et al., 2016).

Brand mobile apps use game design elements such as collecting points and stars, overriding user status ranking, goal completion and feedback to encourage changes in consumer behavior and ensure continuity of use (Robson et al. 2015). The Starbucks application offers similar features to its users. Users who make their payments from the mobile application can collect stars, raise user status, and receive various discounts and rewards. Gamification provides a distinct advantage to its consumers with the entertainment and reward systems that it offers (Blohm and Leimeister, 2013). For this reason, gamification is considered as a factor that encourages the transition from using brand cards to mobile applications.

It is known that the ease of payment and the economic benefit to be obtained also have an effect on the intention to change behavior (Li, 2017). In the purchasing procedure, consumers spend time and energy to complete their transactions. Sieders (2007) stated in their study that consumers perceive the waiting times during their shopping processes longer than they actually are and this negatively affects the brand's service evaluations.

Ease of payment is defined as the consumers conducting their shopping easily and quickly with less effort and time (Teo et al., 2015). Unlike brand member cards, the brand mobile applications offer mobile payment. In this way, users can quickly make payments from their application accounts without using cash and credit cards and without waiting in line. It is known that fast and easy payment has a positive effect on consumers' repurchase behavior (Jih, 2007).

In addition, it has been observed that the economic benefit that the consumers think they will get has a positive effect on the intention to use new technology products (Venkatesh et al., 2012). Because of this, the ease of payment and the advantages provided by the app are evaluated within the scope of the pull effect that will positively affect the transition of users from the Starbucks card to the use of mobile applications.

2.4. Mooring Effect

It is a complicated decision-making process for consumers to change the services or products they use (Li and Ku, 2018). Despite the negative pushing effects of the product leading the customers to change the service they are using, and attractive factors that encourage the use of the new service, the consumer may show resistance against change. Particularly situational and personal factors prevent consumers from changing their services (Bansal et al., 2005). The mooring effect, which is also perceived as change barriers, causes the consumer to continue to use the same service despite various alternatives.

It has been determined that the perception that the consumer is stagnant against change, and that the new alternative service offers the same features as the existing service negatively affects the transition from the use of member cards to the use of mobile applications (Li, 2017).

In the study, substitutability was examined under the mooring effect, and it is defined as two different products/services offering the same or similar features (Mao et al., 2012). When consumers believe that two products are substitutes, even in different forms, they can show a desire to use the new product (Aeker and Keller, 1990). Starbucks member cards and the mobile application, which were handled within the scope of the study, offer similar opportunities to the users with their ease of shopping and discount features even if they are in different forms. The perception of the user that the mobile application is a substitute for the member card can positively affect their intention to change (Li, 2017).

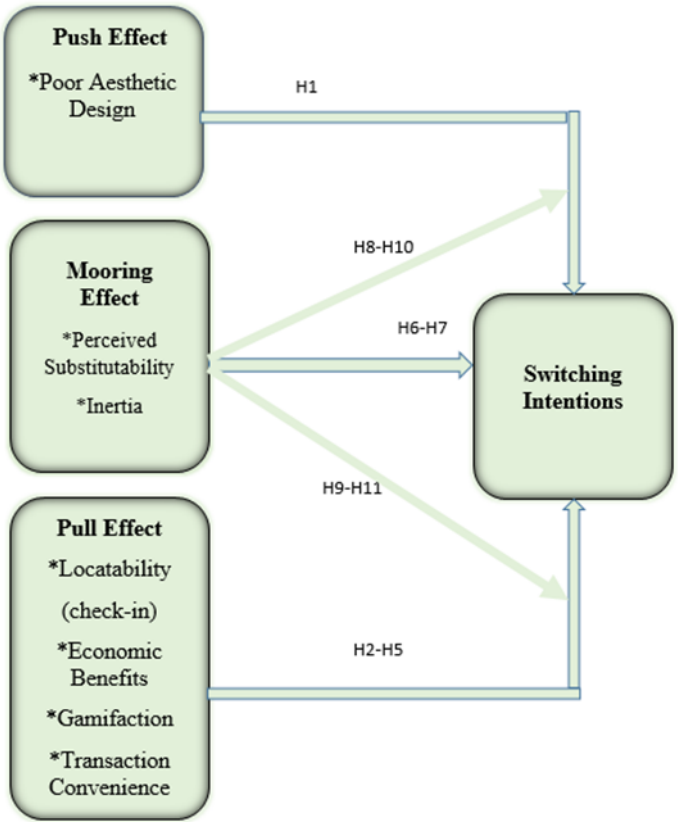
Another barrier to change that prevents consumers from using a new product or service is stagnation against change (Wu, 2011). Resistance to change, defined as unconscious behaviors that serve to maintain the same position of the person even if the existing conditions change, has an important place in understanding consumer behavior in the marketing field (Colgate and Lang, 2011). Consumers with high inertia towards change prefer to use the same product and service even if they encounter different options. Especially when these consumers think that they benefit from the product or service they receive, they avoid searching for new products and comparing products (Pitta et al., 2006). Thus, the individual prefers to use the brand they know and shops in line with their habits. In this study, where the transition process from Starbucks card use to their mobile application has been examined, inertia is evaluated within the scope of payment method and consumption habit, since it is for different products of the same brand. Inertia to change from the brand card and mobile application, which offers similar services, is among the factors that will negatively affect the consumers' intention to switch to the mobile application. A consumer who is especially satisfied with the use of a Starbucks card may tend to continue their existing consumption habits instead of trying a new application (Cheng et al., 2011).

3. METHOD

3.1. Purpose and Model of the Study

With the widespread use of mobile devices and rapid developments in internet access, smartphones have become one of the essentials of daily life. The mobile applications that smart phones, which enable internet use at any time, offer to their users via their e-store, developed for functional and personal needs, went beyond facilitating daily life and have gained an important place in marketing. The aim of the study, in the framework of the push-pull-mooring theory, is to examine the transition process of consumers from the use of member cards to the use of mobile applications of brands, and their intention to change behavior.

In line with the purpose of the research, the research model showing the variables and the relationship between variables is given in Figure 1.



Source: Li, C. Y. (2018). Consumer behavior in switching between membership cards and mobile applications: The case of Starbucks. *Computers in Human Behavior*, *84*, 184.

Figure 1: Study model

In the study, as the push effect, the characteristics of the brand member cards and the perceptions of the users on the shortcomings of the member cards that lead them to the mobile application were discussed. As the pull effect, the features of brand mobile applications and the advantages they provide to users were taken as basis. Personal and social factors that make the transition to the use of mobile application easier or more difficult were examined as the mooring effect. At the same time, the mediating role of mooring effect on the pushing and pulling effects was also examined in the study. The hypotheses developed based on the literature in line with the purpose and model of the research are listed below.

Table 1: Hypotheses

H_1: Poor aesthetic design associated with membership cards exerts a positive influence on consumers' switching intentions with regard to branded apps.
H_2: Locatability exerts a positive influence on consumers' intentions to switch from a loyalty card to a smartphone branded app.
H_3: Transaction convenience exerts a positive influence on consumers' intention to switch from membership cards to branded apps
H_4: Economic benefit exerts a positive influence on consumers' intention to switch from membership cards to branded apps.
H_5: Gamification exerts a positive influence on consumers' intention to switch from membership cards to branded apps.
H_6: Perceived substitutability exerts a positive influence on consumers' intention to switch from membership cards to branded apps.
H_7: Inertia exerts a negative influence on consumers' intention to switch from membership cards to branded apps.

H_8: Perceived substitutability moderates the relationship between a push effect and switching intention. The stronger the substitutability is, the stronger the relationship becomes between a push variable (low aesthetic appeal) and intention to switch from membership cards to branded apps.
H_9: Perceived substitutability moderates the relationship between pull effects and switching intention. The stronger the substitutability is, the stronger the relationship becomes between pull variables (locatability, transaction convenience, economic benefits, and gamification) and intention to switch from membership cards to branded apps.
H_{10}: Consumer inertia moderates the relationship between a push effect and switching intention. The stronger the inertia is, the weaker the relationship becomes between the push variable (poor aesthetic design) and the intention to switch from membership cards to branded apps.
H_{11}: Consumer inertia moderates the relationship between pull effects and switching intention. The stronger the inertia is, the weaker the relationship becomes between pull variables (ability to pinpoint a location, transaction convenience, economic benefits, and gamification) and the intention to switch from membership cards to branded apps.

3.2. Study Group

In this study, where the transition of users from the use of a brand membership card to the brand mobile application was investigated within the scope of the push-pull-mooring theory, the main part of the study consisted of university students who are studying at Çağ University and actively use the Starbucks card or mobile application. In determining the sample of the research, easy, non-random sampling method, was used (Gürbüz and Şahin, 2014). In this context, a survey was conducted with students between April 2018 and October 2019, and the survey was completed with 237 participants in total. Information about the participants is given in Table 2.

Table 2: Demographic Information of the Participants

		Number of Participants (n)	Percentage (%)
Sex	Female	138	58.2
	Male	99	41.8
Starbucks Member Card Use	Yes	169	71.3
	No	68	28.7
Starbucks App Use	Yes	163	68.8
	No	74	31.2
Frequency of Use	Daily	98	41.4
	Weekly	37	15.6
	Once a month	14	5.9
	Twice a month	16	6.8
	Rarely	72	30.4

When Table 2 is analyzed, it can be seen that 58.2% of the participants are female and 41.8% are male. When the card vs. application usage rates, which are the prerequisites of the questionnaire application, are analyzed, 71.3% of the participants state that they use cards, while this rate is 28.7% for those who do not. The number of participants using the application was determined as 68.8%. Finally, when the data on the frequency of using cards and applications were examined, it was determined that 41.4% of the participants used them each day, and 30.4% rarely used them.

3.3. Data Collection Tools and Data Analysis

The research questionnaire consists of two basic parts. In the first part of the questionnaire, an adapted version of Li's (2017) scale for pushing, pulling and mooring effect was used to determine the intentions of consumers to switch to the mobile brand application. In the first part of the scale, there are four statements to determine the pushing effect, 15 statements

to determine the pulling effect and 11 statements to determine the mooring effect. 5-point Likert scale (1: Completely disagree, 5: Completely agree) was used to measure these statements. In the second part of the scale, there are six questions prepared to determine the demographic characteristics of the participants.

During the adaptation of the scale from English to Turkish, the translation-retranslation method was used, and the opinions of two academics who knew both languages well were taken into account. Then, the pilot study was implemented with 30 participants, who were postgraduate students, and the scale was then finalized.

The suitability of the push-pull-mooring scale for factor analysis was investigated by Kaiser-Meyer-Olkin (KMO) and Barlett tests. KMO value for the scale consisting of 30 statements evaluated was found as 919, Barlett test result x2 = 4648.001 and p =.000 ($p \leq 0.5$). The KMO value was higher than 0.60 and the Barlett test is significant, which shows that the data are suitable for factor analysis (Gürbüz and Şahin, 2018). In the analysis phase, a factor load value of 0.40 was taken as basis, and items 15, 16, 19 and 26, whose load value was below 40, and with a difference of 0.10 or less in more than one factor, were excluded from the analysis. In the factor analysis performed with the remaining 26 items on the scale, it turned into an 8-dimensional structure, and the scale explains 64.337% of the total variance.

The reliability of the entire scale and its sub-dimensions was determined by Cronbach's Alpha internal consistency coefficient. When the reliability analysis results of the scale are examined, it was observed that the Cronbach's Alpha value of the scale is 0.94. Cronbach's Alpha values related to the push-pull-mooring sub-dimensions of the scale were determined as follows; aesthetic appearance 0.87, locatability 0.86, economic benefit 0.85, gamification 0.85, ease of payment 0.93, perceived interchangeability 0.85, inertia 0.78, and intention to change 0.76. The alpha value takes values between 0 and 1, and an acceptable value is expected to be at least 0.70 (Altunışık et al., 2010). The scale has been found to be highly reliable since the values obtained are in the range of $0.70 \leq \alpha < 0.90$.

4. FINDINGS

For the purpose of the study, SPSS 22 program was used to test the hypotheses developed based on the research model and the literature. For the hypothesis testing of the research, simple linear regression analysis and regulatory regression analysis were used with the Process program. Regression analysis was used to test the H1 hypothesis, which was developed in order to determine the relationship between the poor aesthetic appearance and the usage of the brand application, within the scope of the push effect. Findings related to the hypothesis analysis are given in Table 3.

Table 3: The Relationship Between Poor Aesthetic Appearance and Intention To Switch

Variable	Beta Value	t Value	P*
Poor Aesthetic Appearance	.399	7.408	.000
F value		44.584	.000
R value		.159	
Corrected R2 value		.156	

***** $p<0.05$

When the findings in Table 3 are examined, it is determined that there is a statistically significant relationship between poor aesthetic appearance and intention to switch. ($F=44.584$; $p<0.05$). According to these results, the **H1**: Poor aesthetic design associated with membership cards exerts a positive influence on consumers' switching intentions with regard to branded apps, hypothesis is supported. The results of the regression analysis conducted to determine the

relationship between the locatability that the mobile application offers to its users and the intention to switch to a smartphone branded app are presented in Table 4.

Table 4: The Relationship Between Locatability and Intention to Switch

Variable	Beta Value	t Value	P*
Locatability	.539	7.013	.000
F value		96.405	.000
R value		.291	
Corrected R2 value		.288	

* $p<0.05$

As a result of the regression analysis, a statistically significant relationship was determined between the participants' intention to switch and locatability. ($F=96.405$; $p<0.05$). Thus, the **H_2**: Locatability exerts a positive influence on consumers' intentions to switch from a loyalty card to a smartphone branded app, hypothesis is supported.

Findings regarding the relationship between transaction convenience and consumers' intention to switch from membership cards to branded apps are given in Table 5.

Table 5: The Relationship Between Transaction Convenience and Intention to Switch

Variable	Beta Value	t Value	P*
Transaction Convenience	.472	7.994	.000
F value		67.279	.000
R value		.223	
Corrected R2 value		.219	

***** $p<0.05$

In Table 5, the relationship between transaction convenience and the intention to switch was tested with regression analysis. According to the findings in the table, there was a significant relationship between the transaction convenience offered by the branded app and the intention to switch ($F=67.279$; $p<0.05$). According to these results, the **H_3**: Transaction convenience exerts a positive influence on consumers' intention to switch from membership cards to branded apps, hypothesis is supported.

The results of the analysis on the relationship between the branded apps offering more economic benefits than the brand card and the intention to switch are given in Table 6.

Table 6: The Relationship Between Economic Benefits and Intention to Switch

Variable	Beta Value	t Value	P*
Economic Benefit	.515	9.674	.000
F value		84.841	.000
R value		.265	
Corrected R2 value		.262	

***** $p<0.05$

In Table 6, as a result of the values obtained with the help of regression analysis, it was determined that there is a statistically significant relationship between the economic benefit and intention to switch ($F=84.841$; $p<0.05$). According to this, the **H_4:** Economic benefit exerts a positive influence on consumers' intention to switch from membership cards to branded apps, hypothesis is supported.

The results of the analysis, which examines the relationship between gamification and the intention to change, which is the last variable discussed within the scope of the pull effect, are given in Table 7.

Table 7: The Relationship Between Gamification and Intention to Switch

Variable	Beta Value	t Value	P*
Gamification	.523	7.798	.000
F value		88.641	.000
R value		.274	
Corrected R2 value		.271	

***** p<0.05

When the relationship between gamification and intention to switch is examined, it is seen that there is a significant relationship between gamification and intention to change (F=88.641; p<0.05). Therefore, the **H_5:** Gamification exerts a positive influence on consumers' intention to switch from membership cards to branded apps, hypothesis is supported.

The relationship between perceived substitutability and intention to change is examined in Table 8 with the help of the regression analysis

Table 8: The Relationship Between Perceived Substitutability and Intention to Switch

Variable	Beta Value	t Value	P*
Perceived Substitutability	.531	3.559	.000
F Value		92.344	.000
R Value		.289	
Corrected R2 value		.279	

***** p<0.05

When the findings regarding the relationship between the perception that the branded apps can replace the membership cards and the intention to switch from a loyalty card to a smartphone branded app were examined, a statistically significant relationship was found (F=92.344; p<0.05). According to these results the **H_6:** Perceived substitutability exerts a positive influence on consumers' intention to switch from membership cards to branded apps, hypothesis is supported.

In Table 9, the relationship between inertia and intention to switch was tested by regression analysis.

Table 9: The Relationship Between Inertia and Intention to Switch

Variable	Beta Value	t Value	P*
Inertia	.321	5.194	.000
F Value		26.976	.000
R Value		.103	
Corrected R2 value		.099	

***** p<0.05

When the findings in Table 9 are examined, the relationship between inertia and intention to switch was tested by regression analysis. (F=26.976; p<0.05). In this case, the **H_7**: Inertia exerts a negative influence on consumers' intention to switch from membership cards to branded apps, hypothesis is also supported.

The SPSS Process program developed by Hayes (2013) was used to test the $Hypothesis_{8,}$ $Hypothesis_{9,}$ $Hypothesis_{10}$ and $Hypothesis_{11}$ which were developed to examine the moderating role of the mooring effect on the push and pull effect, and regulatory regression analysis was performed.

The results of the analysis examining the regulatory role of the perceived substitutability on the push effect and the intention to switch are given in Table 10.

Table 10: Regulatory Role of Perceived Substitutability Between Push Effect and Intention to Switch

Effects	Relation	Coefficient	Standard Error	t Value	p	Confidence Interval Lower Limit	Confidence Interval Upper Limit
Main	PE-IS	.1958	.2811	.6967	.4867	-.3579	.7495
	PS-IS	.5419	.2636	2.056	.4090	.0225	1.061
Interactive	IE*PS	.0042	.0707	.0594	**.9527**	-.1352	.1436

Model Summary

R	R^2	F	Sd1	Sd2	p
.5557	.3088	34.6941	3.000	233.0000	.0000

p<0.05 (PE: Push Effect. PS: Perceived Substitutability, IS: Intention to switch)

The results of the analysis in Table 10 show that the model with the perceived substitutability, push effect and intention of switch variables is statistically significant (F=34.691; p<0.05). R^2 value is 3088 in the created regression model. With this result, it is concluded that approximately 31% of the variance in the intention to switch variable originates from the push effect variable. In Table 10, the interactive effect (PE * PS) or the term of interaction not being significant (p = .9527) indicates that the regulatory variable has no significant effect. According to these results, the **H_8:** Perceived substitutability moderates the relationship between a push effect and switching intention. The stronger the substitutability is, the stronger the relationship becomes between a push variable (low aesthetic appeal) and intention to switch from membership cards to branded apps, hypothesis is not supported.

Table 11: Regulatory Role of Perceived Substitutability Between Pull Effect (PE) and Intention to Switch

Effects	Relation	Coefficient	Standard Error	t Value	p	Confidence Interval Lower Limit	Confidence Interval Upper Limit
Main	PE-IS	.2522	.2314	1.089	.2769	-.2037	.7081
	PS-IS	-.0621	.2451	-.2532	.8003	-.5449	.4208
Interactive	PE*PS	.0894	.0617	1.449	**.1486**	-.0321	.2110

Model Summary

R	R^2	F	Sd1	Sd2	p
.6402	.4099	53.946	3.000	233.0000	.0000

p<0.05

The perceived substitutability's regulating role between the intention to switch and pull-effect is shown in Table 11. According to the findings in the table, the analysis model is considered significant because F = 53.946 and p <0.05. It is concluded that R2 value in the model is 4099, and approximately 41% of the variance in the variable of modification varies from the pull effect variable. In Table 11, the interactive effect (PE * PS) or the term of interaction not being significant (p = .1486) indicates that the regulatory variable has no significant effect. According to the results obtained the **H_9:** Perceived substitutability moderates the relationship between pull effects and switching intention. The stronger the substitutability is, the stronger the relationship becomes between pull variables (locatability, transaction convenience, economic benefits, and gamification) and intention to switch from membership cards to branded apps, hypothesis is not supported.

Table 12: The Push-Effect of Inertia and Its Role on the Intention to Switch

Effects	Relation	Coefficient	Standard Error	t Value	p	Confidence Interval Lower Limit	Confidence Interval Upper Limit
Main	PE-IS	.0108	.1719	.0626	.9501	-.3279	.3494
	IE-IS	-.3046	.2107	-1.445	.1497	-.7198	.1106
Interactive	PE*IE	.1214	.0528	2.297	**.0225**	-.0173	.2256

Model Summary

R	R^2	F	Sd1	Sd2	p
.4617	.2132	21.044	3.000	233.0000	.0000

p<0.05

The results of statistical analysis carried out to determine the regulatory role of inertia on push effect and intention to switch are given in Table 12. First of all, when looking at the model summary to determine the suitability of the model for analysis, since F = 21,044; p <0.05, it is seen that the model is suitable for analysis. In the regression model created, R2 value is 2132. With this result, it is concluded that approximately 21% of the variance in the variable of intention to switch originates from the push effect variable. In Table 12 inertia (IE * DD) effect or the interaction being meaningful (p = .0225) indicates the presence of a regulatory variable. In this context the relationship between push effect and intention to switch is examined at different levels of inertia. In cases where inertia is low (B = .5572, S.S., 1078 =, t = 5.1701, and p = .0000), the relationship between push- effect and intention to switch is stronger.

Table 13: The Pull-Effect of Inertia and Its Role On Intention of Switch

Effects	Relation	Coefficient	Standard Error	t value	p	Confidence Interval Lower Limit	Confidence Interval Upper Limit
Main	PE-IS	.8968	.1448	6.193	.0000	.6115	1.1820
	IE-IS	.4347	.1831	2.375	.0184	.0741	.7954
Interactive	PE*IE	-.0728	.0451	-1.613	.1081	-.1616	.0161

Model Summary

R	R^2	F	Sd1	Sd2	p
.6454	.4166	55.454	3.000	233.0000	.0000

p<0.05

Therefore, the **H_{10}**: Consumer inertia moderates the relationship between a push effect and intention to switch. The stronger the inertia is, the weaker the relationship becomes between the push variable (poor aesthetic design) and the intention to switch from membership cards to branded apps, hypothesis is supported.

The results of the statistical analysis carried out to determine the regulatory role of inertia on pull effect and intention to switch are given in Table 13. The results of the analysis in Table 13 show that the model with the variables of inertia, pull effect and intention to switch is significant (F=55.454; p<0.05). In the regression model, R2 value is 4166. With this result, it is concluded that approximately 42% of the variance in the variable of intention to switch originates from the pull effect variable. It is seen that there is a significant relationship between pull effect and intention to switch (t = 6.193, p <0.05). Similarly, a significant relationship was found between inertia and intention to switch (t = 4347, p <0.05). On the other hand, inertia effect (PE* IE) or lack of interaction term (p = 1081) indicates that the regulatory variable has no significant effect. According to these results, the **H_{11}:** Consumer inertia moderates the relationship between pull effects and intention to switch. The stronger the inertia is, the weaker the relationship becomes between pull variables (ability to pinpoint a location, transaction

convenience, economic benefits, and gamification) and the intention to switch from membership cards to branded apps, hypothesis is not supported.

5. CONCLUSION AND SUGGESTIONS

Brand mobile applications have become a new marketing tool by enabling an active and wide audience for businesses. Many companies tend to follow their marketing, promotion and advertising activities with brand mobile applications on smartphones. Starbucks, which is among the most successful companies in mobile brand application; (myStarbucks worldwide, Starbucks mobile app in Turkey) offers many advantages to its consumers such as ordering, paying, and buying discounted coffee before going to the store. In the study, the intentions of users to switch from membership cards to branded mobile applications were examined in the sample of Starbucks users within the framework of the push-pull-mooring effect. At the same time, the regulating/modifying role of the mooring effect on the push and pull effects was also included in the research. For this purpose, a survey was conducted with 237 participants using the Starbucks brand card and application.

Unlike other technology acceptance models, push-pull-mooring theory offers research opportunities within the framework of its own negative-off-putting factors, and attractive-positive factors. In this context, the weak aesthetic appearance of the brand card was evaluated as a push effect, locatability, economic benefit, gamification, and ease of payment are presented as the push effects. Within the scope of the binding effect, inertia variable from the personal characteristics of the individual, and their perception that the brand application will replace the card are included.

According to the results of the research, it has been determined that there is a significant relationship between the individual's perception that the brand card's aesthetic appearance is weak and their intention to change. In other words, the weakness of the brand card's aesthetic appearance has a positive effect on the intention to switch to the mobile application. This result obtained is also compatible with the literature. In their study, Candi (2010) states that consumers attach importance to the aesthetic appearance of the products and prefer to use products that are attractive to them in terms of appearance. It is possible to say that an aesthetically pleasing design is decisive on user preferences (Liu, 2017).

In the study, it was determined that there was a significant relationship between locatability and the intentions of users to switch to the mobile applications. Bellman (2013) states that, in accordance with the results of the study, users can check-in using mobile applications and easily access places close to them. Similarly, it has been concluded that the shopping gamification feature of the mobile application has a positive effect on the customer's intention to switch to the mobile application. The features offered by the Starbucks application, such as collecting stars, increasing their user status (level) according to the stars they gain, reflect the gamification feature. Gamification positively affects customer loyalty and repurchase behavior (Blohm and Leimeister, 2013). It is possible to say that the locatability and gamification that we encounter as features that are not included in the brand member card, enables us to turn to the use of mobile applications. Another result obtained in the study is that there is a significant relationship between the economic benefit presented by the mobile application and the intention to switch to it, which is examined in the pull effect. It is determined that consumers think that they will gain more economic benefits by using mobile applications. This result shows that users aim to achieve maximum economic benefits during their shopping process (Kara, 2015). When the results of the relationship between the ease of payment and the intention to change are examined within the scope of the pull effect, it is determined that there is a positive and significant relationship. Features such as ordering and paying without going to

the store offered by mobile applications simplify the shopping process. It is known that having an easy shopping process has an impact on the customer's intention to change (Chang and Polonsky, 2012). This result can be evaluated as the consumers finding shopping faster and easier with the mobile application when compared to the brand member card.

In the study, the effect of personal characteristics of the consumers in their intentions to change the use of the brand member card with the mobile application was discussed within the scope of inertia and perceived substitutability. According to the results obtained, the individual's inertia or being closed to change negatively affects their intention to change. This situation can be interpreted as the consumers who are not particularly interested in trying a new product, tend to continue using the member card rather than using the application. This result is also compatible with a study (Cheng et al., 2011) stating that people who are stagnant against change prefer the same product and brand depending on their habits. Within the scope of the study, the regulatory role of inertia on the push and pull effect, and the intention to change was also examined. As a result of the analysis, it was concluded that inertia had a regulatory role between the push effect and the intention to change. Accordingly, in cases where inertia is high, the relationship between the pushing effect and intention to change seems to weaken. In other words, the perception of people, who aren't open to change, on the negative qualities of the card has little effect on the intention to change. Consumers that are closed to change may tend to ignore the negative features of the product or brand they use and justify their choice (Lai et al., 2011). It is also among the study results that inertia does not have a regulatory role between the pulling effect and the intention to change. This result is also compatible with the study of Li (2017). This situation can be interpreted that the users who are closed to change do not tend to try a new application despite the positive features such as locatability, gamification, shopping convenience, and economic benefits.

Finally, when the findings related to perceived substitutability are examined, it is determined that there is a positive relationship between the perception that the mobile application will replace the brand member card and their intention to switch. Accordingly, when the consumer thinks that they will get the services provided by the mobile application, the services provided by the card and more, they tend to use mobile applications. Pillai and Bindroo (2013) state that, in line with the results of the study, consumers will tend to choose the product that will provide maximum benefit in substitutable products that they think will replace each other. Whether displacement has a regulatory role on the push and pull effect and the intention to change is examined with the help of regulatory regression analysis. Considering the findings obtained from the study, it was concluded that substitutability does not have a regulatory role in either analysis. Although the mobile application has a positive effect on the intention to change with its advantageous features, the lack of a regulatory role can be interpreted as a result of being products of the same brand. In this context, a more comprehensive research of the substitutability variable with application and member cards belonging to different brands is recommended for future studies.

REFERENCES

Agustin, C., Singh, J. (2005). Curvilinear Effects of Consumer Loyalty Determinants in Relational Exchanges. *Journal of Marketing Research*, 42, 96-108.

Alnawas, I., Aburub, F. (2016). The effect of benefits generated from interacting with branded mobile apps on consumer satisfaction and purchase intentions. *Journal of Retailing and Consumer Services*, 31, 313-322.

Bansal, HS., Taylor, SF., James, YS. (2005). Migrating to new service providers: Toward a unifying framework of consumers' switching behaviors. *Journal of the Academy of Marketing Science, 33*(1), 96-115.

Bellman, S., Treleaven-Hassard, S., Robinson, JA., Varan, D., Potter, RF. (2013). Brand communication with branded smartphone apps: First insights on possibilities and limits. *GfK Marketing Intelligence Review,* 5(2), 24-27.

Blohm, I., Leimeister, JM. (2013). Gamification. *Wirtschaftsinformatik,* 55(4), 275-278.

Candi, M., Saemundsson, RJ. (2011). Exploring the relationship between aesthetic design as an element of new service development and performance. *The Journal of Product Innovation Management, 28*(4), 536-557.

Chang, YW., Polonsky, MJ. (2012). The influence of multiple types of service convenience on behavioral intentions: The mediating role of consumer satisfaction in a Taiwanese leisure setting. *International Journal of Hospitality Management, 31*(1), 107-118.

Cheng, CC., Chiu, SI., Hu, HY., Chang, YY. (2011). A study on exploring the relationship between customer satisfaction and loyalty in the fast food industry: With relationship inertia as a mediator. *African Journal of Business Management, 5*(13), 5118- 5126. doi: http://dx.doi.org/10.5897/AJBM10.870

Colgate, M., Lang, B. (2001). Switching barriers in customer markets: an investigation of the financial services industry, *Journal of Customer Marketing, 18*(4), 332-47.

Deterding, S., Dixon, D., Khaled, R., Nacke, L. (2011). From game design elementsto gamefulness: defining gamification. In Proceedings of the 15th internationalacademic MindTrek conference: Envisioning future media environments Tampere, Finland, September 28-30.

Dube, A., Helkkula, A. (2015). Service experiences beyond the direct use: indirect customer use experiences of smartphone apps. *Journal of Service Management,* 26(2), 224.

Hamari, J., Koivisto, J. (2015). Why do people use gamification services?. *International Journal of Information Management, 35*(4), 419-431.

Heberle, R. (1938). The causes of rural-urban migration a survey of German theories, *Am. J. Sociol. 43*(6), 932-950.

Heo, JY., Kim, KJ. (2017). Development of a scale to measure the quality of mobile location-based services. *Service Business,* 11(1), 141-159.

Hofacker, CF., De Ruyter, K., Lurie, NH., Manchanda, P., Donaldson, J. (2016). Gamification and mobile marketing effectiveness. *Journal of Interactive Marketing,* 34, 25-36.

Hou, ACY., Chern, CC., Chen, HG., Chen, YC. (2011). 'Migrating to a new virtual world': Exploring MMORPG switching through human migration theory. *Computers in Human Behavior,* 27(5), 1892-1903.

Hsu, CL., Lin, JCC. (2015). What drives purchase intention for paid mobile apps?-An expectation confirmation model with perceived value. *Electronic Commerce Research and Applications,* 14(1), 46-57.

Hyeuk, C. (2016). Consumer brand engagement by virtue of using Starbucks's branded mobile app based on gronded theory methodology. *International Journal of Asia Digital Art & Design, 19*(4), 91-97.

Jih, WJK. (2007). Effects of consumer-perceived convenience on shopping intention in mobile commerce: an empirical study. *International Journal of E-Business Research, 3*(4), 33-48.

Jung, J., Han, H., Oh, M. (2017). Travelers' switching behavior in the airline industry from the perspective of the push-pull-mooring framework. *Tourism Management,* 59, 139-153.

Kara, G. (2015). Marka deneyimi ve tekrar satın alma niyeti arasındaki ilişkide müşteri tatmininin rolü (Yüksek Lisans Tezi, Osman Gazi Üniversitesi, Sosyal Bilimler Enstitüsü, Eskişehir).

Kumar, V., Shah D. (2004). Building and Sustaining Profitable Customer Loyalty for the 21st Century, *Journal of Retailing, 80*(4), 317-29.

Lai, LH., Liu, CT., Lin, JT. (2011). The moderating effects of switching costs and inertia on the customer satisfaction-retention link: auto liability insurance service in Taiwan. *Insurance markets and companies: analyses and actuarial computations,* 2(1), 69-78.

Leenheer, J., van Heerde, HJ., Bijmolt, THA., Smidts, A. (2007). Do Loyalty Programs Really Enhance Behavioral Loyalty? An Empirical Analysis Accounting for Self-Selecting Members, *International Journal of Research in Marketing, 24*(1), 31-47.

Lewis, GJ. (1982). Human Migration: A Geographical Perspective. Croom Helm: London.

Li, CY. (2018). Consumer behavior in switching between membership cards and mobile applications: The case of Starbucks. *Computers in Human Behavior,* 84, 171-184.

Li, CY., Ku, YC. (2018). The power of a thumbs-up: Will e-commerce switch to social commerce?. *Information & Management,* 55(3), 340-357.

Lim, SL., Bentley, PJ., Kanakam, N., Ishikawa, F., Honiden, S. (2015). Investigating country differences in mobile app user behavior and challenges for software engineering. *IEEE Transactions on Software Engineering,* 41(1), 40-64.

Liu, W., Guo, F., Ye, G., Liang, X. (2016). How homepage aesthetic design influences users' satisfaction: Evidence from China. *Displays,* 42, 25-35. doi: https://doi.org/10.1016/j.displa.2016.02.004

Liu, Y., Li, KJ., Chen, H., Balachander, S. (2017). The effects of products' aesthetic design on demand and marketing-mix effectiveness: The role of segment prototypicality and brand consistency. *Journal of Marketing, 81*(1), 83-102.

Mao, H., Mariadoss, BJ., Echambadi, R., Chennamaneni, PR. (2012). Brand extensions via complements or substitutes: The moderating role of manufacturing transferability. *Marketing Letters,* 23(1), 279-292.

Moon, B. (1995). Paradigms in migration research: exploring moorings as a schema, Progr. Hum. Geogr. *19*(4), 504-524.

Nimako, SG., Winneba, KG. (2012). Consumer switching behaviour: a theoretical review and research agenda. *Research Journal of Social Science and Management, 2*(3), 74-85.

Orth, UR., Malkewitz, K. (2008). Holistic package design and consumer brand impressions. *Journal of marketing, 72*(3), 64-81.

Özmen, Ş. (2014). *E-Ticaret ağ ekonomisinde yeni ticaret yolu*. İstanbul: İstanbul Bilgi Üniversitesi Yayınları.

Pillai, RG., Bindroo, V. (2014). The moderating roles of perceived complementarity and substitutability on the perceived manufacturing difficulty–extension attitude relationship. *Journal of Business Research, 67*(7), 1353-1359.

Pitta, D., Franzak, F., Fowler, D. (2006). A strategic approach to building online customer loyalty: integrating customer profitability tiers, *Journal of Consumer Marketing, 23*(7), 421-9.

Robson, K., Plangger, K., Kietzmann, JH., McCarthy, I., Pitt, L. (2015). Is it all a game? Understanding the principles of gamification. Business Horizons, 58(4), 411-420. doi: http://dx.doi.org/10.1016/j.bushor.2015.03.006

Seiders, K., Voss, GB., Godfrey, AL., Grewal, D. (2007). SERVCON: development and validation of a multidimensional service convenience scale. *Journal of the Academy of Marketing Science, 35*(1), 144-156.

Small, J., Melewar, T., Pittard, N., Ewing, M., Jevons, C. (2007). Aesthetic theory and logo design: Examining consumer response to proportion across cultures. *International Marketing Review*, 24(4), 457-473.

Tarute, A., Nikou, S., Gatautis, R. (2017). Mobile application driven consumer engagement. *Telematics and Informatics,* 34(4), 145-156.

Teo, AC., Tan, GWH., Ooi, KB., Hew, TS., Yew, KT. (2015). The effects of convenience and speed in m-payment. *Industrial Management & Data Systems,* 115(2), 311-333.

Turner, J., Wılson, K. (2006). Grocery loyalty: tesco clubcard and its impact on loyalty, *British Food Journal*, *108*(11):958-964.

Venkatesh, V., Thong, JY., Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, 36(1), 157-178.

Wu, LW. (2011). Satisfaction, inertia, and customer loyalty in the varying levels of the zone of tolerance and alternative attractiveness. *Journal of Services Marketing, 25*(5), 310-322.

Zhao, Z., Balagué, C. (2015). Designing branded mobile apps: Fundamentals and recommendations. *Business Horizons,* 58(3), 305-315.

Zhou, T. (2016). Examining user switch between mobile stores: A push-pull-mooring perspective. *Information Resources Management Journal, 29*(2), 1-13.