The Effect of Customer Engagement in the Relationship between Brand Commitment and Customer Retention

Azza Abdel Kader El Borsaly

Esraa Kamel Mahni

Faculty of Business Ain Shams University
Egypt

Faculty of Business Ain Shams University
Egypt

Abstract:

The goal of this research is to determine the role of social media involvement as a moderating variable in the link between brand commitment and customer retention for smartphone businesses. The study is a conclusive descriptive research and employs a technique. study utilizes regulatory deductive The the engagement theory to investigate the proposed research model in the egyptian smartphone industry context. The study targeted a sample of 317 undergraduate students from the faculty of business at Ain Shams University. Structural equation model (SEM) was used to test the conceptual framework in this research. The study focused on the affective and continuance brand commitments as two key positive paths to customer The results indicate that customer engagement retention. positively influences the relationship between brand commitment and customer retention. In addition, affective commitment exceeds continuance commitment in term of customer retention.

Key Words: Brand commitment, Affective commitment, Continuance commitment, Customer retention, Customer

engagement, Affective engagement, Cognitive engagement, Behavioral engagement, social media networks.

1. Introduction

- 2. customers are the most important assets of a company, companies have been giving attention
- 3. to developing customer retention and loyalty programs customers are the most important assets of a company, companies have been giving attention to developing customer retention and loyalty programs

Customers represent one of the most intangible important assets a company can have, this is why companies focus on developing customer retention and loyalty programs. Companies benefit from adopting retention marketing strategies because loyal customers increase their spending at an increasing rate, buy at a full margin instead of waiting for discount prices, and create operating efficiencies (Reichheld & Sasser, 1990). Murphy & Murphy (2002) stated that a customer profitability tends to increase over the life of a retained customer because they buy more as their trust increase. The authors added that 80% of the company's future profits come from just 20% of its existing customers and they illustrated that a 2% increase in customer retention has the same effect as decreasing costs by 10% (Murphy & Murphy, 2002). According to the Marketing Metrics, the probability of selling to an existing customer is 60–70%;

while the probability of selling to a new prospect is 5–20% (Charlton, 2012).

Customer engagement is defined as the art and science of creating value or the "motivation to act" (Higgins & Scholer, 2009). Customer Engagement refers to emotional connection that a customer gain during the repeated purchases and interactions(Bansal & Chandhary, 2016). So (2013) stated that customer engagement plays a crucial role in promoting brand loyalty.

According to the regulatory engagement theory, value is viewed as a motivational force that help the customer to be attracted toward a brand or refuse it, which refers to the direction of the motivation. Then, the intensity of the motivation is determined by the brand hedonic quality and other sources of force intensity but not related to the hedonic quality of the brand that determine whether the engagement is strong or weak (Higgins, 2006; Higgins & Scholer, 2009).

Moorman et al (1992) identified brand commitment as " a desire to preserve a positive brand relationship " such desire is engendered by focusing on the affective and cognitive dimensions. In Egypt, the market share is split into six prominent brands Samsung, Apple, Huawei, Oppo, Xiaomi, and Realme (Statcounter,2020). The main goal for these brands is keeping the current customers. Research shows how to reinforce brand commitment to raise the retention rate of customers. According to Dessart (2017), Customer engagement is "Consumers' positive

individual dispositions toward the community and the focus brand, as demonstrated through varied levels of emotive, cognitive, and behavioural manifestations that extend beyond trade settings.".

The smartphone industry is a fast-growing industry, with global revenues of 330.4 billion dollars in 2013 and forecasted to reach 409.1 billion dollars by 2020. The global smartphone user base grew from 1.06 billion in 2012 to 3.5 billion by 2020. In Egypt, there are 27.9 million smartphone users in 2019, compared to 12.6 million in 2013. (Statista,2020). As a result, the number of smartphone users in Egypt more than doubled between 2013 and 2019. The current study seeks to investigate the effect of customers who are highly engaged with smartphone brand pages on social media networks on the relationship between brand commitment and customer retention.

2. Literature Review

Brand Commitment

Morgan et al (1992) defined brand commitment as "a strong desire to keep a positive relationship with the brand". Morgan and Hunt (1994) first introduced the concept of brand devotion to the marketing discipline by extracting it from organizational behavior (1994). The concept suggested the trust-commitment theory and tested it through the Key Mediating Variables (KMV). According to the model, the authors pointed out that commitment and trust are two very important factors and act as key mediating variables in the relationship marketing.

Consequently, the KMV model considers a starting point to investigate the role of brand commitment in helping brands to improve their relationships with customers. Sahin et al (2013) stated that brand trust has a positive effect on brand commitment. Such result supports what Morgan and Hunt(1994) suggested. Previous studies suggested that customers who are loyal to the brand are more likely to advocate for it. (Fullerton, 2003, Ercis et al., 2012, Turri et al., 2013). A high level of brand commitment had the effect of positively motivating purchase intentions. (Wang, 2002, Erciş et al., 2012, Su et al., 2016, Raju, 2017) and establish self-brand connection (Kemp and Bui, 2011). Additionally, they emphasize that brand commitment has a major impact on brand loyalty (Evanschitzky et al., 2006, Mattila, 2006, Turri et al., 2013, Mathew et al., 2014, Giovanis, 2016). However, there is some scholarly confusion and overlap. Some studies claim that commitment is different from loyalty (Sung and Campbell, 2009, Hur et al., 2011, Wali et al., 2015). According to the consumer – brand relationship context, Fournier (1998) pointed out that a brand commitment refers to an emotional or psychological linkage to a brand within a product class. Literature defined it as an average consumer 's long-term behavioral and attitudinal configuration towards a relational brand (Chaudhuri and Holbrook, 2002., Gundlach, 1995) loyalty is a behavioral Whereas brand phenomenon (Traylor,1984). For example, brand loyalty is a routine in the

purchase process; a customer who is loyal to a brand would buy it regardless of preference, whereas a consumer who is committed to the brand will enter into an implicit contract with it. As a result, brand commitment must involve lovalty, but not the other way around. In other words, brand loyalty is a purchasing habit that reduces the confusion that comes with deciding between the different options offered and consumers who are loyal to a brand have an easier time making purchasing decisions (Warrington and Shim, 2000, Srivastava and Owens, 2010, Wali et al., 2015). Brand commitment has three dimensions namely, affective, continuance, and normative (Allen and Meyer, 1990). Allen and Meyer (1990) defined affective commitment as " a strong emotional or affective connection to the organization in which the extremely engaged individual identifies with, participates in, and appreciates membership in the organization" and Osuna Ramírez et al. (2017) defined it as "the customer's emotional attachment to the brand is based on his or her identification with it or how favorable the customer feels about it. Raju(2017) pointed out that affective commitment is an effective and emotional part of commitment that has a beneficial impact on consumer attitudes toward a brand, resulting in a favorable perception of the relationship with the brand, willingness to make sacrifices, and increased purchase intentions. Kanter (1968) defined continuance commitment as a "when there is a profit connected with continuous participation and a "cost" involved with leaving, this is referred to as commitment." Moreover, Osuna Ramírez et al. (2017) stated that continuance commitment is "psychological attachment based on the perceived costs of ending the relationship with someone. The term "continuous commitment" refers to "having" to keep the relationship going. To conclude, Affective commitment refers to the emotional side of a customer's engagement with a brand, whereas continuous commitment refers to the financial side. (Evanschitzky et al, 2006). It is important to emphasize that previous research has focused on the importance of emotional commitment rather than continuous commitment because the latter is ineffective (Zhang and Bloemer, 2011, Fullerton, 2003, Venetis and Ghauri, 2004).

Customer Retention

Retaining customers has become necessary in order to reduce customer deficiency. To retain customers, companies shouldn't not only work on satisfying customers' expectations, but also exceeding them especially in tough times where competition is fierce. Customer retention is defined as "an agreement to continue doing business or exchanging information with a specific company on a regular basis" (Murali et al., 2016), It is "the process of gaining client loyalty to a specific brand and encouraging them to repurchase its products or services over time" (Hanaysha, 2018). Because the cost of acquiring new customers is higher than the cost of keeping current customers, customer retention is a top priority for any business. (Rosenberg

and Czepiel, 1984, Miller et al., 1997, Boles et al., 1997, Kotler et al., 2014). I other words, retaining existing customers is more advantageous to a company than attracting new ones. For example, profits improve by around 25% to 95% if a company keeps just 5% of its consumers. (Reichheld and Sasser, 1990). Gupta et al. (2004) pointed out that a the importance of customer retention is highlighted by the fact that a 1% improvement in retention increases business value by 5%.

The main objective of customer retention efforts is to ensure sastaining relationships with value-adding customers by reducing their defection rate (Nasir, 2017). Building strong relationships with customers are typically described as customer retention programs (Bhattacharya & Bolton, 2000).

Morgan and Hunt (1994) offered a simulated concept based on Allen and Meyer's research (1990). They proposed the term "commitment" to describe a crucial mediator in relationship marketing. The authors argued that commitment significantly lowers the likelihood of leaving by clarifying that commitment strongly favors customer retention

According to Danish et al(2015), there are three main factors of customer retention: satisfaction, trust, and commitment. In the hotel sector, Han et al. (2020) revealed that increasing customer retention: is determined by two major variables first, satisfaction, and second, emotional connection. Venetis and Ghauri (2004) defined relationship commitment as "

the continuance of a commercial partnership by a partner on purpose " and examined the direct relationship between the two variables of brand commitment (Affective and Continuance) and consumers' intention to keep the relationship in the advertising sector. They pointed out that only affective commitment has a positive effect on customer retention. Lin and Wu (2011) examined the influence of satisfaction, trust, and commitment on customer retention while investigating the relationships between brand commitment dimensions and customer retention. All of these variables have been shown to aid retention, but commitment is the most essential statistically. Gounaris (2005) argued that emotional commitment should be emphasised above continuance commitment since it encourages customers to stay connected with the other party. In addition, Verhoef (2003) stated that managers in the financial business should increase brand commitment to the organisation in order to boost customer retention. To sum up, commitment significantly reinforces customer retention (Verhoef, 2003, Gounaris, 2005, Venetis and Ghauri, 2004, Lin and Wu, 2011, Han et al., 2020, Danish et al., 2015, Parawansa, 2018, Morgan and Hunt, 1994). Consequently the following hypotheses are proposed: -

H1. Brand commitment positively affect customer retention H1a. Affective commitment positively affect customer retention. H1b. Continuance commitment positively affect customer retention.

Customer Engagement (GE)

From the Gallup CE11 metric (2001), the Economist Intelligence Unit report (2007), and the special issues of the Journal of Service Research and the Journal of Services Marketing on CE in 2010, the concept has emerged among practitioners and academics(Vivek et al, 2012).GE has many degrees and it varies from the customer's feelings towards the brand to its interaction with it. This implies that engagement influences the customer affiliative behavior (Tafesse, 2016). Literature provided us with many definitions to CE. Some of them were unidimensional and focused on the behavioral dimension (Van Doorn et al . 2010.. De Vries Carlson.2014..Tsaiand Men, 2013) and some were and included the cognitive, emotional, and multidimensional behavioral dimensions Bowden and Practice, 2009., Hollebeek, 2011a., Vivek et al., 2012).

CE refers to "An individual customer's motivational, brandrelated, and context-dependent state of mind, as measured by precise levels of cognitive, emotional, and behavioral activity during direct brand interactions." (Hollebeek, 2011a). Pansari and Kumar (2017) defined it as "the technique by which a consumer contributes value to a company, either directly or indirectly'. According to the Gallup study, customers who are engaged create revenue gains of 7 to 23 percent, while those who are disengaged generate revenue decreases of 1 to 13 percent. (Kumar and Pansari, 2016).

Social media networks have recently received a lot of attention and have turned into a powerful tool for businesses to not only communicate messages to their customers, but also to engage with them fully. (Shi et al., 2019). Moreover, 73 percent of marketers think that social media and brand presence on social media networks are important. (Mohsin, 2020) that necessitates looking into online customer engagement, particularly the behavioral component (i.e., likes, comments, and shares) (Kabadayi and Price, 2014, Jayasingh and Venkatesh, 2015). Guesalaga (2016) defined customer engagement in the context of social media "as the extent to which the organization's important customers are active in using social media tools".

The moderating Effect of Customer Engagement on Social Media Networks

According to Bowden (2009), dedicated consumers play a crucial dimension in the engagement process, and commitment is separated into two aspects (continuance and affective). According to the author continuance commitment benefits new customers more than affective commitment, because new customers' engagement is based on the cognitive dimension, whereas repeat customers' engagement is influenced by affective commitment, which improves the emotional component of the engagement. Moreover, companies are achieving their objectives

in a changing environment, therefore the major goal of brands is to develop highly engaged consumers through the trustcommitment connection, rather than just sell (Pansari and Kumar, 2017).

Osei-Frimpong et al. (2018) found that social presence has a positive impact on consumer engagement, with the impact being stronger with consumers who have a high level of commitment. The authors added that brand commitment also has a significant impact on consumer engagement. Moreover, the growth of community commitment is responsible for highly engaged customers on social media platforms (Vohra and Bhardwaj, 2019). In the context of social media, another important contribution was made by (Gligor et al., 2019). The authors proposed three different alternatives of significant drivers of customer engagement, such satisfaction, interactivity, loyalty, and commitment, and each alternative included different combinations of these drivers, whereas commitment was constant in each alternative. Vivek et al (2012) that there is a positive association between customer engagement and affective commitment. Rather and Parray (2018) investigated the impact of consumer engagement dimensions on affective commitment, concluding that customer engagement is a strong driver of affective commitment.

Social media engagement also has a significant impact on brand commitment (Dessart, 2017). The presence of highly engaged consumers on social media platforms increases the desire to use the brand and return to its platform page (Osei-Frimpong et al., 2018, Harrigan et al., 2018). Shi et al. (2019) stated that brand commitment is determined by how the brand page interacts with its customers through social media posts as well as customer engagement or reactions to the brand page's content. Marketers can take advantage of this opportunity to leverage social media networks as a key touchpoint for communicating with clients and developing personal relationships (Turri et al., 2013). For example, member activity on a restaurant's Facebook brand page increases customer commitment and trust (Kang et al., 2015).

Given this theoretical background, the presence of engaged customers with the brand page's content on social media platforms would promote the link between highly committed customers and their desire to keep this relationship. Consequently, the following hypotheses are proposed:

H2: Customer Engagement will positively modify the Relationship

between Brand Commitment and Customer Retention H2_a: Affective Engagement will positively modify the relationship

between Affective Commitment and Customer Retention $H2_b$: Affective Engagement will positively modify the relationship

between Continuance Commitment and Customer Retention

H2_c: Cognitive Engagement will positively modify the relationship

between Affective Commitment and Customer Retention.

 $H2_d$: Cognitive Engagement will positively modify the relationship

between Continuance Commitment and Customer Retention.

H2_e: Behavioral Engagement will positively modify the relationship

between Affective Commitment and Customer Retention.

H2_f: Behavioral Engagement will positively modify the relationship

between Continuance Commitment and Customer Retention.

3. Research problem

From one perspective the research problem stems primarily from the lack of research on customer retention in the product or tangible sector, as well as the limited studies that have examined the relationship between brand commitment and customer retention in the services sector (Milan et al., 2015a, Hanaysha, 2018, Parawansa, 2018, Han et al., 2020). Also, previous studies measured customer retention indirectly through loyalty, repurchase intention, and behavioral intention (Milan et al., 2015a, Adzoyi et al., 2018,

Trasorras et al., 2009, Thaichon and Quach, 2015, AlHawari et al., 2009), whereas the current study measures customer retention directly. Moreover, previous studies have focused on analyzing brand commitment as a whole variable without sub-dimensions (Nguyen et al., 2016, Ramaseshan and Stein, 2014, Iglesias et al., 2019), but the current study attempts to fill this gap by investigating the effect of two brand commitment dimensions (affective and continuous). In addition, previous research has focused on the behavioral side of customer interaction with social media networks, but the current research looks at the affective, cognitive, and behavioral aspects. From another perspective, the competitive nature of the smartphone brands market piques interest in what Samsung, Apple, Huawei, and Oppo are doing to establish an affective and ongoing commitment to keep their customers. The study aims to measure the effect of customer engagement on social media networks as a moderating variable in the relationship between brand commitment and customer retention in the smartphone brand market. The study proposes the following conceptual framework:

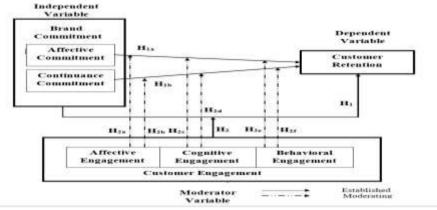


Figure (1) Research Conceptual Framework

4. Research Methodology

The study follows a positivist philosophy and a deductive approach. It is a descriptive conclusive research and a structured questionnaire was developed to achieve the research objectives

4.1 Sample and Data Collection

The research population is Business undergraduate students at Ain Shams University which equal to 60,000 students until 2020.2021 as reported by the student affairs department in the faculty of business, Ain Shams University, Cairo, Egypt. http://www.raosoft.com/samplesize.html is used to calculate the sample size. Depending on the total target population of 1785, the sample size is 317, with a confidence level of 95% and a margin of error of +/- 5%. the sample consists of 188 females out of 317 the total sample and 129 males out of 317 the total

sample. The study focused on simple random sampling (SRS) as one of several probability sampling methods for accurately representing the target population, providing unbiased results, and generalising findings to the determined target population. The study relied on the database of enrolled undergraduate students from the official unit of Arabic credit, then entered the database into an excel sheet and used a random equation to select the sample at random. Finally, the sample was generated by the Excel programme at random. Communications were held with the academic advisors for each level to ask randomly selected students to join a WhatsApp group, where the questionnaire was distributed and questions were answered.

The questionnaire was designed to have two sections: the first covers statements to measure brand commitment, customer retention, and customer engagement, and the second collects some personal data. In addition, all constructs were assessed using existing statements from the literature review and a five-point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree."

The questionnaire was pre-tested on 50 respondents using a convenience sample. The respondents were the college students of both genders and their ages ranged from 16 to 25 years. They were not included in the final research sample. The aim of this pilot study was to examine the questionnaire clarity, to eliminate any ambiguous questions, and to further improve the measurement scales used. The respondents' suggestions and

recommendations were considered in the final version of the research instrument.

4.2 Measuerment

Since there are many measurements in the literate review, the study extracted all measurements that were related to variables and then filtered them based on the context of the current study. In terms of brand commitment, six items were used to measure affective commitment and six items were used to measure continuance commitment (Allen and Meyer, 1990), whereas seven items were used to measure customer retention (Zeithaml et al., 1996, HennigThurau, 2004b, Peighambari, 2007). Furthermore, previous research on customer retention has revealed that marketing scholars consider loyalty, repurchase intention, and behavioural intention to be forms of customer retention (Milan et al., 2015a, Adzovi et al., 2018, Trasorras et al., 2009, Thaichon and Quach, 2015, AlHawari, 2015). Regrading customer engagement, using six items to measure affective customer engagement (Vohra and Bhardwaj, 2019), four items to measure cognitive customer engagement (So et al., 2016), and 3 items to measure behavioral customer engagement (Hollebeek et al., 2014).

4.3 Data Analysis

The researcher will apply direct Path analysis of Structural Equation Modeling (SEM) to test the direct effect of brand commitment approaches on customer retention and will apply indirect direct Path analysis of Structural Equation Modeling (SEM) in order to test the effect of each dimension of customer engagement on social media networks as a moderating variable between of brand commitment approaches on customer retention.

The study finds that there are 13 smart phone brands distributed as the following: 117 iPhone (Apple), 55 Oppo, 53 Samsung, 37 Huawei, 29 Xiaomi,14 Real me, 4 Honor, 3 Infinix, the rest brands (Nokia, TCL 10L, Lenovo, Redmi and Vivo) used only by one person. It also shows that there are 100 person of sample use his or her current smart phone from 1 to 2 years which are presenting about third the sample size, and 99 person of sample use his or her current smart phone from 3 to 4 years, 35 person of sample use his or her current smart phone from 5 to 6 years, 25 person of sample use his or her current smart phone from 7 to 8 years, 10 person of sample use his or her current smart phone from 9 to 10 years and 15 person of sample use his or her current smart phone from more than 10 years.

Descriptive Analysis

The main study variables will be analyzed in order to determine measures of location like mean, maximum and minimum values, and their measures of dispersion, standard deviation and coefficient of variation for each variable

Variable	Minimum	Maximum	Mean	Standard Deviation	Coefficient of Variation
Affective commitment	1.33	5.00	3.45	0.84	0.24
Continuance commitment	1.17	5.00	3.42	0.68	0.20
Affective engagement	1.00	5.00	3.15	0.14	0.04
Cognitive engagement	1.00	5.00	2.74	0.14	0.05
Behavioral Engagement	1.00	5.00	2.61	0.14	0.05
Customer retention	1.00	5.00	3.68	0.08	0.02

Table (1): Variables Descriptive Analysis.

- Affective commitment has a minimum value of 1.33 and maximum value of 5.00 with an arithmetic mean of 3.45, and its standard deviation is 0.84 and this value is less than which lead to a low coefficient of variation of 24% which means that there is a low level of dispersion of values around the arithmetic mean.
- Continuance commitment has a minimum value of 1.17 and maximum value of 5.00 with an arithmetic mean of 3.42, and its standard deviation is 0.68 and this value is less than which lead to a low coefficient of variation of 20% which means that there is a low level of dispersion of values around the arithmetic mean.
- Affective engagement has a minimum value of 1.00 and maximum value of 5.00 with an arithmetic mean of 3.15, and its standard deviation is 0.14 and this value is less than which lead to a low coefficient of variation of 4% which means that there is a low level of dispersion of values around the arithmetic mean.

- Cognitive engagement has a minimum value of 1.00 and maximum value of 5.00 with an arithmetic mean of 2.74, and its standard deviation is 0.14 and this value is less than which lead to a low coefficient of variation of 5% which means that there is a low level of dispersion of values around the arithmetic mean.
- Cognitive engagement has a minimum value of 1.00 and maximum value of 5.00 with an arithmetic mean of 2.61, and its standard deviation is 0.14 and this value is less than which lead to a low coefficient of variation of 5% which means that there is a low level of dispersion of values around the arithmetic mean.
- Customer retention has a minimum value of 1.00 and maximum value of 5.00 with an arithmetic mean of 3.68, and its standard deviation is 0.08 and this value is less than which lead to a low coefficient of variation of 2% which means that there is a low level of dispersion of values around the arithmetic mean.

Test of normality

The study applied Shapiro-Wilk test to determine whether the variables follow the normal distribution or not. Shapiro-Wilk test is a Chi-squared test of normality.

Table (2): Shap	oiro-Wilk	Test of	Normality	•
				Г

Variable	Statistic	DF	P-value
Affective commitment	0.983	317	0.001
Continuance commitment	0.990	317	0.024
Affective engagement	0.965	317	0.000
Cognitive engagement	0.960	317	0.000
Behavioral Engagement	0.948	317	0.000
Customer retention	0.927	317	0.000

From the table above, it is concluded that all the independent, dependent and the Moderators variables are not normally distributed as their p-value of Chi-square statistic is less than 0.05, so the alternative hypothesis will be accepted that the variables are not follow the normal distribution.

Test of Responses Reliability

The term reliability generally refers to the consistency of a measure. The statistical approach to estimating reliability varies depending upon the purpose of the measure. Cronbach's Alpha test to measure the degree of study variables stability and the following table presents that the stability factor for the sample responsiveness is 89.9% which means that the responses were very high and stable in that questionnaire.

Table (3): Cronbach's Alpha Reliability Test for Variables of Research.

Variable	Number of statements	Cronbach's Alpha
Affective commitment X_1	6	0.885
Continuance commitment X_2	6	0.904
Affective engagement M_1	6	0.861
Cognitive engagement M_2	4	0.871
Behavioral Engagement M_3	3	0.876
Customer retention Y_1	7	0.882

From table (5.7) it is concluded that there is a high level of reliability for the responses for each variable as the Cronbach's Alpha test show high level of stability as it values for each variable is more than 70%.

The validity of the questionnaire was tested using t- test and the values of all variables, independent and dependent, were positive and significant as its p-value is equal to 0.0000which represents a high level of consistency. The t-test values of X _1, X_2, M_1, M_2, M_3, Y_1 were 72.718, 89.689, 49.030, 42.819, 40.680, 60.702 respectively.

The study utilized the heteroscedasticity tes for homogeneity, Chisquare value was 57.485436 p value of 0.000017which means that the study model does not suffer from the problem of random error instability and the study variables are endogenous to each other.

The study utlized the variance inflation factor (VIF) test to test the multi-collinearity. The values of X_1, X_2, M_1, M_2, M_3, were 1.820, 1.476, 3.552, 4.009, 3.399 respectively which indicate that there is no variable suffers from muli-collinearity as the VIF values don't exceed 10.

Correlation Matrix

Spearman correlation coefficient will be the most appropriate coefficient for determining the relation strength and direction between each two variables, then the correlation coefficient is tested by a t-test which its null hypothesis states that correlation does not exist if the test p-value is greater than 0.05.

	X_1	X_2	M_1	M_2	M_3	Y_1
X_1	1					
P-value						
X_2	.517**	1				
P-value	.000					
M_1	.623**	.502**	1			
P-value	.000	.000				
M_2	.536**	.424**	.801**	1		
P-value	.000	.000	.000			
M_3	.539**	.434**	.756**	.821**	1	
P-value	.000	.000	.000	.000		
Y_1	.750**	.575**	.676**	.548**	.510**	1
P-value	.000	.000	.000	.000	.000	-

Table (4): Spearman Correlation Coefficient Matrix

From the table above, it is concluded that:

- There is a significant, direct, and moderate relation between Customer retention Y_1 and Affective commitment X_1 of correlation value 0.750 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Customer retention Y_1 and Continuance commitment X_2 of correlation value 0.575 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Customer retention Y_1 and Affective engagement M_1 of correlation value 0.676 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Customer retention Y_1 and Cognitive engagement M_2 of correlation value 0.548 and *P-value* 0.000.

- There is a significant, direct, and moderate relation between Customer retention Y_1 and Cognitive engagement M_2 of correlation value 0.548 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Customer retention Y_1 and Behavioral Engagement M_3 of correlation value 0.510 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Affective engagement M_1 and Affective commitment X_1 of correlation value 0.623 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Affective engagement M_1 and Continuance commitment X_2 of correlation value 0.502 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Cognitive engagement M_2 and Affective commitment X_1 of correlation value 0.536 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Cognitive engagement M_2 and Continuance commitment X_2 of correlation value 0.424 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Behavioral Engagement M_3 and Affective commitment X_1 of correlation value 0.539 and *P-value* 0.000.
- There is a significant, direct, and moderate relation between Behavioral Engagement M_3 and Continuance commitment X_2 of correlation value 0.434 and *P-value* 0.000.

Structural Equation Modeling Analysis

Path analysis determine the most fitted models between the independent variables and many dependent variables in many ways with the least random error values using Chi-square goodness of fit tests.

The direct Path analysis:

The following table shows the direct path analysis model between affective brand commitment and continuance brand commitment and customer retention

Table (5): Direct Path analysis model between X_1 X_2 and Y_1

Path		Estimate	S.E.	C.R.	P-value	
Y_1	<	X_1	0.959	0.048	20.153	< 0.0001
Y 1	<	X 2	0.711	0.057	12.570	< 0.0001

From table (5) it is concluded that there is a direct relation and impact of affective commitment X_1 and continuance commitment X_2 on the customer retention Y_1 as the p-value of X_1 and X_2 less than 0.05.

The indirect Path analysis:

The following Table (6) shows the model paths, the Unstandardized Coefficients, the Standardized Coefficients, the Standard Error (S.E.), the t-test (C.R.), and their p-value between X_1, X_2, M_1, M_2, M_3 and Y_1.

Table (6): Indirect Path analysis model between X_1, X_2, M_1, M_2, M_3 and $Y_1.$

	Path		Estimate	S.E.	C.R.	P-value
M_1	<	X_1	0.844	0.060	14.151	<0.0001
Y_1	<	X_1	0.687	0.056	12.348	<0.0001
Y_1	<	M_1	0.322	0.041	7.847	<0.0001
M 1	<	X 2	0.847	0.082	10.308	<0.0001
Y 1	<	X 2	0.502	0.071	7.084	<0.0001
Y 1	<	M 1	0.489	0.042	11.636	<0.0001
M 2	<	X 1	0.724	0.064	11.301	<0.0001
Y 1	<	X 1	0.819	0.054	15.043	<0.0001
Y 1	<	M 2	0.193	0.040	4.792	<0.0001
M 2	<	X 2	0.714	0.086	8.326	<0.0001
Y 1	<	X 2	0.666	0.074	9.018	<0.0001
Y 1	<	M 2	0.351	0.044	7.989	<0.0001
M 3	<	X 1	0.729	0.064	11.369	<0.0001
Y 1	<	X 1	0.856	0.055	15.433	<0.0001
Y 1	<	М 3	0.142	0.041	3.458	<0.0001
М 3	<	X 2	0.731	0.085	8.557	<0.0001
Y 1	<	X 2	0.694	0.076	9.120	<0.0001
Y 1	<	М 3	0.304	0.045	6.732	<0.0001

From the table above it is concluded that:

- 1) There is a (direct and indirect) relation and impact of Affective commitment X_1 and affective engagement M_1 on the customer retention Y_1 as the p-value of X_1 and M_1 are less than 0.05.
- 2) There is a (direct and indirect) relation and impact of continuance commitment X_2 and affective engagement M_1 on

the customer retention Y_1 as the p-value of X_2 and M_1 less than 0.05.

- 3)There is a (direct and indirect) relation and impact of affective commitment X_1 and cognitive engagement M_2 on the customer retention Y_1 as the p-value of X_1 and M_2 less than 0.05.
- 4) There is a (direct and indirect) relation and impact of continuance commitment X_2 and cognitive engagement M_2 on the customer retention Y_1 as the p-value of X_2 and M_2 less than 0.05.
- 5) There is a (direct and indirect) relation and impact of Affective commitment X_1 and Behavioral engagement M_3 on the customer retention Y_1 as the p-value of X_1 and M_3 less than 0.05.
- 6) There is a (direct and indirect) relation and impact of continuance commitment X_2 and behavioral engagement M_3 on the customer retention Y_1 as the p-value of X_2 and M_3 less than 0.05.

The Regression Analysis

The study will test the effect of each dimension of brand commitment on customer retention individually using simple OLS regression models, then will determine the effect of each dimension of brand commitment on customer retention individually with the presence of moderator three dimensions by applying multiple OLS regression models.

Simple Regression models:

The following two tables (7) and (8) present the simple regression models that tests the two sub-hypotheses of the first main hypothesis.

\			1u
Model	OLS Simple	Dependent variable	Y_1
Variables	Coefficient	p-value	Significance
Constant	0.374127	0.0278	Significant
Affective commitment X_1	0.958888	< 0.0001	Significant
Adjusted R-squared	56.10	021%	

Table (7): simple regression model for the sub-hypothesis H_{1a}

From table (7) it is concluded that the overall model is significant as the p-value of both constant and the Affective commitment X_1 is less than 0.05, and the model adjusted R-squared is 56.1021% which means that 0.561021 change in the dependent variable customer retention is due to change in constant and affective commitment x_1 by 1, and the model final equation will be:

$$Y_1 = 0.374127 + 0.95888X_1$$

Table (8): simple regression model for the sub-hypothesis H_{1b}

Model	OLS Simple	Dependent variable	Y_1
Variables	Coefficient	p-value	Significance
Constant	0.553304	0.0312	Significant
Continuance Commitment X_2	< 0.0001	Significant	
Adjusted R-squared	32.86	511%	

From table (8) it is concluded that the overall model is significant as the p-value of both constant and the continuance commitment X_2 is less than 0.05, and the model adjusted R-squared is 32.8611% which means that 0.328611 change in the dependent variable customer retention is due to change in

constant and continuance commitment X_2 by 1, and the model final equation will be:

$$Y_1 = 0.553304 + 0.916021X_2$$

Multiple Regression Models:

The following tables from table (9) till (15) present the multiple regression models that tests the six sub-hypotheses of the second main hypothesis.

OLS Multiple Dependent Model Y_1 Regression variable Variables Coefficient p-value Significance 0.296660 0.0571 Constant Insignificant Affective commitment X 1 0.686973 < 0.0001 Significant 0.322272 Affective engagement M_1 < 0.0001 Significant Adjusted R-squared 63.1443%

Table (9): Multiple regression model for the sub-hypothesis H_{2a}

From table (9) it is concluded that the overall model is significant as the p-value of both Affective commitment X_1, and the Affective engagement M_1 is less than 0.05, and the model adjusted R-squared is 63.1443% which means than 0.631443 change in the dependent variable customer retention is due to change in Affective commitment X_1, and the Affective engagement M_1 by 1, and the model final equation will be:

$$Y_1 = 0.686973X_1 + 0.322272M_1$$

Model	OLS Multiple Regression	Dependent variable	Y_1
Variables	Coefficient	p-value	Significance
Constant	0.426379	0.0477	Significant
Continuance Commitment X_2	0.502211	< 0.0001	Significant
Affective engagement M_1	0.488824	< 0.0001	Significant
Adjusted R-squared	52.8	3497%	

Table (10): Multiple regression model for the sub-hypothesis \mathcal{H}_{2b}

From table (10) it is concluded that the overall model is significant as the p-value of constant, continuance commitment X_2 and the affective engagement M_1 is less than 0.05, and the model adjusted R-squared is 52.8497% which means that 0.528497 change in the dependent variable customer retention is due to change in continuance commitment X_2 and the affective engagement M_1 by 1, and the model final equation will be:

 $Y_1 = 0.426379 + 0.502211X_2 + 0.488824M_1$

Table (11): Multiple regression model for the sub-hypothesis ${\cal H}_{2c}$

Model	OLS Multiple Regression	Dependent variable	Y_1
Variables	Coefficient	p-value	Significance
Constant	0.327016	0.0470	Significant
Affective commitment X_1	0.818937	< 0.0001	Significant
Cognitive engagement M_2	0.193181	< 0.0001	Significant
Adjusted R-squared	58.9	9457%	

From table (11) it is concluded that the overall model is significant as the p-value of constant, affective commitment X_1, and the cognitive engagement M_2 is less than 0.05, and the

model adjusted R-squared is 58.9457% which means that 0.589457 change in the dependent variable customer retention is due to change in affective commitment X_1, and the cognitive engagement M_2 by 1, and the model final equation will be:

$$Y_1 = 0.327016 + 0.818937X_1 + 0.193181M_2$$

Table (12): Multii	ole regression	model for	the sub-	hvpothesis	H_{2d}
		,				J I	2 U.

Model	OLS Multiple Regression	Dependent variable	Y_1
Variables	Coefficient	p-value	Significance
Constant	0.446009	0.0575	Insignificant
Continuance Commitment X_2	0.665827	< 0.0001	Significant
Cognitive engagement M_2	0.350649	< 0.0001	Significant
Adjusted R-squared		43.9	9658%

From the above table (12) it is concluded that the overall model is significant as the p-value of both continuance commitment X_2 and the cognitive engagement M_2 is less than 0.05, and the model adjusted R-squared is 43.9658% which means that 0.439658 change in the dependent variable customer retention is due to change in continuance commitment X_2 and the cognitive engagement M_2 by 1, and the model final equation will be:

$$Y_1 = 0.446009 + 0.665827X_2 + 0.350649M_2$$

		V 1	
Model	OLS Multiple Regression	Dependent variable	Y_1
Variables	Coefficient	p-value	Significance
Constant	0.360484	0.0311	Significant
Affective commitment X_1	0.855587	< 0.0001	Significant
Behavioral engagement M_3	0.141762	0.0006	Significant
Adjusted R-squared		57.5	5682%

Table (13): Multiple regression model for the sub-hypothesis \mathcal{H}_{2e}

From the above table (13) it is concluded that the overall model is significant as the p-value of constant, Affective commitment X_1, and the Behavioral engagement M_3 is less than 0.05, and the model adjusted R-squared is 57.5682% which means than 0.575682 change in the dependent variable customer retention is due to change in Affective commitment X_1, and the Behavioral engagement M_3 by 1, and the model final equation will be:

$$Y_1 = 0.360484 + 0.855587X_1 + 0.141762M_3$$

Table (14): Multiple regression model for the sub-hypothesis H_{2f}

Model	OLS Multiple Regression	Dependent variable	Y_1
Variables	Coefficient	p-value	Significance
Constant	0.518593	0.0311	Significant
Continuance Commitment X_2	0.693892	< 0.0001	Significant
Behavioral engagement M_3	0.303983	< 0.0001	Significant
Adjusted R-squared		41.0944%	

From table (14) it is concluded that the overall model is significant as the p-value of constant, Continuance Commitment X_2 and the Behavioral engagement M_3 is less than 0.05, and the model adjusted R-squared is 41.0944% which means than 0.410944 change in the dependent variable customer retention is due to change in Continuance Commitment X_2 and the Behavioral engagement M_3 by 1, and the model final equation will be:

$$Y_1 = 0.518593 + 0.693892X_2 + 303983M_3$$

Testing the effect of Brand Commitment on Customer Retention:

A multiple linear regression model was applied to test the total effect of brand commitment (affective commitment X_1 and continuance commitment X_2) on customer retention according to the following hypothesis:

H_1 : Brand Commitment positively affect Customer Retention.

The following table (15) tests the first main hypothesis for determining that brand commitment positively affects customer retention.

Table (15):	Multiple	regression	model for	the hyr	othesis	H_{4}
1 abic (15).	Munipic	1651633011	mouel for	the hijk	othesis	** I

Model	OLS Multiple Regression	Dependent variable	Y_1
Variables	Coefficient	p-value	Significance
Constant	0.434209	0.0360	Significant
Affective commitment X_1	0.789828	< 0.0001	Significant
Continuance Commitment X_2	0.407429	< 0.0001	Significant
Adjusted R-squared		70.	7876%

Based on the above table we conclude that:

- All the independent variable (affective commitment X_1 and continuance commitment X_2) have a significant effect on the dependent variable brand commitment (Y) because their coefficients have a p-value less than 0.05.
- Constant has an insignificant impact on the dependent variable brand commitment (Y) because its coefficients have a p-value more than 0.05.
- The overall model is significant with adjusted R-squared value of 70.7876%, which means that 70.7876% of the variation in the dependent variable brand commitment (Y) due to the variation in the independent variable customer engagement (x) components (Affective commitment X_1 and continuance commitment X_2) and constant.
- The model final equation will be:

$$Y_1 = 0.434209 + 0.789828x_1 + 0.407429x_2$$

Testing the positive effect of customer engagement on the Relationship between Brand Commitment and Customer Retention:

The study will test the total effect of brand commitment (affective commitment X_1 and continuance commitment X_2) on customer retention in the presence of customer engagement (affective engagement M_1, cognitive engagement M_2 and behavioral engagement M_3) as a moderator, so a multiple linear

regression model will present such relation according to the following hypothesis:

H_2 : Customer Engagement will positively modify the Relationship between Brand Commitment and Customer Retention.

The following table (16) tests the second main hypothesis for determining whether customer engagement will positively modify the relationship between brand commitment and customer retention.

Table (16): Multiple regression model for the hypothesis H_2

Model	OLS Multiple Regression	Dependent variable	Y_1
Variables	Coefficient	p-value	Significance
Constant	-0.301131	0.1234	Insignificant
Affective commitment X_1	0.620043	< 0.0001	Significant
Continuance Commitment X_2	0.303305	< 0.0001	Significant
Affective engagement M_1	0.327317	< 0.0001	Significant
Cognitive engagement M_2	0.213745	< 0.0001	Significant
Behavioral engagement M_3	0.107954	< 0.0001	Significant
Adjusted R-squared		95.0	5276%

From the table above it is concluded that:

■ All the independent variable components (affective commitment X_1 and continuance commitment X_2) and the moderator components (affective engagement M_1, cognitive engagement M_2 and behavioral engagement M_3) have a significant effect on the dependent variable brand

commitment (Y) because their coefficients have a p-value less than 0.05.

- Constant has an insignificant impact on the dependent variable brand commitment (Y) because its coefficients have a p-value more than 0.05.
- The overall model is significant with adjusted R-squared value of 95.6276%, which means that 95.96276% of the variation in the dependent variable brand commitment (Y) due to the variation in the independent variable customer engagement (x) components (affective commitment X_1 and continuance Commitment X_2) and moderator customer retention (M) components (affective engagement M_1, cognitive engagement M_2 and behavioral engagement M_3).
- The model final equation will be:

$$Y_1 = 0.620043x_1 + 0.303305x_2 + 0.327317M_1 + 0.213745M_2 + 0.107954M_3$$

The following research model summarizes the results of the study

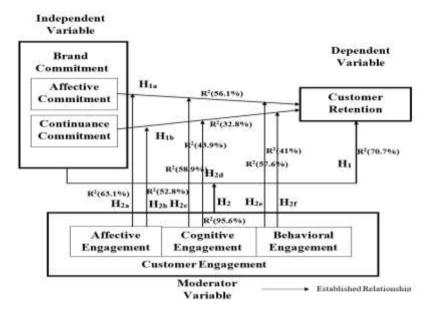


Figure (2) Results of the research model **5.**Conclusion and managerial implications

The current study aims to investigate how customers who are highly committed to a brend are more likely to have a desire to keep their relationship with the brand. In other words, the study shows that brand commitment has a positive effect on customer retention. The results confirm this ides by demonstrating that brand commitment is responsible for 70% of changes of customer retention. Consequently, smatphone brands in Egypt should focus on creating committed customers to retain them in order to increase profits. Reichheld and Sasser(1990) assertain that companies can increase their profits by almost 25% to 95% if retain just 5% of their customers. Additionally, it is important

for companies to understand the possible factors that help to boost customers relationships with their smatphone brands.

Literature demonstrated that customer satisfaction, customer trust, and customer experience are considered as key factors for retaining customers (Su et al, 2016., Giovanis, 2016., Iglesia ei al, 2019. Raju, 2017., Ramaseshan and Stein, 2014).

The Findings confirm that affective commitment has a positive influence on customer retention, whis means that customers who have emotional commitments to a brand have the desire to keep their relationship with it. Such emotions reflect the feelings of belonging, happiness,joy, pride, excitement. According to the adjusted R-square 56%, 56 changes in customer retention is due to affective commitment. This result supports the previous results in literature (Verhoef, 2003., Venetis and Ghauri, 2004, Hennig-Thurau, 2004b., Gounaris, 2005., Han etal., 2020). The findings also confirm the positive influence of continuance brand commitment on customer retention R – square 32.8%, which means that 32.8 changes in customer retention is due to continuance brand commitment. Contonuance commitment is an economical part of brand commitment because of the resonable price of the brand.

Investigating the moderating role of customer engagement on social media networks on the relationship between brand commitment and customer retention is considered as a challenge of the current research. the findings refer to the positive and strong effect of customer engagement which means brand commitment has

70.7% of the variance in customer retention whereas in the presence of customer engagement this percentage reached 95.6%. This is a logical result, highly engaged customers with smartphone brand' pages on social media networks means those have high exposure to their favorite smartphone brands, and that motivates committed customers to keep the relationship. Moreover, the present study has extended its investigation of the effect of each dimension of customer engagement on the two dimensions of brand commitment (Affective and Continuance) on customer retention.

Investigating the moderator role of affective engagement on the relationship between affective commitment and customer retention; the findings of the current study support this hypothesis positively since the correlation value of the relationship between affective commitment and customer engagement equals 0.623, and between the customer engagement and customer retention equals 0.676 and p-value = $0.000 < \alpha$ = 0.05. Consequently, with the presence of affective engagement in the relationship between affective commitment and customer retention, the effect of affective commitment on customer retention will be increased to 63.1% instead of 56.1%.

Exploring the moderator role of affective engagement on the relationship between continuance commitment and customer retention; the results have revealed that there is a direct and positive relationship between continuance commitment and affective engagement (correlation value 0.502 p-value = $0.000 < \alpha = 0.05$), and

strong relationship between affective engagement and customer retention (correlation value .676 p-value = $0.000 < \alpha = 0.05$). Additionally, regarding the moderating effect of affective engagement, there is a remarkable influence which means affective engagement is responsible for increasing the effect of continuance commitment on customer retention to 52.8% instead of 32.8%.

Investigate the moderator role of cognitive engagement on the relationship between affective commitment and customer retention, the correlation value of the relationship between affective commitment and cognitive engagement equals 0.536 and between cognitive engagement and customer retention equals 0.548, and p-value = $0.000 < \alpha = 0.05$). Consequently, cognitive engagement can positively modify the relationship between affective commitment and customer retention by almost 58.9% instead of 56.1%.

Investigating the moderator role of cognitive engagement on the relationship between continuance commitment and customer retention, the correlation value of the relationship between continuance commitment and cognitive engagement equals 0.424 and between cognitive engagement and customer retention equals 0.548, and p-value = $0.000 < \alpha = 0.05$). Consequently, cognitive engagement can positively modify the relationship between continuance commitment and customer retention by almost 43.9 % instead of 32.8%.

Examining the moderator role of behavioral engagement on the relationship between affective commitment and customer

retention; concerning, the correlation value of the relationship between affective commitment and behavioral engagement equals 0.424 and between behavioral engagement and customer retention equals 0.548, and p-value = $0.000 < \alpha = 0.05$). In addition to that, the behavioral engagement positively supports the relationship between affective commitment and customer retention by almost 57.5% instead of 56.1%.

Examining the moderator role of behavioral engagement on the relationship between continuance commitment and customer retention; the findings showed that there is a direct relationship between continuance commitment and behavioral engagement (correlation value 0.434 p-value = $0.000 < \alpha = 0.05$) and between behavioral engagement and customer retention (correlation value 0.510 p-value = $0.000 < \alpha = 0.05$. Furthermore, the behavioral engagement can positively modify the relationship between continuance commitment and customer retention by almost 41.09 % instead of 32.8%.

Given the above presentation of the results, the following discussion shows the reasons behind the positive influence of highly engaged customers on the relationship between brand commitment and customer retention. It is not easy to say or classify that these customers have a high engagement; there are many stages and other factors before reaching engagement level. It is supposed that highly engaged customers with the brand have a mix of feelings towards the brand, these feelings are represented as drivers of engagement. For

instance, the engagement level starts with the connection between a brand and its customers then interaction followed by satisfaction and retention, ending by the commitment and advocacy (Sashi, 2012). Moreover, highly engaged customers consider social media platforms as a meaningful source of information and have an intimacy with the social media community. I addition to, customers who have a high level of engagement love exposure to gain new experiences and prefer broadcasting mode on Facebook "one-to-many". Furthermore, engaged customers have high involvement with the brand and feel this brand expresses their personalities. Consequently, highly engaged customers modify positively the relationship between brand commitment and customer retention.

After analyzing data and discussing the results, the model of the current research will be presented with identified directions and effects as shown in the following figure (2) which shows the number of changes in the dependent variable by the independent variable and the influence of moderating variable on the whole model. Also, the lines of the moderating variable will be straight instead of dashed lines since the findings prove that customer engagement has a positive influence on the relationship between brand commitment and customer retention.

The current study adds to previous studies by providing a deeper understanding of the nature of brand commitment and its impact on customer retention. In addition, the impacts of affective and continuous brand commitment on customer retention are being investigated. On the other hand, the current research's findings will assist other researchers who are interested in investigating brand commitment, customer retention, or the relationship between the two to strengthen their concepts and outcomes. Furthermore, customer engagement has a moderating effect on the relationship between committed customers and their retention.

From a managerial perspective, as a customer is the core of the marketing discipline, the main goal for any company is to retain their customers. If companies retain just 5% of their customers, their profits increase by almost 25% to 95%. (Reichheld and Sasser, 1990). Moreover, the current study, found that affective brand commitment is responsible for 56 percent of changes in customer retention and continuous brand commitment is responsible for 32 percent; and the total influence of brand commitment is 70.7 percent. As a result, marketers must focus on developing brand commitment strategies to achieve the organization's main goal, such as asking regular customers for feedback and suggestions and involving them in the promotion plan. Another marketing implication that marketers should consider is that engaged customers increase revenues by 7 to 23 percent, whereas disengaged customers decrease revenues by 1 to 13 percent (Kumar and Pansari, 2016); current research has found that customer engagement on social media networks increases the effect of brand commitment on customer retention by nearly 95 percent, as opposed to 70 percent without the

presence of customer engagement. As a result, creating engaging content for social media networks is necessary to encourage customers to like, comment, and share, thereby reinforcing affective engagement with the brand.

6. Limitations and Future Research

The current research has limitations that will serve as suggestions and recommendations for future research. The restrictions are as follows: the current research has investigated the effect of affective and continuous commitment on customer retention. It has concluded that customer satisfaction and loyalty are key drivers of customer retention, but this is an opportunity for a future study to make a comparison between brand commitment, loyalty, and customer satisfaction. Additionally, the current research depends on a quantitative approach to collect data through a structured questionnaire. Using situational statements as a qualitative approach may lead to accurate results. Future research will consider whether to make longitudinal a comprehensive model, repeat research to reach investigation model of the current research in different sectors, for example, fashion, cosmetics, filming, and club membership, and change the type of respondents.

References

- Adzoyi, P.N., Blomme, R.J. and Honyenuga, B.Q., 2018. Customer retention among hotels in an emerging market: An employee-based perspective. In Advances in Hospitality and Leisure. Emerald Publishing Limited.
- Al-Hawari, M., Ward, T. and Newby, L., 2009. The relationship between service quality and retention within the automated and traditional contexts of retail banking. Journal of service management.
- Allen, N.J. and Meyer, J.P., 1990. The measurement and antecedents of affective, continuance and normative commitment to the organization. Journal of occupational psychology, 63(1), pp.1-18.
- Boles, J.S., Barksdale, H.C. and Johnson, J.T., 1997. Business relationships: an examination of the effects of buyer-salesperson relationships on customer retention and willingness to refer and recommend. Journal of Business & Industrial Marketing.
- Bowden, J.L.H., 2009. The process of customer engagement: A conceptual framework. Journal of marketing theory and practice, 17(1), pp.63-74.
- Danish, R.Q., Ahmad, F., Ateeq, A., Ali, H.Y. and Humayon, A.A., 2015. Factors affecting customer retention in telecom sector of Pakistan. American Journal of Marketing Research, 1(2), pp.28-36.
- Desatnick, R.L., 1992. Managing to keep the customer. Strategic change, 1(5), pp.273-285.
- Dessart, L., 2017. Social media engagement: a model of antecedents and relational outcomes. Journal of Marketing Management, 33(5-6), pp.375-399.
- Erciş, A., Ünal, S., Candan, F.B. and Yıldırım, H., 2012. The effect of brand satisfaction, trust and brand commitment on loyalty and repurchase intentions. Procedia-Social and Behavioral Sciences, 58, pp.1395-1404.

- Evanschitzky, H., Iyer, G.R., Plassmann, H., Niessing, J. and Meffert, H., 2006. The relative strength of affective commitment in securing loyalty in service relationships. Journal of business research, 59(12), pp.1207-1213.
- Fullerton, G., 2003. When does commitment lead to loyalty?. Journal of service research, 5(4), pp.333-344.
- Geyskens, I., Steenkamp, J.B.E., Scheer, L.K. and Kumar, N., 1996. The effects of trust and interdependence on relationship commitment: A trans-Atlantic study. International Journal of research in marketing, 13(4), pp.303-317.
- Giovanis, A., 2016. Consumer-brand relationships' development in the mobile internet market: evidence from an extended relationship commitment paradigm. Journal of Product & Brand Management.
- Gligor, D., Bozkurt, S. and Russo, I., 2019. Achieving customer engagement with social media: A qualitative comparative analysis approach. Journal of Business Research, 101, pp.59-69.
- Gounaris, S.P., 2005. Trust and commitment influences on customer retention: insights from business-to-business services. Journal of Business research, 58(2), pp.126-140.
- Guesalaga, R., 2016. The use of social media in sales: Individual and organizational antecedents, and the role of customer engagement in social media. Industrial Marketing Management, 54, pp.71-79.
- Gupta, S., Lehmann, D.R. and Stuart, J.A., 2004. Valuing customers. Journal of marketing research, 41(1), pp.7-18.
- Han, H., Jongsik, Y. and Hyun, S.S., 2020. Nature based solutions and customer retention strategy: Eliciting customer well-being experiences and self-rated mental health. International Journal of Hospitality Management, 86, p.102446.

- Hanaysha, J.R., 2018. Customer retention and the mediating role of perceived value in retail industry. World Journal of Entrepreneurship, Management and Sustainable Development.
- Harrigan, P., Evers, U., Miles, M.P. and Daly, T., 2018. Customer engagement and the relationship between involvement, engagement, self-brand connection and brand usage intent. Journal of Business Research, 88, pp.388-396.
- Hennig-Thurau, T., 2004. Customer orientation of service employees: Its impact on customer satisfaction, commitment, and retention. International journal of service industry management.
- Hollebeek, L.D., 2011. Demystifying customer brand engagement: Exploring the loyalty nexus. Journal of marketing management, 27(7-8), pp.785-807.
- Hollebeek, L.D., Glynn, M.S. and Brodie, R.J., 2014. Consumer brand engagement in social media: Conceptualization, scale development and validation. Journal of interactive marketing, 28(2), pp.149-165.
- Hur, W.M., Ahn, K.H. and Kim, M., 2011. Building brand loyalty through managing brand community commitment. Management Decision.
- Iglesias, O., Markovic, S. and Rialp, J., 2019. How does sensory brand experience influence brand equity? Considering the roles of customer satisfaction, customer affective commitment, and employee empathy. Journal of Business Research, 96, pp.343-354.
- Jayasingh, S. and Venkatesh, R., 2015. Customer engagement factors in facebook brand pages. Asian Social Science, 11(26), p.19.
- Kabadayi, S. and Price, K., 2014. Consumer–brand engagement on Facebook: liking and commenting behaviors. Journal of research in interactive marketing.
- Kang, J., Tang, L.R. and Fiore, A.M., 2015. Restaurant brand pages on Facebook: Do active member participation and monetary sales

- promotions matter?. International Journal of Contemporary Hospitality Management.
- Kanter, R.M., 1968. Commitment and social organization: A study of commitment mechanisms in utopian communities. American sociological review, pp.499-517.
- Kemp, E., 2011. Healthy brands: establishing brand credibility, commitment and connection among consumers. Journal of Consumer Marketing.
- Kotler, P., Keller, K.L., Ancarani, F. and Costabile, M., 2014. Marketing management 14/e. Pearson.
- Kumar, V. and Pansari, A., 2016. Competitive advantage through engagement. Journal of marketing research, 53(4), pp.497-514.
- Li, N., Robson, A. and Coates, N., 2014. Luxury brand commitment: a study of Chinese consumers. Marketing Intelligence & Planning.
- Lin, J.S.C. and Wu, C.Y., 2011. The role of expected future use in relationship-based service retention. Managing Service Quality: An International Journal.
- Mathew, V., Ali, R.T.M. and Thomas, S., 2014. Loyalty intentions: Does the effect of commitment, credibility and awareness vary across consumers with low and high involvement?. Journal of Indian Business Research.
- Mattila, A.S., 2006. How affective commitment boosts guest loyalty (and promotes frequent-guest programs). Cornell hotel and restaurant administration quarterly, 47(2), pp.174-181.
- Milan, G.S., De Toni, D., Barcellos, P.F.P., Dorion, E.C.H. and Bebber, S., 2015. A Brazilian experience of customer retention and its key drivers in banking service rendering. Journal of Relationship Marketing, 14(4), pp.269-286.
- Miller, J.L., Fredendall, L. and Patterson, J.W., 1997. A Markov Analysis of Customer Retention and Recruitment. Journal of Customer Service in Marketing & Management, 3(2), pp.35-53.

- Mohsin, M., 2020. 10 Social Media Statistics You Need to Know in 2020 [Infographic]. Oberlo, Oberlo, 15.
- Moorman, C., Zaltman, G. and Deshpande, R., 1992. Relationships between providers and users of market research: The dynamics of trust within and between organizations. Journal of marketing research, 29(3), pp.314-328.
- Morgan, R.M. and Hunt, S.D., 1994. The commitment-trust theory of relationship marketing. Journal of marketing, 58(3), pp.20-38.
- Murali, S., Pugazhendhi, S. and Muralidharan, C., 2016. Modelling and investigating the relationship of after sales service quality with customer satisfaction, retention and loyalty—a case study of home appliances business. Journal of retailing and consumer services, 30, pp.67-83.
- Nguyen, B., Yu, X., Melewar, T.C. and Hemsley-Brown, J., 2016. Brand ambidexterity and commitment in higher education: An exploratory study. Journal of Business Research, 69(8), pp.3105-3112.
- Osei-Frimpong, K. and McLean, G., 2018. Examining online social brand engagement: A social presence theory perspective. Technological Forecasting and Social Change, 128, pp.10-21.
- Osuna Ramírez, S.A., Veloutsou, C. and Morgan-Thomas, A., 2017. A systematic literature review of brand commitment: Definitions, perspectives and dimensions. Athens journal of business and economics, 3(3), pp.305-332.
- Peighambari, K., 2007. Developing and testing a model for explaining customer retention formation: Case of Iranian mobile telecommunication services.
- Raju, S., 2017. Positive and negative effects of affective and continuance brand commitment in a service context. Journal of Indian Business Research.
- Ramaseshan, B. and Stein, A., 2014. Connecting the dots between brand experience and brand loyalty: The mediating role of brand

- personality and brand relationships. Journal of Brand Management, 21(7), pp.664-683.
- Rather, R.A. and Parray, S.H., 2018. Customer engagement in increasing affective commitment within hospitality sector. JOHAR, 13(1), p.73.
- Reichheld, F.F. and Sasser, W.E., 1990. Zero defeofions: Quoliiy comes to services. Harvard business review, 68(5), pp.105-111.
- Rosenberg, L.J. and Czepiel, J.A., 1984. A marketing approach for customer retention. Journal of consumer marketing.
- Shi, S., Cao, Y., Chen, Y. and Chow, W.S., 2019. How social media brand pages contribute to functional conflict: The central role of commitment. International Journal of Information Management, 45, pp.95-106.
- So, K.K.F., King, C., Sparks, B.A. and Wang, Y., 2016. The role of customer engagement in building consumer loyalty to tourism brands. Journal of Travel Research, 55(1), pp.64-78.
- Srivastava, P. and Owens, D.L., 2010. Personality traits and their effect on brand commitment: an empirical investigation. Marketing Management Journal, 20(2), pp.15-27.
- Stata counter (2021), Mobile Vendor Market Share in Egypt , Viewed on 1 march 2022 at https://gs.statcounter.com/vendor-market-share/mobile/egypt.
- Statista (2020), Global revenue from smartphone sales from 2013 to 2020 (in billion U.S. dollars)*, Viewed on 1 march 2022 at Global smartphones sales revenue | Statista
- Su, L., Swanson, S.R., Chinchanachokchai, S., Hsu, M.K. and Chen, X., 2016. Reputation and intentions: The role of satisfaction, identification, and commitment. Journal of Business Research, 69(9), pp.3261-3269.

- Sung, Y. and Campbell, W.K., 2009. Brand commitment in consumer—brand relationships: An investment model approach. Journal of Brand Management, 17(2), pp.97-113.
- Thaichon, P. and Quach, T.N., 2015. From marketing communications to brand management: Factors influencing relationship quality and customer retention. Journal of Relationship Marketing, 14(3), pp.197-219.
- Trasorras, R., Weinstein, A. and Abratt, R., 2009. Value, satisfaction, loyalty and retention in professional services. Marketing Intelligence & Planning.
- Traylor, M.B., 1984. Ego involvement and brand commitment: not necessarily the same. Journal of consumer marketing.
- Turri, A.M., Smith, K.H. and Kemp, E., 2013. Developing affective brand commitment through social media. Journal of Electronic Commerce Research, 14(3).
- Venetis, K.A. and Ghauri, P.N., 2004. Service quality and customer retention: building long-term relationships. European Journal of marketing.
- Verhoef, P.C., 2003. Understanding the effect of customer relationship management efforts on customer retention and customer share development. Journal of marketing, 67(4), pp.30-45.
- Vivek, S.D., Beatty, S.E. and Morgan, R.M., 2012. Customer engagement: Exploring customer relationships beyond purchase. Journal of marketing theory and practice, 20(2), pp.122-146.
- Vohra, A. and Bhardwaj, N., 2019. Customer engagement in an e-commerce brand community: An empirical comparison of alternate models. Journal of Research in Interactive Marketing.
- Wali, A.F., Wright, L.T. and Uduma, I.A., 2015. Customer relationship management for brand commitment and brand loyalty. British Journal of Marketing Studies, 3(4), pp.45-58.
- Wang, G., 2002. Attitudinal correlates of brand commitment: an empirical study. Journal of Relationship Marketing, 1(2), pp.57-75.

- Warrington, P. and Shim, S., 2000. An empirical investigation of the relationship between product involvement and brand commitment. Psychology & Marketing, 17(9), pp.761-782.
- Zhang,J and Bloemer,J2011 The impact of value congruence on affective commitment: examining the moderating effects. Journal of Services Management, 22,pp160-182.
- Zeithaml, V.A., Berry, L.L. and Parasuraman, A., 1996. The behavioral consequences of service quality. Journal of marketing, 60(2), pp.31-46.

APPENDIX

Research Questionnaire

Samsung	Huawei	Oppo			
iPhone (Apple)	Xiaomi	Vivo			
LG	Lenovo	Realme			
Others, please specify					

1. What is your smartphone brand?

١. ما هي علامة الهاتف الذكي الخاصة بك؟

2. How long have you been using your current smartphone brand

approximately? (Years)

٢. منذ متى وأنت تستخدم العلامة الحالية لهاتفك الذكي؟ (بالسنوات)

Less the one year	1-2	3-4
5-6	7-8	9-10
More than 10 years		

3.Gender:

١. النوع

Walc July]	Male ذکر
-----------	--	--	---	----------

0.1500110	se, determine to what extent do statements rega من الحيار ات الثالية في ضوء علامة	rding your	smartphone	brand		100 - 100 -
		الذكي _				
	Brand Cor					
	Statements العبارات	Strongly Disagree ac acity	Dingree غر مواش 2	Neutral 3	Agree oc:20 4	Strongly Agree acting season 5
	I. I love my smartphone brand أحب عاتمة هاتفي الذكي					
Affective Commitment الانتزام الماطلي	Personally, my smartphone brand is representative of me. عاتمة هاتني للذكي تطلقي على المستوى الشخصي					
	Talking about my smartphone brand makes me happy. الاخرين عن التحدث مع الإخرين عن عائمة ماتنى الذكى ا					
2	I am annoyed with negative reviews of my smartphone brand. الزعج من التعليقات السلبية المرتبطة بعادمة هاتفي الذكي					
	I strongly belong to my smartphone brand. انتمى بشدة لعائمة هاتنى الذكى.					
	I consider myself as a member of my smartphone brand family					

The Effect of Customer Engagement in the Relationship between Brand ... Azza Abdel Kader El Borsaly & Esraa Kamel Mahni

Please, determine to what extent do you agree or disagree with each of the following statements regarding your smartphone brand. من فضلك ، حدد إلى أي مدى توافق أو لا توافق على كل من العبارات التالية في ضوء علامة هاتفك

	الالتزام بالعلامة Brand Commitment								
	Statements العبارات	Strongly Disagree غير مرافق يشدة 1	Disagree غير مواش 2	Neutral محاب 3	Agree موافق 4	Strongly Agree مرافق بشدة ع			
Continuance Commitment الائتزام المستمر	7. I am using this smartphone brand due to limited alternatives in the marketplace استخدم هذه العلامة نظرًا اللبدال .7								
	8. Right now, using this smartphone brand is a matter of necessity as much as a desire. 8. في الوقت الحالي ، يمثل الوقت الحالي ، يمثل استخدامي لهذه العائمة ضرورة بقدر الرغبة في الاستخدام.								
	9. I will lose many files if I decided not to use this smartphone brand. و. سافقد العديد من الملفات اذا ورث عدم استخدام هذه العالمة.								
	10. I am using this smartphone brand since another smartphone brand may not provide all the benefits I receive from my smartphone brand.								

The Effect of Customer Engagement in the Relationship between Brand ... Azza Abdel Kader El Borsaly & Esraa Kamel Mahni

10. استخدم هذه العلامه للهاتف الذكي لان علامات الهواتف الذكية الاخرى قد لاتو فر جميع المزايا التي أحصل عليها من علامة هاتفي الذكي.	
11. The cost of this smartphone brand is affordable for me. د كلفة عائمة للهاتف الذكي معتولة بالنسية لي	
12. The cost of this smartphone brand is high but well worth it. 12. كلنة عائمة الهاتف الذكي مرتفعة ولكنها تستحق تاك	

Please, determine to what extent do you agree or disagree with each of the following statements regarding your smartphone brand.
من فضلك ، حدد إلى أي مدى توافق أو لا توافق على كل من الحبارات التالية في ضبوء علامة هاتنك الذكي .

Customer	الاحتفاظ بالعميل Customer Retention								
Statements العبار ات	Strongly Disagree غير مرافق بندة	Disagree غیر مرافق 2	Neutral محابد 3	Agree مراش 4	Strongly Agree مراثق بندة 5				
I. I intend to continue using my smartphone brand in the future. النوى الاستمرار في استخدام عاتمة هاتفي الذكي في المستقبل.									
I would recommend my smartphone as the best smartphone brand. أوصنى بهاتنى كافضل عاتمة أوصنى الذكية									
I would encourage friends and relatives to buy my smartphone brand. ا تُسْمِع الأصنفاء والأقارب ، مُسْمِع الأصنفاء والأقارب ، سَراء عامة الهائف الذكي . للهالمات الخاصة بي.									
4. I am very loyal to my smartphone brand. في أنا مخلص جدًا لمائمة الهائف الذكي الخاصة بي.									
5. I always say positive			k X	3					

smartphone brand to			
others.			
 أقول دائمًا أشياء ايجابية عن 			
علامة هائفي الذكي للآخرين.			
6. dealing with this			
smartphone brand is			
important to me.			
 التعامل مع هذه العائمة للهاتف 			
الَّذكي مهم بالنسبة لي.			
7. I consider my			
smartphone brand as my			
first choice.			
7. علامة هائقي الذكي هي خياري			
الأول.			

Please, determine to what extent do you agree or disagree with each of the following statements regarding your smartphone brand page on Social Media Networks. من فضلك ، حدد إلى أي مدى توافق أو لا توافق على كل من الحيار ات التالية في ضوء صفحة علامة هاتفك الذكي على شيكات التواصل الاجتماعي .

Customer Engagement on Soc	cial Media Networks
علامة على شبكات التواصل الاجتماعي	ارتباط المستهلك بصفحة ال

	Statements العبارات	Strongly Disagree غير موافق يشدد	Disagree غير موافق 2	Neutral	Agree مرافق 4	Strongly Agree مرافق بشدة ع
للمستهلك	I am enthusiastic about this smartphone brand page. أسّعر بالحماس تجاه صفحة علامة هاتفي الذكي.					
لارتبط العاطفي	This smartphone brand page inspires me. نلهمنى صفحة عائمة الهاتف. اللكي الخاص بي.					
Affective Customer Engagement الارتبط العاطلي المستهلك	 This smartphone brand page has meaningful and purposeful. صفحة عائمة هاتقي الذكي مفيدة و هائفة. 					
tomer Enga	 I am interested in this smartphone brand page أنا مهتم بصفحة عائمة الهاتف للنكي الخاص بي. 					
gement	 I feel very positive when visiting this smartphone brand page. أسعر بإيجابية عند زيارة صفحة علامة الهاتف الذكي الخاص بي. 					

The Effect of Customer Engagement in the Relationship between Brand ... Azza Abdel Kader El Borsaly & Esraa Kamel Mahni

	6. I am proud to be a member of this smartphone brand page. هم أنا فعور بكوني حصوا الله الله الله الله الله الله الله ال	Strongly	Disgree	Neutral	Agree	Strongly
	المعارات	Disagree	المر الراك	3	4	Agree ace ace
الإنهاد الدركي السنتهاك Cognithe Customer Engagement	 Time flies when I am visiting this amartphone brand page. ب يمر الوقت سريخا عند زيارة عند زيارة عند إدارة عند الدكي. الماض عود الماض عن الماض ع					
	 I pay a lot of attention to this smartphone brand page. أحلى اهتماقا كبيرًا المستعدة عائمة الهائف الذكي الماضل بي. 					
	P. It is difficult to stop surfing this Smartphone brand page. من السعب الترقف عن تصفح 9 مستحمة عاتمة الماتب التراس بين الماص بين					
	10. I file to learn more about this smartphone brand page. أود معرفة المزيد عن سنفحة عائمة الهاتف الذكي الخاص مين					
		3 /			t.:	66

	Statements العبار ات	Strongly Disagree غیر موافق بشده	Disagree غیر موافق 2	Neutral	Agree مراتق 4	Strongly Agree مرافق بننده ق
الارتباط السلوكي للمستهلك Behavioral Customer Engagement	11. I follow this smartphone brand page. 11. أتابع صفحة عاتمة الهاتف الذكي					
	12. I regularly interact with this smartphone brand page. 12 مندة عاتمه التقاطا الخاصة بي.					
لارتباط Engagement	13. I spend a lot of time using this smartphone brand page. د اقضى الكثير من الوقت في المثخدام صفحة عائمة الهاتف الخاصية بي.					