Abstract

The purpose of this research is to find out Bangkok’s university students’ loyalty towards the Apple iPhones. Both exploratory and explanatory mixed method by Creswell (2014) has been applied in this study. Firstly, two rounds of interviewing stage comprising thirteen and another eleven interviewees. This study found and confirmed validity of major dependent and independent variables used to recreate conceptual framework in the quantitative methodology. Very satisfactory level of reliability has been confirmed with 30 respondents of pre-testing based on questionnaire designated. Secondly, multiple linear regression (MLR) has applied for 400 respondents through SAS enterprise license number 12400609. The statistical results show that students’ dependency on Apple iPhone for their daily life and study purposes. The factors prove the dependency of students, such as mobile applications, convenience, brand trust and social influence, which lead towards brand loyalty of the Apple iPhone.

Keywords - Brand Loyalty, Operating System, Technology, iPhone

Introduction

The smartphone is an important device in our life. It has made our life complex as well as easy. There are lots of different smartphone brands available in the market such as Apple, Samsung, Sony mobiles, Nokia, Motorola and many more. But there is one brand which created an impact in the Smartphone industry is Apple’s iPhone. Brand loyalty way the consumers want to pay more for a brand while having the same group of products available in the market and recommend about that brand by the people around him. The iPhone has been important mobile device among the university students situated in Bangkok, Thailand as discussed in this research.

Brand Loyalty is important in Information technology; there are top Brand like Apple, Samsung, Huawei, OPPO, Vivo, and other Brands. Apple’s iPhone has always been popular among users. Apple’s iPhone still most loyal iPhone around even though there is lots of competition from Samsung Phone. There are some facts identified that 76% of Apple’s iPhone users upgrade from one iPhone generation to another iPhone generation, close to Apple is Samsung in which 58% of Samsung users retain their Samsung's phone in the future. Another brand can keep retention above 40%, this states that Apple’s iPhone is most preferred Brand in iPhone Industry.

Research Objectives

1. To study the influence of the iPhone among life of students
2. To study the importance of Brand loyalty of Apple iPhone among students


![Figure 1: Percentage frequency students owned smartphones according to year of usage](image)

(smartphones usage among university students: najran university case. Alfawareh and Jusoh, 2014)

**Literature Review**

**Brand Loyalty**

According to Vera and Trujillo, (2017), Brand loyalty has turned into an important subject for marketers and consumer researchers, the importance of buyers’ or consumers’ behavioral occurrence that it measures the business performance and what effect it can do with corporate financial performance. Apple always has the reputation of launching great quality products which attract consumers to buy that brand again or repurchase repeatedly. Brand loyalty is known as a huge devoted to consumers to purchase their favorite brand continuously in the future, regardless of the impact of situational factors and the marketers' efforts to make them switch to another brand, according to Seinauskiene et al., (2015).

**Attitudinal loyalty**

Anisimova, (2007) has explained Attitudinal loyalty can be shown adopting the affective and the cognitive substance of the brand loyalty. Consumer Brand loyalty depends on the Attitude of the consumer towards Brand. Apple products consumers will always have a positive attitude towards the Apple brand which make them buy that brand. Attitudinal loyalty as a step beyond the behavioral loyalty component since it moves ahead to know customers’ psychological attachments and attitudinal backing towards a selected product or services started by Izogo, (2016).

**Behavioral loyalty**

Liang and Wang, (2007) defines the structure of behavioral loyalty as a compound size based on a consumer’s buying frequency and total money spent at a seller in compared to the money spent at other sellers from which the customers buy the product. This study applied loyalty of Apple iPhone users. Apple users frequently invest their money in Apple products they know that the product they are buying is of good quality and they will be using it for a long time. Liao et al., (2014) stated that previous research shows that behavioral loyalty needs more consumer commitment and extended sources, indicating that intentional loyalty individually may not lead to actual patronage behavior.

**Mobile Applications**

Mobile Applications for Apple iPhone are developed by iOS mobile developer, they develop applications which can easily run on iOS operating system. According to Filho and Junior, (2016) emerging amount of application downloads on mobile application store like Google’s Play store and Apple’s Application Store. Students also use lot of Mobile Applications to do their daily task and for studying purposes. In this research, researcher examined potential differences, the students are encouraged to learn and write while using the mobile application, according to Kanala et al, (2013). Mobile Application has motivated student to learn and write, they can easily make notes in their Apple’s iPad or iPhone. There are many applications is an Apple App store which students can use. Apple iOS have always been ahead as they were the first one to implement the mobile application.
H1: There is a significant relationship between Mobile Application and Dependency on Apple iPhone.

Convenience
Convenience meaning given by the consumer based on utilization for their purposes according to Reimers, (2014). Apple iPhone have been quite convenient devices for the students as a lot of their daily activities are depended on the iPhone. A lot of students agree that it saves a lot of their time and effort. Students prefer carrying their iPhone more than their laptop for their daily task. iPhone helps them to accomplish tasks easily. Students feel iPhone is convenient and allow them to accomplish their task easily, Previous research has shown a positive relation between service, convenience and behavioral intentions affecting the consumers stated by Jiang et al, (2013).

H2: There is a significant relationship between Convenience and Dependency on Apple iPhone.

Brand trust
Brand trust is defined as the desire of the customer to depend on the brand because of deviation that will perform its task or will produce favorable outcomes explained by Frasquet et al, (2017). Students believe that the quality of the iPhone is trustworthy. They know that iPhone is professional in the smartphone industry. Brand trust provides positive and significantly loyalty to the consumers stated by Frasquet et al. (2017). According to Rampl and Kenning, (2014) Brand trust is known as desire of a consumer to have belief in the reliability and truthfulness of a specific brand. Based on the students experience while purchasing the iPhone, they believed that Apple brand will keep its promise to the customers.

H3: There is a significant relationship between Brand Trust and Dependency on Apple iPhone.

Social Influence
Social influence is interconnected to a method that other people influence one’s opinions, feelings and deportment according to Suki (2013). Social influence can happen from a friend using an Apple iPhone. It fit into a social group which uses Apple iPhone, students are influenced by them to use an iPhone. The social influence of word of mouth is more adaptive rather than passive stated by Sridhar and Srinivasan, (2012). A customer might be susceptible to social influence by inspection, perception, awareness or the expectancy of decisions made by others in connection with smart phones stated by Suki, (2013).

H4: There is a significant relationship between Social Influence and Dependency on Apple iPhone.

Dependency on Apple iPhone
Students use iPhone daily to complete their task shows their dependency on Apple iPhone. Dependency on Apple iPhone shows the success of Apple to keep their customers depend on their iPhone on a regular basis. Mafe and Blas, (2008) stated that dependency concept depends on the relationship between the system and their component which has specific medium. According to Chan et al, (2016) dependency is an important attribute around customer experience that’s not fully explored yet. They also mentioned that dependency implies on regular usage and would have an influence on the satisfaction of the users. Dependency shows regular usage and likely to effect on the satisfaction among users and can be used to predict online satisfaction, according to Chan et al (2016).

H5: There is a significant relationship between Dependency on Apple iPhone and Brand Loyalty.

Conceptual Framework
The researcher constructed the conceptual framework with four independent variables Mobile Application, Convenience, Brand trust, Social influence. The dependent variable is brand loyalty in expression of Attitudinal Loyalty and Behavioral Loyalty. The researchers also included one intervening variable later, which is known as Dependency. This Conceptual Framework is based on shape mainly based on the four models of theoretical frameworks which researcher included in his research.

Research Methodology

This research used mixed methods research by Creswell (2014) in this research. Mixed methods research is a reach to find out that integrate both qualitative and quantitative research methods. Qualitative data is combining the data of two different forms and using distinct designs that might cause Philosophical hypothesis and theoretical frameworks. The main hypothesis of this kind of analysis is the integration of both qualitative and quantitative approaches which offers an extra assumption of a research drawback than either approach singly.

Reliability Test

In this research the reliability test had been used by the researcher to examine the reliabilities of the questions of each variable. In this study Cronbach’s alpha would be assumed by the researcher in SAS software license number 12400609. Table 1 summarize reliability of each variable used in this study.

Table 1: The Summary of Reliability

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach Alpha’s Results (α-test)</th>
<th>No. of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudinal Loyalty (Brand loyalty)</td>
<td>0.825</td>
<td>4</td>
</tr>
<tr>
<td>Behavioral Loyalty (Brand loyalty)</td>
<td>0.820</td>
<td>4</td>
</tr>
<tr>
<td>Dependency on Apple iPhone</td>
<td>0.756</td>
<td>5</td>
</tr>
<tr>
<td>Mobile Application</td>
<td>0.799</td>
<td>5</td>
</tr>
<tr>
<td>Convenience</td>
<td>0.815</td>
<td>5</td>
</tr>
<tr>
<td>Brand Trust</td>
<td>0.851</td>
<td>5</td>
</tr>
<tr>
<td>Social Influence</td>
<td>0.811</td>
<td>5</td>
</tr>
</tbody>
</table>

Target Population

The researcher wants to research about the factors which makes the students of different university to use Apple’s iPhone as their choice of their daily usage, the target population which the researcher had used to conduct the research is six different universities situated in Bangkok, Thailand. They are Assumption University, Mahidol University, Ramkhamhaeng University, University of the Thai Chamber of Commerce, Stamford University and
Bangkok University. University students of any program which are used Apple’s iPhone are used as a target population in this research. Data was collected from total 400 students for this research.

Research Findings

The researcher has used 400 samples of primary data and these data were collected from (7) different universities in Bangkok, Thailand. The researcher collected these data by using a questionnaire during period of February to May of 2018. According to the result of this study, the majority group is a male group (53.0%) followed by a female group (47.0%). All the respondents are from university with the highest age level group of 20-25 years old (56.75%). The biggest personal income in a month group is between 15000 - 20000 THB (59.50%) with a bachelor’s degree (66.50%) as highest educational level.

The researcher used Multiple Linear Regression (MLR) Analysis and a Pearson Correlation (Bivariate) for intervening variable to get the result. Multiple Linear Regression (MLR) and Pearson Correlation (Bivariate) analyses the statistical results shown as the following; -

Multiple Linear Regression (MLR) Analysis

As a result, all four variable shows contribute over 44% in Dependency on Apple iPhone. After backward elimination, there are only three variables remained significant towards Dependency on Apple iPhone. If the mobile application for 1% plateau will affect Dependency on Apple iPhone by -4% (β1 = - 0.04176) at 99% confidence interval. The Convenience for 1% plateau will affect Dependency on Apple iPhone by 49% (β2 = 0.49674) at 99% confidence interval. The Brand Trust for 1% plateau will affect Dependency on Apple iPhone by 13% (β3 = 0.13735) at 99% confidence interval. Finally, Social Influence for 1% plateau will affect Dependency on Apple iPhone by 19% (β4 = 0.19573) at 99% confidence interval. The formula is shown as follows: -

\[ Y_i = -0.04176X_1 + 0.49674X_2 + 0.13735X_3 + 0.19573X_4 \]

Where: \( Y_i \) = Dependency on Apple iPhone; \( X_1 \) = Mobile Application; \( X_2 \) = Convenience; \( X_3 \) = Brand Trust; \( X_4 \) = Social Influence. R-Square = 0.4922

Multicollinearity Analysis

Table 2 shows three multicollinearity indicators comprising in variance inflation (VIF), and tolerance. VIF of indicates that variance inflation factor at lower than 5 while Tolerance is higher than 0.2. VIF and tolerances confirms that these four independent variables have no multicollinearity problem

Table 2: Multicollinearity of the Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>Variance Inflation (VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOA - mean</td>
<td>0.60714</td>
<td>1.64706</td>
</tr>
<tr>
<td>CON - mean</td>
<td>0.41919</td>
<td>2.38553</td>
</tr>
<tr>
<td>BRT - mean</td>
<td>0.63545</td>
<td>1.57369</td>
</tr>
<tr>
<td>SOI - mean</td>
<td>0.76171</td>
<td>1.31283</td>
</tr>
</tbody>
</table>

Pearson Product Moment Correlation Coefficient

For the intervening variable Pearson Correlation analysis was done to find the relation between Dependency on Apple iPhone and Brand Loyalty. The Pearson Correlation Analysis ended that the significance level was equal to 0.00 which was less than 0.01. This means that the hull hypothesis was rejected, and thus, there was a relationship between Dependency on Apple iPhone and Brand Loyalty at 0.01 sig. Levels with a correlation (r) at 0.651, it means there was a medium positive correlation between Dependency on Apple iPhone and Brand Loyalty.
Discussions and Implications

The first hypothesis shows that there is a significant relationship between Mobile Applications and Dependency on Apple iPhone. It shows that the Mobile application plays an important part on the Apple iPhone as students depend on Mobile application for their study purposes. The increase in the price of e-books for students, in the present day makes university students’ willingness to use mobile e-textbook applications for learning, stated by Lai et al. (2012). The testing of the hypothesis, one shows that there is a weak relationship between Mobile Applications and Dependency on Apple iPhone.

The second hypothesis shows that there is a significant relationship between Convenience and Dependency on Apple iPhone. Based on the result, there is a moderate positive relationship between Convenience and Dependency on Apple. The Apple iPhone had been quite convenient for the students studying in the university as it helps them to get information from various sources and applications. Students feel iPhone is convenient and allow them to accomplish their task easily. Previous research has shown a positive relation between service, convenience and behavioral intentions affecting the consumers stated by Jiang et al. (2013). Apple iPhone have been quite convenient devices for the students as a lot of their daily activities are depended on the iPhone.

In the third hypothesis showed that there is a significant relationship between Brand Trust and Dependency on Apple iPhone. According to the result of this hypothesis, it has a moderate positive relationship between Brand Trust and Dependency on Apple. Students at university has trust on Apple brand because of their quality and durability of the products. The Apple iPhone is known for their good build quality and is known reliable brand. Brand trust is formed not only via brand understanding, but also from the emotional elements of the brand started by Alwi et al, (2016). Students believe that the quality of the iPhone is trustworthy.

In the fourth hypothesis, there is a significant relationship between Social Influence and Dependency on Apple iPhone. Based on the result, the hypothesis two has a moderate positive relationship between Social Influence and Dependency on Apple. Social influence has great impact on Brand loyalty towards Apple iPhone. The social influence of word of mouth is more adaptive rather than passive stated by Sridhar and Srinivasan, (2012). Social influence can happen from a friend using an Apple iPhone. It fits into a social group which uses Apple iPhone, students are influenced by them to use an iPhone.

In the last hypothesis, there is a notable connection between Dependency on Apple iPhone and Brand Loyalty. According to the outcome of this hypothesis, it has a moderate positive relationship between Dependency on Apple iPhone and Brand Loyalty. Students use iPhone daily to complete their day to day task shows their dependency on Apple iPhone. Mafe and Blas, (2008) stated that dependency concept depends on the relationship between the system and their component which has specific medium. Dependency on Apple iPhone shows the success of Apple to keep their customers depend on their iPhone on a regular basis.

Conclusions

Since the smartphone market had been dynamic in recent years. Smartphones have been replacing traditional phone usage. It has created a trend among people to use smartphones. People have their specific preference and using their desired brand of smartphone. This research aimed to find the relationship between Brand loyalty, Dependency of students towards Apple iPhone, Mobile Applications, Convenience, Brand Trust and Social Influence. In this research, the researcher applied 400 samples of primary data and these data are collected from universities in Bangkok, Thailand. For the demographic factor all the respondents are students from the universities with the highest age level group of 20-25 years old. Their biggest personal income in the form of group in a month is around 15000 - 20000 THB with bachelor’s degrees as highest educational level.

Hypothesis 2-5 have positive relationships which show the Brand loyalty, Dependency towards Apple iPhone, Mobile Applications, Convenience, Brand Trust and Social Influence. It has a significant effect on Brand Loyalty towards Apple. Only first hypothesis shows negative relationship at - 0.04176. Second and fifth hypotheses show strong positive relationship at 0.49674 and 0.651, respectively.
Recommendations

According to the finding of the research, here are several recommendations to influence the Brand loyalty of students towards Apple iPhone. The factors which were studied in this research are Dependency towards Apple iPhone, Mobile Applications, Convenience, Brand Trust and Social Influence have an important effect on Brand loyalty of students towards Apple iPhone. From the analysis outcome, all the variables have actual relationships, so the suggestion will be made dependent on the five hypotheses.

Firstly, the finding of this research showed the importance of Convenience (H2) and Dependency on Apple iPhone (H5) towards Brand loyalty for the Apple iPhone. Apple should work more on making iPhone convenient for the users. As it plays an important role in Brand Loyalty. The user interface of Apple iPhone can be better and made especially for the students for their easy usage. The Apple iPhone system should be made easy for the students to download any kind of study content and support all kinds of files support in the iPhone.

Secondly, from the finding of the hypothesis three and four, brand trust and social influence are the other issue for the students to stay loyal towards Apple iPhone. The findings direct to improve Brand trust and Social influence to increase the Brand loyalty to Apple iPhone. Brand trust is important to maintain loyalty towards the brand, Apple needs to make sure that the quality of the iPhone is trustworthy, and it will last long in term of usage. Students tend to get influenced by the social media and friends. Apple needs to pay more attention on advertising iPhone on social media, Billboard, TV to spread awareness among the people. Apple can make their product more affordable to students by providing them some student discount especially for the students, which can develop interest towards the iPhone by the other students as well. This can create awareness among the potential consumers.

Thirdly, according to the hypothesis one, Mobile applications are a positive influence towards Brand loyalty, but it had the low score among variables. Apple needs to improve the application experience for the users. Quicker updates can be good for the improvement of the User Interface. Apple can make some important educational Applications free so that the students can easily download it from their Application store. They can also reduce the price of certain important applications which users desire to buy it.

To conclude, Apple should pay more attention on each variable which affects the Brand loyalty. Apple should make their iPhone convenient to use and more free application for student’s study purposes. In addition, a more affordable range of upcoming iPhones can be great for the students. Special discounts provided to the students can be a good way to maintain Brand loyalty and attract new potential clients.

Future Studies

This research mainly paid attention to the factors of Dependency on Apple iPhone, Mobile Applications, Convenience, Brand Trust and Social Influence affect the Brand loyalty. To improve and study the findings, there are other research which can be conducted. Still, this study is useful for smartphone industry, especially for Apple’s iPhones. This topic can be enhanced by further researches. The following recommendation will be useful for the researcher to expand into related fields.

- This research focuses on some variable that affect the Brand loyalty. There are many other variable that influence consumer behavior such as perceived quality, price perception, feedback of productivity, durability, but this research could be referenced for the further study.

- Demographics character should be studied more specifically to get more exact consumer behavior intention from the various groups of people. The income and occupation levels will be a very attractive topic to discuss in the behavior intention of consumers.

- This research was focused on Brand loyalty of Apple iPhone. Further research can be done to investigate about repurchase intention and factors affecting migration to another brand of smartphones.

Acknowledgement
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References