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Assessing the Impact in the Growth of Social Media in Cameroon and User Experience: The Case of Facebook

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Abstract

Purpose: The purpose of this paper is to examine the overall experience of Facebook users and to identify the tactics that should be undertaken in order to improve user experience.

Design/Methodology/Approaches: The study basically consists of Quantitative Research method. Samples were selected based on quota sampling. The target population was chosen considering the objectives of this research. As a result, only those users who have ever used Facebook properties were considered as the possible respondents. The study is based on the students in Catholic University Institute of Buea (CUIB) and their friends on Facebook of some group members where 261 respondents replied, which include 10% (25) direct questionnaires in the School of Business of Catholic University Institute of Buea (CUIB) and 90% (236) internet questionnaires with Google.

Findings: The findings reveal that, Facebook is more appealing to female and teenagers in other words people at the educational level of undergraduate but these majority of users do not show highly addicted usage in terms of access duration per day into Facebook; Nonetheless, majority of the users surveyed are Facebook long time users which could be translated that current Facebook is still capable of maintaining the loyalty of their users.

Originality/Value: This study's research questions and methods are new to the line of assessing the impact of User experience on the growth of Social Media in Cameroon.

Keywords: User experience; Social media; Facebook

Introduction

The 21st century has seen a rise in the development of Social Networking Sites (SNS). According to Barone [1] a social network can be defined as "web based services that allows people to build a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection and to view and transverse their list of connections and those made by others within the system. One of the most popular networking websites today is the Facebook. Starting from the youngsters to the middle aged people, to the elderly ones, Facebook has gained wide popularity among all the aged groups and most of the people spend a major chunk of their time utilizing this website whether to keep in touch with family and friends or even for business referrals.

Facebook is a social networking service and website launched in February 2004, owned and operated by Facebook, Inc. As of May 2016, Facebook has over 900 million active users, more than half of them using Facebook on a mobile device. Users must register before using the site, after which they may create a personal profile, add other users as friends, and exchange messages, including automatic notifications when they update their profile [2].

Problem statement

However, the increase rate of Facebook active users is dropping in recent years. Table 1 will show the increase rate of Facebook active users in recent years.

The table obviously shows the monthly increase rate of Facebook active users is dropping increasingly. The latest monthly rate is 1.74% in April 24, 2016, which decreases by 48% from 3.37% in September 22, 2015.

The more and more serious competition of social media market is one of main reasons of the decreasing monthly growth rate. Twitter,

Google+ and other social networking websites are becoming stronger day by day. Facebook is the king of social website now. How long will Facebook be the king in this market? How attractive is Facebook now? As a result, further studies are needed in order to examine the overall user experience of Facebook and what measures should be adopted in order to improve one's experience.

Research objectives

The Objectives of this study are:

Date	Users (millions)	Days later	Monthly growth
April 24, 2016	900	215	1.74%
September 22, 2015	800	115	3.37%
May 30, 2014	700	145	3.45%
January 5, 2013	600	168	3.57%
July 21, 2012	500	166	4.52%
February 5, 2011	400	143	6.99%
September 15, 2010	300	160	9.38%
April 8, 2010	200	225	13.33%
August 26, 2009	100	1,665	178.38%

Source: (Google finance)

Table 1: The increase rate of Facebook active users in recent years.

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To examine the overall experience of Facebook users and to identify the tactics that should be undertaken in order to improve user experience.

Specific objectives

1. To examine how Enjoyment, ease of use, usefulness influence the overall experience.

2. To examine the relation between enjoyment, ease of use, usefulness.

3. To identify particular group of users with significant user experience.

Literature Review

Demographic of Facebook users

Admin [2] in the article entitled "Facebook Usage: How Often Do Different Types of Users Access Facebook?" makes a deep research on how the frequency of Facebook access varies by age, gender, and other demographic characteristics. This survey has lots of caveats, and the results can be considered preliminary and would need to be validated via a larger, formal study.

• Age: The Facebook users can be divided into four groups, 18-24, 25-34, 35-44, and 45-54. The youngest users accessed Facebook the most frequently, with 73% reporting checking Facebook several times a day. The 25-34 set was also fairly active, though there's a steep drop in daily access. Nevertheless, 73% still report accessing Facebook at least once a day. Only 37% of the users between 35 to 44 years old use Facebook several times one day. However, there is an increasing trend of using frequency in the users from 45 to 54 years old.

• Gender: Men and women showed remarkably similar patterns of Facebook use, as far as frequency go. The greatest differences between women and men being that about 10% more women access Facebook daily.

• Work status: The differences between working and non-working women were not huge. About the same number reported checking Facebook several times a day. A somewhat larger number of working women reported checking daily, whereas the non-working women had a somewhat higher incidence of several times/week. Men without work were far more likely to check Facebook several times a day. But almost 100% of at-home Dads reported checking Facebook daily. Working dads, on the other hand, are most likely to only check Facebook several times a week.

Independent variable one – ease of use: Social media includes web-based and mobile-based technologies which are used to turn communication into interactive dialogue among organizations, communities, and individuals [3]. Social media technologies take on many different forms including magazines, Internet forums, weblogs, social blogs, micro-blogging, wikis, podcasts, photographs or pictures, video, rating and social bookmarking.

In the modern society, social media is becoming more significant for each business area. What social media can do for business is to make a better company by allowing people to listen, react and build faster and more efficiently than ever before. According to "18 Reasons to Use Social Media" by Lisa Barone, there are 18 reasons to use social media in business, or called the advantages of using social media in business. The 18 reasons are the visibility, branding yourself as a resource, easily getting speaking gigs, building a community, decreasing time to conversion, highlighting your product, hanging with other influencers, telling your company's story, being a mentor, improving your writing skills, developing better ideas, network faster, finding partners, getting answers faster, creating a resource depositary, developing your company culture, better hires.

In the article "Why Do People Use Online Social Networking", Dachary Carey pointed out that online social networking is positive in helping people connect and collaborating at work. In Carey's opinion, social networking enables people keeping in touch with old friends and making new oneself across the miles available. "It's the ultimate networking tool" said by Carey. For individual using, Carey concluded that online social networking is a great way to expand your social circle and get in touch with people you otherwise wouldn't speak with regularly.

In the business area, social networking tools are also very useful. Carey mentioned that both employees and employers can get benefits in looking jobs and hiring staffs. Furthermore, social networking also can be used for advertising new products and deals, communicating with customers or anything else.

But, Carey still highlighted out that the social networking also carries a few negatives, especially for children. He mentioned that parents must vigilant to ensure kids are still spending quality time with friends in person due to the dangerous that using online social networking may lead people withdrawing from real life interactions.

Independent variable two – perceived enjoyment: A user's enjoyment is one of the most important factors contributing to the success of any social networking website [4]. According to Venkatesh and Davis [5], perceived enjoyment is the extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use. When a user finds Facebook as enjoyable he/she will tend to use the website again and again. Also, perceived enjoyment is considered to be a type of intrinsic motivation. A person will be more motivated to do or repeat an enjoyable activity that is enjoyable more as compared to the same activity which is not enjoyable. Based on the study conducted by Teo et al. [6] it shows that perceived enjoyment is positively related to the frequency of internet usage and daily internet usage. Therefore, perceived enjoyment has a positive influence on the attitudes and intentions of consumers towards Facebook and also the amount of time a consumer spends on the same.

Independent variable three – Perceived usefulness: Perceived usefulness is how useful the site is for friendship maintenance and social surveillance conducts. It is also said as the degree to which a person believes that using a particular system would enhance his job performance. When people feel that the system is useful, they think positively about it as cited by Sibona and Jae [7]. Sibona and Jae [7] found out that the usefulness of Facebook is in line with the purpose they stated which is; "a social utility helps people communicate more efficiently with their friends, family and co-workers." Moreover, it is categorised as extrinsic motivation since it is about committing an action because of its perceived helpfulness in achieving value [8].

Rugambwa [9] study the use of Facebook for promotion, in this case for urban music events in Helsinki is due to the reach of Facebook to certain specific consumers, supported with provision of multimedia content and event promotion-friendly features within such as the photos and videos sharing on Facebook event or group pages. All this are made available thanks to the diffusion of innovations available in Facebook.

Theoretical framework

According to the different experiences of Facebook users by conducting the literature studies, we formulated the research theoretical framework with three independent variables pointing to the dependent variable as shown in the Figure 1.

Methodology

Research design

The study basically consists of Quantitative Research method. This method is a formal, objective, systematic process in which numerical data are used to obtain information about the world. It is an excellent way of finalising results and proving or disproving a hypothesis. According to Harris and Rae [10] this method is all about knowing the views and ideas of people in a structured manner so that information and facts can be provided which will help one in conducting a research. The quantitative method is chosen because the main objective of this research is to study and examine the relationship between the various independent and dependent variables of the study. The dependent variable of this study is overall user experience and the independent variables of the study are perceived usefulness, perceived enjoyment and ease of use. Thus a quantitative type of research methodology is most appropriate for this kind of study.

Research sampling

Sample population: The target population was chosen considering the objectives of this research. As a result, only those users who have ever used Facebook properties were considered as the possible respondents. Moreover, due to the fact that youngsters are the ones who heavily use Facebook now-a-days, the main target was to survey these young adults who are college and university students and also working people as well.

The study is based on the students in Catholic University Institute of Buea (CUIB) and their friends on Facebook of some group

Figure 1: Theoretical framework.

members where 261 respondents replied, which include 10% (25) direct questionnaires in the School of Business of Catholic University Institute of Buea (CUIB) and 90% (236) internet questionnaires with Google.

Sampling technique: Samples were selected based on quota sampling. Quota sampling is a non-probability sampling technique of gathering representative data from a group. As opposed to random sampling, quota sampling requires that representative individuals are chosen out of a specific subgroup. For example, a researcher might ask for a sample of 100 females, or 100 individuals between the ages of 20-30. In this study, quota sampling was performed based on Facebook. The respondents are all Facebook users, who have experiences of using Facebook.

Sample size: In all, 261 questionnaires were distributed to respondents. According to Saunders et al. (2009), 150 questionnaires is the suitable sample size which would yield statistically significant results in social sciences research. Therefore 261 samples were done as this size can reflect the comprehensive experience of Facebook users.

Data collection

In this study, both primary and secondary sources are used in order to collect data because when these two sources exist together, it gives a very good understanding of the quantitative data.

Primary data: This study was unique in terms of the nature of defining and grouping of variables. Therefore, no one suitable validated questionnaire could be used. Thus, a descriptive research questionnaire was designed by researchers based on the identified variables from the previous literature search performed.

The questionnaire designed of four sections. The first examined the demographics of respondents. And the following three sections focused on the three independent variables, the perceived enjoyment, information privacy and perceived usefulness.

Secondary data: The secondary sources used were books, journal articles, newspaper, internet databases and business magazines.

Measuring instrument

According Schroeder [11], within a short time frame and limited resources a self-administrated Questionnaire is the most appropriate method to collect data for research. As a result, the data collection tool that is used for this study is the Questionnaire since it enables one to gather information from a large number of people in a very short time and with very little effort. The questions in the questionnaire consist of both Open ended as well as close ended questions [12].

The questionnaire contains around 15 questions in which section 1 consists of Demographic data where the respondents were asked questions regarding their age, gender, race, location etc. The next section consisted of questions regarding the various variables of the research which includes questions like the hourly usage of users of the various Facebook from 0 to 40 or more hours a week. It will also include questions regarding why the users use Facebook i.e., whether it is for their personal use or for business purposes. The close ended questions will use a 5 point Likert scale from "Strongly Disagree" to "Strongly Agree" [13].

Data analysis

Statistical analyses were used Statistical Package for the Social Science (SPSS). The descriptive analysis was performed using frequency
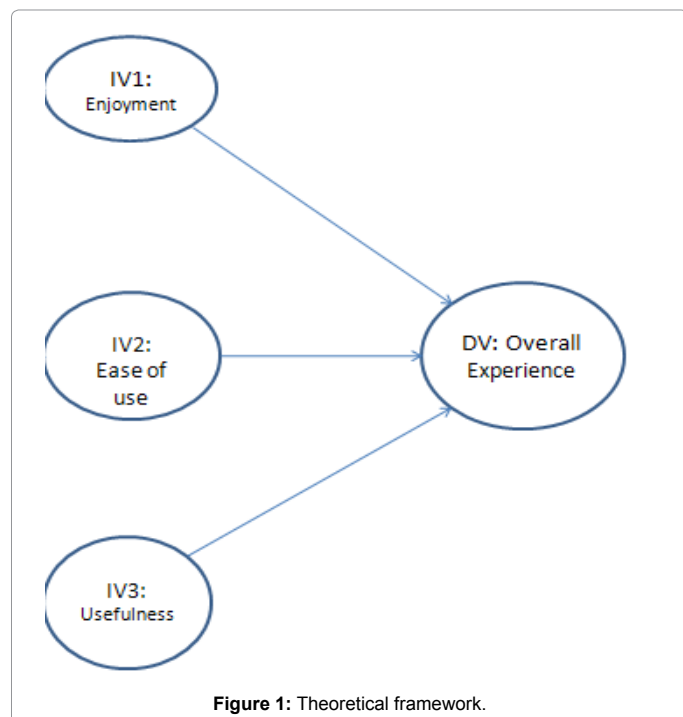
distributions, cross tabulation, descriptive statistics and graphs. Besides, factor analysis was performed to identify the independent variables which highly correlate with each other. Appropriate assumptions and post-hoc tests were also performed when required.

Empirical Findings and Analysis

Characteristic of respondents

Population in this study mostly comprises of female respondents, with individuals at the age 18 to 24, subsequently means that most came from undergraduate education level. Most of our respondents are occasional Facebook user (access Facebook less than 2 hours per day) with length of usage in Facebook being dominated between 2 to 4 years (Table 2).

Consolidation and verification on survey responses

This study managed to obtain answers from 261 respondents comprise of 4 perceived factors by the user.

In order to conduct better testing, the questions are consolidated through factor analysis under four basic construct. Each of the construct fulfilled the necessary assumption with adequate sample size, proper correlation at sufficient communalities level where the construct cumulative variance are at acceptable level for social science study (above 60%) (Table 3).

Usefulness is the only category where 4 of the questions were removed (in order: I spend time on Facebook when I should be doing other things, I use Facebook to meet new people, I use Facebook to get useful information, I use Facebook to check out someone I met socially) due to low communalities where the result before any removal only provide explanation of 52.618%. This category is then split into two sub-category where category 1 can be labeled as 'usefulness in obtaining information' and category 2 labeled as 'usefulness for social interaction'.

Characteristics (N=261)	N (%)
Gender	
• Male	115 (44%)
• Female	146 (56%)
Age	
• Below 18	10 (3.8%)
• Between 18 to 24	145 (55.6%)
• Between 25 to 34	85 (32.6%)
• Between 35 to 44	15 (5.7%)
• Between 45 to 54	4 (1.5%)
• Above 54	2 (0.8%)
Education level	
• High School	22 (8.4%)
• Undergraduate	140 (53.6%)
• Postgraduate	86 (33%)
• Others	13 (5%)
Years of using Facebook	
• Less than 2 years	21 (8%)
• Between 2 to 4 years	135 (51.7%)
• Between 4 to 8 years	97 (37.2%)
• More than 8 years	8 (3.1%)
Hours per day of using Facebook	
• Less than 2 hours	152 (58.2%)
• Between 3 to 4 hours	71 (27.2%)
• More than 4 hours	38 (14.6%)

Table 2: Characteristic of respondents.

Constructs (N=261)	Total Variance	Total Correlation
Usefulness*	61.149%	
Factor 1 (Usefulness in obtaining information)		
I use Facebook to get answers to specific questions		0.511
I use Facebook to get business referrals		0.421
I use Facebook to get advice about something I want to buy		0.467
I would save time using Facebook		0.454
Factor 2 (Usefulness for social interaction)		
Facebook allows me to keep track of what my friends are doing		0.354
Using Facebook would make my communication with others more efficient		0.37
I use Facebook to keep in touch with old friends		0.281
Enjoyment*	89.139%	
Factor 1		
Using facebook is fun		0.783
Using facebook is an interesting activity		0.783
Ease of use*	69.281%	
Factor 1		
Facebook has always been easy to use		0.681
Learning to use Facebook is easy for me		0.588
Using facebook does not require a lot of mental effort		0.58
Overall Experience*	84.225%	
Factor 1 (Positive wording)		
pleasant		
enjoyable		
Factor 2 (Negative wording)		
tedious		
boring		

*Cronbach Alpha > 0.7

Table 3: Summary of consolidation and verification process.

Result on overall experience shows that it can be grouped into 2 main categories where the only difference is in the positive and negative wording while they actually measure the same thing (only used to identify any respondents who filled the questionnaire randomly) as such only factor 1 will be used on future analysis. The result Figure 2 shows how the result are actually inversed between the positive (two charts on the left side) and negative (2 charts on the right side) which confirm that respondents are generally aware of the questions in the survey and responded properly.

Filtered variables in factor analysis were checked further for their reliability where as the variables shows relatively moderate to high correlation. Variables under usefulness display relatively moderate correlation compared to variables in the other two constructs which displays strong correlation; nonetheless, all three constructs shows ufficient level of reliability in the test conducted (Cronbach Alpha > 0.7).

How are they related?

Summary on the relation between user's perceived factors was shown in Table 4.

Non-parametric test were conducted on the variables due to skewed curve on the test conducted prior to correlation-test (Table 4). According to the table, the four items have a positive significant influence on overall experience, especially the "enjoyment", which has a strong positive significant influence on the overall experience.

In order to understand further on how the usefulness, ease of use,

Figure 2: Verification on respondents answer.
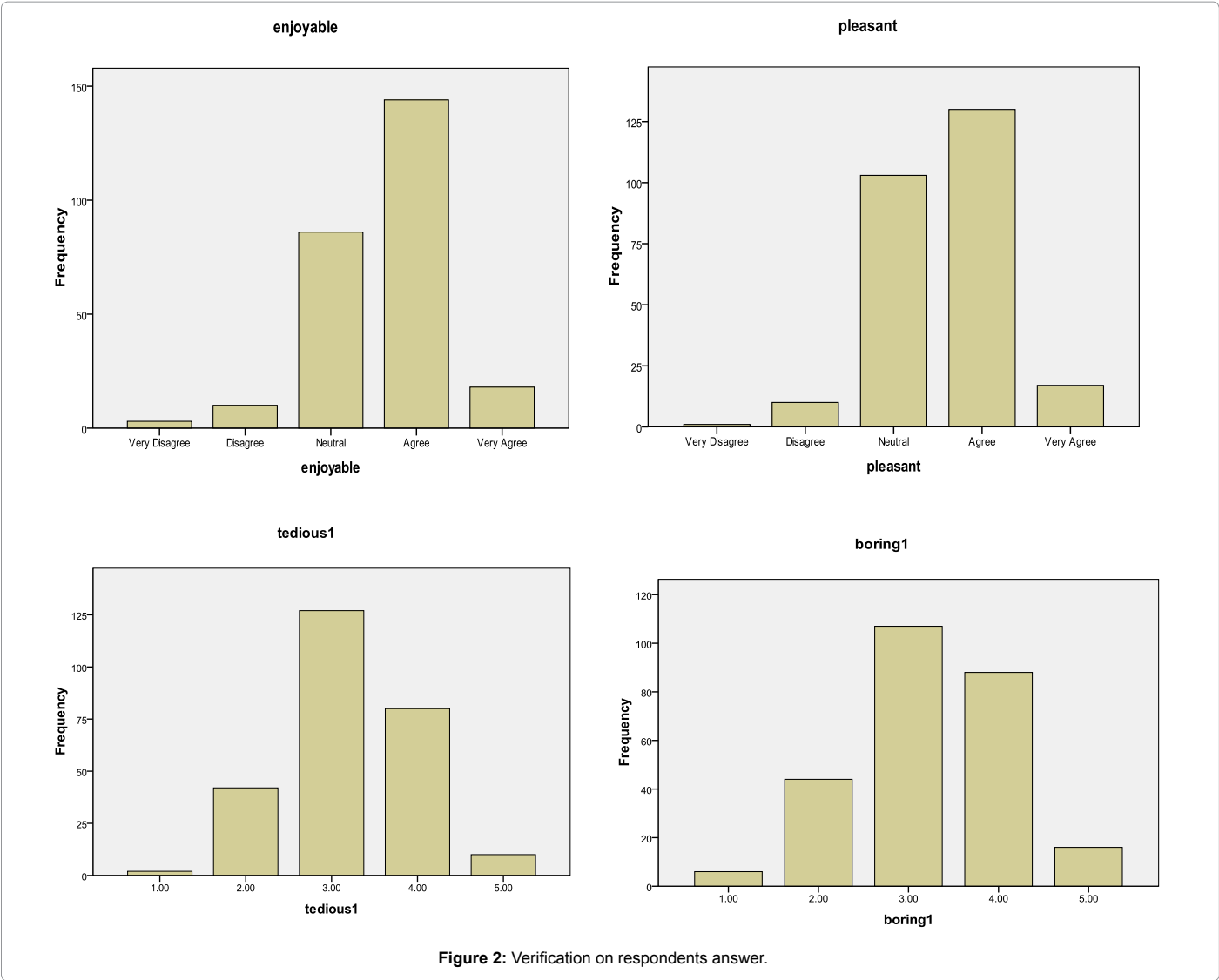
(N=261)	Coefficient
Usefulness	
Usefulness in obtaining information -- Overall Experience	0.219*
Usefulness for social interaction -- Overall Experience	0.35*
Ease of Use	
Ease of use -- Overall Experience	0.412*
Enjoyment	
Enjoyment -- Overall Experience	0.673*

*Significant at 5% level

Table 4: Summary on the relation between users perceived factors.

and enjoyment of using Facebook relate to Facebook user's experience, distribution of the plots (Figure 3) shows that the usefulness to obtain information in Facebook only has minor positively relationship to the overall experience in using Facebook where a similar but at a stronger relationship (moderate level) can be seen from the easiness in using Facebook and the usefulness of using Facebook for social interaction to user experience. The enjoyment in using Facebook is the only reason that could be considered to have a strong positive relation to the user experience (Figures 4 and 5).

Framework Testing; the influence of Independent Variables on Dependent Variable

Both F-VALUE and R-square (0.434) shows that the regression is significant and the fitness is good since a cross-sectional survey had been taken. Based on the t-value, the "usefulness in obtaining information", "usefulness for social interaction" and "Ease of use" have no significant influence on the dependent variable however, the removal of the non-significant variable does not improve the adjusted R^2 does not improve (it actually went to a lower value) as such, the variables are maintained (Table 5). The formula is:

Y (overall experience) = Constant + 0.023 (usefulness in obtaining information) + 0.092 (usefulness for social interaction) + 0.066 (ease of use) + 0.455 (enjoyment)

Analysis on group of respondents

The years of using Facebook (Significant difference is notable between user who has used Facebook for less than 2 years and more than 8 years) and hours per day (users who uses Facebook for less than 2 hours a day is significantly difference from those who uses Facebook
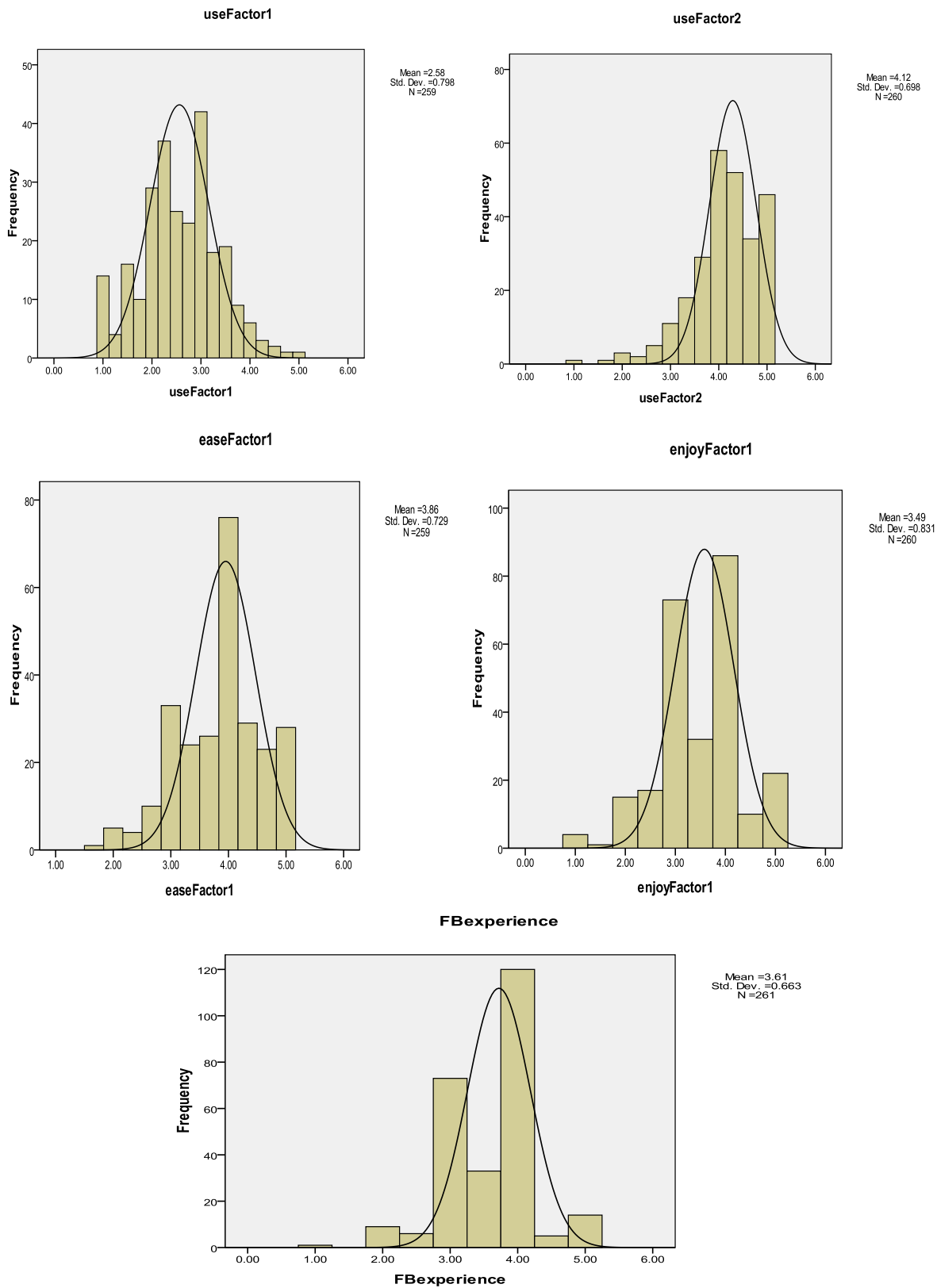
NOTE: *Usefulness 1=Usefulness in obtaining information
**Usefulness 2 = Usefulness for social interaction

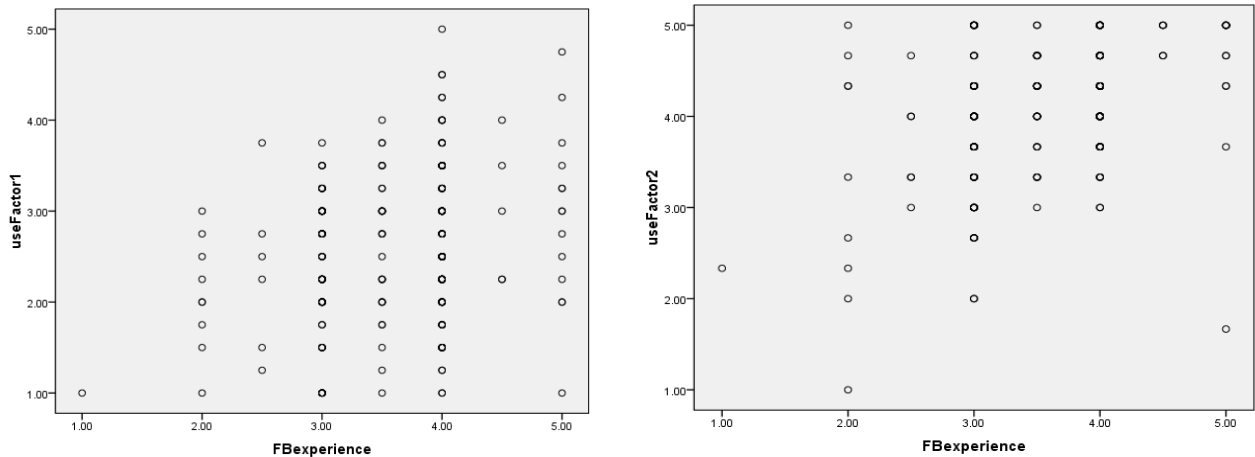**Figure 3:** Frequency distribution.

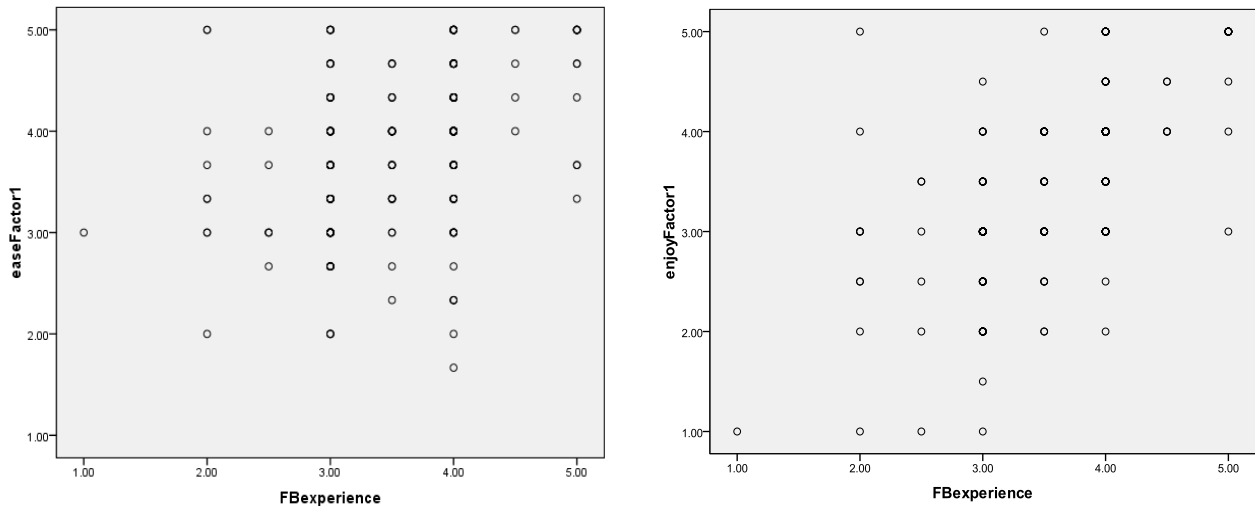**Figure 4:** Plot on usefulness1 (left) and usefulness2 (right).

Figure 5: Plot on ease of use (left) and enjoyment (right).

for more than 2 hours per day) of using Facebook are significantly difference compared to the other groups in the context of Facebook user experience (Table 6).

Influence based on group of user

From the table, we can see that years of using Facebook and hours spent in Facebook per day do not have a significant difference towards overall experience of using Facebook. Subsequently, the interaction between years of using Facebook and hours spent in Facebook per day does not have influence towards overall experience in using Facebook (Table 7).

Conclusions

Based on the findings presented above, it can be concluded that Facebook is more appealing to female and teenagers in other words people at the educational level of undergraduate but these majority of users do not show highly addicted usage in terms of access duration per day into Facebook; Nonetheless, majority of the users surveyed

Regression Model (N=261)	R Square	Adjusted R Square
(Constant), enjoyFactor1, useFactor1, useFactor2, easeFactor1	0.443	0.434
	F Value	
	49.963*	
Ratings	**Coefficient**	**T - Value**
Usefulness in obtaining information	0.023	0.538
Usefulness for social interaction	0.092	1.738
Ease of use	0.066	1.294
Enjoyment	0.455	9.536*

*Significant at 0.1% level

Table 5: Result on testing the framework model.

are Facebook long time users which could be translated that current Facebook is still capable of maintaining the loyalty of their users.

The usefulness and friendly interface (ease of use) does not seem to have any significant influence to the user experience in using Facebook but the user enjoyment in using Facebook is significantly influencing their experience although the study shows that usefulness, ease of use,

Constructs (n=261)	Mean
Gender	
• Male	133.88
• Female	128.73
Age	
• Below 18	3.5
• Between 18 to 24	3.5828
• Between 25 to 34	3.6412
• Between 35 to 44	3.6667
• Between 45 to 54	3.5
• Above 54	4
Education level	
• High School	3.7273
• Undergraduate	3.5321
• Postgraduate	3.7209
• Others	3.4231
Years of using Facebook*	
• Less than 2 years	3.381*
• Between 2 to 4 years	3.5407
• Between 4 to 8 years	3.701
• More than 8 years	4.125*
Hours per day of using Facebook**	
• Less than 2 hours	112.91*
• Between 3 to 4 hours	147.54
• More than 4 hours	172.47

*$p<0.05$
**$p<0.001$

Table 6: Different Facebook experience per user profile.

Constructs (n=261)	F value
Years of using Facebook	1.215
Hours spent in Facebook per day	1.399
Years of using Facebook - Hours spent in Facebook per day	1.158

Table 7: Summary on influence and interaction between groups of users to user experience.

and enjoyment in using Facebook does have a significant relationship to user's overall experience in using Facebook where users access duration and loyalty seem to have significance toward the experience in using Facebook.

Recommendations

Although current Facebook is capable of preserving the loyalty of their users, recommendations can be made based on the result of this study to further improve the overall user experience in Facebook at more appropriate targeted users.

Facebook should focus more on the enjoyment for their teen to middle aged users because enjoyment is the significant factors that influence the user experience while the teen to middle aged users are their majority users making up to 88.2% out of their total users.

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