Asian University for Women (AUW)

Economics Department

FACEBOOK REDUCES UNEMPLOYMENT:

A Holistic Research on How Beauty Index Affects a Facebooker's Chance of Getting Jobs on Facebook

Senior Thesis

by

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ABSTRACT:

Facebook, a familiar term with many of us, has yet to receive much attention from researchers, social scientists and economists. However, for ages Facebook's power in transmitting information and expanding networks has been confirmed. Once again, the parallel between the rapid increase in Facebook registration and decrease in unemployment among Vietnamese youth in the current year is intriguing, and it triggers the interest for this study. This paper aims to analyze how personal characteristics and Facebook's features influence a user's probability of getting jobs on Facebook. The study is assessed through qualitative and quantitative analysis. The first stage is based on in-depth interviews collected from 191 Facebook-users who have either searched for jobs or sold products on Facebook, a new and popular trend among Vietnamese youth. The second stage creates a regression model predicting the chance of getting jobs on Facebook, based on 400 survey questionnaires. The results show that Beauty Index and membership of job groups overweigh the importance of age, education, marital status and years of using Facebook in influencing an individual's chance of being employed and self-employed on Facebook. The result also opens new scopes for future research about the importance of expertise and searching intensity in getting a job on Facebook.

Keywords: Facebook, unemployment, employed, self-employed, Beauty Index, Vietnam

I.   INTRODUCTION

The number "1 million" turns into "1.39 billion" by the end of 2014. After eleven years of its existence – since 4th February 2004 – Facebook succeeds in attracting more than one billion monthly active users worldwide in the 31st December 2014 ("Investor Relations"). Besides, on the average, 890 million people are actively using Facebook on a daily basis, which leads to an increase in Facebook's revenue from $7,872 million to $12,466 million between 2013 and 2014 ("Investor Relations").Each minute, Facebook has 510 comments and 293,000 statuses posted and 136,000 photos uploaded("Top 20 Valuable Facebook Statistics").From a page limited only to university students and those older than 13 years old in September 2006, Facebook transforms into a familiar term for everyone regardless of their gender, age, occupation, or location. It proves itself to be an effective tool to diffuse information, if not the most effective one. More importantly, the information on Facebook is very diverse, which obviously benefits both job seekers and employers. Different people depend on Facebook to search for part-time, full-time, seasonal, and permanent jobs. Employers also exploit Facebook to post numerous recruiting advertisements. Additionally, Facebook is a place to build connections. 50% of all Facebook users have more than 200 friends ("Facebook"). People expand their connections on Facebook, even to those they have never met. These are necessary factors – the reduction in asymmetric information and an increase in social connections –that are believed to adversely affect unemployment rate. Therefore, given Facebook's popularity and power in information transmission, it is surprising to realize that there have been only few studies about Facebook and its impact on unemployment. Besides, there are studies suggesting that investigations about the Internet or social media are possible such as the study about Google Trend's capability of predicting Ukrainian unemployment. Another instance is the impact of one classical advertisement website in the U.S., named Craigslist, on the U.S unemployment.

Furthermore, research about Facebook would be implausible without the existence of the Internet. Therefore, it is reasonable to look at the history as well as evolution of the Internet during the last century. The Internet was born during the Cold War 1969 under the name ARPANET and considered as the only means of communication that could

survive nuclear attacks. During that time, the Internet was limited to only few governments, industries and intellectuals (Haas et al. 2001). However, it has soon evolved and become "a world-wide broadcasting capability, a mechanism for information dissemination, and a medium for collaboration and interaction between individuals and their computers without regard for geographic location" ("Brief History of the Internet"). After its 31-year existence, in 2000 0.3% of Vietnamese population officially got connected to the Internet. After ten years, that number increased 12.4 times. And in December 2013, Vietnam has 31,302,752 Internet users, 35.53% of the population (Ngo, 389). Currently, Vietnam "ranks 18/20 countries with the largest number of Internet users in the world, ranking eighth Asia and ranks third in Southeast Asia" (Ngo, 388-9).Because of its magic-like power, the Internet always attracts interest of many researchers, including economists. The Internet's impact on frictional unemployment, minimum wage, market efficiency, or equality in the distribution of resources has long been topics for economic investigations.

Another reason triggers this research interest is the parallel in the rapid decrease of unemployment and increase in Facebook users in Vietnam. International Labor Force statistics shows weaker employment growth in Southeast Asia, e.g. in Thailand, Laos, Philippines and Korea. In comparison with this situation, the Vietnamese economy is working enormously to create more jobs to meet this challenge, where labor force growth is very swift and is ranked eleventh in the world (World Bank 2013). According to the World Fact Book in 2013, this expansion is more than one million a year. A remarkable change in rate of unemployment, from 3.2 % in 2012 to 1.3 % in 2013, has been observed in Vietnam (World Bank 2013). The government is trying to reduce it more, and according to a survey report of trading economy in year 2015, there will be 100% employment. At the same time, the number of Vietnamese Internet users increased from 74 million to 128 million between 2011 and 2012, among them about 11 million subscribed to Facebook in 2012 (internewworldstats.com). These statistics just cannot be coincidence. Therefore, based on the assumption of Facebook's influence on unemployment, this study is designed to test the role of Facebook in case of Vietnam's noteworthy reduction in unemployment, particularly in the southern region, where most of the youth use this social networking site for entertainment and exchange of

information. This study will predict the probability of getting a job by using Facebook, based on personal characteristics and Facebook usage.

Objectives:

1.   Evaluating the effectiveness of Facebook in employment outcome in Vietnam

2.   Predict what characteristics and Facebook features contributing to the users' chance of getting jobs.

3.   Contributing to the knowledge pool about the effect of social networks in unemployment

The final aim of this study is to tackle unemployment phenomenon more effectively, not only in Vietnam but throughout the world, after determining the potentials of Facebook in recruitments and job-seeking procedure.

Hypothesis:

1.   Facebook contributes to reducing unemployment in Vietnam
2.   Among facebookers, a young, beautiful and educated female will be more likely to get a job on Facebook.

The paper's structure:

The rest of the paper will be organized as follows. Section II presents literature reviews in the related fields. Section III outlines the research's methodology. Data analysis and conclusion are in section IV and V respectively. Section VI points out some limitations, and the last section summarizes some recommendations for future research.

Definition of recruiting-process on Facebook

The employers post advertisements and requirements publicly on job-searching groups on Facebook. For jobs that are urgent and require a large amount of labors, facebookers just need to leave their names and phone numbers on comment boxes. They will be contacted or receive messages mentioning the locations and responsibilities of the jobs. They can start the jobs immediately, in case the employers and employees agree with all of the

conditions. These jobs usually choose the labor according to the rule "first come, first serve."

On the other hand, in internship-and-permanent-job groups, information is also publicly advertised. However, these jobs' selection is based on traditional procedure where applicants need to submit their CV, sometimes with cover letters, to given emails. They then will be interviewed and hired for the jobs. In this case, Facebook plays a role of job-posting sites such as Indeed.com, bdjobs.com, or Vietnamworks.com.

II.   LITERATURE REVIEW

Studies about impacts of the Internet and social media such as Twitter's or Facebook's on macroeconomic data the Internet are mushroomed. For instance, in January 2015, Facebook, together with its partner Deloitte, published a report on Facebook's global economic impact. According to the report, Facebook indeed triggers the development of the global economy by "connecting people and businesses, lowering barriers to marketing, and stimulating innovation" (1). Facebook becomes a marketing platform connecting customers and sellers; it is also a fruitful destination for app developers, and it is also the reason for the increase in sale of mobile devices and Internet connection ("Facebook's Global Economic Impact," 4).However, the influence of Facebook in unemployment at the local level seems yet to be addressed.

Interestingly, despite the difference in the independent variable of the two equations – the Internet and Facebook, their dependent variable is the same – unemployment. Therefore, it is worthy to look at what has been done in case of the Internet as references before investigating the influence of Facebook.

The majority of studies pay attention to Internet use on the functioning of labor markets. Kuhn and Skuterud (2004) are pioneers in exploring the Internet's impact on unemployment. They observe that those searching for jobs on the Internet have shorter unemployment duration and spend less time being unemployed (Kuhn and Skuterud 2004). However, when the participants' observable characteristics –age, education and occupation – are held constant, there is no correlation between these two, or in some

cases the reverse happens (Kuhn and Skuterud, 2004). They then conclude that "either Internet job search is ineffective in reducing unemployment durations, or Internet job searchers are negatively selected on the unobservables" (Kuhn and Skuterud, 2004).

In 2006, the paper "The Impact of the Internet on Worker Flows" presents that only 9% of the unemployed use the Internet to search for jobs, while 81% of the employed do so (Stevonson 4). The employed exploit the Internet at work to seek jobs (Stevonson, 5). There is also evidence that those searching for jobs online tend to change jobs more frequently and slightly to be unemployed than others (Stevonson, 5).

Pursuing the same interest, Betsey Stevenson explores the correlation between the Internet and job search's results. She finds out that recently unemployed and employed workers tend to seek jobs through the Internet rather than traditional methods.Among the whole population, the number of online jobs seekers increased from 5.7 to 11.5% between 1998 and 2003; among those using the Internet this figure changes from 16.9 to 19%. Stevenson also argues that among the unemployed, the Internet tends to be the major method of job searching (84). The spell of the unemployment for online job seekers is also shorter, perhaps due to the low cost of job searching procedure (84). The below table is taken from her publication:

Online job search from 1998 to 2003

	Year	Employed	Unemployed	Not in labor force	Total
Panel A: Percent searching for jobs online					
Total population	1998	7.2	14.0	1.9	5.7
	2001	11.4	31.2	3.3	9.4
	2003	13.7	37.8	4.3	11.5
Those who use the Internet	1998	17.1	52.6	11.2	16.9
	2001	17.2	58.8	9.6	16.9
	2003	19.1	65.1	11.4	19.0

Additionally, Peter J. Kuhn (2003) also draws to the conclusion that those searching for jobs online have higher education level (Kuhn, 6). They also tend to be in occupations

with lower unemployment rate, are more likely to get jobs after leaving the previous jobs, have shorter unemployment spell, and more likely to be in their "prime" working years, between 25 to 64 years old (Kuhn, 6). Consequently, online jobseekers are selected based on their observable characteristics such as age, education and occupation and have faster re-employment rate even without the use of technology in job searching (Kuhn, 7).

In another study, Kuhn (2014) also addresses the question of who is more likely to search for jobs online. Not surprisingly, younger and more educated people are more likely to use the Internet to search for jobs than others. The gap is still large even when the access to the Internet at home increases. Additionally, those working in IT, finance, insurance, and real estate department tend to seek jobs online more often than others.

Similarly, Constantin Mang (2012) also concludes that more people turn to online job searching because the Internet changes the search process. The Internet allows job seekers to simultaneously gain access to thousands of jobs and use filter mechanism to find suitable vacancies. Advertisements on the Internet also provide more details about the jobs than traditional methods. Employers can also screen applicants more effectively (Mang, 2). His study argues that the Internet enhances the matching quality between employers and employees (Mang, 4). The result shows that online job seekers are six percent more likely to apply their skills in their jobs; significantly happier; eight percent more likely to be promoted and receive better social benefits than their counterparts (Mang, 6).

On the contrary, many studies show the negative impact of the Internet on unemployment rate. David H. Autor (2001) agrees to some extents the advantages of online job search. However, online job search leads to some unavoidable problems such as the adverse selection of applicants. Autor argues when the information of jobs is very cheap and easily to get access, employees will simultaneously apply more than one job. This is problematic for employers because they have to screen everyone's application, which increases the cost of recruitment.

The same critics are from the paper "The Future of Employment: How Susceptible Are Jobs to Computerization?" It gives evidence for the declines in manufacturing

employment and routine jobs because they are computerisable, whereas demands for occupations requiring cognitive tasks and low-income manual occupations increases (Frey and Osborne 2013, p. 3). The result of their study shows that jobs requiring creativity and social intelligence are unlikely to be substituted by the computers. On the contrary, transportation and logistics occupations, administrative tasks and labor in production occupations are at high risk. This explains the U shape of the US employment, which means that lowest and highest skilled employees are far preferred than that of middle-skilled employees (Frey and Osborne 2013, p.12).

Not only positively or negatively affects the unemployment rate, the Internet is also shown to have no influence on unemployment, shown through the study about the Craigslist– a website allowing users to post job ads and apartment and housing rental advertisements at no cost. With this hypothesis, they conduct the study analyzing Craigslist particularly and its impact on the rate of unemployment. Surprisingly, the results show that Craigslist has no correlation with unemployment, and it also does not crowd out low-skilled workers. The authors present some explanations. Firstly, there may be many more popular job websites, so Craigslist itself cannot contribute a big effect to unemployment. Another reason may be because online posts do not improve the diffusion of the job information because most of the job information is transferred through interviews. The last reason may be because the study cannot detect the website's impact (Kroft and Pope 2012, p. 24).

Furthermore, the Internet (and Facebook) promotes online shopping, which results in the creation of jobs for many people. Statistics reveal that in 2008 more than 85% of Internet users purchase products online, which is 40% higher than in 2006 (Prompongstorn et al., p. 736).In Vietnam specifically, about 6 out of 10 Vietnamese Internet-users purchase online products. Today, this number increased by about 53%, compared with the statistics in 2013. Moreover, each online shopper spent $145 on the average in 2014, given that the statistics only include revenues from big branches such as Lazada, Sendo or eBay ("Online Shopping"). Online shopping is gradually replacing traditional forms due to its reduction in "land costs, labor, [and] management" (Ngo, 389).

In conclusion, existing literature examine the Internet's influence on unemployment through analyzing the unemployment duration, the matching quality and the development of online shopping. However, these findings are still puzzling. In the next sections, this paper will utilize these factors to develop a model analyzing Facebook's impact on unemployment in the Vietnamese context.

III.   METHODOLOGY

The study is divided into two different stages

A. STAGE 1: IN-DEPTH INTERVIEW
1. <u>Study Design and Selection of Participants:</u>
In this cross sectional study, participants are chosen based on two conditions:

- Either they have searched for jobs, applied for jobs, got jobs through Facebook
- Or they have sold products on Facebook

This is because jobs under analysis in this study include full-time, part-time and selling products, a recent and popular trend among Facebook users in Vietnam. Following snowball and convenient samplings where friends, friends' friends, and members of recruitment groups on Facebook such as Promotion Girls-Promotion Boys Communities (HCMC) or Internship-Career Opportunities (HCMC) are contacted, about 200 participants have partaken in the qualitative part. These participants are chosen because they are experiencing or have experienced Facebook's influence in job searching, which allows them to offer opinions about Facebook's advantages and disadvantages. Data collection started from July and continued till the end of December2014.

2. <u>Questionnaire Pattern:</u>
 Because there have not been any studies about the impact of Facebook on unemployment rate, this project's questionnaires were designed based on previous studies' questionnaires about the impact of the Internet, in general, to macroeconomic variables. There are four sections in the questionnaires: background of the patients including their names, genders, emails and current jobs; general questions about the participants' activities on Facebook; in-detail questions for those having found jobs through Facebook

or having sold products on Facebook, including their satisfaction, job seeking duration and Facebook features influencing their getting jobs. The third section is about the participants' opinion on the impact of Facebook towards unemployment. The last is the participants' suggestions for the improvement of the interviewer and the questionnaires.

3. **Ethical Approval:**

Ethical clearance is obtained from the IRB ethical review committee of the Asian University for Women.

3. **Data Collection:**

Data collection began in only the southern part of Vietnam, due to the limitation of resources and time, in the summer 2014. The data is corrected through three ways: in-person interviews, Skype interviews and paper interviews in which the participants are provided with the questionnaires to complete by their own. In case of paper interviews, detailed questions are mailed to the participants after the answers are reviewed until the interviewer gets enough details or the interviewee refuses to participate. Before each interview, the aim of the study and the ethical requirements are clearly explained to the participants. After giving informed written consent, the participants are interviewed about 20-30 minutes.

A. **STAGE 2: SURVEYS AND ANALYZE THE REGRESSION MODEL**

1. **Model**

The interviews in the qualitative part give light for variables in the logistic model measuring the probability of a person getting jobs on Facebook. These variables are presented in the following models:

logit (π)= log $(\frac{\pi}{1-\pi})$ = $\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \varepsilon$

Given that:

logit (π)= is the probability a person can get a job on Facebook (0= no, 1= yes)

X_1 = whether the person is beautiful or not (0= no, 1= yes)

X_2 = gender of the person (0=male, 1= female)

X_3 = age of the person (years)

X_4 = education of the person (0= high-school, 1= undergrad, 2= grad)

X_5 = the marital status of the person (0= single, 1= married)

X_6 = the number of years the person have used Facebook (years)

X_7 = the kind of job the person is seeking (0= part-time, 1= full-time)

Reason for these variables' selections:

- There are many studies about beauty discrimination and consensus among the participants about the role of beauty in job seeking on Facebook.
- The majority of the participants agree that there are more jobs on Facebook for females than males.
- According to observations, jobs and recruitment information on Facebook are mostly for persons aged between 18 and 25.
- The importance of education seems diverse according to the participants, depending on their jobs found on Facebook.
- Most of the participants agree that single people will have more time for job seeking on Facebook and employers also prefer single to married employees.
- The fact that Facebook connects people with one another leads to an assumption: the longer time a person spends on Facebook, the higher job probability he/she has due to the connections.
- Part-time jobs are understood as common jobs for everyone; full-time are jobs requiring specialized knowledge or educational level. Most of the participants agree that Facebook only provides part-time and unspecialized jobs.
- Experience is agreed to be an important factor to affect a person's probability of getting jobs on Facebook. However, it seems difficult to measure experiences.

A Google Drive is created to measure characteristics of Facebook users influencing their being employed or self-employed on Facebook. The survey includes 15 multiple choice

questions about basic information relating Facebook users and their searching jobs on Facebook.

The Google Drive is shared publicly on Facebook and allows everyone with the link to access to. In this round, 400 participants who have not participated in the qualitative part fill in the Drive.

<u>Desired Sample Size:</u>

To ensure 95% confident interval estimate of the proportion of Facebook users who get jobs is within 5% of the true proportion, and the prevalence of getting jobs is 50%, the sample size should be: $n = p(1-p)\left(\frac{z}{E}\right)^2 = 0.5 * 0.5 * \left(\frac{1.96}{0.05}\right)^2 = 384.2$ participants

B. DATA MANAGEMENT:

The interview responses were coded according to the codebook. The hard copy of the questionnaires will be stored carefully. After that the data (both qualitative and quantitative) was entered into Eviews 7 data sheet. Only my supervisor and I will have the authority on the data set. The result of this study might be used by others. However, the data set will only be shared after the study's finding or the participants' permission are obtained.

C. STATISTICAL ANALYSIS:

The data was entered into Eviews 7. Then the result was analyzed with Eviews and Excel. At the end, final paper will be shared with the AUW community, the participants, and journals or conferences with the hope that policies or techniques of exploiting Facebook's power in lowering unemployment will be imposed in the near future.

IV.   BEAUTY INDEX

One of the variables for the above model is very intangible and subjective: beauty. "Beauty is in the eye of the beholder." This study, however, tries to quantify the beauty index (BI) based on the idea of measuring Human Development Index (HDI). Indicators of BI include the numbers of friends, the numbers of followers, and the average number

of "likes" one person usually receives for his or her profile pictures on Facebook. In this case, beauty on Facebook is equalized with popularity. This measurement somehow gives rationale for the fast-growing trend of using Photoshop or software to edit pictures before posting on Facebook among the youth.

Before the actual data collection, a pilot test is done. A Google Drive with questions for Facebook users about the number of their friends, followers and "likes" for all of their photos are collected, together with the number of years they have been using Facebook. The last variable is collected because of the prediction that years of using Facebook may be the confounder in this correlation. In the pilot test, 21 voluntary Vietnamese participants, regardless of their gender and locations, fill in the Google Drive and give their Facebook Account for judgment. Four judges, two are from Vietnam, one from Bangladesh and one from Nepal rank the participants' beauty based on the scale from one to four (one is the lowest and four is the highest). The result of the judgment shows that people, despite their nationalities, share common standards about beauty. The result also fits the predication: more beautiful facebookers tends to have more friends and followers and receive more 'likes' than their counterparts

However, the pilot test also points out some important notes in measuring the Beauty Index. First, Pew Research Center has published that "Half of all adult Facebook users have more than 200 friends on their network." With the statistics that an average Facebook user has about 200 friends on Facebook and the assumption that the more beautiful a person is, the more friend he or she will have on Facebook, the researcher considers 200 friends the threshold for possessing over-the-average appearance, in other words good-looking. However, there appears to be no studies or statistics about the average of followers or "likes" a person can have for pictures on Facebook. Therefore, to make it measurable, the researcher uses the average "followers" of participants in the pilot test – more than 70 – as a standard for those having appearance over the average. Furthermore, with the hypothesis that profile pictures will attract more "likes" than the statuses (Cooper), the threshold of having more-than-average appearance for "likes" is 100, 50% of the average friends a person can have on Facebook.

Additionally, the pilot test shows that many Facebook users either do not know how to activate "follow" option or do not know where the "followers" section is or do not allow any followers on their Facebook. This may lead to lots of missing value in the question "Do you have more than 70 followers on Facebook?"

The summary of the beauty index is portrayed in the below table:

The number of friends (fr)	The number of followers (fo)	The number of "likes" for profile pictures (li)	Beauty Index (BI) = (1/3*fr+1/3*fo+1/3*li)
fr = 1 (if fr≥ 200) fr = 0, otherwise	fo= 1 (if fo≥70) fo= 0, otherwise	li=1 (if li ≥100) li= 0, otherwise	

V. QUALITATIVE RESULT (Analyzing in-depth interviews)

Facebook is addictive. In this study, 200 Vietnamese interviewees agree that facebooking has become their daily routine. The reason for this contagious trend appears to be Facebook's ability to connect people in every corner of the globe, to diffuse information in the fastest and most convenient manner, and to remind people about special occasions in their lives. Facebook is so friendly-using and convenient that everyone can and should get access to it, the majority of the participants share.

However, the interviewees are also aware of Facebook's disadvantages. One of the biggest drawbacks is that Facebook consumes its users' time smoothly than they could realize. On the average, the participants spend about 5.02 hours (± 6.20) on Facebook per day, mostly on chatting, reading news, playing games, seeking jobs, or just scrolling the NewFeed. Facebook also causes distraction from work and study, which leads to the reduction in productivity. Importantly, this new era of communication also adversely affects people's emotional intelligence – people's skills in interacting with others. This is because Facebook users focus too much on their "lives" on Facebook and forget about the real lives, 18% (n=24) of the respondents agree. Moreover, Facebook triggers the users to exploit all of their "ability" in writing and photographing. Facebook users feel

the sense of obligation to write statuses or post pictures, just for the sake of updating on their Facebook. Wherever active facebookers go, they have to take pictures; whoever they meet, or whatever happens in their lives they have to post on Facebook. This habit is complained to destroy the quality of friendships or travelling. This is because friends can rarely stay, chat and laugh together due to the existence of the third party – Facebook. Travelers can rarely enjoy the scenery with full attention because they are busy choosing the pose for pictures on Facebook.

Table 1: Distribution of respondents based on demographic characteristics

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	119	66	65.75	65.75
	Male	62	34	34.25	100
	Total	181	100	100	
Reason of having a Facebook account (overlapping answers)					
Valid	Trend	49	26	25.65	
	Friends introduced	18	9	9.42	
	Studying	19	10	9.94	
	Entertainment	16	8	8.37	
	Job-searching	9	5	4.7	
	Information	40	21	20.9	
	Connection	105	55	54.97	
	Locked blog	8	4	4.1	
	Total	191			
Years using Facebook (years)					
Valid	Less than 3	34	22	21.52	21.52
	From 3 to 5	112	71	70.88	92.40
	From 6 to 8	12	8	7.59	100
	Total	158	101	100	

Moreover, Facebook is also able to alter people's moods. There are participants checking Facebook in every five minutes to calculate the numbers of "likes" they receive for their new profile pictures, or there are those being upset the whole day upon updating good news happening with their Facebook's friends. One male interviewee mentions, "[Facebook's disadvantages are] sometimes, [I will] stay up late and affect my health; affect and have negative emotions. For instance, if my friends post travelling pictures or they are beautiful or they have electric bikes or famous mobiles, I do not have anything, I will be pessimistic in life." Kramer et al. (2014) also proves that Facebook can transfer the users' emotion, let them experience emotional contagion without their awareness (8788). However, his experiment shows when one's NewFeed appears more positive expressions, he or she is likely to post more positive and less negative statuses and vice versa (8788). In other words, the facebookers are experiencing the same feelings with their friends via Facebook; they are happy to see their friends happy. Nonetheless, Kramer seems to ignore the fact that we, human beings, tend to compare ourselves with others. Hence, it is hard to be always optimistic upon seeing our friends achieve so many successes and we do not.

Discussing job seeking phenomenon on Facebook, the results of these interviews raise some questions relating to the importance of education among Vietnamese youth. Only about three out of ten (36%) participants agree that education plays a significant role in getting jobs on Facebook because appearance is the first thing Facebook recruiters or Facebook buyers are looking for. For example, despite extremely high prices, customers still chase after cosmetic products sold by a female because she is beautiful and sexy. This discrimination is more obvious in Promotion Boys (PB)[1], Promotion Girls (PG), models or waiters positions. This perception comes from the assumption that beautiful people will deliver high productivity or sell qualified products, which is similar with findings in studies about beauty discrimination in the workplace (Zakas, 2005 and Toledano, 2013). Worse, in the traditional workplace, less beautiful people will only

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[1]: Promotion girls and boys are new Vietnamese terms for young, beautiful, and enthusiastic girls and boys. They apply for different kinds of jobs, varying from advertising for new products or games, selling promotional products, being model, MC and more. Their jobs are very temporary and mostly require their appearance.

receive less salary or be treated less equally. On Facebook, less beautiful people tend to be taken away the right to enter the workforce.

The beauty discrimination is shown through the fact that more and more employers are asking for applicants' Facebook account as a criterion in the application form. Once asked about the reason, one interviewee shares, "as long as I know, some employers ask applicants to reveal their Facebook account so that somehow they can know the face and pictures of the applicants," another says, "Yes because maybe employers will see your profile on Facebook."

Table 2: Distribution of respondents' major answers

Start using Facebook					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2006-8	12	66	65.75	65.75
	2009-11	112	34	34.25	100
	2012-14	33			
	Total	157	100	100	
Reason of having a Facebook account (multiple answers)					
Valid	Trend	49	26	25.65	
	Friends introduced	18	9	9.42	
	Studying	19	10	9.94	
	Entertainment	16	8	8.37	
	Job-searching	9	5	4.7	
	Information	40	21	20.9	
	Connection	105	55	54.97	
	Locked blog	8	4	4.1	
	Total	191			
Use Facebook to (multiple answers)					
Valid	Connect with people	168 (out of 186)	90		
	Gain information (news/class/jo	161 (out of 178)	90		

	b)				
	Entertainment	61 (out of 163)	37		
	Online business	37 (out of 167)	22		
	Post personal information on FB	48 (out of 167)	29		
Disadvantages of using Facebook (multiple answers)					
Valid	Being addicted	99 (out of 148)	67		
	Leaking info.	13 (out of 132)	9		
	Living in illusion	23 (out of 135)	17		
	Being deceived	39 (out of 136)	29		
	Offensive pictures and info.	23 (out of 136)	17		
	Affecting health	14 out of 133	11		
Jobs gotten due to using Facebook					
Valid	Do not get	29	16	16.2	16.2
	part-time	84	47	46.9	63.1
	Internship	11	6	6.1	69.2
	staffs (in company, full-time)	13	7	7.3	76.5
	online seller (self-employed)	42	23	23.5	100
	Total	179	100	100	
How did you get that job?					
Valid	Found it by myself	119	74	73.9	73.9
	Being introduced	23	14	14.3	88.2
	Both (myself found and others introduce)	19	12	11.8	100

	Total	161	100	100	

Salary of jobs found on Facebook

Valid	Okay	43	54	53.8	53.8
	Low	12	15	15	68.8
	High	14	17.5	17.5	86.3
	Stable	2	2.5	2.5	88.8
	Fluctuate	6	7.5	7.5	96.3
	Depends on the job	2	2.5	2.5	98.8
	Did not get paid	1	1.25	1.25	100
	Total	80	100	100	

Working time

Valid	Flexible	63	84	84	84
	Strict	6	8	8	92
	Short	2	2.7	2.67	94.67
	Long	4	5.3	5.33	100
	Total	75	100	100	

Sustainability

Valid	No	51	72	71.8	71.8
	Yes	14	20	19.7	91.5
	Don't know yet	6	8	8.45	99.95
	Total	71	100	100	

Comparing the time found jobs on Facebook with other methods

Valid	Shorter	61	66	65.6	65.6
	Longer	11	12	11.82	77.42
	Equal	12	13	12.9	90.32
	Don't know	9	10	9.68	100
	Total	93	100	100	

According to your observation, are there many people wanting to do that job?

Valid	Many	128	85	84.8	84.8
	Not many	5	3	3.3	87.7
	Few	5	3	3.3	91
	Don't know	13	9	8.6	99.6

	Total	151	100	99.6	

Reason for others to want the job (multiple answers)

Valid	Good working time	18	15	15.1	15.1
	Good salary	32	27	26.9	42
	Interest in the job itself	8	7	6.7	48.7
	The job is easy in terms of investment and time	32	27	26.9	75.6
	The job is described in details	9	8	7.6	83.2
	The job information is not disclosed	1	0.8	0.84	84.04
	The job information is not reliable	2	1.7	1.68	85.72
	Temporary/ bad/strict/ working time	3	3	2.5	88.22
	Other reason	14	12	11.8	100.02
	Total	119	100	100.02	

Facebook lowers unemployment

Valid	No	54	30	30.3	30.3
	Yes	86	48	48.3	78.6
	Yes, but only for the small extent	26	15	14.6	93.2
	Not now, but in the future	5	2	2.8	96
	Don't know	7	4	3.9	99.9
	Total	178	100	99.9	

Facebook lowers unemployment because it provides more jobs

Valid	Yes	27	19	19.1	191.
	No	114	81	80.9	100
	Total	141	100	100	

Facebook lowers unemployment because it helps to expand connections

Valid	Yes	9	6	6.5	6.5

	No	130	64	93.5	100
	Total	139	100	100	
Facebook lowers unemployment because it provides more information					
Valid	Yes	67	46	45.9	45.9
	No	79	54	54.1	100
	Total	146	100	100	
Facebook does not lower unemployment because it only provides temporary jobs					
Valid	Yes	26	19	18.97	18.97
	No	111	81	81.02	99.99
	Total	137	100	99.99	
Facebook does not lower unemployment because there are more effective job sites					
Valid	Yes	14	10	10.1	10.1
	No	124	90	89.9	100
	Total	138	100	100	

Interestingly, some interviewees imply that Facebook is a place to create gender discrimination, but against males. Only five participants agree that males are more likely to get jobs on Facebook, whereas 49 participants agree that it is the case for female. The rationale is because being female means being beautiful – once again the importance of appearance is emphasized; females are better at communication skills; and there are just more jobs for females than males on Facebook such as PG, models or sellers. Most of products sold on Facebook are clothes and cosmetic products, so it is understandable that females are more likely to become on-Facebook-sellers than other sexes. However, this phenomenon raises the question of whether females are actually better off and what the definition of gender discrimination is. The female users are receiving jobs which require them to show their faces or bodies. They are unintentionally categorized as those who cannot perform jobs requiring intelligence as their counterparts. Hence, in terms of income, the females may have more advantages, but their value is still unclear.

Some interviewees, on the contrary, are hopeful that Facebook can become a solution to erase the certificate discrimination in Vietnamese society, where certificates, rather than real ability or experiences, are the tickets to enter the workplace. Although beauty may
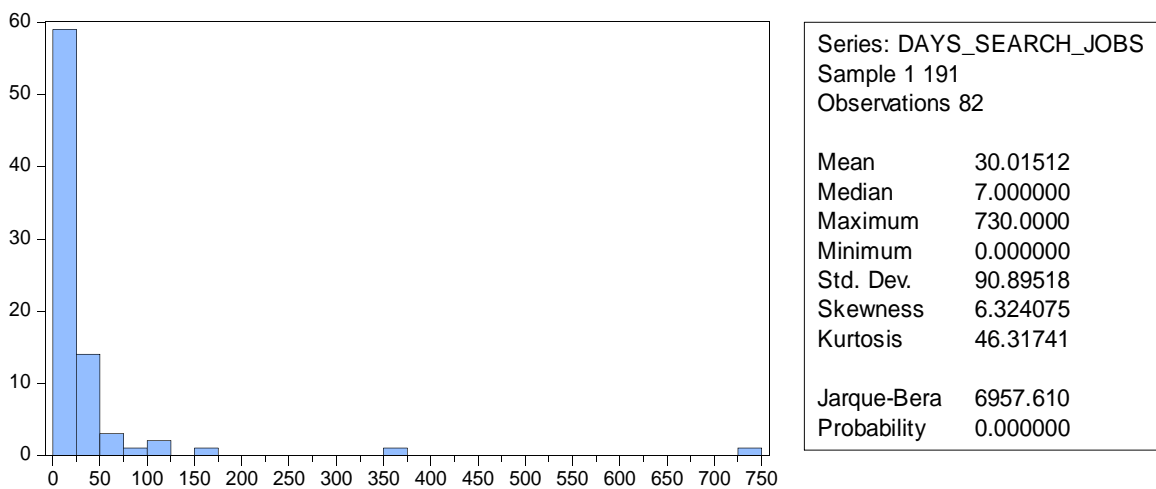
not be a good criterion for jobs, this at least means those with beauty and/or certificates can enter the workforce, comparing to the past when only those with certificates could.

Graph 1: The distribution of daily hours spent on Facebook

Series: HOURS_USE_FB	
Sample 1 191	
Observations 164	
Mean	5.016768
Median	3.000000
Maximum	24.00000
Minimum	0.000000
Std. Dev.	6.195559
Skewness	2.282939
Kurtosis	7.250501
Jarque-Bera	265.9124
Probability	0.000000
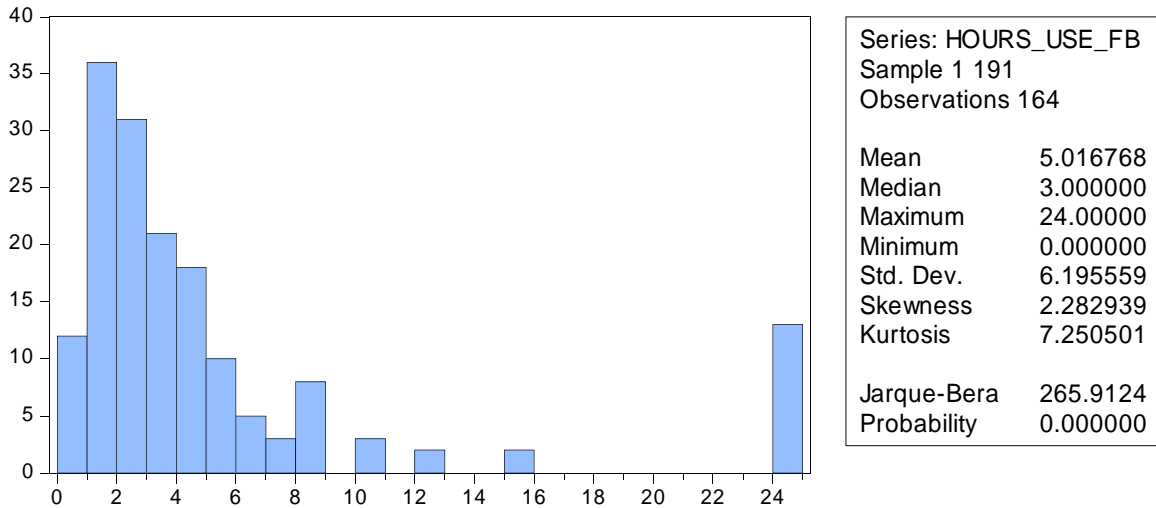
On the contrary, one interviewee claims that the number of pictures is the criterion for recruitment on Facebook. This is because through the pictures, the employers can judge the applicants' communication skill, extra activities and expertise. The interviewee shares, **"**It depends on different people, because today, people will hire you through your pictures, rarely they hire you through direct meetings. Whoever has more pictures will have chance to work in light jobs with high salary, regardless of this person's beauty."

Graph 2: The distribution of the days spend searching before getting a job on Facebook

Series: DAYS_SEARCH_JOBS	
Sample 1 191	
Observations 82	
Mean	30.01512
Median	7.000000
Maximum	730.0000
Minimum	0.000000
Std. Dev.	90.89518
Skewness	6.324075
Kurtosis	46.31741
Jarque-Bera	6957.610
Probability	0.000000

Mentioning about jobs, there is a lot of interviewees agreeing that jobs on Facebook are very diverse. Surfing around Vietnamese job groups on Facebook only for one minute, it is not uncommon to find job descriptions asking for labors to cut grass; to taste pilot products; to lend hair for dying, curving or straightening; or even for females to go to dinner with a male because he is sad. However, these types of jobs found on Facebook are very limited in terms of time; they last only for some days or even hours. More than 18% (n=26) of the interviewees complain that jobs found on Facebook are very temporary, including selling products on Facebook, and simple to perform. Because of this characteristic, most of the job seekers or job receivers on Facebook are students, who have free time and do not have enough experiences to perform specialized jobs. There also exist jobs for executives, professors, or engineers though. However, these jobs are linked directly to websites of the companies or shared by those working or having connections with the companies' employees. Due to these reasons, 49% (n=87) of the participants Facebook confirm that Facebook reduces unemployment rate, but only among students or the youth. Some others, on the other hand, claim that Facebook can only solve the shortage of jobs, not unemployment, reasoning that unemployment will be reduced only with the existence of full-time jobs. One interviewee shares, "Facebook only somehow solves the problem of shortage of jobs, unemployment: cannot yet because jobs on Facebook are very temporary, only part-time." Another participant even emphasizes that Facebook is a place attracting labors, not talents.

There are also few interviewees opposing Facebook's role in lowering unemployment rate. Poor performance due to the distraction and the leaking of personal information on Facebook are reasons leading to the increase in unemployment, they argue. 14 out of 138 interviewees claim that Facebook is a tool of entertainment, rather than a tool of job seeking. It will be a job searching tool only when the security on Facebook is controlled, and information is selectively posted. The latter becomes a concern due to the complaint that most of the information on Facebook is very unreliable, which is the result of fast transmission of information. Nowadays, Facebook has become a place where freedom of expression is exercised mostly. People can post whatever they want, regardless of the validity, including job information. For example, "Disadvantages [of Facebook is]: lots of unreal information, which makes it difficult to evaluate. People even exploit Facebook to
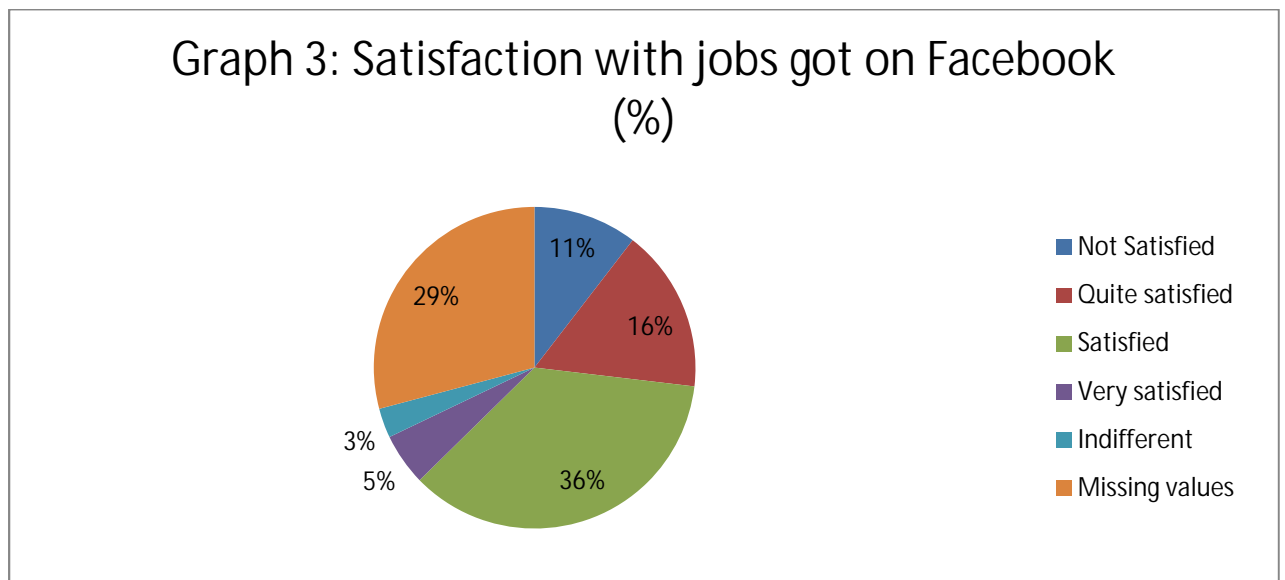
backbite each other. Lots of products so [it is] difficult to choose," one interviewee mentions. Another shares "Facebook cannot reduce unemployment because Facebook allows everyone to say everything there." Hence, 30% (n=40) of the participants express the worry about the unreliable information on Facebook. There are many deceiving forms of multilevel marketing on Facebook, some state. There are many recruiters refusing to provide payment for labors after their jobs. There are many on-Facebook customers refusing to pay for the products they have ordered. However, the consensus has yet to reach in this case. Some facebookers are very optimistic about Facebook, arguing that it contributes to decrease the chance of deceiving information thanks to comments from different people.

Moreover, there have not been any concerns relating to being fired by posting so-called inappropriate pictures or comments on Facebook, which has happened in different places in the world. One example is the situation of a teacher being fired after posting the picture of her carrying two glasses of wine. Or the instance of a male teacher in Bronx high school was fired after commenting "This is sexy" on one of his students' shared pictures ("17 People Who Were Fired").

Discussing the selling products sector on Facebook, most of the sellers agree upon the easiness and convenience in selling products. This is partly because facebookers can earn money just by staying at home, posting the products' pictures, waiting for the orders and delivering the products. Another reason is that they do not need to invest capitals in hiring locations, buying the whole sales in advance or paying taxes or wages for any assistants, 10% of the participants agree. This again triggers the concern relating to the sustainability of on-Facebook transactions. Some sellers share that the government is banning these transactions due to the loss of taxes. Some argue that the competition on selling products on Facebook is very high, which crowds out sellers who are not attractive or have narrow network. However, none of the interviewees mention about the competition with official and famous online brand such as eBay, Amazon, or the like. This may be because the customers of Vietnamese online shops rarely purchase products from these brands , given that the price, including the shipping costs, are very high comparing to the students' pocket money.

Furthermore, the level of satisfaction for jobs found on Facebook is also diverse. 14% of those being employed or self-employed on Facebook (n=16) is not satisfied with the jobs, reasoning that either the salary is too low or the working time is too strict or the job itself is not sustainable. On the other hand, 22% of them (n=25) express their quite satisfaction with the job, either in terms of salary, working time or sustainability. About 48% of them (n=55) and 7% of them (n=13) feel satisfied or very satisfied with their found-on-Facebook jobs respectively. On the other hand, 4% of them (n=6) is indifferent, reasoning that jobs found through Facebook and other methods are similar.

Graph 3: Satisfaction with jobs got on Facebook (%)

- Not Satisfied
- Quite satisfied
- Satisfied
- Very satisfied
- Indifferent
- Missing values

VI. QUANTITATIVE RESULT (Analyzing surveys)

1. *Subjects*

Anonymous participants in these surveys are mostly students. They are contacted through the snowball method. Others were approached directly in job-searching groups. Their mean of age is 20.94 (± 2.93). Among 379 participants revealing their gender, 40% (n=153) are males; 59% (n=225) are females and one chose "other."Their educational status is followed: 10% is pursuing high school level; 2% is pursing vocational education; 13% college; 72% university level and 3% postgraduate level. Among287 job seekers on Facebook, 146 of them report to get jobs, either part-time or full-time or both. On the other hand, 118 of them were or are selling products on Facebook.

2. *The Beauty Index (BI)*

The mean of BI in the sample is 0.48(±0.32)

Based on the previous formula, BI takes the number of friends, followers and average "likes" of profile pictures into consideration. Followers and friends are mutually exclusive in this context, in which Facebook users have no-friend connection with the people they follow; instead only statuses of the people they are following appear on their News Feed.

Table 3: Distribution of respondents based on demographic characteristics

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	225	59	59.4	59.4
	Male	153	40	40.4	99.8
	Other	1	1	0,2	100
	Total	379	100	100	
Range of Age					
Valid	From 12 to 17	29	7.4	7.4	7.4
	From 18 to 25	342	87.2	87.2	94.6
	From 26 to 35	19	4.8	4.85	99.45
	From 36 to 43	2	0.5	0.51	100
	Total	392	100	100	
Highest Academic Qualification					
Valid	Primary	0	0	0	0
	High School	36	9.8	9.8	9.8
	Vocation	8	2.2	2.2	12
	College	49	13.3	13.3	25.3
	University	268	72.6	72.6	97.9
	Post-Graduate	9	2.4	2.4	100
	Total	369	100	100	
Jobs (being employed or/and self-employed– overlapping answers)					
Valid	Do not get	86	29.9	29.9	29.9

Employed	146	50.9	50.9	80.8
Self-employed	118	41.1	41.1	121.9
Total	287	121.9	121.9	

3. *Missing data*

After omitting all of missing (N/A) values throughout the surveys, the sample size is deducted from 403 to 194. Missing data is managed by deletion methods with two rationales:

a) It maintains the pure form of the primary data.
b) About 200 participants refuse to provide one or more details of theirsemi-personal data such as age, educational status, marital status or working stage due to the fear of leaking personal information, one of the biggest fears among social-media users. This issue should be one of the concerns for data collection relating to social media.

4. *Result*

The dependent variable– Job –is defined as being employed through Facebook (1) such as tutors, waiters, or PG and becoming self-employed by selling products on Facebook (2).

Job = being employed (1) + self-employed (2)

The result shows that a Facebook-user with a higher interval of BI (one interval is 0.33) will have about9.87 times (OR$= e^{2.29}$, p $= 0.001$)more probability to get a job on Facebook than their counterparts (Table 2).On the contrary, other variables show no statistical significance towards an individual's probability of getting jobs on Facebook. The variable "kind of job: temporary or permanent" is left out from the previous model because of the large number of missing values.

Similarly to the interviews' result, this result supports that either in case of being employed or self-employed, beauty is strongly assumed with higher marginal productivity, which explains why beautiful people are hired more than their counterparts.

Additionally, R-squared value is about 8% (Table 2). Despite low R-squared, the F-test shows a strong significance with LR statistics = 22.37 (p-value = 0.002). This number indicates that BI indeed influences the probability of getting jobs on Facebook for individuals in the population.

Table 4:

Dependent Variable: JOB
Method: ML - Binary Logit (Quadratic hill climbing)
Sample (adjusted): 1 403
Included observations: 215 after adjustments
Convergence achieved after 5 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
AGE	-0.010325	0.080657	-0.128008	0.8981
BEAUTY_INDEX	2.294191	0.567859	4.040072	0.0001
EDUCATION	0.156223	0.197242	0.792035	0.4283
GENDER_MALE	0.230491	0.329005	0.700568	0.4836
MARITAL_MARRIE	-0.522740	0.999060	-0.523232	0.6008
MARITAL_OTHER	0.999741	1.166271	0.857212	0.3913
YEARS_USING_FB	0.016515	0.132637	0.124510	0.9009
C	-0.725223	1.495263	-0.485013	0.6277

McFadden R-squared	0.085448	Mean dependent var		0.702326
S.D. dependent var	0.458303	S.E. of regression		0.443284
Akaike info criterion	1.188126	Sum squared resid		40.67568
Schwarz criterion	1.313545	Log likelihood		-119.7235
Hannan-Quinn criter.	1.238801	Deviance		239.4470
Restr. deviance	261.8188	Restr. log likelihood		-130.9094
LR statistic	22.37180	Avg. log likelihood		-0.556853
Prob(LR statistic)	0.002191			

Obs with Dep=0	64	Total obs	215
Obs with Dep=1	151		

The fact of the low R square seems to indicate two problems in the sampling:

1ˢᵗ: there are likely to have lots of noises in the sample. These noises can appear due to the collecting data. Another noise tends to be the disproportion of the sample; it cannot proportionally represent the population due to the snow-ball and convenient sampling.

2ⁿᵈ: maybe there are not enough meaningful variables taken into account in the model. The fact that BI index is statistical significant proves that personality type might be the biggest predictor of chance of getting job on Facebook. Also the surveys did not take into account the skills and experience of the interviewees, which may play important roles in getting jobs on Facebook.

Table 5:

Dependent Variable: JOB_GENERAL
Method: ML - Binary Logit (Quadratic hill climbing)
Date: 04/07/15   Time: 10:46
Sample (adjusted): 1 403
Included observations: 215 after adjustments
Convergence achieved after 5 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
AGE	-0.028529	0.079362	-0.359481	0.7192
MORE_THAN_100_LIKE	0.123530	0.438708	0.281577	0.7783
MORE_THAN_200_FR	0.310710	0.448536	0.692720	0.4885
MORE_THAN_70_FO	1.737650	0.470572	3.692638	0.0002
GENDER_MALE	0.211678	0.334164	0.633456	0.5264
MARITAL_MARRIED	-0.846306	1.069364	-0.791411	0.4287
MARITAL_OTHER	0.378813	1.221172	0.310204	0.7564
YEARS_USING_FB	0.006247	0.136312	0.045831	0.9634
EDUCATIONAL_STATUS	0.153556	0.197372	0.778001	0.4366
C	0.036955	1.487558	0.024843	0.9802

McFadden R-squared	0.108556	Mean dependent var	0.702326
S.D. dependent var	0.458303	S.E. of regression	0.439790
Akaike info criterion	1.178590	Sum squared resid	39.65011
Schwarz criterion	1.335364	Log likelihood	-116.6985
Hannan-Quinn criter.	1.241934	Deviance	233.3969
Restr. deviance	261.8188	Restr. log likelihood	-130.9094
LR statistic	28.42188	Avg. log likelihood	-0.542784
Prob(LR statistic)	0.000811		

Obs with Dep=0	64	Total obs	215
Obs with Dep=1	151		

Interestingly, when BI is replaced by the number of friends, 'likes' and followers, the R-squared in the logit model increases about 3% (Table 3). Moreover, the variable "having more than 70 followers" appears to be the most dominant indicator in BI with p-value of 0.0002. On the other hand, "having more than 100 'likes' and "having more than 200 friends" variables show no statistical significance. This result shows that those having more than 70 followers on Facebook will have 5.69 times more chances to get jobs on Facebook than those with less than 70 followers (OR $= e^{1.74}$, $p = 0.002$). The importance of followers in getting a job on Facebook can be explained through the popularity of the user. Indeed, a person followed by others usually possesses some important characteristics: either of his or her beauty, smartness, or reputation. And together with the average of 200 friends, the number of followers will contribute to an individual's possibility of getting more information and having more customers for their online business, all of which helps to reduce the level of frictional unemployment.

Table 6:

Dependent Variable: BEING EMPLOYED ON FACEBOOK
Method: ML - Binary Logit (Quadratic hill climbing)
Sample (adjusted): 1 403
Included observations: 194 after adjustments
Convergence achieved after 5 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
AGE	-0.062357	0.084641	-0.736721	0.4613
MORE_THAN_100_LI	0.051933	0.405664	0.128021	0.8981
MORE_THAN_200_FR	0.192179	0.478073	0.401986	0.6877
MORE_THAN_70_FO	1.288063	0.396974	3.244699	0.0012
EDUCATION	0.480355	0.218554	2.197883	0.0280
GENDER_MALE	0.019773	0.324942	0.060850	0.9515
MARITAL_OTHER	-0.630632	0.885243	-0.712383	0.4762
YEARS_USING_FB	0.058079	0.128433	0.452210	0.6511
C	-0.990132	1.687869	-0.586616	0.5575

McFadden R-squared	0.086922	Mean dependent var		0.572165
S.D. dependent var	0.496045	S.E. of regression		0.476977
Akaike info criterion	1.339491	Sum squared resid		42.08886
Schwarz criterion	1.491093	Log likelihood		-120.9307
Hannan-Quinn criter.	1.400879	Deviance		241.8613
Restr. Deviance	264.8857	Restr. log likelihood		-132.4429
LR statistic	23.02438	Avg. log likelihood		-0.623354
Prob(LR statistic)	0.003333			

Obs with Dep=0	83	Total obs	194
Obs with Dep=1	111		

Another important feature of the regression is the increase in the value of F-test, which shows a bigger impact of the independent variables in the dependent one when BI is separated.

The dominance of the variable "having more than 70 followers" is also obvious when "being employed" (1) and "being self-employed" (2) are considered as dependent variables respectively. Besides the variable "having more than 70 followers," educational status also significantly affects the probability of an individual's being employed on Facebook (Table 6). This is because most of the participants are university-level, who are the most active users on Facebook as well as in need of part-time jobs. The result shows that a user with a higher level of education (for instance, from high school to college) are about twice more likely to being employed than others ($OR = e^{0.48}, p = 0.03$). It is vital to note that the variable "whether an individual is married or not" is left out in this regression because of its quasi-complete separation problem. In other words, all of married respondents in the sample are not employed on Facebook; their marital status perfectly predicts their employed result.

When being self-employed is taken as a dependent variable, the predicted model is (Table 7):
logit (π)= -2.07 + 0.8*(having more than 70 followers on FB) + 0.26*(years using FB)
The model indicates that a person without at least 70 followers on Facebook and just using Facebook for less than a year has 0.13 time chance of getting jobs on Facebook. Additionally, when other variables remain constant, "having more than 70 followers" increases the chance of a Facebook user's being self-employed by 2.23 times. Furthermore, the variable "years of using Facebook" also significantly contributes to the probability of an individual becoming self-employed. When other variables remain constant, with one more year of using Facebook, an individual's possibility of selling online products will increase by 1.29 times ($OR = e^{0.26}, p = 0.03$). This explains the

importance of networks: using Facebook for a longer period is positively associated with the number of friends, customers and information in selling products' process.

Surprisingly, an individual's membership of any job-searching group significantly influences the probability of an individual getting a job on Facebook. When membership of job-groups is included in the base model, R-squared value increases from 8% to about 16%, and F-value shows more significance than previous models. The rapid increase in R-square value (about 100%) is likely to emphasize the vital contribution of being members in job-groups to get jobs on Facebook (Table 6). In fact, members of any job-searching group have 4.18 times ($OR = e^{1.43}, p = 0.0001$) more likelyto get jobs than those who are not. This is because being members of these groups expands individuals' networks and information range and in turn reduces their frictional unemployment.

Table 7:

Dependent Variable: BEING SELF-EMPLOYED ON FACEBOOK
Method: ML - Binary Logit (Quadratic hill climbing)
Sample (adjusted): 1 403
Included observations: 276 after adjustments
Convergence achieved after 4 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
AGE	-0.014302	0.057842	-0.247270	0.8047
MORE_THAN_100_LI	0.296026	0.328045	0.902395	0.3668
MORE_THAN_200_FB_FR	0.500642	0.447536	1.118663	0.2633
MORE_THAN_70_FO	0.801523	0.316777	2.530242	0.0114
EDUCATION	-0.061633	0.151381	-0.407136	0.6839
GENDER_MALE	0.118539	0.282086	0.420223	0.6743
MARITAL_MARRIED	0.569156	0.916870	0.620760	0.5348
MARITAL_OTHER	0.028285	0.714647	0.039579	0.9684
YEARS_USING_FB	0.256918	0.114716	2.239597	0.0251
C	-2.071777	1.124852	-1.841822	0.0655

McFadden R-squared	0.067083	Mean dependent var		0.326087
S.D. dependent var	0.469631	S.E. of regression		0.457202
Akaike info criterion	1.250500	Sum squared resid		55.60303
Schwarz criterion	1.381674	Log likelihood		-162.5691
Hannan-Quinn criter.	1.303138	Deviance		325.1381
Restr. Deviance	348.5178	Restr. log likelihood		-174.2589
LR statistic	23.37966	Avg. log likelihood		-0.589018
Prob(LR statistic)	0.005398			

Obs with Dep=0	186	Total obs	276
Obs with Dep=1	90		

It is also important to keep in mind that the number of observation in each model is different because Eviews automatically omit individuals with at least one N/A value in any variable.

Table 8:

Dependent Variable: JOB
Method: ML - Binary Logit (Quadratic hill climbing)
Sample (adjusted): 1 403
Included observations: 209 after adjustments
Convergence achieved after 5 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
AGE	-0.048234	0.079009	-0.610481	0.5415
BEAUTY_INDEX	2.437330	0.616506	3.953457	0.0001
EDUCATION	0.078225	0.207996	0.376088	0.7069
GENDER_MALE	0.317045	0.357032	0.888002	0.3745
MARITAL_MARRIED	-0.253210	1.057477	-0.239448	0.8108
MARITAL_OTHER	1.262424	1.253787	1.006888	0.3140
YEARS_USING_FB	0.024938	0.142642	0.174831	0.8612
MEMBER_JOB_GRO	1.433596	0.363179	3.947359	0.0001
C	-0.708796	1.480659	-0.478703	0.6321

McFadden R-squared	0.156175	Mean dependent var	0.703349
S.D. dependent var	0.457878	S.E. of regression	0.423001
Akaike info criterion	1.112215	Sum squared resid	35.78595
Schwarz criterion	1.256143	Log likelihood	-107.2264
Hannan-Quinn criter.	1.170406	Deviance	214.4528
Restr. Deviance	254.1439	Restr. log likelihood	-127.0719
LR statistic	39.69104	Avg. log likelihood	-0.513045
Prob(LR statistic)	0.000004		

Obs with Dep=0	62	Total obs	209
Obs with Dep=1	147		

Table 9: Summary of Hypothesis Tests in the quantitative part:

Hypothesis	H-test result
H1: Younger Facebook users get jobs on Facebook easier than their older counterparts	Reject (p=0.98>0.05)
H2: More beautiful Facebook-user gets jobs on Facebook easier than their less beautiful counterparts	Support (p=0.0001<0.05)
H3: More educated Facebook-user gets jobs on Facebook easier than their less educated counterparts	Reject (p=0.43>0.05)
H4: Females gets jobs on Facebook easier than males	Reject (p=0.48>0.05)

VI.   LIMITATION

Due to the time, budget limitation and especially the nature of collecting data on the Internet where the researcher has no mean to testify the validity and completeness of answers of surveys, the number of missing values in this study is numerous. Furthermore, ambiguity in defining jobs is an obstacle in getting proper response. Also, together with the lack of a bigger sample size, the study seems to miss out some important factor such as experiences, the intensity of job-hunting and prior working experiences, all of which are highly to influence an individual's probability of getting jobs on Facebook. This explains the low value of McFadden R-squared in models. What's more, the snow-ball and convenient sampling may also lead to response and voluntary biases.

Additionally, in the sampling process for the logistic model, the fact that the survey is published on Facebook does not guarantee that all of the participants have Facebook account. Therefore, the researcher should have considered ways to omit those without Facebook accounts from the analysis.

VII. FURTHER STUDIES

The study showed the strong impact of the number of followers on an individual's chance of getting jobs on Facebook. However, the different impacts due to the nationality of followers can also be a topic for future's researches followers have stronger impact. Additionally, an individual's experiences and intensity of job searching are also expected to play a role in the model. Moreover, in the future, the same model can also be expanded to other means of social media such as Instagram, LinkedIn or Twitter.

VIII. CONCLUSION

This paper targets to figure out what personal characteristics and Facebook's features affecting unemployment level among the Vietnamese youth. This study shows that besides its role as an entertaining site, Facebook indeed opens up job opportunities, creating social networks between employees and employers. This explains why the membership of job-searching groups significantly influences the possibility of being employed or becoming self-employed on Facebook. Furthermore, Beauty Index, especially the number of followers on Facebook, is also positively correlated to one's chance of getting jobs on Facebook. Although this result shows no association between gender, marital status, age and employment, it significantly correlates BI and membership of job-searching group with employment on Facebook in Vietnam. With this, it tends to shift the question of how to discourage people to spend lots of time on Facebook into how to use Facebook effectively. This is because ultimately Facebook is another tool of job searching, and it is likely to reduce unemployment among Vietnamese youth if used efficiently.

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APPENDIX

Table 10: The Survey's questionnaires for the logistic model

Questions	Options
What is your gender?	A: Male B: Female C: Other
What is your age?	
What is your highest educational level till now?	A: Primary school B: High School C: Vocational education D: College F: University G: More than university level
What is your marital status?	A: Single B: Married C: Other
Do you have more than 200 friends on Facebook?	A: Yes B: No C: 200 friends
Do you have more than 70 followers on Facebook?	A: Yes B: No C: 70 followers
On the average, do you have more than 100 "likes" for your profile pictures?	A: Yes B: No C: 100 'likes'
How long have you been using Facebook?	
Have you ever searched for jobs on Facebook	A: Yes B: No
If yes, what kinds of job have you been looking for?	A: Have not searched B: Permanent C: Temporary D: Both
If yes, have you been selected for any jobs?	A: Have not searched B: Yes C: No
Are you member of any job-searching group?	A: Yes B: No
Have you ever sold products on Facebook?	A: Yes B: No
If yes, is selling products your temporary or permanent jobs?	A: Have never sold B: Permanent

	C: Temporary
During the time of job searching or selling products on Facebook, which province of Vietnam are you? (If you are abroad, please indicate)	