

# **Social Media Usage among AUT International Students**

Prepared for:	Philip Carter
Prepared by:	Mao Chuan Li
Student ID:	14854389
Submit Date:	2015/05/30
Paper Name:	Research Methods I
Paper Number:	COMP811

# **Abstract**

This research project is to look at what kind of social softwares are being used by AUT international students, and how the students put the usage of them into their life and study. The report found that a variety of social softwares are being actively used among the students, in which Facebook is the dominant media that almost everyone has an account for it. In contrast to any other country, most of Chinese students are using a single social software to satisfy all their needs – WeChat.

The research result provides a general overview of the social softwares usage among the international students, especially the usage of WeChat among Chinese students are examined. These data could provide AUT international student service team a starting point to analyse how the students are studying and living in AUT, and the potential problems may arise, meanwhile the new international students coming to AUT may find a quicker way to blend into the AUT campus life.

## Contents

Abstract.....	2
1 Introduction.....	1
1.1 Literature Review.....	1
1.2 Research Questions .....	2
2 Research Design .....	2
2.1 Test Subjects.....	3
3 Findings .....	4
3.1 The major social platforms being used .....	4
3.2 The friends demographics .....	4
3.3 The impact on the study measured by the usage frequency .....	5
4 Discussion and Analysis .....	7
4.1 Limitations .....	8
5 Future Work.....	8
6 Appendix.....	9
6.1 Questionnaire .....	9
7 References .....	16

# 1 Introduction

For any international student, flying thousand miles to New Zealand to embark a new study and life is definitely a challenge. The cultural shock for many of them and the stressful academic pressure makes the journey even more challenging. However, the journey is not just homesickness and piles of textbooks, but also is full of adventures and fun with the other international students from all around the world.

The pervasiveness of Internet has shortened the distance between the people from every corner of the earth; the popularity of social softwares like Facebook has further linked families and friends together closer than ever before. The students do not feel as far away from home as before because the internet and the social softwares could provide them connection to anyone at anytime, anywhere, and best of that is free.

This research is aimed at studying how the social platforms are used among the AUT international students, and how these softwares are impacting the students' daily life and study. The paper begins with a discussion of the current literature on social platforms, especially on the Facebook, as it is the most widely-spread social platform for the whole world. Then it discussed the three research methods harnessed to answer the two research questions. After that, a few research findings are demonstrated. Finally the results of the paper are concluded as well as the limitation in this research and the future work that could be further extended.

## 1.1 Literature Review

There are a lot of social platforms around the world, Kemp (2015) published a *Digital, Social & Mobile Worldwide* report for the statistics of global internet, mobile, social media, mobile social, etc., in which 17 social platforms (e.g., Facebook and Twitter) are ranked based on their active user base, all having more than 100 million active users on a monthly basis. Globally, Facebook continues to dominate the social platform with a leading 1,366 million active users. But country-wise, some other social platforms overtook Facebook because of their own preference on local platforms, such as Kakao Talk in South Korea, Twitter in Japan, and VK in Russia.

As most of the countries, New Zealand population prefers Facebook as well, with more than half of Kiwis are using Facebook according to a social media study (ROI Marketing, 2013). In the November 2013, another report *Who uses Social Media in*

*New Zealand* (Interactive Advertising Bureau of New Zealand) reported that 42.6% of Facebook users came from young people ranged from 15 to 34. From the age range, we can deduce that most of them are from the students.

Due to Facebook's extreme popularity and its penetration to people's life and study, all kinds of research on it have been conducted. There are apparently two voices of using social media like Facebook: one side claims that the usage of Facebook could benefit the students with better communication between students and lecturers (Staines & Lauchs, 2013); the other side found a deal of evidence that a high percentage of students become addictive (Zaremohzzabieh, Samah, Omar, Bolong, & Kamarudin, 2014) to Facebook and obviously obtained a lower grade than those nonusers (Kirschner & Karpinski, 2010).

## **1.2 Research Questions**

The research questions are:

1. What is the most popular social media among AUT international student?
2. Do these social media impose a positive or negative influence on their study?

## **2 Research Design**

The best way of conducting the research is to follow the students and observe how they use the social softwares, however, this is impractical and no one would allow me to 'monitor' how they use the softwares and what they input because of privacy issues. Thanks to the nature of instant interaction of all social platforms, I can 'talk' to all my friends and monitor their online status, so that I can record their behaviours and ask follow-up questions afterwards.

Firstly, a survey with only two questions "what SNS softwares are you using and which is the most popular in your daily life" either on social platform or by face to face conversation was conducted at first, a general idea of the current social media usage is constructed.

Secondly, a series of conversations on the social media were established and a list of questions about how the softwares are used were 'interviewed'. In the meantime, an important data "response" time was recorded to reflect how frequently these students check their social status. On Facebook, the friends' online status is shown on the right side of a web browser. An automatic screen capture tool is used to

capture the web browser screen every 10 minutes for a day from morning 9:00 to afternoon 6:00. With these screen data, the frequency of checking Facebook status of my friends could be extracted. On WhatsApp and WeChat, a text message “*A research experiment: if you see this message: ‘ping’, please reply ‘pong’, thank you! I want to investigate how frequent you are using WeChat/WhatsApp.*” was sent to all my WeChat and WhatsApp friends for 3 times. A response time for each was recorded.

Thirdly, after being tired of getting asked questions one by one on social media, test subjects required to answer the questions all together, so a questionnaire was created for each of them and the answers were collected. Because of the restrictions and primness of traditional questionnaire, I abandoned to create the questions on the current online survey websites like the SurveyMonkey, nor hand it out with papers. To make the questionnaire more open and encourage respondents to comment freely, a brand new website <http://maosurvey.cloudapp.net/> was constructed from scratch based on Microsoft Azure cloud. A collaborative web page was created for each respondent with a separate Etherpad editor page. When the test subject was answering the questions, I can see how they typed the answers, and ask further questions based on their answers.

Lastly, after organizing and analysing the questionnaire answers, a few ambiguous questions were further asked to test subjects and clarified.

## **2.1 Test Subjects**

The research is focusing on the AUT international students, so naturally all my classmates and friends studying at AUT become my test subjects, which includes 45 friends who are in my friend list, distributed in 3 social platforms: Facebook, WhatsApp and WeChat. They are mostly coming from my own country (34) – China, all the others are from India (4), Germany (2), Brazil (1) and Netherlands (2), UK(1) and USA(1). The origin of these friends of mine is obviously biased to China, and India, which leads to one of my research limitations.

## 3 Findings

### 3.1 The major social platforms being used

Be consistent with the *Digital, Social & Mobile Worldwide in 2015* report (Kemp), every non-Chinese has a Facebook account and actively check their friends' status frequently. Meanwhile, nearly every Chinese student has a Facebook account, even so, they rarely use it.

According to the survey, apparently Facebook is the dominator in the social platforms among AUT international students. Following that, a variety of other social platforms are also active such as WeChat, WhatsApp, Facebook messenger, Skype, Facetime, and Snapchat.

An interesting finding is that the world famous Instant Messaging platform Twitter is not popular here in AUT, only 2 of the test subjects are using it occasionally.

All the 45 test subjects were separated into 3 groups: Westerners, Indian and Chinese because of their similarity in culture. All the following studies are focused on the Facebook usage by both Westerners and Indian, WhatsApp usage by Indian, and WeChat usage by Chinese because of the each group's preference.

### 3.2 The friends demographics

The Table 1 below summarized the friends' status for all the 45 test subjects. The first column shows the total friends number in these software platforms for the 3 groups. For the Facebook users, normally they have 600~700 friends, which more than doubled than the WhatsApp users, and is about as 4 times as the Chinese WeChat users.

The second column shows the newly added friends since they came to New Zealand. All the students have rapidly grown their relations with new friends. But the westerners seems to be more competitive than the Indian and Chinese, which overran them again with a median number 37.5 within just 3 months.

The third column listed the number of friends from non-home countries, for the westerners, only a small portion of their new friends come from their own country, in contrast, both Indian and Chinese students are more likely to keep contact with their own compatriots.

The fourth column showed an interesting phenomena that all the 3 groups of students tend to keep a social circle by themselves, a line between them seems blocking them get in touch with the others.

	<b>Total Friends</b>	<b>Newly Added Friends within 3 months</b>	<b>New Friends from non-home country</b>	<b>New Friends Origin</b>
<b>Westerners with Facebook</b>	Max=898 Min=417 Median=645	Max=60 Min=15 Median=37.5	Max=54 Min=14 Median=29	All westerners, and only a few  Chinese and Indian
<b>Indian with Facebook</b>	Max=851 Min=626 Median=753	Max=50 Min=4 Median=20	Max=5 Min=1 Median=2	All Indian, and only a few  Chinese, Japanese, French, Mauritius
<b>Indian with WhatsApp</b>	Max=450 Min=169 Median=250			
<b>Chinese with WeChat</b>	Max=441 Min=14 Median=167	Max=100 Min=7 Median=31	Max=10 Min=0 Median=2.5	All Chinese, and only a few  Indian, Japanese, Korean, Saudi Arabian, Vietnamese, Kiwi, Malaysian, English, American

Table 1 Friends Demographics

### 3.3 The impact on the study measured by the usage frequency

The Facebook platform is different on the operations than the other two platforms, it requires users to frequently refresh the web pages to obtain the latest feeds from all friends. The WhatsApp and WeChat are both Instant Messaging platforms, which alarm or vibrate when a new message comes in. So basically the users only need to listen for the alarms of the IM applications, do not need to frequently check them.

For these 2 types of applications, 2 tests were designed to collect the data of usage frequency:

- For Facebook friends, monitor and record the online status every 10 minutes for a day starting from 9:00 am to afternoon 6:00 pm.



- For WhatsApp and WeChat, a test message “Ping” was sent to all friends 4 times, asking the respondents to send back a “Pong” message once they check the application and saw the message.

At first, the impact on the study data is collected with the help of 30 questionnaire responses from the WeChat and WhatsApp users.

Two questions were asked to the WeChat and WhatsApp users:

1. Do you check the WhatsApp messages once you hear there is a notification/vibration?
2. Do you think WhatsApp, Facebook or any other SNS applications like Viber/Line impact your study? Positively or negatively?

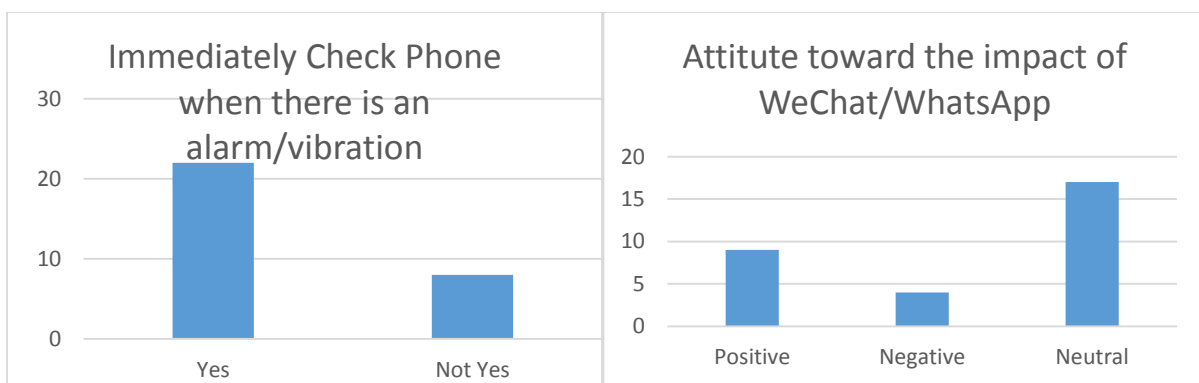


Figure 1 - two questions answer regarding to the impact of social media

From the responses, 22 (73.33%) of the respondents stated that you all react to the phones' notification immediately, in the meantime, only 9 (30%) of them claimed that the social softwares have a positive impact on their study. When they were asked if they keep their phone connected in class, only 5 of them claimed that they will shut down the connection.

The follow-up “Ping-Pong” experiment results have further solidified the above first question, with 4 times tests and an average 49.07% of 33 respondents all sending back a “Pong” within a minute.

On the other side, 12 Facebook users' logon status were recorded for a day starting from 9:00 am to 7:30pm. The friends are listed on the right side pane of the Facebook home web page. Each friend has a status of either “Online” or “Offline”. When they are online, an elapsed time since they log off Facebook is shown. The observation is automated with a screen capture tool to record these status change, and the elapsed time at an interval of 10 minutes. The online status and a less than

10 minutes elapsed time indicate that the user has logged on the Facebook website, and it was counted as “one time logon”.

Compared to the Westerners, although Indian students have equivalent amount of friends on Facebook, but their logon frequency is far less. On the side of Westerners, polarization of usage is observed, too. The minimal logon times is 0.625 per hour, while the maximal is up to 3.125 for an hour. The addictiveness to Facebook seems exist among these Westerners.

## 4 Discussion and Analysis

One of the goals of the research is to identify the most popular social softwares being used in AUT international students, based on the initial interviews with all my friends who are studying in AUT, three social platforms are identified, which are closely linked to three groups of people: Facebook by Westerners and Indian, WhatsApp by Indian, and WeChat by Chinese. This finding is consistent with the social platform ranking report *Digital, Social & Mobile Worldwide in 2015*.

With the three dominant in mind, the origins of friends in each user's friend list are further investigated. It turns out that each group of people all tends to expand their social circle with their own group, very few could cross the lines between these 3 groups and get added into other groups' friend list. These rare cases happened when

1. A student has a part-time job, co-working with other groups of students;
2. A student lives in AUT student apartment, having more chance to get contact with other international students;
3. A student joined a football club, which consists of different country students.

The other goal of this research is to evaluate if these social applications impose a positive impact on students or a negative impact. Without long enough time to track the students' academic performance within this research, the usage pattern of these applications were examined by a questionnaire and 2 experiments. From the students' personal attitude on the social applications, most of them do not consider or realize that the usage has any impact on their study; nevertheless, from the test results, we can infer that the constant internet connection and those unexpected messages could often disrupt students' study. Even under a pressure of delivering a report, they will not shut down the connection to acquire a short period of quite time.

## **4.1 Limitations**

The first and biggest limitation in this research is the selection of test subjects. The research scope was targeted to all AUT international students, but due to my own social limitation, I can only conduct my research with all my 45 friends, most of them are from my classes, which may become another limitation.

Secondly, the frequency monitoring is not 100% accurate, and an important data – duration time on the social platform was not collected. The ping-pong tests could be impacted by a few uncertain factors, such as the network connectivity, and the respondents' reluctance to send a pong message back.

Thirdly, the questionnaire did return some unexpected answers, but fortunately a further clarification on the social platforms amend the problems finally.

## **5 Future Work**

A wider scope, including all countries and all faculties should be taken into account for this research to have a more general understanding of the social media usage among AUT international students.

A web browser add-on may be developed for Internet Explorer, Firefox or Chrome that could parse the Facebook web pages dynamically so as to more precisely monitor the logon time and the duration of each logon. Or a mobile phone application that could use some Facebook open APIs to implement the same kind of job.

A mobile application for both WhatsApp and WeChat need be created to monitor the usage of these 2 applications in real-time manner to record the most precise behaviours of students.

An in-depth study on the 'line' between the 3 groups of students is worth to pay more attention on it, more successful line-breaker cases deserves to be found and given a good study so that AUT international students could more easily jump over the line and establish a better relationship with all the other countries.

## 6 Appendix

### 6.1 Questionnaire

Here is one sample online questionnaire that would be available online by the end of May, 2015.

<http://maosurvey.cloudapp.net/p/sample>

#### **Social Media Usage among International Student**

You have been invited to take part in a small project that I am conducting as part of the Research Methods 1 paper that is part of the Masters in Computing and Information Sciences degree at the Auckland University of Technology.

#### **What is the purpose of this research?**

The aim of this research is to identify the usage patterns of social softwares like WeChat among the international students, specially the Chinese, and the benefits or drawbacks of using them.

#### **How was I chosen for this invitation?**

You are using WeChat/WhatsApp, and you are Mao Chuan Li's friend.

#### **What will happen in this research?**

You may be asked to complete a questionnaire. Participation is fully voluntary. You may withdraw yourself at any time during data collection and all data will be destroyed.

#### **What are the benefits?**

It is anticipated that the results from this research will assist the understanding towards international students' usage of social media.

#### **How will my privacy be protected?**

The researcher and lecturer will assure the confidentiality of the participants. When writing up the report, real names will not be used. All the data collected will be securely stored and is only accessible for the researcher and his supervisor. You do not have to provide your real name.

#### **How do I agree to participate in this research?**

Please complete the consent form below

#### **Will I receive feedback on the results of this research?**

The results and discussion sections will be sent to you either electronically or by post upon request.

#### **What do I do if I have concerns about this research?**

Any concerns regarding the nature of this project should be notified to the Project Supervisor, Philip Carter, [pcarter@aut.ac.nz](mailto:pcarter@aut.ac.nz), 921 9999 ext 5300.

#### **Whom do I contact for further information about this research?**

Researcher: Mao Chuan Li email: [mao.chuan.li@gmail.com](mailto:mao.chuan.li@gmail.com)

Supervisor: Phil Carter email: [pcarter@aut.ac.nz](mailto:pcarter@aut.ac.nz) (921 999 ext 5300)

All answers in this questionnaire will be anonymous, please answer the questions as honestly as possible. If you have any questions/feedback feel free to email me at [mao.chuan.li@gmail.com](mailto:mao.chuan.li@gmail.com).

#### **Participant Consent**

##### **Social Media Usage among International Student**

Course Coordinator: **Dr Philip Carter**

Student: **Mao Chuan Li**

• I have read and understood the information provided about this research project as outlined in the information sheet.

- I have had an opportunity to ask questions and to have them answered
- I understand and agree I will be asked to answer an electronic questionnaire.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that all relevant transcripts, or parts thereof, will be destroyed
- I grant permission for any information collected to be used for purposes as outlined in the information sheet.
- I agree to take part in this research.

I wish to receive a copy of the report from the research?

- Options:
  - A. Yes
  - B. No
  -

If Yes, please enter your email address

Do you agree with the above points and give your consent?

- Options:
  - A. Yes
  - B. No

=====Questionnaire=====

**Welcome to Mao Chuan Li's WeChat/WhatsApp Social Applications' Usage among International Students Survey, Thank you very much for your support!**

**欢迎来到李茂川的国际留学生社交软件使用调查，非常感谢您的支持！**

**Notice:** you may change your answer colour with clicking button in the right-upper corner.

- 你可以点击右上角的 button 改变你的答案的颜色
- using computers to type answers is recommended, the phone's screen might be a little small.
- 建议您使用大屏幕的电脑来回答，手机屏幕有点小，看得不舒服。
- if you are interested in how this website was created, ping me.
- 如果你对这个网站是如何做得感兴趣，ping 我一下

**Q0: Do you know you can use WeChat on your laptop? 你知道你可以用电脑的浏览器使用微信吗？**

- Options:
  - A, Yes, I use it, 知道，我有时候用
  - B, Yes, I don't use it. 知道，但我不用
  - C, No, 不知道，你可以 ping 我，我可以告诉你，很方便

**A0:**

**Q0-1: Do you know any Chinese around you NOT using Wechat? 知道周围有人不用微信吗？**

**A0-1:**

**Q1: Do you check the WeChat/WhatsApp messages once you hear there is a notification/vibration? 当听到震动，声音提醒，是不是马上打开查看？**

- Options:
  - A, Yes 是,
  - B, No 不是，置之不理，等一会儿

**A1:**

**Q2: For WeChat only, when there is no new message, how often do you check the friends update? 当没有新消息，多长时间刷一下朋友圈？**

- Options:
  - A, 1-5 mins

- B, 5-10 mins 分钟
- C, 10-30 mins 分钟
- D, 30 mins - 1 hour 半小时 --- 一个小时
- E, 1 hour + 一个小时以上

A2:

•

**Q3: Do you keep WeChat/WhatsApp online all night? 晚上你会保持微信/WhatsApp 连线吗？**

- Options:
  - A, Yes, 晚上一直连接着
- B, No, shut it down when I start sleep, 睡觉的时候就把它关掉
  - C. No, shut it down when I get home, 回家就关掉
  - D. No, others 其他

A3:

**Q3-1: Do you check the WeChat/WhatsApp in the morning when you get up? 早晨起床后，是不是检查一下微信的状态？**

- Options:
  - A. Yes
  - B. No

A3-1:

**Q3-2: Do you keep your WeChat/WhatsApp online in class? 上课微信还保持连接吗？ 有影响吗？**

A3-2:

**Q4: Do you think WeChat/WhatsApp impact your study positively or negatively? 你认为微信对你的学习有好的影响，还是坏的影响？**

- Options: A, Positively 正面的
  - B, Negatively 反面的
  - C, Neutral 没感觉

A4:

**Q5: Can you give a little description how it does that? 能具体说一下是怎么影响的吗？**

A5:

**Q6: How long have you been in New Zealand? 来新西兰多久了？**

A6:

**Q7: How many friends in your current WeChat/WhatsApp application? 你现在微信中有多少个好友？**

A7:

**Q8: How many new 'friends' did you add to WeChat/WhatsApp since you came to NZ? 自从来了 NZ，你在微信中，增加了多少个新朋友？**

A8:

**Q9: Do you have non-Chinese friends in your WeChat/WhatsApp friends list? 在朋友圈中，有外国朋友吗？哪国人？**

A9:

**Q10: What do you use WeChat/WhatsApp for? 你主要使用微信 WhatsApp 做什么？**

A10:

•

**Q11: What kind of network are you using? 你使用哪种联网方式?**

- Options:
  - A: Home Wifi 家里的 wifi
  - B: AUT Wifi 学校的 AUT wifi
  - C: Cellphone Data 或者是手机流量

**A11:**

**Q12: What is the phone's network plan? 你使用哪种流量包?**

- Options:
  - A: Pay-as-you-go, 用多少, 交多少
  - B: 100MB
  - C: 500MB
  - D: 1GB+
  - E: No such plan, do not use it. 完全不用

**A12:**

**Q13: Do you still use cell phone to make international call? 你仍然使用手机打长途电话吗?**

- Options:
  - A: Yes, I pay for that, 我使用手机打长途
  - B: No, I don't have such need, 我不打长途, 没需求
  - C: No, I use WeChat to make international call/video call 我使用微信打长途语音, 或视频电话
  - D: No, I use Skype or other softwares to make international calls. 我用Skype, 或其他软件打长途电话?

**A13:**

**Q14: Have you tried to install new SNS softwares to adapt to NZ? Facebook, LINE, Viber, WhatsApp, etc. 是否尝试过安装使用新的软件来适应新的环境?**

**A14:**

**Q15: If you have tried any of them, please list them in preferred order? 如果您使用过, 请按喜好程度排列。**

**A(Most)...<<< >>> D (Least)**

**A15:**

**Q16: Who are the foreigners whom you are acquainted with or familiar with? 身边认识的, 或者比较熟的外国人都是什么人?**

- Options:
  - A: Classmates 同学
  - B: Roommates/friends in the same Homestay 同宿舍的, 同一个 homestay
  - C: friends from Churches/教会朋友
  - D: Others/其他

**A16:**

**Q17: Do you want to get in touch with other countries' international students or local KIWI? 你希望跟其他国家的学生或者 KIWI 进行接触交流吗?**

- Options:
  - A: Yes
  - B: NO

**A17:**

**Q18: What kind of approaches have you tried? 你都尝试过哪些方式? What is the effect? 效果如何?**

**A18:**

Q19: What is the biggest problem/obstacle for contacting foreigners? 与外国人接触，最大的障碍是什么？

A19:

Q20: If you answered 'English language', then what else do you think it could be? 如果你回答‘英语’的话，那还有其他障碍吗？

A20:

## 6.2 WeChat and WhatsApp Response Time Data

Name	29/04/2015				7-May
	Response Time[1]	Response Time[2]	Response Time[3]	Response Time[1]	
S1	0:15	0:01	0:16	0:29	
S2	2:02		0:27	1:34	
S3	2:45	1:07		0:01	
S4	0:01			0:01	
S5	0:18	0:35	0:06	0:17	
S6	0:09		0:01	0:05	
S7	0:01	0:17	0:01	1:01	
S8	0:01		0:01	6:35	
S9	0:01	0:06		0:26	
S10	0:01	0:24	0:30	0:01	
S11	0:01	0:01			
S12		0:28			
S13	0:01	0:37	0:05	0:01	
S14	5:00	1:15		0:24	
S15	0:01	0:01	0:01	0:01	
S16	0:05	0:01		0:27	
S17	5:21	1:17			
S18	0:01		0:11	0:07	
S19	0:01	0:01	0:01	0:01	
S20	forgot	0:53	0:04	0:27	
S21				0:01	
S22	4:51	1:10	0:01		
S23	0:01	0:01	0:01	0:01	
S24	0:01	0:01	0:01		
S25		0:26		0:01	
S26	0:01				
S27		0:01			
S28	0:30	0:08	0:01	0:01	
S29	0:19	0:01		0:01	
S30	0:05	0:01	0:01	0:01	
S31				0:49	
S32				0:22	
S33	2:05	1:32	0:30	5:42	
reply within 5 mins	15	10	13	14	
Total Pings	27	24	18	26	



Percentage

55.56%

41.67%

72.22%

53.85%

### 6.3 Facebook Users Logon Times Data

	Westerners									Indian		
7-May	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
8:57	36m	1h	7h	47m	11h	8h	35m	45m	30m	on	10h	5h
9:10	48m	1h	7h	6m	11h	8h	3m	3m	41m	1m	10h	5h
9:20	58m	1h	7h	16m	11h	8h	13m	13m	51m	11m	10h	6h
9:30												
9:40	on					on						
9:50				5m		on						
10:00	1m					5m						
10:10	5m			on								
10:20												
10:30						on						
10:40				6m		8m	on					
10:50									on	1m		
11:00	3m					on			3m		5m	
11:10												
11:20			2m			5m	2m					
11:30	on		on	7m		4m	6m					on
11:40												
11:50	on		on			on	6m					
12:00	on		on	on		on			on			on
12:10	on			9m		8m	2m		on			9m
12:20	on		on				1m	10m	on			
12:30	on		on				1m		on			
12:40	on					on	8m		on			1m
12:50	on		5m						on			6m
13:00	9m	4m					1m	4m	9m			
13:10			on		on		on					
2 hours data lost												
15:20												
15:30	on	7m	on	7m		3m						
15:40	7m	2m	on				4m					
15:50		on	on						online			1m
16:00			on	on		1m			on			1m
16:10			1m	4m								
16:20	on			5m								
16:30	4m		on			3m						
16:40			on	on	on							
16:50			5m	on	on			7m				
17:00		5m	5m	on								
17:10				5m			on					
17:20				8m		5m	on					

17:30	1m	on	on	6m									
17:40		5m	on	1m	8m								
17:50		on	on	6m									
18:00	on	7m	on	on	1m	3m							
18:10			on	on									
18:20	4m	8m	on										
18:30			on	1m						on	7m		
18:40		1m	on	1m						3m			
18:50	5m	1m	on	6m	on								
19:00	1m	9m	on	7m									
19:10	9m	on		on									
19:20	on	1m		6m	on								
19:30	4m	on		9m									
Total Logon													
Times	21	8	22	25	5	25	25	6	11		5	1	8
Duration							8 hours						
Logon													
Timers/Hour	2.63	1	2.8	3.13	0.6	3.1	3.13	0.75	1.375		0.63	0.1	1

## 7 References

- Interactive Advertising Bureau of New Zealand. (2013). Who uses Social Media in New Zealand? , from <http://iab.org.nz/resources/item/comscore-jan-2014-who-uses-social-media-in-new-zealand>
- Kemp, S. (2015). Digital, Social & Mobile Worldwide in 2015. from <http://wearesocial.net/tag/statistics/>
- Kirschner, P. A., & Karpinski, A. C. (2010). Facebook® and academic performance. *Computers in Human Behavior*, 26(6), 1237-1245. doi: <http://dx.doi.org/10.1016/j.chb.2010.03.024>
- ROI Marketing. (2013). Social Media Market Share & Demographics in New Zealand. from <http://www.roimarketing.co.nz/articles/social-media-marketshare-demographics-zealand/>
- Staines, Z. R., & Lauchs, M. (2013). The use of Facebook in tertiary education. *Interactive Technology and Smart Education*, 10(4), 285-296. doi: 10.1111/j.1467-8535.2011.01195.x  
<http://dx.doi.org/10.1108/ITSE-05-2013-0008>
- Zaremohzzabieh, Z., Samah, B. A., Omar, S. Z., Bolong, J., & Kamarudin, N. A. (2014). Addictive Facebook Use among University Students. *Asian Social Science*, 10(6), 107-116. doi: <http://dx.doi.org/10.1080/02500160903250648>