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Lamisi Gurah Blackman
Tiwonge Davis Manda

A Comparative Study of University Students' Use of Mobile Devices to interact on social media: University of Oslo vs. University of Malawi

Lamisi Gurah Blackman & Tiwonge Davis Manda

Abstract

This study investigates the use of social media by university students at the University of Oslo, in Norway, and the University of Malawi. Of particular interest to the study are the following: social media solutions in use, device choices, and market contexts. In relation to social media solutions, we will look into which social media are most commonly used, how much time is spent on it and if these are accessed through a mobile phone. One device choices we classify the varieties of phone represented in the survey, and analyse the type of features they have that would be beneficial or helpful for accessing social media. Finally, with regard to market context, we present findings around payment plans, level of satisfaction with the present phone and the respondents experience with social media through mobile phone vs. desktop/laptop computers.

Findings from this study suggest that there are no huge variations in how the respondents from Malawi and Norway interact with social media. However, notable variations between the two sets of respondents have been noted. For example, Norway is a mature mobile telephony market whilst Malawi is an emerging mobile telephony market. The respondents from Norway are also able to get phones with an initial lower price using contract services, an option that is not available to their Malawian counterparts.

Key words: Social media, mobile device, mobile phone, social network, market

1 Introduction

As of February 2011, the shipment of smart phones to stores worldwide has overtaken that of PCs (Albanesius 2011). Now, the potential to help bridge the digital divide has increased with the availability of high speed mobile data networks, and appearance of increasingly-affordable web enabled phones (Boyera 2007). Furthermore, advances in wireless data networking web-enabled mobile devices have accorded users more flexibility in accessing data and information services, such as collaborative web systems regardless of the user's physical location or movement behaviour (Jing, Helal et al. 1999; Kirsch-Pinheiro, Villanova-Oliver et al. 2005). Mobile phones, for example, now allow people to enhance social contact outside usual geographical and time barriers (Kennedy, Dalgarno et al. 2007). This way, the socio-technical affordances of mobile phones have

revolutionized how people operate within their social networks, like fixed wire line telephones did in the early 20th century (Kennedy, Dalgarno et al. 2007).

In addition to all this, all people are part of social groups and networks and need to maintain relationships (Kikin-Gil 2006). The use of social media permits wide-scale interaction between members of the public, thereby setting ground for collective resourcefulness, self policing and production of information that cannot otherwise be easily obtained (Sutton, Palen et al. 2008). In the use of social media, there has been a significant rise in the use of social networking sites by both teens and adults (Lenhart, Purcell et al. 2010). Now the mobile social networking revolution is upon us and could significantly enhance social interaction as conventional Internet access has done for online information access and discourse (Beach, Gartrell et al. 2008).

This study investigates the use of social media by university students at the University of Oslo, in Norway, and the University of Malawi. By almost any measure, it is clear that Norway is a mature mobile telephony market. For example at the start of 2004, 87% of all people above the age of nine were reported to personally own a mobile telephone (Ling 2004). Malawi on the other hand is an emerging mobile telephony market. However, in as much as access to ICT is still very low, Malawi has over the past decade registered considerable growth in ICT-related service and infrastructure development, especially around mobile cellar telephony. For example, between the years 2000 and 2009, the country's number of mobile telephony subscribers jumped from 0.41% to 15.7% of the population (ITU 2011).

The rest of this paper is structured as follows: firstly, we describe our case. Then we describe the methodology employed for the study. This is then followed by a review of relevant literature to our study. We follow this up with a presentation and discussion of our findings.

2   The Case

2.1   The Countries and Research Sites

Malawi is located in Southern Africa. The country covers a total area of 118,480 square kilometres, and has a population of about 13.1 million people (NSO 2008). The University of Malawi was established in 1964 and is Malawi's largest university. The university has 5 constituent colleges spread across 2 cities.

Norway is located in Northern Europe, bordering the North Sea and the North Atlantic Ocean, and west of Sweden. The country covers a total area of 385,199 square kilometres, and has a population of around 4.8 million (US Department of State 2010).

The University of Oslo was founded in 1811, as The Royal Frederick University, and is Norway's largest university.

2.2 ICT Trends and Mobile Technology in Norway

Norway ranks amongst countries with the widest diffusion of ICT. By almost any measure it is clear that Norway is a mature mobile telephony market. For example at the start of 2004, 87% of all people above the age of nine were reported to personally own a mobile telephone (Ling 2004). As of 2011, the major players in Norway are working on the development of the next generation infrastructure, 4G. It is an IP-based solution that will provide services for voice, data and multimedia to its users. Being IP based means increased transmission speed and it is expect to be ten times faster than the current turbo-3G currently available. 4G will be able sustain services like mobile broadband, MMS, video chat, mobile-TV with HDTV-quality, with IP-based voice and data (Wikipedia 2011).

2.2.1 Mobile market

The mobile market is strongly regulated through the Norwegian Post and Telecommunications Authority (Post- og teletilsynet). In the Norwegian mobile market there are several players that mostly fall within the following categories: infrastructure owners, network operators, virtual mobile providers and resellers. Such categorization is a function of the relative high investment cost of building communication infrastructure (Post- og teletilsynet 2005).

In 2003, the government expressed its wish for a higher degree of infra structural competition, based on e-communication regulations in other European countries. This meant that network providers without a nation wide infrastructure needed to get access to a national roaming plan by another network to be able to service the entire country (Post- og teletilsynet 2005).

Currently there are three mobile networks that own the infrastructure in Norway. These are Telenor Mobil, Mobile Norway and Netcom. These companies resell the use of their network infrastructure to other providers that in turn will resell this directly to customers. This has been referred to as a "ladder of investment" (Post- og teletilsynet 2005). Owing to this model, the Norwegian mobile market has 17 virtual mobile providers that are owned by the above mentioned companies: Tele2, OneCall, Chess, Ludo Mobil, Telipol, Lebara, Telenor, Netcom, Call Norwegian, TalkMore, Xito,Ventelo Privat, dJuice, Lyse, Ibidium, Trigcom, and ACN (Post- og teletilsynet 2008).

2.2.2 Trends

The diffusion of mobile telephony in Norway has been impressive. For example, statistics from as early as 2003, collected by Statistics Norway in 2003, indicated 100 %

of the teens aged 16 – 20 they interviewed in their media use survey had a mobile phones (Ling 2004). Despite this, the adoption of mobile telephony across socio-demographic groups has not been always been uniform. In the early stages of adoption it was business persons and delivery persons who were the adopters. It is mostly when alternative subscription systems immerged that teens and young adults started to own and, use mobile phones (Ling 2004). In figure 1 below we present general trends for fixed telephone lines, mobile cellular subscriptions, and internet usage in Norway between the years 2000 and 2009.
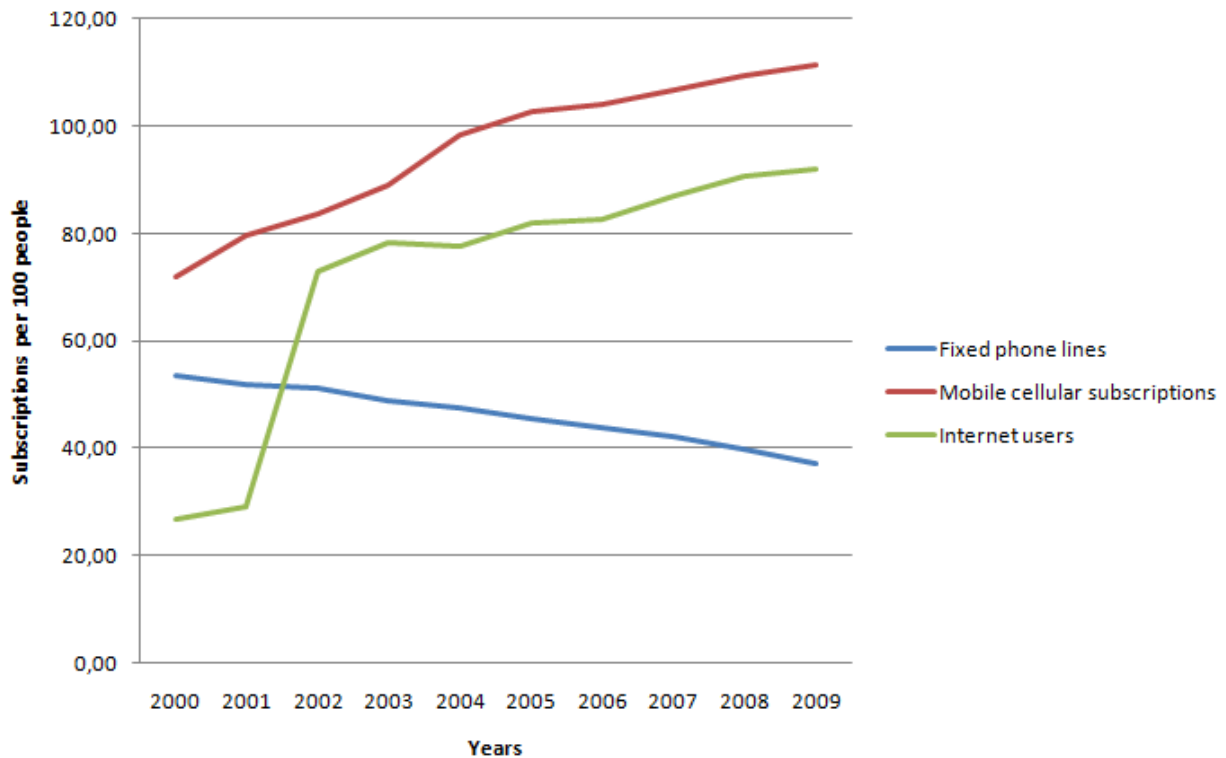

Figure 1: Trends in fixed-line and mobile cellular subscriptions and Internet use in Norway (Data source -(ITU 2011))

The graph depicts a decline in fixed line phones and increases in mobile phone subscription. The graph also shows saturation in the Norwegian market, as concerns mobile telephony.

2.3   Pricing Plans for Mobile Technologies in Norway

In Norway there are several ways of obtaining a phone and a service provider. Some of the providers sell mobile phones extremely low (as low as 1 NOK), given that the buyer subscribes to the particular network and payment plan. The phone itself is then most times locked and can only be unlock after a certain time have passed (usually about 12 months). There are also options for post-paid and pre-paid subscriptions that give access to phone calls, SMS and data traffic. Top up cards are easily available in a varieties

of stores, and some networks have an option of topping up online. There are 10 providers that offer pre-paid payment options (Post- og teletilsynet 2008). For the post-paid/contract there are two payment plan options available:

1. Pay per minute for actual call made and data traffic made via net. Some have a fixed monthly fee in addition to the actual use ranging from 29 - 899 NOK per month

2. Bundles are packages offered for a fixed price per month. For example of 500 minutes and 500 SMS for 199 NOK. If this bundle is exhausted there is a per minute price in addition. If it is not used at the end of the period the "remaining" is lost

2.4 Mobile Technology in Malawi

In as much as access to ICT is still very low, Malawi has over the past decade registered considerable growth in ICT-related service and infrastructure development, especially around mobile cellar telephony. For example, between the years 2000 and 2009, the country's number of mobile telephony subscribers jumped from 0.41% to 15.7% of the population (ITU 2011). Figure 2, shows trends in fixed-line telephony and mobile cellular subscriptions, and estimated Internet use.
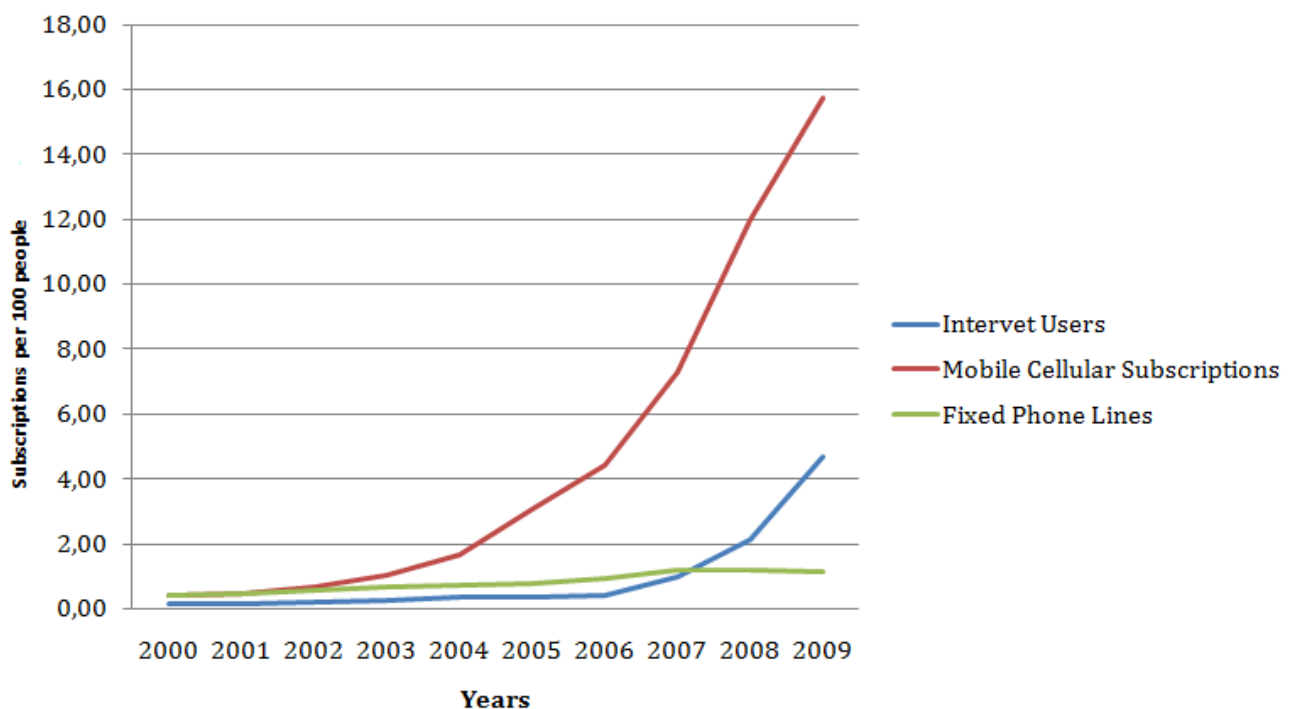

Figure 1: Trends in fixed-line and mobile cellular subscriptions and Internet use in Malawi (Data source -(ITU 2011))

The graph demonstrates an exponential diffusion of mobile cellular phones that is far above that of fixed line phones and fixed-internet. Malawi has two mobile service providers, namely Airtel and Telekom Networks Malawi (TNM). The two mobile service providers have also started rolling out 3G cellular telephony services. At the moment these services have targeted major cities and resort areas. Despite this GPRS services are available almost in all places where GSM-based voice services can be accessed. Figure 2 below provide a picture of GSM coverage in Malawi.

2.5   Pricing Plans for Mobile Technologies in Malawi

In Malawi people need to buy phones on cash basis. There are currently no provisions for the purchase of phones on contract, as is the case in developed countries like Norway. However, as concerns the purchase of voice services, Malawians can choose post-paid or prepaid pricing plans. Data services are available on prepaid basis but mobile phone user can purchase specific bundles (quantities) for data use or use the normal phone credit.

3   Research Methodology

3.1   Study design

This study makes use of both qualitative and quantitative data to address our issues of interest. Quantitative data has mostly been used to show numerical variations between users response, such as popularity of social media solutions, how frequently respondents access social media, as well as how long the spend interacting on such media. Qualitative data was gathered to evaluate user satisfaction with their mobile devices, as well as compare user experiences with accessing social media using mobile phones as compared to desktop computers. Our primary data was collected using an online questionnaire hosted on Google (see appendix).

3.2   Limitations

The number of respondents was not as high as we had originally envisaged. There is also an imbalance between the countries in representation. This has therefore limited the extent to which results from our study can be generalised. Besides this, the survey does not give answer to how much the respondent paid for the phone, or time of purchase. The price of a phone generally changes over a period of time. Prices are usually higher at launch. The indicated prices are from prices found online through a variety of online stores, and they may deviate from the price at which the respondent paid.

Furthermore, it was also quite hard to get respondents from the Malawian side, as the University of Malawi's two main constituent colleges were shut down just before we started collecting data, due to a stand off between university lecturers and the

government. This limitation was partially circumvented using one of the researchers' social contacts.

3.3 Data Analysis

Our data is mostly analysed along the following dimensions:

1) Social media solutions: We will look into which social media are most commonly used, how much time is spent on it and if these are accessed through a mobile phone.
2) Device choice: here classify all the varieties of phone represented in the survey, and analysing the type of features they have that would be beneficial or helpful for accessing social media. We will also try to categorise the phones into low-, mid- and high level phone. The key factors motivating the choice of a device will also be presented.
3) Market Context: here we present findings around payment plan, level of satisfaction with the present phone and the respondents experience with social media through mobile phone vs. desktop/laptop.

4 Literature Review

4.1 Social Media

The term social media refers to *"a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content"* (Kaplan and Haenlein 2010: pp 61). Social media encompasses a wide range of online platforms such as blogs, company-sponsored discussion boards and chat rooms, consumer product or service ratings websites and forums, social networking websites, and moblogs (sites containing digital audio, images, movies, or photographs), among others (Mangold and Faulds 2009). Wikipedia, YouTube, and Facebook are some of the most popular examples of social media.

At the heart of social media is user-generated content. Such content needs meet the following criteria: i) the content should be made publicly available over the Internet, ii) the content should reflect a certain amount of creative effort, and iii) the content should be created outside of professional routines and practices (OECD 2007; Kaplan and Haenlein 2010). Kaplan and Haenlein (2010) present a categorization of social media based on social presence/media richness and self-presentation/self-disclosure, as shown in figure 3 below.

		Social presence/ Media richness		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

Figure3: Classification of Social Media by social presence/media richness and self-presentation/self-disclosure (Source: (Kaplan and Haenlein 2010))

The categorization above is quite useful in terms of looking at level of engagement users are afforded by various social media solutions.

4.2 Mobile Internet and Social Media

Advances in wireless data networking and introduction of new web-enabled mobile devices, such as laptops, PDAs and cellular phones have accorded users more flexibility in accessing data and information services, such as collaborative web systems regardless of the user's physical location or movement behaviour (Jing, Helal et al. 1999; Kirsch-Pinheiro, Villanova-Oliver et al. 2005). Mobility permits communication to be interleaved with the ongoing activities of everyday (O'Hara, Black et al. 2006). Mobile phones, for example, now allow people to enhance social contact outside usual geographical and time barriers (Kennedy, Dalgarno et al. 2007). Mobile phones have afforded such new communication access opportunities to people across socioeconomic divides, in both developing and industrialized economies (Kennedy, Dalgarno et al. 2007). Now, the potential to help bridge the digital divide has increased with the availability of high speed mobile data networks, and appearance of increasingly-affordable web enabled phones (Boyera 2007). This way, the socio-technical affordances of mobile phones have revolutionized how people operate within their social networks, like fixed wire line telephones did in the early 20th century (Kennedy, Dalgarno et al. 2007).

Now the mobile social networking revolution is upon us and could significantly enhance social interaction as conventional Internet access has done for online information access and discourse (Beach, Gartrell et al. 2008). The power of online social networks can be harnessed using mobile and wireless technology. For example, systems that build on local wireless networking infrastructure using mobile devices to share each individual's social networking ID, can enhance interaction by eliminating unfamiliarity. Such systems could also provide users with automatic updates on nearby locations or events of interest, as well as link up essential service providers with clients in real time (Beach,

Gartrell et al. 2008). Teens and young adults stand to enhance and benefit from this revolution, as cell phone ownership is nearly ubiquitous among teens and young adults and overall wireless internet use rates are considerably high among young adults (Lenhart, Purcell et al. 2010).

4.3 Factors Affecting Adoption of Mobile Devices

As already pointed out, all people are part of social groups and networks and need to maintain relationships (Kikin-Gil 2006). The use of mobile phones to support social interaction is particularly suited to young adults, most of whom are considered digital natives having grown up surrounded by and using various digital technologies (Prensky 2001). This notwithstanding, the adoption of mobile devices by young adults is influenced my a multiplicity of factors some of which include the desire to be accessibility to peers, emancipation from parental control, security, micro-coordination of activities among a network of friends and the desire to strengthen one's social position and importance among peers (Ling 2000). Sarker and Wells (2003) also present a more comprehensive model of factors that shape hand held device use and adoption. Their model suggests that the use and subsequent adoption of mobile devices is shaped by individuals' characteristics, communication task characteristics, modality of mobility, technology characteristics, socio-economic context, and use process. The use process comprises exploration and experimentation with devices, followed with an assessment of such experiences (Sarker and Wells 2003). This framework is depicted in figure 4 below
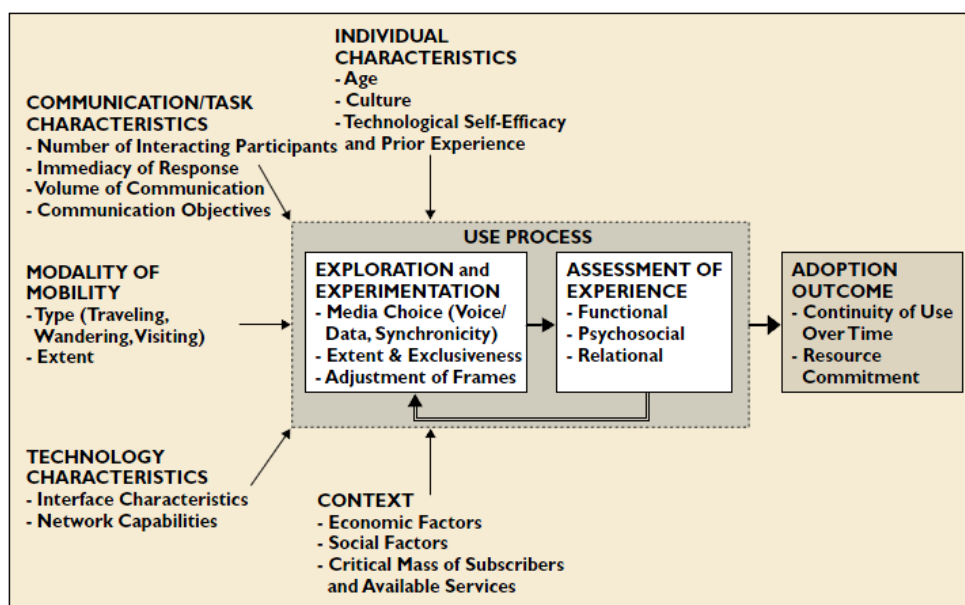

Figure 4: An Integrated framework for the use and adoption of mobile handheld devices (Source:(Sarker and Wells 2003))

The model above demonstrates how various factors interact to shape a user's experience with their mobile device. I it is fundamental to understand the needs and expectations of people, as well as specific challenges and issues of using mobile devices, for example to access the web (Boyera 2007).

5   Findings

There were in total of 26 responders to the survey, 13 females, and 13 males. From the people that responded 18 are from Malawi and 8 from Norway.

5.1   Social Media Solutions

Going through the responses, we have found that the following social media solutions are being used: Facebook, Twitter, MySpace, YouTube, among others. Figure 5 below shows a summary from our survey questionnaire.

What social media solutions do you use?

Facebook	25	96%
Twitter	9	35%
MySpace	2	8%
Youtube	11	42%
Never on social media	0	0%
Other	5	19%

People may select more than one checkbox, so percentages may add up to more than 100%.
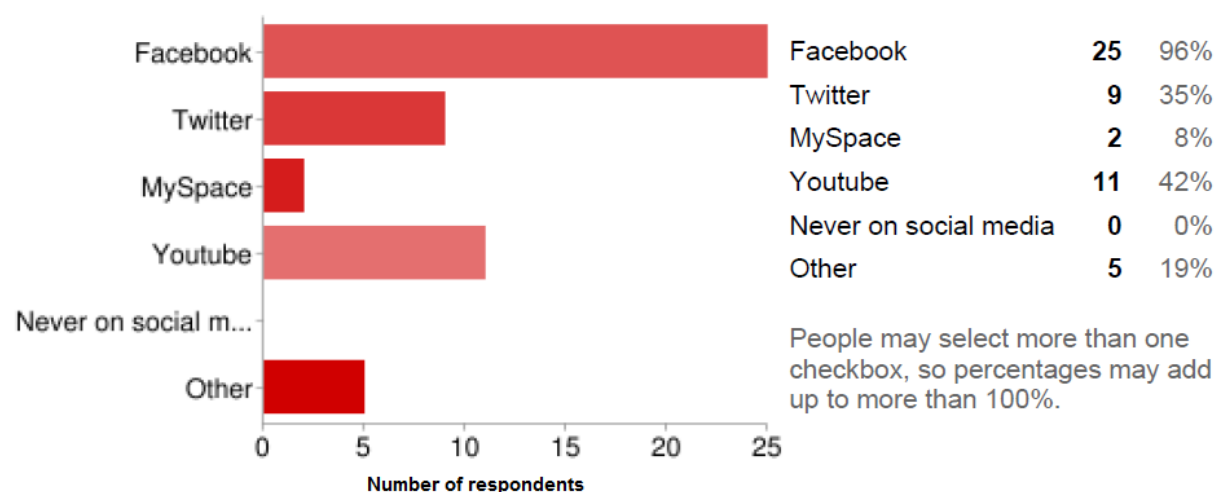
Figure 5: Use of social media solutions

The most popular social media solution in use amongst the respondents is Facebook. Everyone, except one respondent from Norway indicated that they use facebook.

5.2   Frequency of Access to Social Media

In this study, 81% of the respondents indicated that they access social media "everyday, several times a day", while 8% access "everyday, once a day", 4% access social media "2-3 times per week", another 4% access social media "once a week", and yet another 4% "once a month". Figure 6 presents a graphical depiction of these distributions.

How often do you use do you use these social media solutions?

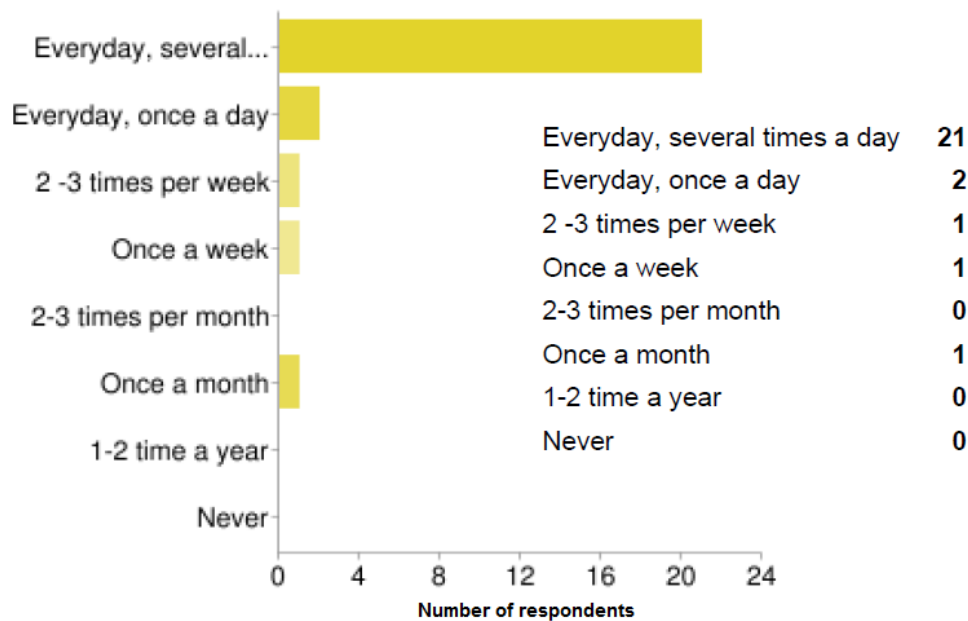|	
Everyday, several times a day	21
Everyday, once a day	2
2 -3 times per week	1
Once a week	1
2-3 times per month	0
Once a month	1
1-2 time a year	0
Never	0

Figure 6: Frequency of access to social media

The figure and statistics above indicate strong use of social media, with the majority of respondents accessing social media everyday and several times during the day.

5.3 Duration of Access to Social Media

Our findings suggest that 19% of the respondents spend more than 5 hours a day accessing social media. Equally as many spend less than 60 minutes, or between 1 - 2 hours, on a social media. The largest group, 23% people spend less than 30 minutes. Figure 7 show a graphical representation of these statistics.

On average how much time do you spend using your prefered social media solution, in a day?
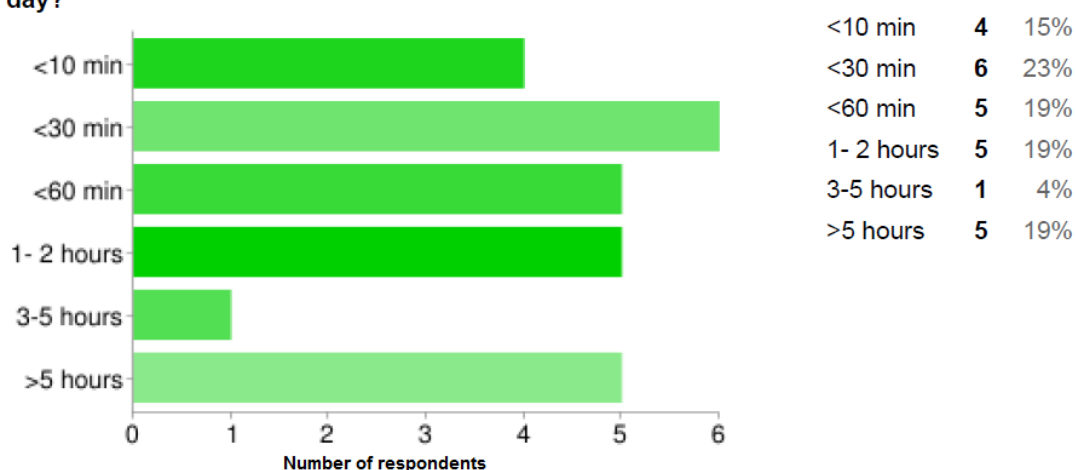

<10 min	4	15%
<30 min	6	23%
<60 min	5	19%
1- 2 hours	5	19%
3-5 hours	1	4%
>5 hours	5	19%

Figure 7: Duration of daily access to social media

5.4 Device of Choice

The respondents reported that the following devices were being used: iPhone HTC Desire, HTC android, Nokia Express music, Samsung, iphone4, Sony Ericsson Nokia6500s, Nokia X2-00, HTC Desire, Android 2.2, Samsung s5233, Nokia E88, Nokia N80, Nokia 6303, Android ,Nokia E90, HP pre webos, Nokia X2-00. Table 1 below presents a cross-section of the devices, indicating key features. The devices have been analysed against several features such as integration with social media as standard, Internet surfing capabilities, data traffic technology, multimedia, GPS, active life time. The standard package some extra features

Table1: Feature of devices being used by respondents

	Touch screen	Integrated Social Media Access	Browser	Data network	Video/ Camera	GPS	Talk Time (battery)	Estimated Price
HTC Desire	x	Facebook, Flicker, Twitter, YouTube		3G Wi-Fi GPRS EDGE	Camera Video	x	6.6 hrs	2999 NOK
Nokia N80			x	WLAN Bluetooth GPRS	Camera Video		3 hrs	2374 NOK
Nokia E88	x			WAP GPRS Bluetooth	Camera Video			
Nokia E90			xHTML	WLAN GPRS	x	x	5 hrs	
Nokia X2-00				GPRS	Camera			777 NOK
Nokia 6303			xHTML, HTML, VML OperaMini	GPRS EDGE Bluetooth	Camera Video MPEG4	x	7 hrs	1118 NOK
Nokia 6500s		Flickr	xHTML Opera mini	3G GPRS EDGE	Camera Video MPEG4		6 hrs	
Nokia xpress music			Browser	WLAN GPRS	Camera MPEG4		8.3 hrs	824 NOK
Samsung s5233			xHTML Wap	GPRS Video	MP4		10 hrs	
HP Pre	x			WLAN	Camera Video	x		
iPhone	x	via Apps Youtube	Safari	3G Wi-Fi GSM EDGE UMTS	Camera Video	x	7 hrs (2G) 14 hrs (3G)	4433 NOK

The table indicate quite a heterogeneous set of mobile devices in use by the respondents.

5.5   Market context

In this study, 73%(19) of the respondents use the pre-paid option, 12% (3) use contract, 15% (4) stated they use other forms of subscription (other is not specified). Asked on what devices they were using and whether those devices were their ideal one some respondents gave the responses below:

"Would prefer a newer version (iPhone 4 instead of 3GS)" - Norway

"[yes], this device have excellent performance in all aspects." (HTC Desire) - Norway

"Yes because of the beautiful design, and usability of Apple products. Easy and Intuitive" (iPhone) - Norway

"Yes..i want a touch screen phone and with Android" (Nokia Xpress music) - Malawi

"Nop, its not my ideal phone the problem with slide Samsung its the cable thing, once it starts misbehaving that's the end of it!!!!!!" (Samsung) - Malawi

"Yes - advanced functionality. the best" (iPhone4) - Malawi

"yes, because i can take it with me where ever i am going" (nokia) – Malawi

"No. I may want to upgrade, but the reason for the change won't be cause of Fb,but simply catching up with the tech." (Nokia X2-00) - Malawi

"no, I would like a newer version of it, Desire HD" (HTC Desire, Android 2.2) - Norway

"i would prefer another one mobile which easy to use and is durable" (NokiaE88) -Malawi

"no. The screen size is small and the phone is heavy" (NokiaN80) - Malawi

"yes, amazing operating system" (hp pre webos) Norway

"yes, currently ideal, but if I get something more advanced than this, I will go for it." (nokiaE90) - Norway

"Yes. Not only is it convenient (can access social media anytime) but it is also cheaper." (nokia 6303) - Malawi

"Yes. Because it is convenient and cheaper" (nokia 6303) - Malawi

Our results indicate that most of the respondents from Norway were content with their devices, but there were varied views on how the Malawian respondents viewed their devices. A quick look through the devices in use shows that the Norwegian respondents mostly possess very high-end phones compared to their Malawian counterparts, a reason we think might explain how content the respondents are with their devices.

5.6 Social media access: Mobile phone vs. desktop computers:

Our study also solicited views of the respondents on how accessing social media on mobile phones compares with doing so using desktop computers. Below we present a range of statements the respondents made based on their experiences:

"Its convenient, u can access the internet anywhere as long as there's a network..one challenge is charging the battery frequently" – Respondent from Malawi

"mobile devices are so easy to use no need for training can also be used when one is walking or charting with friends but the screen size can lead to eye problem. Laptops & PC are so cool to use, the screen size its wow but its not a benefit to some one who doesn't know a computer." - Respondent from Malawi

"You can check in on your current location through facebook, foursquare and get in touch with friends in the area. Screen size is always a challenge." – Respondent from Norway

""it is easier to access it using the phone because i can do it anywhere and at anytime because i always have my phone with me. the challenges of using the phone are that sometimes i may not have enough credit to access the internet." – Respondent from Malawi

"Benefits : Easy access, Always updated, ... Challenges : Small screen, lack of a full keyboard(touch keyboards are not the best), mass of information flowing to the brain, ..." – Respondent from Norway

"using mobile devices makes people ant - social for example see most people or friends using these sites (facebook, twitter and mixt) for example while physically(charting, parting etc) on a group of friends i feel it is stealing much of the quality time that people need to have when in a conversation or doing things together. I would rather people use laptops, and desktop computers this is because the do not necessarily make people move around everywhere while on these sites. This i think will make people not to lose friends for one avoid accidents and will make people be productive i.e. concentrating work,stuying etc as long as they are not near a computer or they do not have phones around" - Respondent from Malawi

"With phones its easier ans faster.. The internet in my office is far much slower than when am using my phone. and i can access the internet almost every where i go. My only challenge is the mobile service operators don't have enough services to provide up to the standard of the phone i would want to use other than just internet." - Respondent from Malawi

"Mobile devices: expensive (rates), small screen, bad resolution, slow, mobility… Laptops: fast, good resolution, less mobile" –Respondent from Norway

The user views above reflect a blend of opportunities and challenges presented by the use of mobile devices to access social media. People, for example benefits from new found 'communication on the move, but are also faced with challenges like battery life and small screen sizes, and detachment from immediate social context.

6   Discussion

Our findings suggest that there are no huge variations in how the respondents from Malawi and Norway interact with social media. However the large difference between the number of respondents from the two countries (18 from Malawi and 8 from Norway) makes it somewhat difficult for us to form a more comprehensive picture. Despite this, notable variations between the two sets of respondents have been noted. For example, Norway is a mature mobile telephony market whilst Malawi is an emerging mobile telephony market. The respondents from Norway are also able to get phones with an initial lower price using contract services, an option that is not available to their Malawian counterparts. Having an initial lower purchase price for a phone makes it relatively easier for students to posses high-end phones, and therefore have a more pleasant experience using their mobile devices. The general contentment with mobile devices expressed by our Norwegian respondents as compared to their Malawian counterparts is a possible indication of this. This is important because user evaluation of the general experience with using mobile devices is critical towards device adoption (Sarker and Wells 2003).

6.1   Benefits of accessing social media using mobile devices

Advances in wireless data networking and introduction of new web-enabled mobile devices, such as laptops, PDAs and cellular phones have accorded users more flexibility in accessing data and information services, such as collaborative web systems regardless of the user's physical location or movement behaviour (Jing, Helal et al. 1999; Kirsch-Pinheiro, Villanova-Oliver et al. 2005). Mobility permits communication to be interleaved with the ongoing activities of everyday (O'Hara, Black et al. 2006). Mobile phones, for example, now allow people to enhance social contact outside usual geographical and time barriers (Kennedy, Dalgarno et al. 2007). Spontaneous

interactions facilitate frequent exchanges of help and useful information. Furthermore, awareness of ongoing activity creates shared knowledge and provides an appropriate platform for meaningful interaction (Bellotti and Bly 1996).

Our finding suggest that students are generally content with accessing social media using their mobile devices, as compared to desktop computers. For example, the respondents indicate that the use of mobile phones permit access from anywhere, better supports exploratory learning when compared to desktop computers, and also allows users to access context-responsive services like GPS. We argue that such factors enhance the adoption of mobile devices. For example, based on findings from their study, Saker and Wells (2003) indicate that "mobility means efficiency." Furthermore, Saker and Wells (2003) also indicates that the use of mobile devices permits people to take care of business and social obligations throughout the day, rather than batch them for responding when the user has access to the usual workstation. Here the use of mobile devices permits students to continuously be accessibility to peers, micro-coordinate activities among a network of friends and in the process strengthen their social positions and importance among peers (Ling 2000).

6.2 Challenges with using mobile phones to access social media

In as much as mobile phones have afforded new communication access opportunities to people across socioeconomic divides, in both developing and industrialized economies (Kennedy, Dalgarno et al. 2007), their use is not without challenges. The use of mobile phones is paradoxical, in that of mobile phones does not only help users achieve certain goals, it also does generate various unintended consequences (Arnold 2003). For example, our findings show that the small screen sizes, short battery lives, and high costs of phone credit in some cases can be quite annoying to users. Shrinking device sizes mostly limit how big displays for mobile devices can be. Small screen sizes, for example, can be a considerable usability problem depending on the application being used on mobile devices (Müller, Jentsch et al. 2008).

Another interesting finding we made is that the use of mobile devices to enhance social contact with people who are remotely situated, might actually negatively affect social relations with people that are physically present when someone is interacting on a mobile device. In the words of one respondent *"using mobile devices makes people ant - social for example,i see most people or friends using these sites (facebook, twitter and mixt) for example while physically(charting, parting etc) on a group of friends i feel it is stealing much of the quality time that people need to have when in a conversation or doing things together…"* Other studies confirm such negative impacts that the use of mobile devices might have on professional and social relationships (Sarker and Wells 2003).

7   Conclusions

Findings from this study suggest that there are no huge variations in how the respondents from Malawi and Norway interact with social media. However, the large difference between the number of respondents from the two countries (18 from Malawi and 8 from Norway) makes it somewhat difficult for us to form a more comprehensive picture. Despite this, notable variations between the two sets of respondents have been noted. For example, Norway is a mature mobile telephony market whilst Malawi is an emerging mobile telephony market. The respondents from Norway are also able to get phones with an initial lower price using contract services, an option that is not available to their Malawian counterparts.

Our study has also demonstrated that the target group is generally content with accessing social media using their mobile devices, as compared to desktop computers. For example, the respondents indicate that the use of mobile phones permits access from anywhere, better supports exploratory learning when compared to desktop computers, and also allows users to access context-responsive services like GPS. This notwithstanding, our findings do indicate that the use of mobile devices to enhance relationships with remotely situated peers do introduce certain unintended consequences. For example, our findings show that the small screen sizes, short battery lives, and high costs of phone credit in some cases can be quite annoying to users. Furthermore, the use of mobile device might enhance connectedness with remotely situated contacts, but at the same time hurt relations with people in one's physical context.

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Appendix : Study Questionnaire

SocialMobile

This is a questionnaire with regards the use of a mobile devices and social media. Hope you will spare a moment to help us with providing some useful information to this research. Thank you. Andre = Other

* Required

Gender? *
- ⦿ Female
- ⦿ Male

Country *
- ⦿ Malawi
- ⦿ Norway
- ⦿ Other: [   ]

What social media solutions do you use? *
- ☐ Facebook
- ☐ Twitter
- ☐ MySpace
- ☐ Youtube
- ☐ Never on social media
- ☐ Other: [   ]

Which social media solution do you use the most? * [   ]

How often do you use do you use these social media solutions? *
- ⦿ Everyday, several times a day
- ⦿ Everyday, once a day
- ⦿ 2 -3 times per week
- ⦿ Once a week

- ⊙ 2-3 times per month
- ⊙ Once a month
- ⊙ 1-2 time a year
- ⊙ Never

On average how much time do you spend using your prefered social media solution, in a day? *

- ⊙ <10 min
- ⊙ <30 min
- ⊙ <60 min
- ⊙ 1- 2 hours
- ⊙ 3-5 hours
- ⊙ >5 hours

What mobile device/phone do you own/use? * [____]

Do you use this to access social media? *

- ⊙ Yes
- ⊙ No

What influenced your choice for a mobile device? *

- ☐ a. Usability
- ☐ b. price
- ☐ c. screen size

What pricing plans for the purchase of mobile devices do you have access to? *

- ⊙ Cash
- ⊙ Contract
- ⊙ Other: [____]

Is the device given in the question above your ideal device, or you would prefer another mobile device? * State yes or no, and a short reason why

Do you use any other mobile device to access the internet? ex. Tablet such as iPad *

- ◌ Yes
- ◌ No

Do you use your phone for services other than social media (other than obvious use such as phone calls and sms with friends) Please state if you use your mobile to interact with other commercial/non-commercial services

How would you compare accessing social media using mobile devices to accessing social media using laptops and desktop computers? Please give some benefits and challenges *

Submit