accredited by DGHE (DIKTI), Decree No: 51/Dikti/Kep/2010

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Google+ vs Facebook: The Comparison

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Abstrak

Jejaring sosial adalah suatu alat yang popular digunakan untuk berhubungan dengan teman, kolega dan/ atau keluarga. Baru-baru ini Facebook telah berada di puncak rantai makanan jejaring sosial, dengan penurunan pengguna yang dialami Bebo dan MySpace dan peningkatan besar pengguna Facebook dalam waktu singkat. Google baru saja baru saja meluncurkan Google +, sebuah situs jejaring sosial. Ini bukan pertama kalinya bahwa Google telah berusaha untuk masuk ke kancah jejaring social, namun ada kemungkinan bahwa upaya-upaya gagal yang telah dialami mengajari mereka sesuatu. Dengan basis pengguna Facebook yang sangat beragam, tersebar di berbagai negara, ras, usia, profesi, dan minat, jaringan ini adalah model yang baik untuk dibandingkan sebagai pesaing Google+. Google + telah dirancang untuk melakukan hal-hal yang sama seperti Facebook tapi lebih baik untuk dicoba dan dengan mencuri sebagian dari daya tinggi dan keharusan yang telah diperoleh Facebook. Facebook memiliki News feed, Google memiliki Stream. Facebook memiliki Lists, Google memiliki Circle. Facebook memiliki like's, Google memiliki +1. Facebook menyumbang 10% dari penggunaan internet secara keseluruhan. Makalah ini akan melihat berbagai perbandingan antara dua jejaring sosial tersebut dan menganalisis fungsionalitas yang lebih baik, desain dan kemudahan penggunaan di antara keduanya. Hal tersebut selanjutnya akan dapat digunakan untuk menentukan mana yang merupakan jejaring sosial yang lebih baik untuk digunakan.

Kata kunci: facebook, google+, internet, jejaring sosial network, www

Abstract

Social networks are a varyingly popular tool used to connect with friends, colleagues and/or family. Recently, Facebook has been at the top of the social network food chain, with Bebo and MySpace decreasing in users and the huge increase of users joining Facebook in such a short time. Google have just recently launched Google+, a social networking site. This is not the first time that Google have attempted to break into the social networking scene but it is possible that these failed attempts may have taught them something. As Facebook's user base is extremely diverse, spreading across different countries, races, ages, professions, and interests, to name a few, this network is a good model to compare new rival Google+ to. Google+ has set out to do the same things as Facebook but better to try and steal away some of that high power and necessity that Facebook has gained. Facebook has News feed, Google has Stream. Facebook has Lists, Google has circles. Facebook has like's, Google has +1. Facebook accounts for 10% of overall internet usage. This paper will look at various comparables between the two social networks and analyse the better functionality, design and ease of use. It will then conclude a verdict on which is the better social network to use overall.

Keywords: facebook, google+, internet, social networks, www

1. Introduction

Facebook currently exceeds 800 million active users [1]. Users of the social networking site must register before using the service, after which they may create a personal profile, add other users as friends, and exchange messages, including automatic notifications when their profile is updated with new content from other users. Additionally, users may join commoninterest user groups, organized by school, college or workplace, and categorize their friends into lists for example "Work Colleges" or "Close friends". Facebook allows any users who declare themselves to be at least 13 years old to become registered users of the site.Google+ is the search-engineleader's latest attempt to launch a social network with aims to be the main competitor of Facebook. Google launched Google+ on June 28, 2011 with a private beta [2]. The Google+ social network is a compilation of several social products. The features include:

a. Circles – A function which allows people to place friends into specific groups, and then share different levels with information and content with each group.

- b. Hang Outs Live, multi-user video conferencing which permits friends to drop in and out of live group conversations.
- c. Huddle Group Instant Messaging.
- d. Sparks A feature which connects individuals to others with similar interests.

This is not Google's first attempt at dominating the social networking scene. It has a long history in social media, including Orkut and its biggest success forthe social department, YouTube [3]. However, it has had two flops in the social networking scene: Google Wave and Google Buzz which never kicked off as such in the social networking scene [4].

Google+ is similar to Twitter in that it needs only unidirectional consent to connect. A unidirectional network connection is where a device may only transmit data or only receive data, but not both. That is, a source can transmit data to one or many destinations, but the destination cannot send data back to the source because it is unable to receive [5]. This unidirectional consent has contributed to its rapid growth rate, which reached 25 million users within one month of the field trial period [6]. However, unidirectional consent also makes the network noisier, but to combat this Google+ has Circles that enables the user to maintain the noise by grouping friends together. Google+ went for a unidirectional network. Facebook users who are exceedingly interconnected in friend's lists could bring lots of friends to Google+ and are exactly those that are least likely to switch. That is because these users would experience a lot of inconvenience (i.e. a loss of utility) on the new platform. On Google+ they would not be able to communicate with their friends until they rebuild the large network they had, this is going to take time. And it will take more time if Google choose the bidirectional consent mechanism. Granted that people do not really have to commit to a hard switch; they can be on both platforms, since both are free. But if people do not regain their lost utility quickly, Google+ will have difficulties converting user's from Facebook.

As the two Internet giants are set to battle it out in the social networking scene, many are wondering how do the services stack up. One way to measure this is to examine both of the social networking services and how their interactions and usage of both sites meet the user's needs and expectations. This study therefore seeks to investigate the common and unique features of both sites.

2. Google and Facebook Market Share

With Google+ just out of the beta testing stage, Google is attempting to challenge Facebook head-on in the increasingly important social networking scene. Analysts give the edge to Facebook with its large head start. The company exceeds more than half a billion active users worldwide, most of who log onto the site each day. Google has a clear edge globally reaching a billion unique visitors worldwide in May 2011 [7], while Facebook rang in at 713.6 million.Google's lead is less in the U.S., where it had 155 million unique visitors from desktop and laptop computers in May compared with Facebook's 140 million [8]. The Nielsen survey does not include mobile devices. Google's lead is narrower in the U.S., where it had 155 million unique visitors from desktop and laptop computers in May compared with Facebook's 140 million. Facebook had a huge lead in time spent per person: more than 6 hours vs. an hour and 20 minutes. Facebook users however have been unhappy with the social media site. In 2010, it scored in the bottom 5% of all measured private sector companies and in the same range as airlines and cable companies, two perennially low-scoring industries with terrible customer satisfaction [9]. Google's score of 80 (out of 100) was substantially higher than Facebook's 64. Google has proved to be the Internet's leading brand in terms of number of users [10]. Facebook has a very large base of regular users who spend a considerable amount of time using the social networking service, much more time than on Google. However, Facebook's users were not particularly happy with their experience last year. Google's revenues are quitetransparent; as it is a public company it must report their revenue data each quarter. Facebook's are a little moreconcise, since it is still privately held. According to one estimate [11], Facebook had \$1.86 billion in ad revenue last year and should top \$4 billion this year. Google reported \$29.3 billion in overall revenues last year (not just from advertisements).

Google+ is Facebook's main competitor at the moment. Facebook is on the idea that all "friends" are created equal, that you want to have the same online relationship with your father,

your best friend since primary school, your work mates and that person you never met but whose request to be a Facebook friend you went ahead and accepted. Once an update of a photograph is posted, every member of your friends list sees them, unless you specificallyset Facebook's Custom Privacy box to authenticate who can or cannot see the post.Google+ does the opposite. You create "circles" of friends - one for your family, one for friends, one for acquaintances, one for school friends, one for a football team and so on. That way, if you want to share plans for next Christmas with your friends or family and include photographs of last Christmas, you can share only with them, rather than with people you work with or people in football team. With Google+ you have more control overwhom you communicate with and how you communicate with them.Whilst testing all features of Google+ over the past few daysand so far it has been quite enjoyable. But to be honest: There are aspects of Facebook that presentlyare still preferred, which includes the way the Wall is displayed, as well as the way that photo albums are presented. Here, an analysis and comparison ofGoogle+'s rules, regulations, quidelines and features will be constructed to see how they compare with Facebook's.

Many aspects of Facebook's "real name" policy are found to be troubling, but the most troubling of all is the fact that users whose profiles have been disabled or frozen due to reports that they are using analias have occasionally had to submitformalidentification to prove that this is not the case. Also frustrating is the fact that "known" alias (e.g., pen names, stage names) are not allowed. Google+ gets it right, marketing itself as a service for which identity is important. It does not require users to submit their full legal name on the social network (as Facebook does), neither would it disable nor remove the profile of an individual using a known pen name; such as Facebook did with the Chinese blogger and activist Michael Anti [12]. Instead users are encouraged but not forced to "use the name that you commonly go by in daily life.". There is no implications that users will have to provide dentification on Google+ to prove their identity, but Google does propose that users accused of impersonation may be required to do so [13]. Unfortunately, as with Facebook, Google suggests it will ask for ID via an e-mail notification.

2.1. Google+ and the "Circle" Concept

From a graphical and layout prospective, the user interface of Google+ does bear some significant similarities to that of Facebook. The main part of the screen is taken up by your "stream" known in Facebook as the "news feed", this includes the messages and photographs you've shared with others and that others have shared with you. It includes comments on those messages and photos as well. On the right hand side of the screen there is a list of people who are your friends, along with suggestions for other users whom you might want to be friends with. Near the top of the page there is a text box where you can type in messages for others to see, which includes buttons for uploading photographs, videos and attachments, and for sharing your location. At the very top is a navigation bar. But there is one significant difference between the Google+ stream and Facebook's News Feed. The Google+ stream is astack of many separate streams - one for each of the circles. On the left side of the page, there is a list of all the circles that you have created. Select any of those circles, and one will instantaneously see the individual stream for that circle. (You can see a feed from just one Friends list in Facebook, and it has not been placed in an obvious area).

To create a circle, you select the Circles option in the navigation bar at the top-half of the page. This brings you to a section that has already-made labels for circles such as Friends, Family and Acquaintances. Above those circles is a collection of contacts (names and photographsgathered from your Google Contacts list. Drag any contact into a circle to add them to that group. You can create a new circle by clicking the empty circle to the left of the other circles. All you have to do then is name it and drag contacts into it. Consequently, when you want to deliver a message, aphotograph, a video or a link to that group of contacts, just select that circle where it's listed on the left side of the main screen, and your message or media will be sent to every member of the circle. Selecting the circle additionally means that you can view all messages and content related to that precise circle in your stream. Also if you would like to see all your messages and content from your entire circles, you just select on the word "Stream" in the left column. You also can deliver a message to several circles simultaneously, to an individual (or several individuals), or just make it public for all to view. A contact can be part of more than one circle; if you send a message to both circles, that person will only get the message once which is understandable. This approach of communicating is clearly superior to Facebook's "one-message-fits-all" technique. Not only will it be beneficial for communicating

with friends and family, but because it gives you the optiontoselect who gets which types of messages, it can be useful in a business situation as well. Users are informed about new messages via both e-mail and a notification button at the top right of the main window. (This notification also appears on your Gmail window). Nonetheless, communicating with people is not quite as apparent as it at first sounds, probably because Google+ has a limited number of members at this point. For now, most of the users you put into circles cannot communicate with you directly on Google+. Alternatively, they'll just get an e-mail, which depreciates the usefulness of Google+ considerably. Until Google+ enters more boundless distribution, it will remain more a test bed than a useful communications tool.

2.2. Google+ Sparks and Hangouts

Circles are the centre of Google+, but there's more to the social networking service as well. Sparks connects together the best of Google and the social networking - it is anintelligent way to find and share content that interests you and could interest people contained in your circles. Sharing content in Sparks with all your followers or with specific circles and individuals is made rather easy by just a simple click of the share button. Select the Sparks button, and you will be presented with list of general topics, such as Sports, Fashion, Movies and so on. Select any of the topics on this list, and a stream of content will appear relating to the topic, including blog posts, news articles and videos. Users can also construct your own topics to follow by typing in a search term, clicking the search button, and then clicking a button labelled "Add interest" all being quite self-explanatory.



Figure 1. Google+ hangout in progress

An additional feature, Hangouts, gives users the ability to videoconference with others in their circles. Users can create a hangout and preferentially invite others to join, or just wait for others to join; a message that the user has created a hangout will be displayed in the stream of people in their circles. For users who enjoy videoconferencing will find this a convenient way to video chat with friends via webcam. It's reallystraight forward to use, and requires that you have the necessary equipment (webcam and a microphone). If the user does not have a webcam, they can make avail of the audio only option. Google+ has an easy interface to share photographs with other users. Users can create individual photos or entire photo collections available to certain circles or to everyone in all of the users circles. The photograph feature ties directly into Picasa, which means it's quite easy to find the photographs and albums a user wishes to share. Users can also see all the photographs that others have shared with them.

3. Walkthrough Comparison of Google+ and Facebook

We next examine the main features of the social networks. In particular we look at: creating an account, finding and adding friends, maintaining your profile, posting status updates, adding photos and videos and social networks.

3.1. Creating an Account

The first step anyone takes when using a social network site for the first time is creating their account. This is the first appearance for the website and just like job interviews first appearances are key. If a user has to spend any length of time firstly trying to figure out how they have to register then the likelihood is that they will get fed up and decide against using the social network and try another. Whereas if the user can clearly see what they have to do to register and it's easy enough then they will give it a go.

Google+: After entering the homepage for Google+ the user can see a button at the top corner of the page with the text 'Sign In'. When clicking this option the user is then faced with a login box but above this box is a link for new users to create an account. On the registration screen Google+ requires the user to enter the main details to set-up an account: email address, password, location (this offers a dropdown box for the user to select which country they live in), birthday and then word verification. It should be noted that at the top of the page it informs the user that if they already have an account with Google. i.e. Google mail or YouTube they can use the details of these to create an account. After entering the information required the user must then verify their email address by logging into their account and clicking on a link. Once this is done the user then has to enter their mobile number for another verification process. Once the user enters the required verification details they are then taken to the Google+ main page where the user is allowed to enter their name and choose to add a picture if they require.

Facebook: When entering the Facebook homepage the user can see on the right hand side a form for the user to enter their details, it also informs the user that creating an account is "free and always will be". Facebook asks the user to enter first name, last name, email-address, password, gender and date of Birth to sign up. The next step is word verification which ensures that Facebook is not being overloaded with spam users, once this is completed the user must then confirm their email address by clicking a link on an email Facebook sent. After confirming their email the user is then allowed to enter their profile.

3.2. Finding and Adding Friends

Once your account is created the first thing you want to do is find your friends already on the site and add them. If the process is difficult then the user might just give up and forget about the whole process. Most social network sites make this easier by allowing the user to connect to an email address and add friends from their contact list.

Google+: After creating your account the first page that appears allows the user to enter an email address and Google+ will do the rest as it sends and email to your contacts whether they have Google+ or not and sending them a request. If the user does not want to use this approach they can skip it and enter their profile page, on the right hand side of their profile page the user has a search bar where it can enter the names of their friends to view their profile and follow them. When you find a friend it gives you the option to add the friend to a circle, the circles act as a group there you group your friend's e.g. university friends, sports team friends. Google + has a default list set which include: Friends, Family, Acquaintances and following but gives the option for the user to create a circle. Once the user has added enough friends Google+ then gives suggestions of people who you might know based on one or more of your friends having this person in one of their circles.

Facebook: Just like Google+ the first page allows the user to see after creating their account is to enter their email address and Facebook will email their contacts informing them that you have created a Facebook and gives them the option of adding you as a friend. If the user doesnot decide to do this at the current time then Facebook provides a search bar at the top of every page which allows the user to search for friends individually. The difference with Facebook is that to become friends you have to wait for your request to be accepted by the other user. Another feature that Facebook provides that while on the home page, it provides some suggested friends on the right hand side, it can obtain these suggestions from the

information you have entered being where you live and what school you attended or if the person has a number of mutual friends with you.

3.3. Maintaining Your Profile

One of the key features is the ability for users to keep their profile up-to-date [14]. This involves being able to update their profile data such as place of work, education, where they live and ability to change their profile picture.

Google+: To edit your profile in Google+ it provides a button in your profile page that takes your straight to the webpage to edit your profile. From here it allows you to update all the information that it displays in your profile, such as occupation, education, gender and relationship status. Also from here its lets you edit your pictures and videos and edit previous posts. Although Google+ does not give you the option to change the layout of your profile, it leaves the user having to keep the Google+ default interface.

Facebook: In Facebook there is two ways to get to the page to edit your information, one way is to click the arrow in the banner at the top of the page and select account settings, or else the user can click edit profile in their profile. Once you are in this page Facebook allows you to edit the basic information which include current location, hometown, gender, birthday (it also allows you to choose whether this is visible in your profile), languages and about you. Then on the left hand side it provides a list which allows the user to edit the rest of the information in their profile such as family members, sport, interests, hobbies and education/work.

3.4. Posting Status Updates

The main feature of social networks is being able to post status that your friends can view and comment on. Status have come a long way from when social networks first started, in Bebo there was no such feature and you would have to individually write on your friends wall which could become annoying when you need to get a message out to numerous friends.

Google+: Google+ only allows you to enter a status in the home page and not in your profile page, this can become annoying as when your editing your profile you are in your profile page but have to leave it only to come back, although Google+ does allow you to add pictures and videos to your status and also to add your location, when adding your location Google+ does all the work for you and saves you having to add the location yourself. One positive from Google+ is that once you have signed into your account you can update your account when your browsing through Google search pages if you come across anything that you want to comment on and even further when using the Google chrome browser there is a toolbar that allows you to update your status while surfing through any website.

Facebook: When Facebook first started it introduced the status feature to the social network and it has now become the most important feature. Unlike Google+ Facebook allows the user to update their status from the profile page or their home page. This makes life easier for the user if they just have their profile page open while browsing the internet and find something that they want to share. When updating your status Facebook allows the user to do numerous things with the status such as post a link and comment on it, upload a photo or video and comment on it, add your location, tag your friends, choose what group of friends are/arenot allowed to view the status and creating a poll as your status.

3.5. Adding photos and videos

Just like a user's status, photos and videos are becoming a main feature in social networks, at the start users were only able to add 4 or 5 photos at a time, this lead to users having to sit on their computer for a long period of time uploading a full album of photos. As time has gone by so has the process of uploading photos and videos making it easier and more efficient to upload a full album of photos.

Google+: When uploading photos in Google+ it allows you to create the album and add the photos you want to upload, the same dialog box making it easier to put the photos in the one album. In this dialog box it allows you to edit the name of the album and either allows the user to drag the photos in or search through your computer files. After selecting the files the user is allowed to add a caption for each file or rotate them but restricted from doing anything else to the picture or writing a description for the album. Google+ uses the same format when users want to upload videos to their profile.

Facebook: With Facebook being more experience and being around longer it has acknowledged that user wanted to be able to do more to their photos. When you select to add more photos it allows you to search through your computer files and select multiple photos to be added. Once you have selected the photos it takes you to the stage of creating your album. Here not only can edit the name of the album but add where the photos were taken, what quality you want the pictures and who you can share your album with. Like Google+ Facebook uses the same format for uploading videos as its photos allowing the user to edit details like where it was taken and who can see it.

3.6. Social Networks on Mobile Devices

With smartphone becoming more and more popular provides users with another method of accessing their social profile. The ability for users to be able to use these applications to do almost everything they can do with a computer is vital as people are looking for easier ways to access their profile and change or update them [15].

Google+: Google+ was designed with great detail for a mobile world, as clarified by its very well-designed and created Android app. There is currently no iOS app available yet for Apple's devices such as the iPhone, but Google has stated that it is on the way. The Android app has a clean, easy-to-use interface that makes tasks such as viewing your stream, managing your circles, see photographs etc. quite simple. The Google+ Android app includes several features not available on the computer version of Google+, where users can create a "huddle" with friends and group text chat. Users can also take photographs with their phone or mobile device and upload them to Google+, using the phone's built-in GPS to include location information if the user wishes. It allows the users to view their circles and search for friends to add to their circles. Other features include being able to upload photos from your phone and viewing your stream. In the stream the application allows you to view updates from people who are near your location that you might not have in your circle but know.

Facebook: Being around for a while and not having any real competitors for a long period gave Facebook the benefit of being able to learn from their mistakes and not have to worry about people not using their app anymore. The first app was very limited in what it could do but since then it has come a long way. As well as doing the basics it allows the user to use the GPS in their phone to add their location to check-in places and add friends to their location. Other features include easily being able to add photos and videos by either choosing one from your phone library or taking it and uploading the video/photo straight away. It allows the user to view what friends are nearby from their check-ins and RSVP to events that are happening. Along with the major new features, the updated iOS Facebook app is set to improve sharing options, add tagging of friends and places in the users posts, tweaks the design of both Profile and Group walls, and provides added privacy controls on posts that match the users settings on the Web site. Smaller refinements and bug fixes include faster notification speeds, bug fixes for Facebook chat, changes to filter selection in the News Feed, tweaks to the notification bar, and general improvements to performance and stability. But with these bug fixes put into place there are still major issues with the built in Facebook chat option in the iOS and android app. Facebook chat is the most used service on Facebook, that is why Facebook keep fine-tuning the message system (and in turn making a lot of people unhappy about the changes). Because of this popularity, Facebook have just released a standalone chat app for iPhone and Android that they state will help conquer the existing bugs and issues that the users are facing [16]. It is clear that Facebook have big plans for Facebook messenger, and right now the App remains quite basic; with the aim to get as many users of Facebook to use Facebook messages to its full potential.

3.7. Community Guidelines

Both sets of community standards overlay the following topics: nudity and sexual material (neither of the companies permit it), hate speech (is forbidden), copyright/intellectual property (both will respond to Digital Millennium Copyright Act complaints), and phishing & spam (considered bad by both companies). There are however differences.

Google+: Google+ seems aimed towards an older audience; that said, it does present a guideline on illegal activities, and its section on confidential information (not sharing what is yours) is worded more specifically than Facebook. Google+'s standards are preferred. Their documents are worded clearly and offer more flexibility on interpretation. For example,

Facebook's guidance on bullying and harassment states that "contacting people you do not know in person can be a form of harassment." This often results in users who contact or add too many other users "too quickly" (something spammers certainly do) having their accounts either frozen or disabled. It is still unsure how Google+ will enforce the rules. As an example, does no nudity mean no pictures of breastfeeding (like on Facebook)?

Facebook: For quite some time, Facebook users had to endure with only a legalese version of the very long Terms of Service, which was only available in a few languages to boot. Not anymore: Facebook released its community standards document in 2011 to help users understand the rules. Google+ provides a set of community standardssimilar to Facebook's. Facebook also offers guidelines on theft vandalism, and fraud; bullying and harassment; graphic violence; the promotion of self-harm; and threats to users. At a glance, these additional guidelines make sense: Facebook advertises itself as a tool for young people, permitting users as young as 13 on the service. With all of its gaming features, that makes sense. Facebook also includes a guideline on identity.

3.8. Other Features

With the previous 6 points both sites contained the feature but just had a different method of showing them, although the ease-of-use of these features is critical in getting users to comeback and use the site after first using it the social networks had to add other features that would help them stand out from the rest. With Facebook being the older more experienced site it has the better features but given time Google+ will be able to produce features that will help it compete with Facebook.

Google+: With only being new on the market Google+ hasnot been able to add many new features above the basics, the only real notable features is the games which are mainly similar to those games that you find on Facebook. The real main feature is that with Google+ it is easy to navigate to your mail and calendar when using Google chrome. Given time and depending on the success rate of Google+ it will expand and add more features that will help set it aside from Facebook.

Facebook: When talking about features people enjoy using when on social networks most features that people will answer would have originated from Facebook. The main features include Facebook chat, where it makes it easy to chat to friends who are online, this feature has itself surpassed msn messenger as it is built into Facebook and makes it handier to use. Another feature is the ability to tag or be tagged in photos, this saves the user having to search through friends photos looking for pictures of them to use in their profile. Other feature that makes Facebook the most used social network is being able to create an event, such as a party, and add a selected amount of friends to attend. This feature is becoming widely used and is an easy way to inform your friends of an event.

4. Conclusion

The first stage for the user is key, from attempting to set up an account for each social network the process for Google+ seemed to take long, although it was an easy process to do but having to create an account for Google and then be able to set up an account for Google+ would turn many users off having to register for the site. Whereas the Facebook setup was made easy with the form on the homepage and only having to validate your email address, it took half the time to set up than Google+. With both networks using emails to contact all your email contacts from an outside email address it made it easy to set-up and add your friends at the beginning. Again later on if you want to search for friends both websites provide a search bar at the home page and suggest friends for the user. With Facebook allowing the user to enter more information it provides a better interface for the user to edit their details and is also easier for the user to access, whereas with Google+ you have to go to settings to find this option. With Facebook having been the first to use statuses it has made it easier for its users to update their status as they can do so at their profile page or home page, it also allows more features to be included in their status which stands out more than Google+. With both networks offering a similar method to updating photos and videos it is hard to say which method is easier to use. The only feature that Facebook includes which Google+ doesnot is the ability to write where the photos were taken and what the event was. As with most features Facebook has benefitted from being around longer and having the experience of making mistakes and being able to improve on them. It would be unfair to compare these two as Google+ is only out and just offers the basic features but given time for their network to expand their mobile applications will also do the same.

If Facebook wishes to, it can bridge the gap with Google+ fairly quickly to catch-up with a few of the advances of Google+. Recently, Facebook announced on-site video powered by Skype. Google Hangout is exceptionally better than Facebook's current Skype integration, but nothing is stopping Facebook from the addition of multi-user support in the near future. Even more significantly, Facebook currently supports lists as well as publishing of status updates. In fact, Facebook's filters are far more unpolished than Google+'s [17]. The problem is Facebook carries out filtering based on networks rather than friend lists, and the current user interface and layout does not really show these features very well. All these are aspects that Facebook could easily change should it start being more competitive. Google will have to constantly iterate and innovate, which it has successfully done with Google Chrome in order to successfully compete with Facebook. Google+ is like a mixture between Facebook and Twitter. It is similar to Twitter, as it is a unidirectional connected network. This has made the network very noisy, brittle, and an easy target for bots. However, that is what it takes to convert users from a competing network that is very big and cohesive [16]. Google's attempts to deal with these undesired side effects of unidirectional networks by enabling both sender and receiver curation mechanisms via Circle. However, this is not as effective as the inherited sender/receiver curation mechanism on Facebook, because people tend to share to public by default. Google has succeeded in convincing user's regarding the advantages of Google+. Users like the use of Circles, since it allows them to mix their life-stream and news-stream in a method that is most relevant and helpful. Many are finding Hangouts and Huddles to be addictive and Google bar with its smart notifications quite interesting and useful. These together along with the advantages of Google+ mentioned before may be convincing enough reasons for users to switch to Google+. Most users donot mind using a slightly inferior product as long as it gets the job done but Google will have to prove that Facebook's social graph is broken in order to succeed.

As well designed as Google+ may be, there are quite evidently obstacles ahead. The largest hurdle is the by-now accepted theory which means the value of a network increases exponentially with the number of users currently accessing it. With an approximate 800 million members, Facebook has immense value. With only a relatively small number of initial users at this point, Google+ has less value even when it launched publicly, it is still finding it difficult to catch-up. The very concept that makes Google+ valuable may well be the concept that holds it back from gaining the kind of popularity enjoyed by Facebook: the method in which users organize contacts into separate circles and communicate in different ways with them. But on Facebook, users simply accept another user's friend invitation or issue one. Google+ requires a lot more care and tending, and less people may want to spend their time completing these tasks.

References

- [1] N Olivarez-Giles. Facebook F8: Redesigning and Hitting 800 Million Users. LA Times, September 22nd 2011. Http://latimesblogs.latimes.com/technology/2011/09/facebook-f8-media-features.html.
- [2] B. Parr. Google Launches Google+ To Battle Facebook. Mashable. June 28, 2011 http://mashable.com/2011/06/28/google-plus/.
- [3] P. Insap Santosa. Cost and Benefit of Information Search using Two Different Strategies. TELKOMNIKA. 2010; 8(3): 195-206.
- [4] Z. Sniderman. Google Social Media Attempts. Mashable, July 7th 2010 http://mashable.com/2010/07/09/google-social-media-attempts/.
- [5] I. Pais, & M. Almeida. End User Behaviour and Performance Feedback for Service Analysis. Intelligence in Next Generation Networks. 2009. ICIN 2009: 1-6. doi:10.1109/ICIN.2009.5357083.
- [6] L. Whitney. Google Speeds to 25 Million Users in First Month. CNET. August 3rd 2011. http://news.cnet.com/8301-1023_3-20087374-93/google-speeds-to-25-million-users-in-first-month/.
- [7] ComScore. Google Reaches 1 Billion Global Visitors. comScore Data Mine. June 22, 2011. http://www.comscoredatamine.com/2011/06/google-reaches-1-billion-global-visitors/
- [8] Nielsen. Top U.S. Web Brands. Nielsen Report. May 2011. http://blog.nielsen.com/nielsenwire/online_mobile/may-2011-top-u-s-web-brands/.
- [9] ACSI. American Consumer Satisfaction Index Report. ACSI. Org. July 2010 http://www.theacsi.org/index.php?option=com_content&view=article&id=229:press-release-july-2010 & catid=14&Itemid=289.

[10] G. Fowler, A. Das. Facebook Numbers Feed IPO Outlook. Wall Street Journal. May 1st 2011. http://online.wsj.com/article/SB10001424052748704436004576297310274876624-search.html.

- [11] K. Arola. The Design of Web 2.0: The Rise of the Template. *The Fall of Design, Computers and Composition*. 2009; 27(1): 4-14. DOI: 10.1016/j.compcom.2009.11.004.
- [12] Tran, T. Activist Michael Anti Furious He Lost Facebook Account--While Zuckerberg's Dog Has Own Page. Huffington Post. August 3rd 2011. http://www.huffingtonpost.com/2011/03/08/michael-anti-facebook_n_832771.html.
- [13] Google. Report an inappropriate profile, Google Online Help. http://www.google.com/support/accounts/bin/answer.py?answer=97707.
- [14] C. Y. Wang, S.-cho T. Chou, H.-ching Chang. Emotion and Motivation?: Understanding User Behaviour of Web 2.0 Applications. IEEE Computer Society Seventh Annual Communication Networks and Services Research Conference. 2009: 1341-1346.
- [15] A. Mullally, N McKelvey, K Curran. Performance Comparison of Enterprise Applications on Mobile Operating Systems. *TELKOMNIKA*. 2011; 9(3): 503-514.
- [16] L. Caviglione, M. Coccoli. Privacy Problems with Web 2.0. Computer Fraud & Security. 2011; 10: 16-19. Elsevier Ltd. doi:10.1016/S1361-3723(11)70104-X.
- [17] Y. Wong. How Google+ Shows That Google Still Doesn't Understand Social. Quora. http://www.quora.com/Yishan-Wong/Posts-by-Yishan/How-Google+-Shows-That-Google-Still-Doesnt -Understand-Social.