ABSTRACT

The focus of this paper is to explore social networking sites like Facebook in order to understand their recent success and popularity. Recent developments within Web 2.0 have provided users with more freedom to create their own unique user experiences. The conflict between traditional usability methods and user experiences are addressed through carrying out a Heuristic Evaluation to assess how well Facebook complies with usability guidelines and by conducting a user study to unveil unique user experiences. The findings of this study calls for a more holistic method of evaluation that redefines usability to encompass the user experience in line with future technology.

Categories and Subject Descriptors
H.5.5 [Information Interfaces and Presentation]: HCI

General Terms
Measurement, Design, Human Factors

Keywords
Usability, User Experience, Social Networking Sites, Facebook, Web 2.0, Evaluation

1. INTRODUCTION

With the advent of Web 2.0, social networking websites (SNS) have been one of the main internet success stories in recent years. Facebook is receiving most of the attention as it continues to become a growing success. Contrary to prior predictions that moving social interactions from face-to-face to text based media would lead to an “impoverished communication environment”, this new media has now adapted the use of social web services as a vital means of interacting, communicating and sharing, thus enhancing human connectivity and sociability [18].

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According to Alexa’s website, Facebook is the 7th most visited global website, while MySpace is ranked 6th. Both of these websites attract from the same pool of primarily 18-30 year olds and although different in style, they offer similar functionality [5]. However, in the UK Facebook is the most popular SNS, ranking 2nd, with MySpace only being 9th, therefore Facebook was chosen to be the main focus of this study.

Most academic research on Facebook has focused on the concerns of identity and privacy [5, 21]. Although users are free to share as much (or as little) data as they feel comfortable with, Facebook users express a greater amount of trust and willingness to share personal data, despite personal profiles being searchable by anyone on the network. The majority of users appear aware of the visibility of their profiles and rely on their ability to control the information, thus managing their own concerns regarding privacy [5].

Other recent research has looked at the relationship between the profile structure and friendship articulations, [12] and social capital accumulation through using online sites [6]. Facebook in particular plays an important role in the process of forming and managing social capital by improving self esteem and low life satisfaction as well as crystallizing relationships that may remain short lived [7]. Another particular aspect of Facebook that makes it distinctly different from other SNS is the online and offline trend. Members seem to be using it as a tool for maintaining previous relationships, and as a ‘social search’ tool by which they can investigate people they have meet offline. Members use the site mainly to manage relationships initiated offline by maintaining contact with old friends and getting to know new ones. Other SNS carry out ‘social browsing’ or searching for new online friends with the intention of moving that relationship offline [12]. Facebook members use online channels less to meet new people and more to intensify offline relationships [6, 21].

The success of Facebook is undeniable, but the reasons behind its popularity remain unclear. Traditional usability methods used to evaluate websites are being challenged as they do not consider the user’s ‘felt experience’ when interacting with these new technologies [16].

User experience is not new; as early as 1984, Malone [15] published the first Heuristics for designing enjoyable user interfaces for computer games, and Carole & Thomas [4] examined the

1. www.facebook.com (social networking site)
2. www.alexa.com web information service (traffic ratings)
3. www.myspace.com (social networking site)
relationship between ‘ease’ and ‘fun’, and called for a scientific study of fun in 1988 [17]. The slow adoption of user experience as a research topic within the Human Computer Interaction (HCI) research arena has been due to a number of reasons. One of these is the difficulty to empirically measure user experience; whereas usability has been extensively measured usually through Heuristics, performance, time and number of errors. Thus HCI researchers tend to focus on observations of behaviour and objective measurements, and remain cautious about personal judgements and opinions of users as they seem too fuzzy [17]. However, user experience is set to be a major issue as technology becomes far more ubiquitous and moves out of the office into the wider environment. As Donald Norman advocates in his book ‘Emotional Design’, “everything we do and think is tinged with emotion”, which “plays a critical role in our daily lives” [20] pp.19.

2. METHODOLOGY

This paper describes an exploratory study involving 26 participants within the age range of 18-44, consisting of 16 female and 10 male with the majority being students (85%). Over half the participants (54%) had been Facebook members for over a year, with the majority (92%) accessing Facebook at least 2-3 times a week. All the participants were assured that information given would remain anonymous.

The adopted methodology used in this study consisted of three distinct stages. The first stage involved expert evaluation of participants’ Facebook pages using Nielsen’s 10 guidelines [19]. The second stage involved performing structured interviews with the aim to uncover trends in the patterns of Facebook’s usage, as well as its perceived satisfaction. Finally, the third stage focused mainly on collecting qualitative data through the use of self-reporting questionnaires. This involved observation of participants’ interaction with their Facebook accounts, followed by in-depth semi-structured interviews with the purpose to explore users’ experiences and to probe into their attitudes towards Facebook.

3. RESULTS

This section describes the study’s main findings in terms of the results from the Heuristic Evaluation, and the outcomes capturing and revealing user experience.

3.1 Heuristic Evaluation

The results of this evaluation show that Facebook performs poorly with regards to traditional usability guidelines. Only 2 of the 10 heuristics are adhered to in Facebook, while 4 were rated as having minor problems and 4 rated as having major problems. It has particular problems with consistency and standards, error prevention and recognition rather than recall. In theory, Facebook should not be the success it currently is due to its failure when tested using a traditional usability evaluation method. In order to explore Facebook’s success – despite its apparent usability problems – we progressed with a user study, the outcomes of which are outlined below.

3.2 Pattern of Facebook Usage

Of the 26 participants, 77% stated that they visited Facebook every day. The length of time spent on Facebook on each visit was reasonably short with the most common duration being 15 minutes (42%) followed by 5 minutes or less (35%). When explored deeper, it was discovered that it was not simply the case of visiting once a day for between 5 and 15 minutes; rather, users frequently visited several times a day, browsing Facebook, when doing something else (usually an online activity) and then periodically re-visiting Facebook. One user explained his usage as follows: “I usually have Facebook open in the background, you know when I’m doing uni work and then every now and then I’ll, like… go and check for updates or just have a look around… do a quiz or something… just as, like, a break from working”. This new form of internet browsing, of ‘hanging around’ on websites contrasts with previous web surfing habits that Jakob Nielsen describes as: “Most people just want to get in, get it and get out” [2]. In a situation where users are ‘hanging around’ on a website it further raises the question about the relevance of traditional measures of usability such as task completion time when designing and evaluating social web services.

3.3 Perceived ‘Ease of Use’

When asked to rate Facebook’s ease-of-use on a Likert scale of 1 to 5 (1 being “very easy”, 5 being “very difficult”) the majority of participants (85%) stated that it was “very easy” or “easy”. The remaining participants responded that it was “average”. None felt it was “difficult” or “very difficult”.

3.4 User Experience

The investigation of Facebook’s user experiences was performed in the light of two theoretical frameworks: McCarthy and Wright [16] and Jordan’s Four Pleasures [11]. For this, we developed a brief self-reported experience scale consisting of the ten most prominent positive and negative aspects thought relevant for online social networking. The positive experiences were fun/playfulness, enjoyment, excitement, self-expression and curiosity; and the negatives experiences consisted of frustration, embarrassment, boredom, feeling limited and rushed. Participants were given the pre-defined aspects characterising user experiences and asked to associate ‘how they feel’ in relation to each of the Facebook main features such as, browsing or sharing photos, checking other profiles, joining a group or network, reading or writing on the ‘wall’, finding new or old friends, creating or updating their profile, and adding or using applications.

As expected, the features that were highlighted as being the ‘most typical’ or ‘most often’ used were those that users felt created the better experiences [Figure 1], for example, browsing photos, checking other profiles or newsfeeds and communicating with friends (the 3 top activities in terms of level of use) all rated highly for positive experiences while rating low for negative ones.

![Figure 1: Facebook features rated for positive experiences](image)

Two experiences that were selected most often were curiosity and enjoyment. Curiosity in particular was demonstrated during the observations and interviews. During each observation of people using their own Facebook account, they started at their home page, which has a ‘news feed’ (or summary) of all recent activity
of their friends. An example of curiosity is when one user navigates to a friend’s profile due to an activity update shown on her newsfeed. She then starts browsing her friend’s profile - “I’m just looking to see if they’ve added anything interesting”. She clicks on an application and goes through the process of adding it to her own profile and then begins interacting with it. She explains that this is how she got the majority of applications on her profile - by seeing it on someone else’s profile.

Another interesting social aspect of curiosity that was commented on frequently in the interviews was that of keeping an eye on what friends are up to. This was often referred to as “stalking” or “page-stalking” or just being “nosey”.

Users often referred to the social pleasure or enjoyment gained from using Facebook. In fact, it was often said that it was the ability to communicate with friends that was what “Facebook is really good for”. One user explained that one of her main uses of Facebook is to keep in touch with people she has recently met, “It’s like the stage in between email and texting. It’s a bit more personal than email but you’re not quite at the stage to give them your mobile number yet so you add them to Facebook”.

Another user comments on the pleasure of the various methods of communicating: “I like it when I get a message with a gift, or even just a gift. Like Elaine sent me a block of cheese!” (This user is a lover of cheese). The many types of communication (‘poking’, sending ‘drinks’ or ‘gifts’ etc) were also favoured because they were quick and reflect positive emotions within real life, like “hugging someone”.

Finally, Facebook provides a platform for self-expression or a means of identification, as one user explains, “it’s just showing the world who I am”; along with social pressure to appear interesting or as one user stated “to prove I have a life!” This was even found in some cases to be a motivating factor behind visiting Facebook - to alter their profile, for example to change their status or upload new photos.

4. DISCUSSION

Both the quantitative and qualitative data suggest that Facebook was an easy to use tool that enabled users to achieve their goal of being able to effectively communicate with friends. However this did not concur with the Heuristic Evaluations which found that Facebook performed poorly in terms of usability. Could this be due to the positive user experiences gained from using Facebook which outweighed the poor usability? Despite the proliferation of applications that create a negative user experience of frustration, this was contrasted with the positive experiences of enjoyment, excitement and fun. Applications that were personalised, yet simple, quick and reflected real life were preferred. These include applications like sending a special gift; as well as those applications involving innovative ways of interacting with friends through the use of games and quizzes in order to create pleasurable experiences.

The most significant aspects that emerged from our study and pertain to user experience are outlined below, as they were considered significant when they appeared as recurrent themes in participants’ answers. This happened in two circumstances: (i) when such aspects related directly to the aspects within our self-reported experience scale, and (ii) when such aspects were emerging as overarching themes throughout several experience accounts.

Pleasure

One of the most popular reasons for both joining and continuing to use Facebook was social reasons. Jordan [11] identifies ‘Socio-Pleasure’ as one of the four pleasures (along with Physio-Pleasure, Psycho-Pleasure and Ideo-Pleasure) that makes for an enjoyable experience. As a social networking site, Facebook assists the facilitation of social interaction offering a plethora of methods of interacting with friends, which is one of the necessities of a social network.

Human need for pleasure and fun is as important as functionality and usability. Products should include both the functional pragmatic aspects as well as the positive ‘emotional’ and ‘hedonic’ user experiences to be successful [9, 10 & 20]. From this study both emotional and hedonic user experiences were declared using Facebook. Negative emotional experiences of frustration, irritation contrast the positive experiences of enjoyment, fun and excitement. These fall into the hedonic aspect of ‘stimulating’ experiences which facilitates fulfillment [8].

Curiosity and Fun

Curiosity also emerged as another popular user experience and was often accompanied by fun, which can be a compelling motivator. Facebook takes advantage of curiosity by enticing users in to find out more about their friends though the numerous options on a profile page. A user is drawn in through the mini-feed, groups, photos and applications which ultimately cause page clutter leading to poor usability. Yet a user is motivated enough to ignore the clutter in order to find out more about their friends. This is particularly important for a website that relies on its users to have no particular goal and who are open for their attention to be easily grabbed.

Identification and Self Expression

The aspect of representing oneself to other people in a social situation was a key feature within Facebook, which allows its users to express themselves through the creation of personal profiles that can be shared with friends. This hedonic aspect of ‘Identification’ is similar to ‘Social-Pleasure’, which is that of representing oneself to other people in a social situation [8, 11]. Facebook also allows its users to individually express themselves and reflect their values in many different ways, from exchanging photos to choosing to belong to different interest groups. Similar to Ideo-Pleasure individuals can express themselves through communicating their identity as a personal form of self-expression which was very apparent in this study. However, there was a feeling of limitation and confinement reported with relation to creating unique profile pages and adding applications, which appears to de-motivate users to update or customise their pages any further.

Surprise and Serendipity

Serendipity refers to the positive aspect of making discoveries by chance [14]. This can be illustrated by the most outstanding and enjoyable user experience disclosed by those interviewed that of the opportunity to make new friends and find old friends, considered a reward for using the website. Facebook provides a mechanism not only to find distant friends, but to reconnect to past memories and preserve them. Similar to the hedonic aspect of ‘Evocation’, that provokes memories of past relationships, which can be very engaging and provide strong motivational factors for users leading to a truly powerful user experience [8].

Privacy

Concern for privacy of data was apparent within this study, and users had a more cautious approach when using Facebook. There was a reluctance to communicate, upload personal photos, and even update profile pages, due to the open nature of how data is displayed and controlled by Facebook. The benefits of accessing other members data in terms of finding what your friends have been doing, looking up new and old friends appears also to have its drawbacks. The aspect of ‘stalking’ was found to be a common activity on Facebook, which was generally done in secret where users felt guilty at intruding on their friends’ privacy.
This study has focused mainly from the user perspective in terms of usability and user experiences. Recent bad press on Facebook’s use of personal data has created a negative effect on their brand image [1]. Creating a positive brand image can provide an emotional link between Facebook (the brand) and its users [10]. This study may not reflect the general population of Facebook users, yet is an indicator of a possible future trend. Concern for data along with the lack of control of the many applications now apparent within Facebook can lead to a general sense of boredom and annoyance which could impinge on the future use of Facebook.

This study only touched the surface in identifying the importance of the user’s experiences over usability while interacting with social networking sites like Facebook. The limited sample size constrained the breadth and focused on current users which may have impacted on the generalization power of study findings.

5. SUMMARY
It is evident from this study that while Facebook fails in traditional usability evaluation terms it excels in providing many positive user experiences for its vast community of members. As a social web service it not only provides a great deal of social pleasure but provokes curiosity, provides a base for self expression and evokes memories of the past, along with a myriad of emotional and hedonic user experiences.

In a system where the user has a specific goal in mind and satisfaction arises from qualities such as ease of use and enhanced productivity then guidelines such as Nielsen’s 10 heuristics are fit for purpose. However, these traditional usability methods do not capture the aspects of users who are looking for fun and pleasure while ‘hanging around’ on the WWW. Therefore this calls for a more holistic approach, with the need for new design guidelines to support the modern day web experience.

“…utility and usability are important, but without fun and pleasure, joy and excitement, and yes, anxiety and anger, fear and rage, our lives would be incomplete” [20] pp.8.

6. ACKNOWLEDGMENTS
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7. REFERENCES