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**PERSONAL WEBLOGS AND FREE HOSTED
ONLINE BLOGWARE SUCCESS:
THE ROLE OF USABILITY.**

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the conditions of the award of the degree *M.Sc Computing Interaction Design*.

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1 Abstract

This project has focused on the usability of Blogware and Weblogs, the biggest area of Web 2.0 user generated content. This study has focused on one type of Blogware: free, hosted, browser-based Blogware. This study has also focused on one type of Weblog: personal Weblogs, written by individuals, not by groups of authors or for businesses.

The main question was whether or not the usability of free hosted browser-based Blogware impacts, or not, on the usability of the personal Weblogs they create? The hypothesis was that Blogware with good usability will be more likely to generate Weblogs with better usability. The aims and objectives of this study were to analyse the relationship between free hosted browser-based Blogware usability and the usability of personal Weblogs they create.

As this has focused on free hosted Blogware used through a browser this study is not conclusive for all types of Blogware but the conclusions indicate areas for further research. This study has focused on the top five (most used) free hosted browser-based Blogware. The variation in the features in UI design between Blogware has been controlled through the tasks used in usability testing to ensure the results focus on the usability and not the features of Blogware. Additionally as this study has focused on Personal Weblogs, the conclusions may not extend to other types of Weblogs, but indicate areas for further research.

Previous work has looked at the relationship between Blogware technology and Weblog success but has not investigated the usability of Blogware technology and Weblog success.

The contribution of this study is to identify whether or not the usability of browser-based Blogware impacts, or not, on the usability and usage of personal weblogs they create. This could then be used as the basis for further research into investigating the usability of other Blogware, other Weblog types, other Web 2.0 software such and other Blogger types.

The methodology has included Expert Heuristic Usability Evaluation, Summative and Comparative usability testing and a SUMI questionnaire. The quantitative and qualitative data collected have provided an empirical basis to learn and make judgements about Blogware usability for the development of design guidelines to improve browser-based Blogware usability. The data collected also provide usability best practice guidelines for bloggers.

After identifying which Blogware tools created which of the Weblogs this study has analysed and identified that there is a correlation between the usability of the Blogware and the usability of the Weblogs they created.

This paper presents the findings.

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- Seth Godin, author of blog <http://sethgodin.typepad.com/>
- Jolie O’Dell, author of blog <http://jolieodell.wordpress.com>
- Jennifer R Hubbard, author of blog <http://writerjenn.livejournal.com>
- Ann Althouse, author of blog <http://althouse.blogspot.com>
- Author of huck_muleeva blog anon.
- Darnell Clayton, The Blog Herald
- Gabe Young, Freebloghelp.com
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3 Introduction

Democratisation of the web, and users as designers, are challenges and opportunities of Web 2.0. As the user experience is being created by the users, the questions are especially relevant to Human Computer Interaction.

“How do we effectively communicate with 10 million end-user designers?”
(Dix and Cowen, 2007)

The problem is that Web 2.0 means web content is being created by many authors who have no design or HCI background. As users and usability may not be considered, Web 2.0 could threaten the quality of web content by giving the web publishing tools direct to users. The risk is the Internet may become flooded with content by 10 million end-user designers who are not considering usability, and the quality of the online experience may decline. The risk is Web 2.0 software may result in an increase of web content with poor usability:

“Web 2.0 Can Be Dangerous.”(Nielsen, 2007)

This in itself is not a problem if those publishing tools enable the users to deliver content which is usable and useful to users. If they don't, the result could be, in Nielsen's words, we're: “polluting the Internet”(Nielsen, 2003) and diluting quality.

“For every innovative and inspiring site, there are at least a dozen downright dreadful alternatives.” (Raphael, 2008)

Usability in this project is as defined by ISO 9241-11.3 (W3org). This project has been an HCI study which has evaluated Blogware and Weblogs for effectiveness, efficiency and satisfaction with which specified users achieve specified goals and motivations in particular environments. Specifically this project has measured the effectiveness, efficiency, utility, learnability, memorability, safety and the User Experience Goals of Weblogs and Blogware to investigate how useful, usable, valuable, desirable, findable, credible, accessible, satisfying, enjoyable, engaging, pleasurable, helpful, motivating, and emotionally fulfilling they are. This project has

also evaluated Blogware and Weblogs for heuristic usability principles of tolerance, visibility, feedback, affordance, consistency and constraints.

Web 2.0 Software includes Blogware (Blog creation technology), the sites they produce which are Weblogs (or blogs), wikis and Mash-up software such as iGoogle, Google Mashup Editor, Open Kapow, Yahoo Pipes, Wavemaker Studio and IBM Mashup Centre. Blogware is just one part of that picture. There are four types of Blogware: free browser hosted, premium paid browser hosted, freeware downloaded desktop, premium paid downloaded desktop. This study has focused on free hosted Blogware accessed and used through a browser. It is possible to distinguish between these as a Weblog will say 'Powered by WordPress.com' or 'Powered by WordPress.com VIP' (premium) or 'powered by WordPress' (desktop).

This project focused on Blogware and Weblogs because this was the greatest area of Web 2.0 activity at the time of this study. By October 2008 there were 133 million Weblogs (Technorati, 2008). This is nearly double the number quoted in the same report in 2007 (Sifry, 2007). The Technorati October 2009 survey has established that overall Blogging is not in decline although for those who are blogging less they are more likely to be using social networking applications instead.

Weblogs have evolved since the term was first used by John Barger (1997) who defined a Weblog as:

“a page where a blogger ‘logs’ all the other web pages they find interesting.”
(Barger, 1997)

Today Weblogs are fully developed sites which share one key characteristic:

“the site consists of dated entries.” (Blood, 2000)

Wikipedia defines a blog as:

“A contraction of the term "web log"...a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in

reverse-chronological order. ‘Blog’ can also be used as a verb, meaning to maintain or add content to a blog.(Wikipedia)”

Technorati have defined a Weblog as:

“A Web site, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order...but the lines between what is a Blog and what is a mainstream media site are becoming less clear. Larger Blogs are taking on more characteristics of mainstream sites and mainstream sites are incorporating styles and formats from Blogs.” (Technorati, 2008)

There are many different types of Weblogs with varying content: Entertainment, Business, Sports, Politics, Autos, Technology, Living, Green, Science (taken from Technorati Blog Directory topics). Across these topics these Weblogs are created by different types of Bloggers whose motivations differ a great deal.

Most (72% (Sussman, 2009)) Weblogs are created by individual ‘Hobbyist’ Bloggers who are writing about a variety of topics as a form of personal self expression. However an increasing numbers of Weblogs are created by professional Bloggers or teams of Bloggers to build a brand name, create sales leads and generate revenue. As their motivations differ from personal ‘hobbyist’ bloggers, their choice of Blogware and what features they would consider to be useful and usable may differ from personal hobbyist bloggers.

Therefore to reduce these variables this study will focus on the highest ranking (Technorati) Personal Weblogs created using the Top 5 free hosted browser-based Blogware by individual bloggers as their personal Weblogs, writing about topics they are passionate about. The topics may vary but the motivations to create these Personal Weblogs by the users are consistent: a medium of personal expression for personal satisfaction and to demonstrate expertise on their topic. The main justification for this focus is personal Weblogs represent the majority and main reason for blogging:

“Self expression and sharing expertise continue to be the primary motivations of bloggers.” (Sussman, 2009)

In the beginning most Bloggers created their own code to create their Weblogs, but since (Bauer, 2004; Technorati, 2008) and the vast majority of users have turned to Blogware to build and host their Weblogs. Blogware simplifies the creation and maintenance of Weblogs, supporting authoring, editing, and publishing of Weblogs. In particular, free hosted browser-based Blogware such as Blogger and WordPress.com have seen tremendous growth. As Nilsson (2003) and Blood (2000) have commented, free hosted, browser-based Blogware freed users from needing technical skills which led to this rapid growth. Blogware such as Blogger enabled everyone to Blog without cost, effort or technical skill, liberating users to publish freely. Blood saw this as:

"a staggering shift from an age of carefully controlled information provided by sanctioned authorities to an unprecedented opportunity for individual expression on a worldwide scale." (Blood, 2000)

The question is whether or not the usability of these free hosted browser-based Blogware impacts, or not, on the usability and usage of personal Weblogs they create? The hypothesis is that free hosted browser-based Blogware with good usability will be more likely to generate personal Weblogs with better usability. The aims and objectives of this study were to analyse the relationship between free hosted browser-based Blogware usability and the usability and usage of personal sites they create. The outcome of this study provides an empirical basis for the development of design guidelines to improve free browser-based Blogware usability and provides best practice guidelines for bloggers. Due to the focus of this study on free hosted browser-based Blogware and Personal Blogs the conclusions may not apply to all types of Blogware and Weblogs, but indicate areas for further research.

The contribution of this study is to identify whether or not the usability of Free Hosted Browser-based Blogware impacts, or not, on the usability of Personal Lifestyle Weblog sites they generate. This could be used as the basis for further research into investigating the usability of other types of Blogware such as Premium services and Blogware applications you download to your computer desktop, other types of Weblogs such as professional Weblogs created by professional teams of Bloggers or for businesses, and other Web 2.0 software or other Blog and Blogger types such as Business Blogs and corporate Bloggers.

4 Background

4.1 Background – Bloggers

Bloggers are the users of Blogware, the creators of Weblogs. Unlike many of the key research studies which have been undertaken into Blogware and Weblogs, this project is an HCI User-centred investigation of Blogware and Weblogs. This project started with identifying who the Blogware users are. The most recent research into user profiles for Bloggers is the Technorati State of the Blogosphere Survey October 2009: Hobbyists are the dominant Blogger segment (72%). The other main profiles identified for Bloggers were Part-Timers (15%), Self Employeds (9%) and Corporate/Pros (4%).(Technorati, 2009)

This project focused on Hobbyist individual bloggers because this is the majority user profile of bloggers today.

4.2 Background - Blogware

Some bloggers have written their own code for their Weblogs, but these fall into the vast minority (Pingdom, 2009). Most bloggers use Blogware. Maintenance through the Internet is a universal feature of all Blogware, but there are four types of Blogware:

- 1) Free Blogware service - a third-party service handles the blog software and hosting for you. This software is browser-based using a browser-based interface to enable authors to create and update content on their Weblog
- 2) Premium paid-for and licensed browser-based Blogware services e.g. Squarespace.com.
- 3) Free Desktop Software you download and use when you set up and host the Weblog yourself.
- 4) Premium paid-for and licensed Desktop Software you download and use when you set up and host the Weblog yourself.

This study focused on Type 1, free, hosted browser-based Blogware. In particular this study focused on the 5 most used of these at the time of the study:

- WordPress.com



- Typepad.com (Micro)



- Blogger.com



- Livejournal.com



- Xanga.com



Appendix 1 shows how the identification of these services as the Top 5 free browser-based web-hosted Blogware tools was done.

The justification for this focus is:

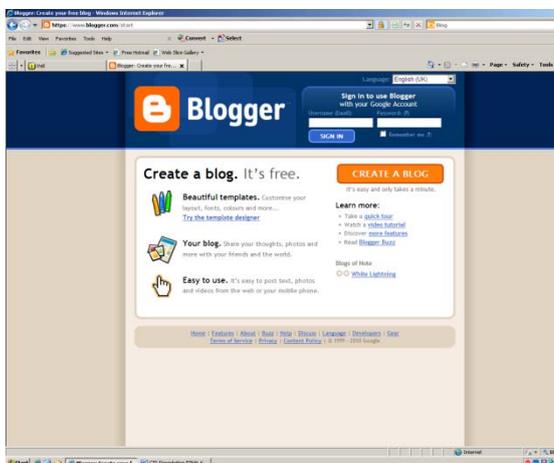
- These are the top 5 of this type of Blogware used.
- These represent Type II and III Blogware which Du and Wagners study (Du and Wagner, 2006) proved had a connection between their richer features and the success of the Weblogs they created.
- They have been a direct driver in increased Blogging activity (Blood, 2000).

- They are the most used by individual Hobbyist bloggers creating personal Weblogs.
- Technorati established:

“by far the most common blogging solution is to use a free third party hosting service, as 59% of respondents report having done.” The Technorati Study identified that the “vast majority of bloggers who use third party hosting services use a free one...the most important factor in their decision-making process is cost, followed closely by features.” (Sussman, 2009).

This may be due to the easier user experience of not having to download software, but is more likely to be due to being free of charge. This focus is also because Technorati established:

“by far the most common blogging solution is to use a free third party hosting service, as 59% of respondents report having done...the vast majority of bloggers who use third party hosting services use a free one...the most important factor in their decision-making process is cost, followed closely by features.” (Sussman, 2009).



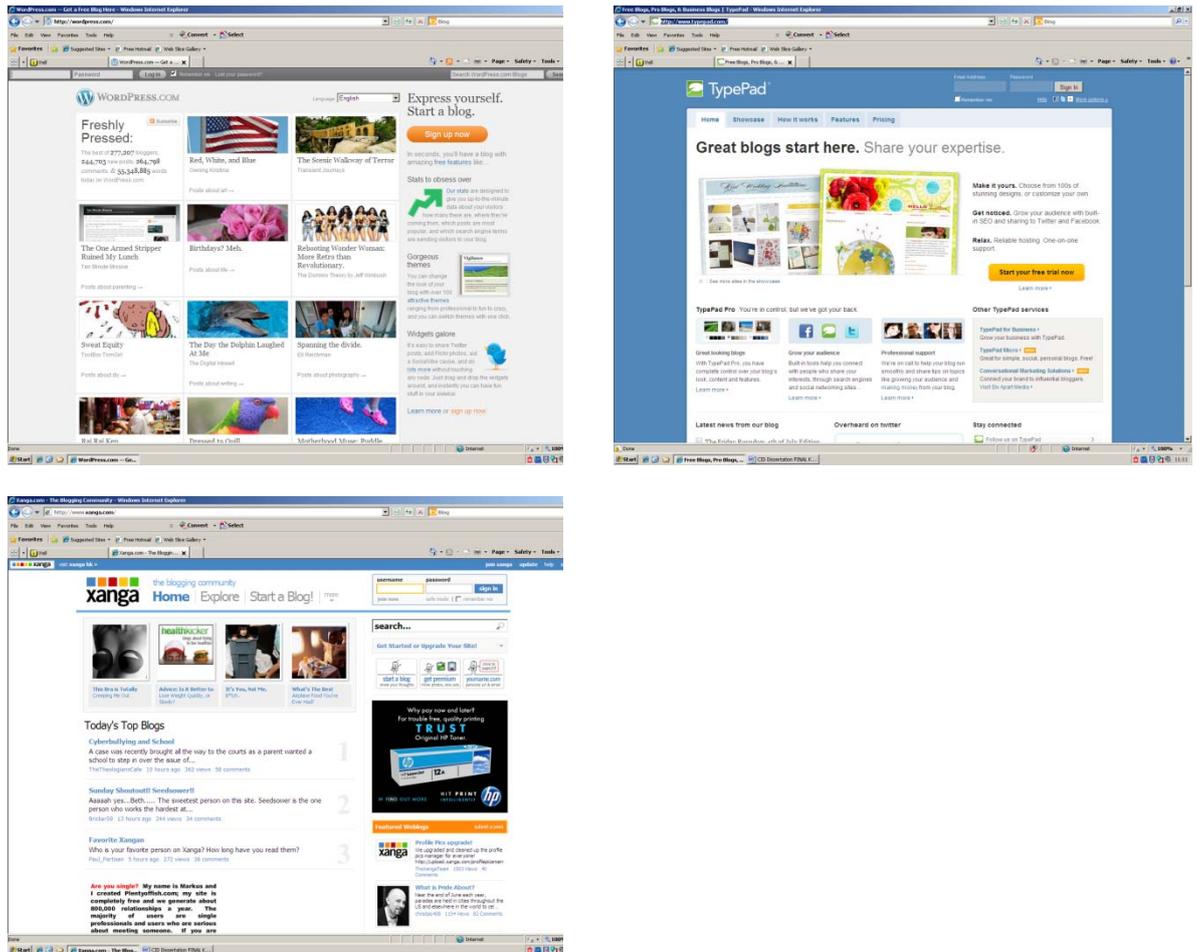


Figure 1 - Homepages of Blogware

4.3 Background - Blogware Features

Appendix 2 lists the different types of features which can be found in Blogware. The focus of this project has augmented Du and Wagners' Study and focus on Type II and III Blogware (Du and Wagner, 2006) because they concluded there was a connection between the richer features of these Blogware and the success of the Weblogs they created. The focus of this project has been to evaluate the usability of the interface which gives the user access to and affords the use of specific features, and the usability of these features themselves to enable users to achieve their goals. This project has evaluated standard features available with all free hosted browser-based Blogware and are shared and common to them all (DRX, 2009). The focus of this project has been to evaluate the usability of these features. The usability tasks have concentrated on the use of the standard shared features common to all Blogware of this type.

Shared common UI design features:

- Creating and Editing features
- Blog design tools, design templates
- Posting features
- Multimedia features such as adding photos
- Categorisation/ tagging features
- Engagement/ sharing features
- Links to other blogs/ websites

This project has acknowledged that the interfaces of the different Blogware evaluated are different so it has been very important to control the UI design variables to ensure the variation in features are not the reason for greater user satisfaction and to be able to isolate usability as a driver of user satisfaction. The variation in the features between these Blogware UI designs have been the independent variable factors controlled by ensuring the factors evaluated have focused on the standard features which all the tools share, so controlling the variation in design features between the different interfaces.

Variable UI design features which will be controlled through task design in the usability testing:

- CSS style sheets
- Widget plug-ins providing enhanced functionality
- Stats dashboard to monitor usage, views
- Features to enable social interaction between bloggers and social networking.
- Permalink
- Trackbacks
- Emoticons

This project has controlled variable UI design features by excluding the variable features from the study.

4.4 Background - Weblogs

Building on the work done by Du and Wagner, this project has taken its sample of Weblogs as the highest Technorati ranked Personal Weblogs created by individual bloggers and using one of the top five free hosted online blogging services. The Weblogs selected were the highest Technorati ranked at the time of selection in April 2010.

The Technorati Top 100 features a lot of Weblogs which are not relevant for this study, as they are either not created by the Top 5 free web-hosted Blogware tools or they are weblogs written by groups of authors or for businesses. This study only focused on the highest ranked personal weblog created by each of the 5 free Blogware services. Definition of Personal Weblogs:

- Written by individual authors, not groups of authors.
 - Individual hobbyist bloggers writing for personal reasons.
 - Not written for a business.
 - Content is whatever is of interest to that individual Blogger.
- The top-ranking (Technorati) Personal Weblogs created by individual Hobbyist bloggers, created using the top 5 free hosted browser-based Blogware (Wordpress.com etc) (5 Weblogs in total) at the time of the study were:

4.4.1 Blogger – Blogspot.com free web-hosted Althouse - <http://althouse.blogspot.com>



As of April 3rd, 2010: Technorati Rank 118, Technorati Authority 752

Figure 2 – Althouse Homepage

4.4.2 TypePad Micro - free web-hosted Seth's Blog - <http://sethgodin.typepad.com>



As of April 3rd, 2010: Technorati Rank 133, Technorati Authority 748

Figure 3 – Seth Godin Homepage

4.4.3 WordPress.com free web-hosted

Jolie O'Dell - <http://jolieodell.wordpress.com>



As of April 3rd 2010: Technorati Rank: 797, Technorati Authority: 632

Figure 4 – Jolie O'Dell Homepage

4.4.4 LiveJournal.com free web-hosted

Writerjenn, the blog of Jennifer R. Hubbard

<http://writerjenn.livejournal.com>

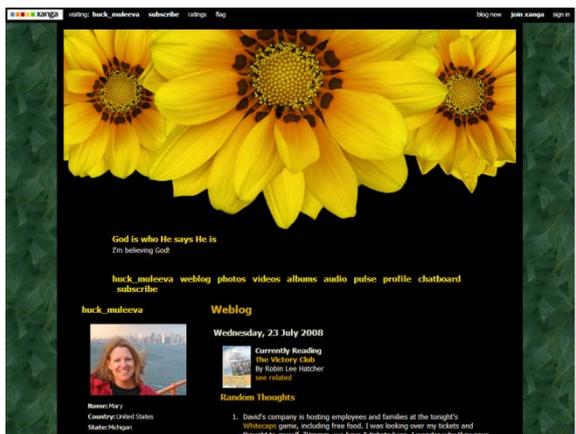


As of April 3rd 2010: Technorati Rank: 1580, Technorati Authority: 584

Figure 5 – WriterJenn Homepage

4.4.5 Xanga.com free web-hosted

Huck Muleeva - <http://huck-muleeva.xanga.com/>



As of April 3rd 2010: Technorati Rank: 92706, Technorati Authority: 91

Figure 6 – Huck Muleeva Homepage

5 Literature review

This thesis is new because there has not been a research study into the usability of Blogware and how this impacts, or not, on the usability and usage of the Weblogs they create. No one has previously investigated through a formal usability study whether or not any kind of Blogware with good usability will be more likely to generate Weblogs with good usability. The contribution, aims and objectives of this study were to analyse the relationship between free browser-based Blogware usability and the usability and of Personal Weblogs.

There has been a considerable amount of research done into Blogging and Weblogs: Halavais (2002) analysed text of 125 blogs; Cohen (2004), D McDonald and J Towle (2004) conducted empirical research studies of photoblogs; Krishnamurthy (2002) studied blog posts about September 11; others analyzed reasons why people blog (Shang, Chen and Chen, 2007; Gumbrecht, 2004; Nardi, 2004; Schiano and Swartz, 2003); Mishne and de Rijkes (2006) focused on researching how users searched blogs. Their methodology was purely statistical based on search log data. None of these research studies used Usability Testing in their methodologies or investigated the usability of Blogware or Weblogs.

The rest of this literature review covers previous works which bear more relevance to this project due to the methods used and topics investigated.

5.1 Myth Breaker – Blogs are in decline, being replaced by social networking and blogging is yesterday's news

Popular perception is that Blogging is in decline, replaced by Social Networking on sites such as Facebook. However, the facts disprove this.

The interviews conducted with users as part of this project showed that they used both and for different reasons. The frequency of their blogging may have declined, mainly due to time pressures, but bloggers are using social media (more frequently but for less time in one usage session) to promote their blog entries and to be prompted about other blogging activity. Services such as Facebook and Twitter are not replacing blogging, instead they are driving traffic to blogs. The different services are being used together to augment bloggers' online reach. When bloggers do blog and read blogs they invest more time into the activity but less frequently.

The Technorati 2009 State of the Blogosphere survey supports this:

“bloggers are blogging more than ever, and the State of the Blogosphere is strong... Blogging is on an upward trajectory in many ways... Blogging is here to stay... Blogs are not yesterday's news, they are a critical online media.”
(Technorati, 2009).

The Technorati study was a credible survey implemented by market research firm Penn, Schoen and Berland Associates, an Internet survey in September 2009 among 2,828 Bloggers. The survey was only administered in English, but Bloggers responded from 50 countries, with nearly half from the United States. The margin of error for the survey is +/- 1.84% at the 95% confidence level and larger for subgroups. It generated quantitative statistical data which provides a sound empirical basis for profiling Bloggers and was a viable research study. The weakness is that it will have been self-selecting, and may reflect a US bias. Overall Blogging has not declined, people are not Blogging less. People are blogging and using Facebook and Twitter. The motivations of users are very different for using these different services. Blogging is motivated by self-expression (as is social networking) but blogging is motivated also by establishing credibility and sharing expertise, where social networking is motivated far more by social contact and sociability, and directing traffic to blogs. Social networking activity is about rapid low-touch interaction, where blogging is a less frequent activity which sees users invest more time and cognitive effort into a single session. The two areas are merging and there are overlaps between them, especially as progressive Blogware are providing social networking features to connect Bloggers together, but there are distinct differences. Given Blogging is not in decline the focus of this project was appropriate and relevant today to learn and make judgements to inform design guidelines for Blogware tools for tomorrow.

This study focused Blogging, but a future research study could investigate the crossover between Blogging and social networking and the role of usability in that.

5.2 The relationship between Blogware and Weblog success

This study augments the conclusions of “Weblog success: Exploring the role of technology” (Du and Wagner, 2006) which established there is a relationship between Weblog success and the features of the technology used to create those Weblogs. This empirical study was a statistical examination of 126 successful Weblogs tracked over 3 months, and the features of the Blogware used to create those. The sample represents a sufficiently broad sample size to draw statistically viable conclusions from because it is a pre-ranked list from the Technorati Top 100 Blogs or “The A-List of Blogs”, a common measure of ‘the best Blogs’. This is valid as “it is to some extent the combined indication of attention, influence and authority of a Weblog, and a widely used Weblog success metric.” (Du and Wagner, 2006). The ‘rank aggregation technique’ used was sound. The categorisation criteria considered popularity growth along with popularity rank and were both valid. Based on their popularity rank and growth dimensions, they created an interesting model to categorise Weblogs: Rising Star, Emerging, Core, Fringe, Falling Star, and Dropout. They identified which Weblogs had been created by which Blogware and identified which ones fell into which groups. From this they could draw conclusions about Blogware features linked to Weblogs which were more ‘popular’. For example, it identifies:

“An important value factor is the built-in capability of a Weblog to present and organise content to facilitate between-blog connectivity and social interaction between bloggers. This capability is a direct result of the blogging technology.” (Du and Wagner, 2006).

It is a useful study and the authors concluded:

“Our analysis indicates that Weblog success is associated with the type of blogging tool used. We argue that technology characteristics affect the presentation and organisation of Weblog content as well as the social interaction between bloggers, and in turn affect Weblog success or popularity.”(Du and Wagner, 2006).

This is interesting as it offers one conclusion about the relationship between software usage and Weblog usage, and forms the basis for further investigation into the usability questions posed by this project. Their conclusion indicates that:

“The choice of the right technology or development of more appropriate technologies may create a distinct advantage in the highly competitive top-levels of the blogging world.” (Du and Wagner, 2006).

This previous work therefore forms a good complement to this HCI-based study.

5.3 User-centred approach to evaluating Blogware and weblogs

Although a credible empirical study, the research undertaken by Du and Wagner (2006) did not take the user-centred approach taken for this project. Du and Wagner did not consider users, user motivation, the context in which Weblogs are created or used, the dynamic nature of Weblog ‘popularity’, or the stages of a blog lifecycle. They did not evaluate usability as a measure of success. Therefore they were unable to take a user-centred approach to investigate the usability of Blogware and Weblogs and any relationship that may exist between these.

One research study (Nardi, Schiano and Gumbrecht, 2004) conducted audio-taped ethnographic interviews with bloggers and analysed the blog posts they created. 23 users from the USA (16 men and 7 women), ranging in age from 19–60, participated in the research. This study identified motivations for blogging and identified user requirements for Blogware. They did not undertake a usability study of users trying to use this Blogware, nor did they undertake a usability study of the Weblogs bloggers were creating. However their ethnographic study was sound and as it did involve a User Study it is one of the closest in methodology to this project. Based on their ethnographic user research their study made design recommendations to Blogware providers.

Like Nardi et al, this research study used a user-centred approach to evaluating Blogware and Weblogs. However this study did not include the Ethnographic context/ observation methodology undertaken by Nardi et al, instead it is used expert heuristic usability evaluation and usability testing to evaluate how effectively Blogware and Weblogs enable their users to complete their Evaluation Cycles. (Norman, 1988).

5.4 Blogware usage numbers

The most recent investigation into which Blogware is used the most is by Pingdom.com. (Pingdom, 2009). Their data is valid, based on identifying the Blogware from the source code of the Weblogs they created, or from contacting the Weblog owners. Pingdom identified that more than one third of the top 100 Weblogs use hosted, browser-based Blogware. (Pingdom, 2009). Pingdom identified the most-used Blogware were Typepad.com and Wordpress.com. However, they did not differentiate between the free and premium paid-for versions of these within the Technorati Top 100. Looking at the Weblogs they have mentioned, they were all created using the premium versions. Instead this project focused on only the free versions.

This project focused on the usability of the Top 5 free hosted browser-based Blogware services provided as part of a software and hosting package used by the highest ranked (Technorati) Personal Weblogs.

5.5 Users of Blogware and weblogs

Du and Wagner did not identify who the users of Blogware were. They only mentioned Blogware users as being ‘consumer, small business and corporate’. Consequently Du and Wagner did not assess user satisfaction or whether the Blogware met users’ requirements. Du and Wagner also did not look at the users of the Weblogs, the readers. Therefore they did not investigate reader satisfaction as a measure of success. This project instead looked at the users of Blogware and Weblogs to ensure a user-centred investigation.

Other literature however has more closely examined the users of Blogware. The most comprehensive and contemporary study of Bloggers is Technorati “State of the Blogosphere” (Sussman, 2009). Nardi et al’s Ethnographic Study (Nardi, Schiano and Gumbrecht, 2004) evaluated the requirements of Bloggers. Rubin and Diddy (2006) analysed the impact of users’ perceptions about credibility on their usage of Weblogs.

However they did not analyse the usability of the Weblogs, and they did not look at Blogware, which this study has.

5.6 User motivation for blogging and reading weblogs

Understanding user motivation is a key part of being able to identify whether Blogware and Weblogs meet user requirements and satisfaction as part of measuring their success. User motivation and how users evaluate their satisfaction are critical success factors for any user interface, so was a key consideration in this project.

The study by Du and Wagner did not take into account previous research which had already been done at the time into motivations of bloggers. (Nardi, Schiano and Gumbrecht, 2004). User motivations for blogging were investigated in 2004 in "Why we Blog." (Nardi et al, 2004) This study however was limited to interviewing 23 people who all lived around Stanford University so the sample size was not large or diverse enough to be credible still today. However despite these limitations the recent quantitative and comprehensive Technorati Study (Sussman, 2009) confirmed the main motivations for bloggers (including Hobbyist) were still very similar to those identified by Nardi et al:

“Self expression and sharing expertise continue to be the primary motivations of bloggers.” (Sussman, 2009)

This is a key reason why this project focused on Weblogs which are Personal Weblogs as this represents a majority of bloggers today.

Understanding how users measure their Weblog success is a key part of being able to evaluate user satisfaction.

“70% of all respondents say that personal satisfaction is a way they measure the success of their blog.” (Sussman, 2009).

This would be the case for Hobbyist bloggers who create personal blogs, but would be different for professional bloggers which is why this study will focus on personal blogs. Unlike the research studies cited by Nardi et al the study by Du and Wagner did not identify users, user motivations or how users evaluate their satisfaction. Their definition of success was limited to whether a Weblog was in the Technorati Top 100.

By not looking at users and their motivations, their paper ignores HCI theories. This project instead investigated these aspects. Du and Wagner were conscious that:

“success is a complex construct that should include multiple measures...we left out other aspects of success such as users’ or readers’ satisfaction rating.” (Du and Wagner, 2006).

Therefore their singular definition of success as ‘popularity’ according to the Technorati Top 100 is a weakness. As theirs was a purist statistical analysis without any User Studies the need for the statistical validity of their study needed to be very sound for their findings to be reliable. However, their indicative conclusions are still valid and further research into usability of Blogware and Weblogs would plug the gaps with their findings.

The different motivations of corporate professional bloggers to generate business weblogs to generate revenue and sales leads may lead to very different requirements for Blogware.

To remove this variable therefore this project focused on the free web-hosted, browser-based blogware used more by bloggers who create Personal Weblogs.

5.7 User motivation and lifecycle impact on need for different features

In contrast to Du and Wagner, the stages of the Blog Lifecycle in relation to the Blogger and their motivations were investigated by Gurzick and Lutters (2006). They identified how user motivations affected the choices of Blogware features and concluded:

“For the designers and developers of blogging software an understanding of the issues faced by Blogs at different stages of their lifecycle will allow them to develop tools that cater to the specific needs of bloggers in particular stages” (Gurzick and Lutters, 2006).

This study was qualitative so gave rich insights into user motivations. However only 15 bloggers were interviewed which was not large or diverse enough a sample to give reliable data and they did not analyse the usability of Blogware or draw any relationship between Blogware usability and weblog usability or usage. Nardi et al

also recognised the impact of lifecycle on users' choice of Blogware and which features would be appropriate and considered useful:

“Blogger is the most popular and easiest to use system, but also the most limited in features. Several of our informants started with Blogger, but then wanted more advanced features, and either constructed their own or migrated to more full-featured blogging applications.” (Nardi, Schiano and Gumbrecht, 2004).

This study considered these results as a variable in the user profile. This study ensured users were recruited who represented the different stages of the blogging lifecycle.

5.8 Definition of poor weblogs – poor usability

There are many examples of poor Weblogs. The definition of a weak blog in this study is poor usability. It is not about the content.

“Blogs are often too internally focused and ignore key usability issues, making it hard for new readers to understand the site and trust the author.”(Nielsen, 2005).

This study defined a poor weblog as having poor usability. It has defined ‘success’ as a combination of a weblog having good usability and its Technorati Ranking. Jakob Nielsen argued that there were special usability rules for weblogs. (Nielsen, 2005). However as Weblogs have developed since 2005, although Jakob Nielsen’s rules will still have some relevance, usability principles which apply to all websites are more appropriate, so the usability of a weblog can be measured in the same way as any other website.

However, Nielsen’s rules were considered as a measurement factor in the usability analysis of the weblogs’ usability.

5.9 Weblog genre and content variables impacting on weblog usage

There are three primary types of Weblogs: individually authored personal journals, "filters" (showing links to other related Weblogs) and "knowledge logs," as identified by the research study by Herring et al (2006). The majority of Weblogs in their sample (70%) were of the personal journal, "online diary" type. This reflects the latest Technorati Survey which established 70% of bloggers are Hobbyist Bloggers

generating Weblogs about their personal lifestyles. They also reported a quantitative analysis of 203 randomly selected Weblogs, focusing on Weblog author characteristics, reasons for blogging, frequency of posts, usage of blog features, and frequency of commenting. Their research study was comprehensive and provides a sound empirical basis for its conclusions, but it did not investigate Weblog or Blogware usability.

The Technorati Authority rankings in 2009 were changed to show the Top 100 overall and also the Top 100 per Weblog content topic. Technorati recognised the fact that by not differentiating between content topics of Weblogs it was not comparing apples with apples in their Top 100. Du and Wagner did not consider content topics as a relevant factor in either a web log's success or in their definition of the 'most popular' Weblogs. However, the authors acknowledged a limitation of their research as:

“The content nature of these Weblogs was not analysed...the readership popularity of a social media site is associated with its technology-dependent, content-dependent and context-dependent characteristics.” (Du and Wagner, 2006)

To remove this variable this project evaluated Personal Weblogs which covered different content topics.

5.10 Usability as a measure of weblog success

The definition of Weblog success has been varied, but not by usability research. Du and Wagners' (2006) definition was singular, only “popularity”, it did not analyse other aspects or characteristics which contribute to or define success or ‘popularity’, such as usability. Their definition of Weblog success was ‘popularity’ based on the Technorati Top 100 in 2004. They claim:

“For Weblogs inbound links have become the defacto success metric.” (Du and Wagner, 2006)

This overlooks the other success metrics highlighted by Technorati's survey (Sussman, 2009). The definition of popularity as Technorati Top 100 is in itself

limited. As Du and Wagner's empirical study was based on statistics gained from Technorati, their results rely on Technorati's definition of their Top 100 to be correct for their Popularity Rank dimension to be correct. However, Technorati was redesigned in 2009, and with it so was the 'Technorati Authority Ranking' (from which it compiles its Top 100). The Authority Ranking calculations (Technorati) were changed:

“To better reflect the continually changing attention of the Blogosphere.”
(Technorati)

The changes they made reflect acknowledgement of weaknesses in their own previous ranking calculations.

An empirical statistical research study by Safran and Kappe (2008) researched and identified factors of success for Weblog communities as: activity, number of textual entries, number of images, comments given, comments received, guestbook entries given and guestbook entries received and that the most important of these factors are the community activities of the authors, i.e. writing comments and guestbook entries in other blogs. However they did not undertake a User Study or evaluate the usability of Weblogs as a factor of success.

A study into the usability of social network sites and RSS feeds has been conducted by Jakob Nielsen (2009). This study however was limited to social messaging, and they only studied corporate business use of social networks and RSS.

They did not study personal usage, Weblogs or the usability of Weblogs or Blogware, which this study did.

5.11 The relationship between Blogware usability and weblog usability

Questions which are relevant to this project were asked by Dix and Cowen (2007):

“As every web page becomes a user interface how do we effectively communicate appropriate usability advice? Can widely used toolkits provide

‘built-in’ usability so that end-developers need to know less?” (Dix and Cowen, 2007).

They recognised:

“There is a growing recognition of the need to understand how usability and Web 2.0 phenomena interact.” (Dix and Cowen, 2007).

Although this paper asked these relevant questions it did nothing to answer them. No other study has explicitly researched into these questions to understand this relationship.

This project evaluated browser-based Blogware features to establish if any afford ‘built-in usability’ and established ‘usability’ features do exist in Blogware, as well as the usability of the tools’ features.

5.12 Usability of Blogware as a measure of effectiveness

This project evaluated the usability of Blogware and Weblogs for effectiveness, efficiency and satisfaction with which specified users achieve specified goals in particular environments. Specifically this project measured the effectiveness, efficiency, utility, learnability, memorability and safety of Weblogs and Blogware. This study also evaluated top priority user experience goals of Weblogs and Blogware including usefulness, usable, valuable, desirable, findable, credible, accessible, satisfaction, enjoyment, engagement, pleasure, helpfulness, motivation, emotionally fulfilling and supporting creativity. This project evaluated Blogware and Weblogs for heuristic usability principles of tolerance, visibility, feedback, affordance, consistency and constraints.

Du and Wagers’ (2006) conclusions were statistical and credible, and were based on drawing a relationship between Blogware “technology characteristics” – features of the Blogware, and Weblog success, based on statistics they had obtained from Technorati. They claimed:

“Tool characteristics may be another indicator that measures its functional capability to present and administrate the content, as well as to enrich social interaction.”(Du and Wagner, 2006)

This suggests the utility of Blogware (if the functionality enables a user to meet their goals) is critical to Blogware and Weblog success. However, Du and Wagner’s study did not investigate this or other usability measures of Blogware features. Du and Wagner identified that features of the UI design (tool characteristics) drove value, but did not investigate if and how usability added value. Their study only alluded to Blogware usability:

“Weblogs started to gain popularity...[when]...tools provided the ease and affordable opportunity for non-technical persons to communicate online...First type of tools interfaces are easy-to-learn and use ...Second type of tools have the same click-and-post ease.” (Du and Wagner, 2006).

The investigation therefore suggested a relationship between usability and growing popularity of blogging and Blogware, but did not take this line of enquiry any further. They claimed their analysis “evaluated Weblog success and technology use.” (Du and Wagner, 2006). However the study did not analyse the use of the Blogware, it did not investigate user numbers or actual usage of the Blogware, and it did not look at usability. They concluded that:

“Weblog-building technology has a direct impact on blog content...technology’s enabling character is reflected through its usability and sociability of supporting Weblog success at both content and social levels.” (Du and Wagner, 2006).

However they did not evidence this claim as they did not investigate Blogware usability.

A model of Weblog success was presented (see Figure 7) by Du and Wagner (2006) which included usability as being a key assumed driver of technology (Blogware) value and this in turn impacts on Weblog success. However, they did not examine the usability of those tool characteristics and the relationship to Weblog success; it only assumed the affect of usability.

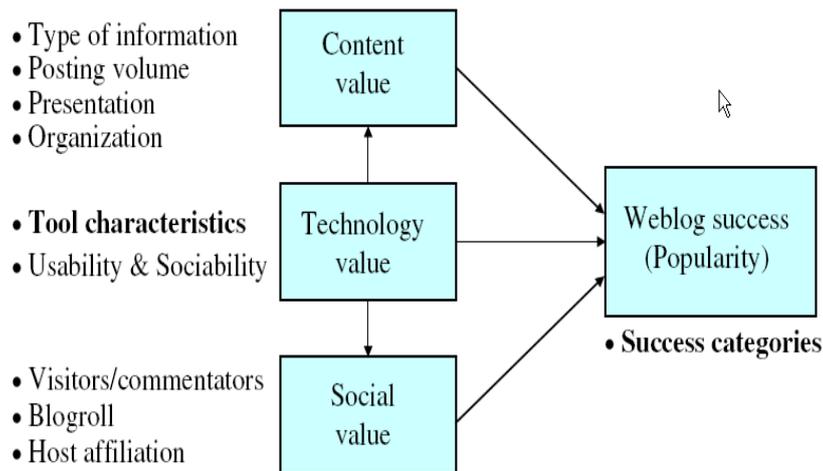


Figure 7 - The role of technology and weblog success (Du and Wagner, 2006)

Their study defined only technology characteristics as the technical features provided by the Blogware. They categorised Blogware into three different types according to those features. Their focus on Blogware features was credible but the usability of these features was not investigated. The most important features Technorati (Sussman, 2009) identified were: (1) archiving posts by date or category; (2) commentary systems; (3) built-in content syndication.

The study by Du and Wagner was focused in its scope and aware of its limitations and clearly states that further research would be needed, which could explore these other areas. Du and Wagner (2007) did further study but expanded the focus from Weblogs and Blogware to 'social media'. However, they did not undertake a usability study of Blogware. Du and Wagner's study was statistically credible and provides a useful foundation to this study as it proved there was a relationship between the Blogware used and 'success' of the Weblogs created.

This project develops that argument. However this project investigated the usability of Blogware technical features to prove the affect of usability on the value of Blogware.

The ease of use of Blogware and "push-button publishing for the people" (Blood, 2004) made blogging popular: "The availability of free and easy-to-use tools overturned the broadcast model" (Blood, 2004). However Blood's paper shows no

evidence of any usability studies of Blogware to support this view, and although based on expert opinion, is not substantiated by any research. Therefore the question of the usability of Blogware remains unanswered by a formal empirical usability study. *This study answers that question.*

The relationship between easy-to-use Blogware and the growth of blogging was not investigated by Du and Wagner but was acknowledged by Rebecca Blood in *How Blogging Software Shapes the Online Community* (2004):

“Spurred by easy-to-use commercial software, blogging is less about creating links and references to sites and sources and increasingly about Bloggers’ own comments and personal interests... This pattern, development of free tools in response to widespread practice, continues to shape Weblogs and blogging. Services now automate everything from site syndication to the display of reading lists... Whenever a sizeable number of bloggers start doing something, someone, it seems, will construct a tool to automate it, further popularising the activity.” (Blood, 2004)

This is relevant insight, however it is based on Blood’s expert opinion and is not substantiated by any research. Nor does Blood do any investigation into her own assumptions about ‘easy to use software,’ and just assumes a link between Blogware ease-of-use, or usability, and the growth of blogging.

Therefore the questions posed by this project remain unanswered by previous work.

The study by Du and Wagner also ignored previous research (Preece, 2001) which looked at usability of online communities, although online communities were often Weblogs. Preece (2001) looked at the relationship between sociability, usability and what determined success for online communities. The study defined Usability as:

“describing the nature of human-computer interaction” whereas “sociability describes the nature of social interaction in an online community.”

The study concluded:

“The main usability issues for online communities are similar to those for most other web-based software but the following four components are particularly important because they are concerned with the software’s role as a medium and place for social interaction”

These usability issues were listed as: Dialog and social interaction support; information design; navigation; access. Therefore the effectiveness and utility

(usability factors) of Weblogs (as an example of an online community) functionality, information design, navigation and access will be key to a Weblog success. This study by Preece was a hypothetical framework which is relevant to this project, as it gives direction to prioritising usability goals and principles. However Preece did not undertake any usability studies to prove or disprove any of the hypotheses posed by this project.

A research study being undertaken at the moment is investigating “Improving the usability of web 2.0 applications” (Pilgrim,2008), but this does not propose to focus on Weblogs or Blogware. Instead it will focus on Business applications and will investigate:

“how the introduction of web 2.0 technologies such as Ajax into a commercial website have affected the level of disorientation and cognitive overhead that users might experience.” (Pilgrim,2008),

Chris Pilgrim was contacted about the status of his project and he confirmed his findings would not be ready until it was too late to provide insight into this project.

Therefore the initial question about the usability of Blogware and any relationship with Weblog ‘success’ posed by this project remained unanswered by previous research at the time of this study.

6 Methodology

This was a Positivist study to derive knowledge from a combination of qualitative and quantitative usability methods, forming an empirical study to gain knowledge through observation.

The methods used were 1) Expert Heuristic Usability Evaluation of the five most used Blogware and 2) Comparative Usability Testing using a Think Aloud Protocol and a Software Usability Measurement Inventory (SUMI) questionnaire on 5 Weblogs. The results were analysed and compared to derive the conclusions.

6.1 Research preparation

- A Persona was created for a Hobbyist Blogger based on past research and interviews with bloggers. *See Appendix 3* for the persona.

- Key usability goals and objectives, user experience goals and objectives and usability principles were identified and prioritised for Hobbyist Bloggers for blogging and reading blogs. *See Appendix 4* for the usability and user experience goals.
- Key tasks and user goals were identified for Blogging and reading blogs. These were done as a Hierarchical Task Analysis. *See Appendix 5* for the Hierarchical Task Analysis.
- A research plan was written – *See Appendix 6* for preparation documents.

6.2 Expert Heuristic Usability Evaluation of Blogware

- Each Blogware was evaluated against the key user goals and tasks.
- Each Blogware was evaluated for effectiveness, efficiency and satisfaction with which specified users achieve specified goals in particular environments. It measured the effectiveness, efficiency, utility, learnability, memorability and safety of Blogware. It evaluated top priority user experience goals of Blogware and heuristic usability principles of tolerance, visibility, feedback, affordance, consistency and constraints.
- The same data collection template was used to evaluate each Blogware service.
- The same scoring was used for each:
 - 0 usability catastrophe
 - 1 serious usability flaws
 - 2 significant issues
 - 3 minor concerns
 - 4 generally usable
 - 5 exemplar for usability
- All aspects of the user interface of each Blogware were evaluated and scores given for each, and then averaged to get to overall scores for each overall aspect.
- Results were analysed against the key priority usability goals and objectives for Blogware.

- Conclusions were made about free browser-based hosted Blogware usability. *See Appendix 7* for heuristic evaluation template used.

6.3 Comparative Usability Testing of Weblogs.

- The Usability Testing evaluated each of the 5 Weblogs to verify whether they fulfilled user requirements and if usability goals were met.
- Weblogs were evaluated for effectiveness, efficiency and satisfaction with which specified users achieve specified goals in particular environments. The study measured the effectiveness, efficiency, utility, learnability, memorability and safety of Weblogs as well as how well user interfaces met user experience goals and usability principles.
- Tasks were created based on the Hierarchical Task Analysis which focused on using and reading blogs, key user tasks which users would expect to do when reading blogs. Usability tasks and instructions were prepared based on these. *See Appendix 6* for prep documents.
- All users were asked to perform the same 11 typical, relevant tasks identified as being the key main tasks blog readers would expect to do in a blog. These 11 tasks all meant utilising core standard features provided by the blogging platforms to bloggers to use in their blogs. These core 11 tasks were identified from interviews with users to understand prime blog usage and blogging tasks, when the Hierarchical Task Analysis was completed. These findings were also substantiated by published research from the literature review which forms part of this study.
- These tasks were provided on for the users to follow whilst using each blog.
- The tests were all undertaken using the same tasks to reduce the variable of usage.
- The usability testing evaluated what users actually do when they try to use Weblogs, giving credible quantitative data to understand task times, and task success rates plus qualitative data from what they said and observation of how they behaved.
- The Usability Testing used the same standard tasks repeated and a Think Aloud Protocol in order to establish qualitative data.

- This identified a comprehensive range of usability problems in the design and root-causes of issues hindering users' cognitive processing, as well as what was working well for users and meeting requirements.
- This study also used Jakob Nielsen's (Nielsen, 2005) rules for good Weblogs to measure against.
- Test variables were controlled to reduce the only variables to being the interfaces being tested and the independent variables in the UI design between these were isolated to identify the drivers for usability.
- 6 Users were recruited who are Hobbyist Bloggers who read personal blogs and blog in the way which matches the Hobbyist persona. All users met the persona profile criteria.
- Each User was interviewed before each usability test to confirm they met the Persona profile and to confirm their motivations and goals met those identified from past research. *See user interviews Appendix 8.*
- Each user was rewarded with £15 John Lewis vouchers.



- The test method was controlled with careful planning documents and data collection templates to ensure all the evaluations are consistent. This means the results overall give sufficient evidence to learn and make judgements about Weblog usability. *See Appendix 6 for the prep documents.*

- The usability evaluations were conducted on an IBM X61 laptop and on an iPhone 3GS.
- The browser used was Internet Explorer 8, Firefox and Chrome browsers on the laptop, Safari on iPhone.
- 6 usability tests were conducted taking 2 hours each with each user, divided into two one hour sessions so that users did not get exhausted.
- Each user used all 5 Weblogs.
- The usability tests were run in May-June 2010.
- The tests were all undertaken in the same room using the same computer to control the number of environmental variables.
- The Think Aloud Protocol will be used to obtain qualitative data.
- A data collection template was used to capture quantitative metrics for successful task completion, task time, and partial task completion and qualitative data of user comments and observation findings. *See Appendix 6 for prep documents.* The same data collection templates were used in each test to reduce the variable of how data is collected and to produce standard analysis across the data.
- Camtasia screen recordings and audio recordings were taken of each test to supplement data collection templates for post-test analysis.
- At the end of each test further questions were asked to gain further qualitative insights.
- At the end of each usability test of each blog, immediately after the user had used it, a SUMI questionnaire was used to give insight into users' perceptions about usability of the interfaces tested and user satisfaction. The questionnaire was designed based on standard SUMI questions, and captured quantitative data. The questionnaire complemented usability testing by revealing users' mental models which were not being satisfied by actual use. This generated quantitative data captured in a data collection template. The method used was a rapid-fire question technique. This provided insight into users' conscious perceptions compared to what they actually did, and insights into their perceived satisfaction vs. their actual use behaviour. *See Appendix 9 for the SUMI Questionnaire used.*
- The same scoring was used for each usability evaluation:

- 0 usability catastrophe
- 1 serious usability flaws
- 2 significant issues
- 3 minor concerns
- 4 generally usable
- 5 exemplar for usability
- The usability test results were evaluated and scores given for finding, and then averaged to get to overall scores for each overall aspect.
- Results were analysed against the key priority usability goals and objectives for Weblogs.
- Conclusions were made about Weblog usability.

6.4 Final analysis

- Analysis was done to understand if there are any patterns or relationships between the usability of the Weblogs and which Blogware applications were used to create them.

7 Results and discussion

The following pages present the results of this study.

7.1 Usability of Blogware

For how to access the complete Usability Evaluations of each Blogware service showing detailed findings for each see Appendix 10.

7.1.1 Expert Heuristic Usability Evaluation of Blogware - Overall Results

	LiveJournal	Xanga	Blogger	WordPress.com	TypePad Micro
Provide an effective home page - Ensure intuitive access to main user tasks	2	3	4	5	4
Provide an effective home page - Ensure visual elements do not compromise usability	1	3	4	4	5
Match structure with user needs - Ensure decomposition of tasks evident in site structure	2	3	4	5	5
Match structure with user needs - Design a simple state space	1	2	5	3	5
Provide usable e-functions - Visible System Status	2	3	5	5	3
Provide usable e-functions - Does it give the user control and freedom?	3	3	3	3	2
Provide usable e-functions - Does it offer effective error management?	3	3	5	5	5
Is the site user-centred? - Take account of human limitations	3	4	4	5	4
Is the site user-centred? - Does it match language with user needs?	2	1	5	5	5
Enable easy navigation - Does it make navigation efficient and effective?	2	2	3	5	3
Support the user - Does it Facilitate learning?	3	4	5	5	5
Support the user - Provide quality help and documentation	3	5	3	4	5
	LiveJournal	Xanga	Blogger	WordPress.com	TypePad Micro
Average score	2.3	3	4.2	4.5	4.3

Table 1 – Blogware Expert Heuristic Usability Evaluation Overall Results

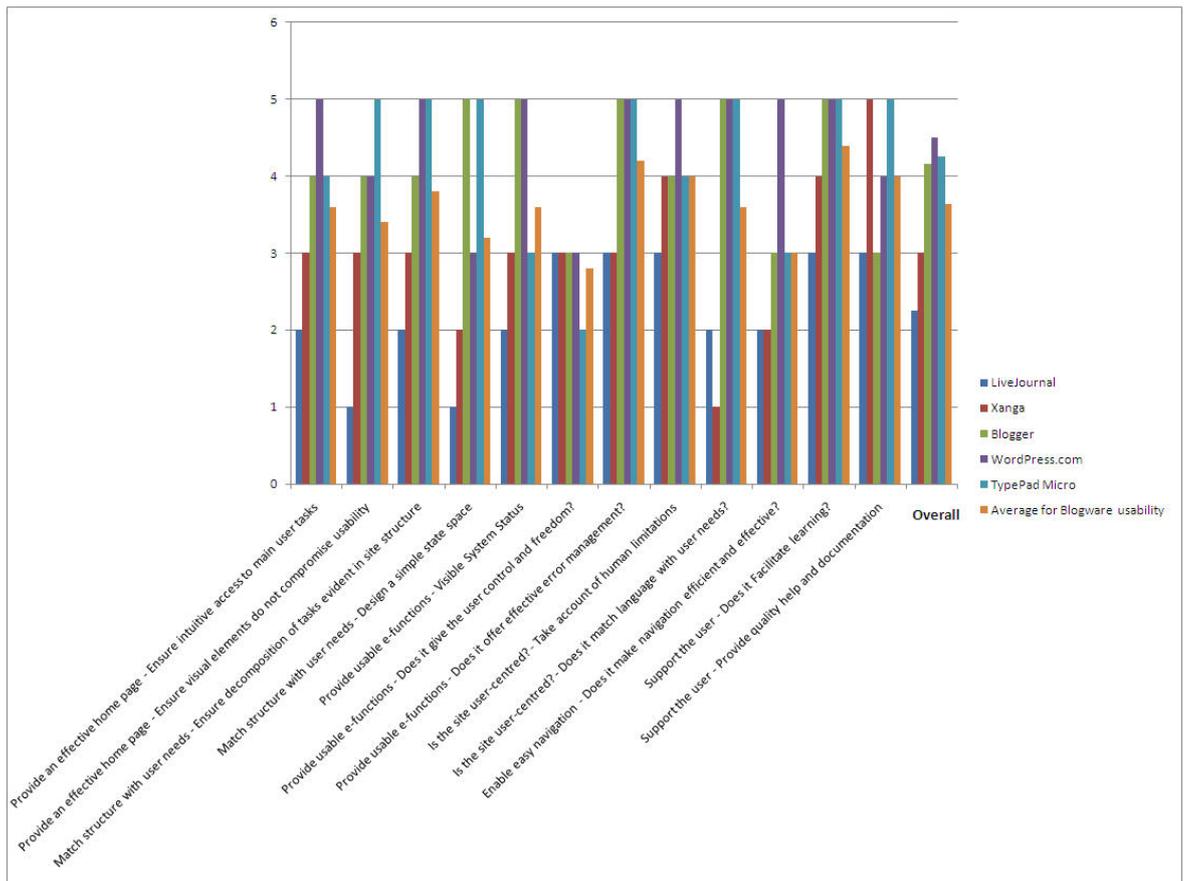


Figure 8 – heuristic usability evaluation of Blogware – comparison of results

7.1.2 Usability of Blogware - WordPress.com

See Appendix 10 for how to access the complete evaluation and data for expert heuristic usability evaluation of WordPress.com.

WordPress.com is very usable and useful to users with very good usability. It scored the best out of the five Blogware tools evaluated in this study.

4.5 average score

- 8 out of 12 (66.7%) of the key factors evaluated in the WordPress.com interface had exemplary usability:
 - a) Intuitive access to main user tasks;
 - b) Decomposition of tasks evident in site structure;
 - c) Effective error management;

- d) Matches language with target client group needs;
 - e) Efficient and effective navigation.
 - f) Facilitates learning
 - g) User-centred, takes account of human limitations
 - h) Usable e-functions provide visible system status
- The most successful aspect of WordPress.com is the navigation.
 - WordPress.com successfully meets usability goals of being effective, efficient, safe to use, easy to learn, easy to remember how to use and with excellent utility. Users will be able to achieve their main tasks and goals blogging with WordPress.com.
 - Another very successful aspect of the WordPress.com interface is how well it meets user experience goals. The overall user experience is rich and makes users feel positive: enjoyable: pleasurable, entertaining, fun, emotionally fulfilling, satisfying, rewarding, desirable, motivating: engaging, exciting, aesthetically pleasing, useful, valuable, helpful, supports creativity, enhances sociability. This will create user advocates who recommend WordPress.com.
 - A serious concern is around how much control and flexibility users have – especially with the appearance of their blog. This will impact on a primary motivation for Hobbyist Bloggers for personal self-expression. This will demotivate and frustrate users. Despite offering 93 design templates to choose from it is more limiting than other free online hosted blogging tools such as Blogger.com, as it does not enable customisation of those themes, users can't upload templates or their own CSS, and users can't change the page layouts or font sizes easily.
 - An area of some concern was the simple state space due to the apparent complexity of the dashboard which will impact most on users' first impression when they start using the tool. This will impact on the learnability and create an early barrier to use. If users get beyond this and persevere for no more than about 1 hour, this issue will become a non-issue due to the high levels of learnability and memorability within the tool's interface. Due to the high levels of safety users will

feel confident to explore and try things out, which is why this is only a minor concern and not a major issue.

7.1.3 Usability of Blogware - TypePad

See Appendix 10 for how to access the complete evaluation and data for expert heuristic usability evaluation of TypePad.

TypePad Micro is generally usable with some exemplary usability.

Average score - 4.3.

- 7 out of 12 (58%) of the key factors evaluated in the TypePad Micro interface had exemplary usability. These were:
 - The design ensures visual elements do not compromise usability.
 - Structure matches with users' needs
 - Decomposition of users' tasks is evident in the interface structure
 - The design provides a simple state space.
 - Very effective error management.
 - It matches language with target user needs.
 - Supports the user both with the provision of quality help documentation and facilitates learning.
- The most successful aspect of TypePad Micro is how much it supports the user and exceptionally meets learnability goals for users.
- TypePad Micro successfully meets usability goals of being effective, efficient, and safe to use, easy to learn, easy to remember how to use and with excellent utility for the functionality and information that is provided. Users will be able to achieve their main tasks and goals blogging with TypePad Micro.
- The TypePad Micro interface very successfully meets user experience goals. The overall user experience is simple, engaging and positive with information, features and functionality which will enrich the user's blogging experience and make them

feel positive, that TypePad is: enjoyable, pleasurable, entertaining, fun, emotionally fulfilling, satisfying, rewarding, desirable, motivating, engaging, exciting, aesthetically pleasing, useful, valuable, helpful and enhances sociability. It works a lot harder to be more than just efficient, effective and useful, the rich user experience will make the tool much more engaging.

- TypePad Micro was the best blogging platform evaluated for meeting sociability goals with users, helping them to share with others using social networking, and providing very easy built-in social networking functionality into the blogs published, to further enhance the social network for a blogger. It will also feel familiar to bloggers who are familiar with social networking products such as Facebook and Twitter as it feels like a blend of Twitter and Blogger, further enhancing how easy to learn it will be.
- There are some minor concerns with visible system status and the efficiency and effectiveness of the navigation.
- A quite serious concern with significant issues is how little it gives users control and freedom to change the design of their blog. TypePad Micro is very weak at supporting creativity and self-expression for users. It was the worst blogging tool evaluated for the lack of flexibility to change the design of a blog. The user experience is very similar to Blogger but does not offer the same scope to enhance the blog design. It only offered 3 inflexible 'themes'. This will impact on the primary motivation for Hobbyist Bloggers of personal self-expression.
- If TypePad Micro provided more than 3 design themes with more flexibility it would have scored better and overall would have had the best user experience, but the design limitations meant overall the user experience was not as good as WordPress.com.

7.1.4 Usability of Blogware - Blogger

See Appendix 10 for how to access the complete evaluation and data for expert heuristic usability evaluation of Blogger.

Blogger is generally very usable and useful to users with very good usability.

4.2 average score.

- One third of the areas of Blogger's usability scored 4 – generally usable.
- 5 out of 12 areas of Blogger's usability scored 5 – exemplar usability: design a simple state space; visible system status; matches language with target user group needs; facilitates learning and effective error management was the most successful element of Blogger.
- Only 3 areas of Blogger's interface showed minor concern about usability – giving users control and freedom, help, and navigation.
- No main areas with significant issues, but the most significant were the poor utility of linking functionality and poor utility and features for managing blog performance and stats.
- No areas with serious usability flaws or catastrophes.

7.1.5 Usability of Blogware - Xanga

See Appendix 10 for how to access the complete evaluation and data for expert heuristic usability evaluation of Xanga.

Xanga.com is quite usable with some minor concerns overall, a couple of significant issues and one serious usability flaw.

- 3 average score – minor usability concerns on average.
- The most successful aspect of Xanga.com is the Help which has exemplary usability: supports the user by providing quality help and documentation.
- Xanga.com quite successfully meets usability goals of being effective, efficient, safe to use, easy to learn, easy to remember how to use and having the right information and functionality at the right time (utility). Users will be able to achieve their main tasks and goals blogging with Xanga.com, but less efficiently and effectively than they could if these issues were resolved.
- The overall user experience is rich and positive with a lot of information, features and functionality which will enrich the user's blogging experience and make them

feel positive. It feels positive and pleasurable, the visual design and use of colour will be motivating. Users' perceptions may be that Xanga.com is quite enjoyable, pleasurable, entertaining, fun, emotionally fulfilling, satisfying, rewarding, desirable and quite Motivating: engaging, exciting, aesthetically pleasing, useful and valuable. They will find Xanga very helpful and it supports creativity and enhances sociability.

- The most serious concern with Xanga was the serious usability flaw in the site with the prolific use of 'Xanga-speak' – internal language used to turn commonly understood features and actions into something the user would have to try and interpret in Xanga. The language used for naming and labelling and the overall information architecture in Xanga is not focused on the user, it is very internally Xanga-centric. This will impact on Xanga's ability to meet all usability goals as users will too often not understand the relevance of a term to the task they are trying to do so won't find the functions or information they need to successfully and efficiently complete tasks.
- Two areas which had significant usability issues were efficient and effective navigation and designing a simple state space.

7.1.6 Usability of Blogware - LiveJournal

See Appendix 10 for how to access the complete evaluation and data for expert heuristic usability evaluation of Blogger.

LiveJournal has significant usability issues.

Average score – 2.3

- The best aspect of LiveJournal's usability is the freedom it gives users to express their creativity with the flexibility it offers to change the look and feel of the design of a blog. This will be motivating for these users whose primary motivation to blog are about self-expression, and LiveJournal's design flexibility will enable users to do that very effectively. There are hundreds of flexible layouts to choose from. This will contribute to a more positive perception in users of their experience of using LiveJournal because this is such a key factor for users.

LiveJournal was the best blogging platform out of those evaluated at giving users this design flexibility. However:

- None of the main key factors evaluated had exemplary or good usability. At best LiveJournal has minor usability concerns.
- There are major usability flaws with the visual presentation of LiveJournal screens, visual elements compromise usability.
- The homepage does not have an appropriate mix of visual attractors and distractors. There are a lot of images and graphics which clutter the screen and are over-used. Animation, advertising, profile icons and background graphics all distract.
- The homepage composition has the main navigation bar and user login at the top which is very effective. However it does not concentrate the user on main tasks. Instead the main body of the homepage is dominated by Recent Posts by other bloggers and 'ONTD Oh No They Didn't' – which users may not understand as this is not self-explanatory.
- The overall result is the user's short-term memory will be dominated by all these different visual elements which compete with each other for the user's attention, overloading the cognitive effort required by the user.
- The logged-in Homepage is the same as the main LiveJournal public homepage, so has all the issues of the public homepage but will have a greater negative impact on users because the user will be signed-in with specific goals/ tasks in mind. The homepage for the signed-in user does not focus the user on the main tasks and instead will act as a distraction for the user, making it inefficient.
- Additional pages add complexity which impact on the simple state space – navigation menus have options which appear in some instances to duplicate each other, users will have to think harder to work out which option to select. Generally the user has to take too many actions to get from the homepage to complete a task due to the complex structure.
- Pages are not managed very effectively – they are too long, users have to scroll in every case, because of advertising at the top and down the sides.

- Text is not kept to a minimum.
- Inconsistent navigation menus add to the complexity of the design. The homepage has two navigation systems across the top, when one would be more simple and effective.
- All of this reduces the efficiency of the site, making it inefficient to use.
- The Homepage does not ensure intuitive access to main user tasks.
- LiveJournal's structure does not match with user needs, the decomposition of tasks is not evident in the site structure.
- There are significant issues with how it presents a visible system status.
- The user interface does not match the language of users.
- It does not enable effective and efficient navigation.

All of these issues combine to impact on the other areas of LiveJournal's user interface to result in some minor usability concerns.

7.1.7 Summary of findings of Blogware usability

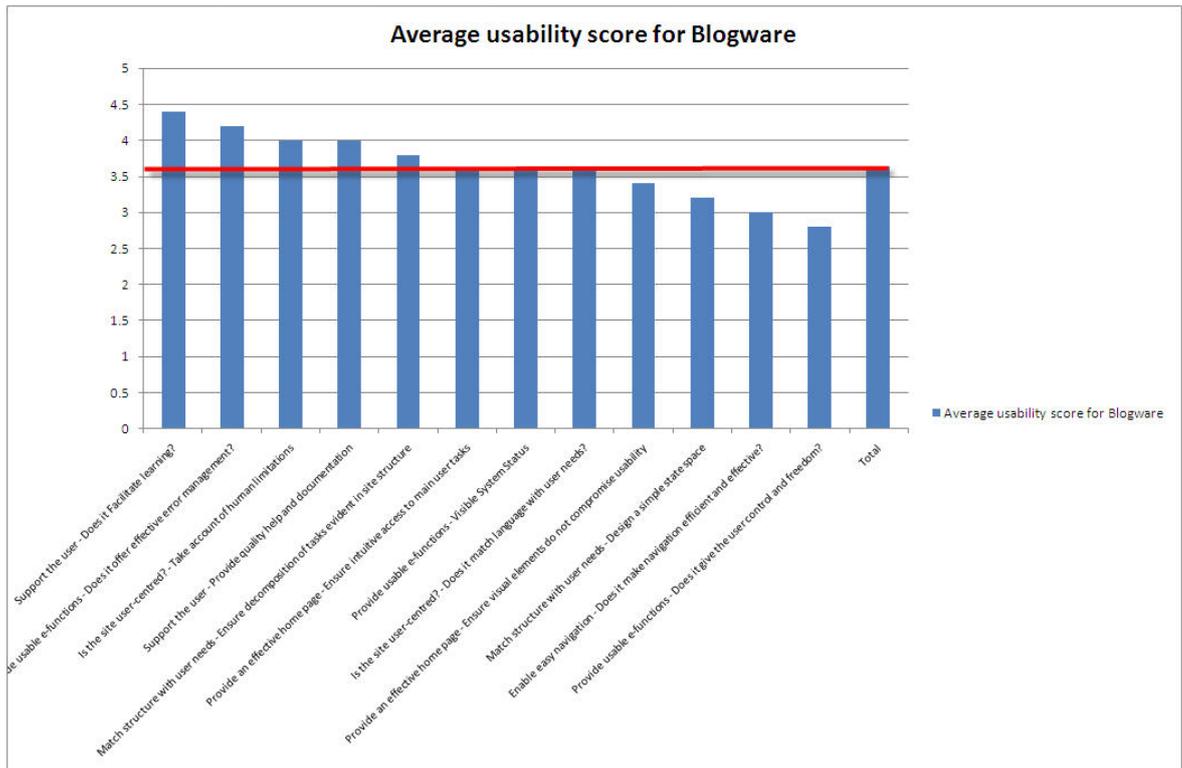


Figure 9 – Summary of findings of Blogware usability

- WordPress.com had the best usability.
- TypePad Micro was almost as good as WordPress.com but didn't offer users the same degree of creative flexibility and freedom. For the user persona of this study a key motivation is to 'express myself' so this would have a bigger negative impact on the overall user experience than other factors.
- Blogger was the third most successful platform.
- Xanga and LiveJournal had the most issues, with LiveJournal being the Blogware service which rated the worst.
- Overall Blogware usability averages at 3.6, so generally usable with minor concerns.
- Blogware overall is best at facilitating learning, so follows Internet platform conventions, offers good internal consistency – including visual identity, use of text, supports user control and freedom and actions such as undo and redo. Blogware services are also offering good effective error management generally, are taking account of human limitations and are providing effective help resources.

- Blogware services generally need to improve ensuring visual elements do not compromise usability, providing a simple state space which focuses on users' needs, offering efficient and effective navigation and giving the user greater control AND freedom.

7.2 Usability of Weblogs

For how to access the complete Usability Study Report showing detailed usability findings for each Weblog see Appendix 10.

7.2.1 Usability of Weblogs – overall

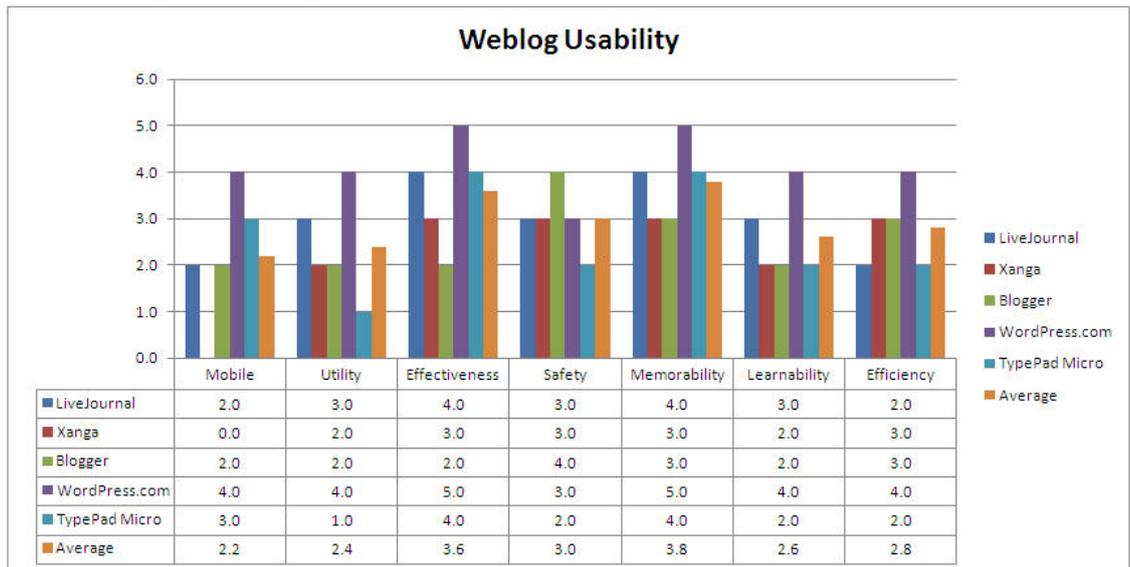


Figure 10 – Weblog usability goal scores comparison

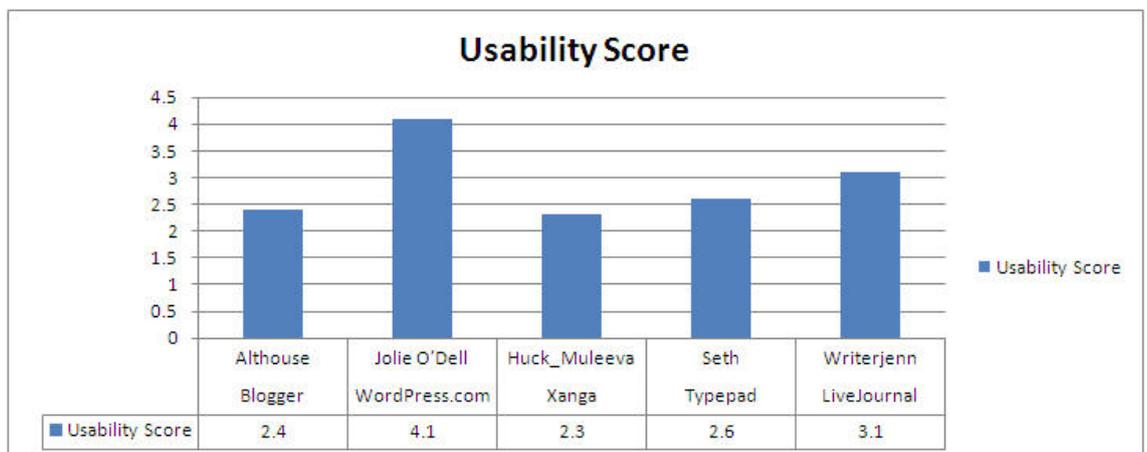


Figure 11 – Weblog usability scores overall comparison

- Weblogs scored 2.9 average overall for usability, meaning overall weblogs have usability with minor concerns.
- Overall on average Weblogs are best at Memorability, scoring 3.8, so generally making it easy for users to remember how to use something once they have used it before.
- Overall on average Weblogs are good at Effectiveness, scoring 3.6, so Weblogs generally are effective to use, they do what they are supposed to do, and are generally capable of allowing users to do the main intended tasks.
- Overall on average Weblog usability is worst at offering an easy-to-use, useful and satisfying experience when Mobile, scoring 2.2, showing significant issues. Blogs experienced through the iPhone when users are on the move generally have a lot to improve.
- Overall on average Weblogs are poor at offering good utility, so they do not provide the right kind of functionality and information at the right time so that users can do what they need to do, and the set of functions are not appropriate to enable users to do the main intended tasks.
- The WordPress.com weblog (Jolie O'Dell's blog) had the user interface that scored the best for usability and user experience overall with 4.1 with a good and overall usable and satisfying to use user interface.
- The LiveJournal weblog (Writerjenn) had a user interface which scored 3.1, a satisfying user experience but with some minor concerns about the usability.
- The TypePad blog (Seth Godin's) had a user interface which has combination of some significant and minor concerns with the usability which impacted on user satisfaction, scoring 2.6
- The Blogger weblog (Althouse) scored 2.4, and had a user interface with some significant issues with the usability which impacted on user satisfaction.
- The Xanga blog (Huck_Muleeva) had a user interface with the most significant usability and user experience issues (2.3).
- All the blogs had some examples of exemplary usability with some aspects of their user interfaces.

7.2.2 Mobile experience (iPhone 3GS)

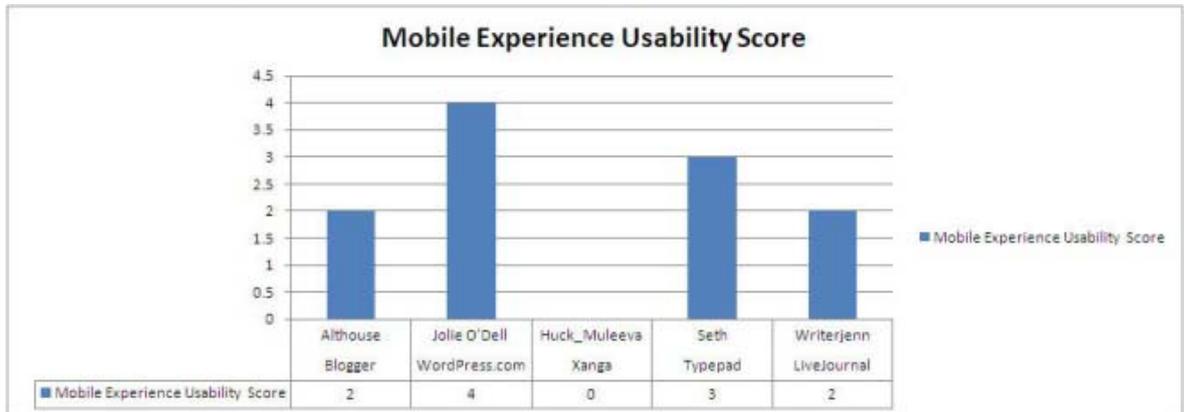


Figure 12 – Weblog mobile experience usability score comparison

7.2.3 Utility – overall

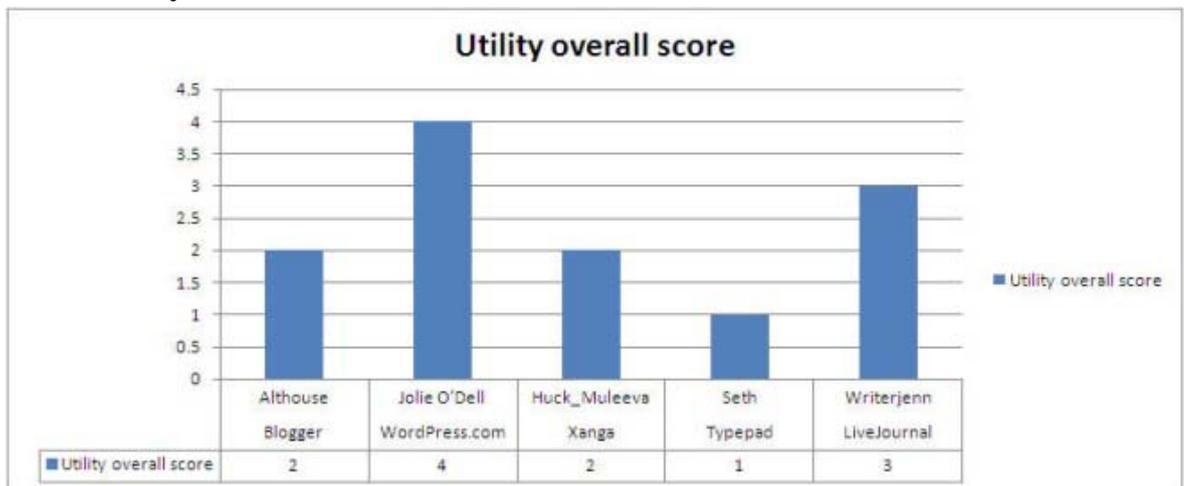


Figure 13 – Weblog utility usability goal score comparison

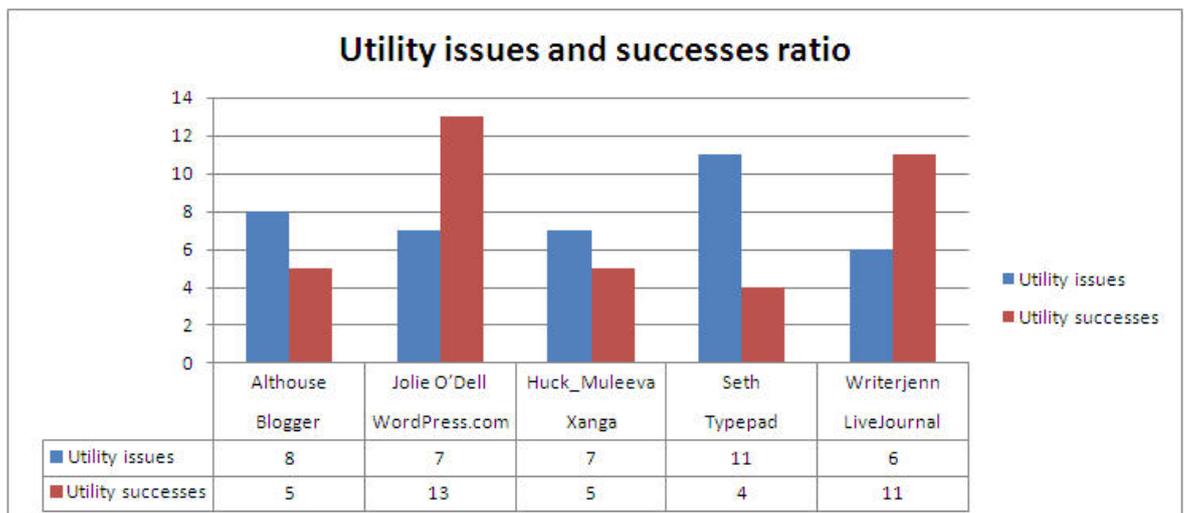


Figure 14 – Weblog utility issues vs. successes ratio comparison

7.2.4 Utility – successes

	Althouse	Jolie O'Dell	Huck_Muleeva	Seth	Writerjenn
Gauge readership	4	3	4	4	4
Time and date utility	3	4	5	4	4
View comments	5	4	3	X	5
Profile	4	5	4	X	3
Leave comments	5	4	3	X	4
Share	x	X	4	X	5
Structure of the user interface matches with user needs	x	4	x	X	4
Descriptive self-explanatory blog content	x		x	4	3
Tagging	x	4	x	X	4
Links to most recent posts	x	3	x	X	4
Understand what the blog is about	x	4	x	X	x
Effective navigation	x	5	x	X	x
Subscribe	x	x	x	4	x

Table 2 – Weblog Utility goal successes

7.2.5 Utility – issues

	Althouse	Jolie O'Dell	Huck_Muleeva	Seth	Writerjenn
Subscribe functionality	2	1	2	2	1
Insufficient information provided to users at the right time when they need it to explain what the blog is about.	1	2	2	3	3
Long page	2	3	2	2	3
Issues with content search utility	1	0	0	1	0
The design does not provide sufficient functionality at the right time to users (that is visible to them) to help them find content in this blog.	2	x	2	2	2
The user interface functionality and information does not enable easy navigation	0	X	2	1	2
	Althouse	Jolie O'Dell	Huck_Muleeva	Seth	Writerjenn
Issues with share utility	2	2	x	2	X
Structure of the user interface does not match with user needs	1	X	1	2	X
Headlines and body copy are difficult to scan	x	X	2	X	X
Categories are included but has	x	3	x	X	X

issues with utility (visibility)					
Issues with time and date utility	3	X	x	X	X
There is insufficient information is provided to users at the right time about this blogger's profile	x	X	x	2	X
Issues with comments to read utility	x	x	x	0	X
Issues with leaving comments utility	x	x	x	0	x
'tags' and 'filed under'	x	2	x	X	x

Table 3 – Weblog Utility goal issues

7.2.6 Effectiveness – overall

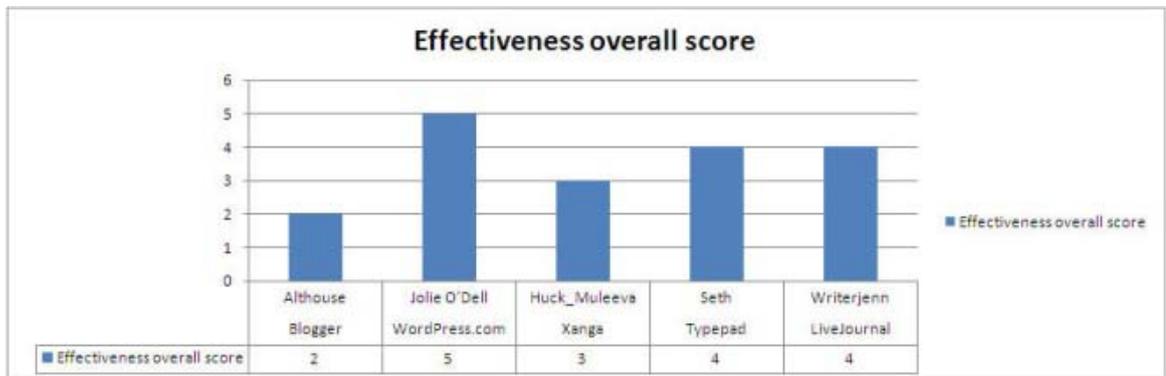


Figure 15 – Weblog effectiveness goal score comparison

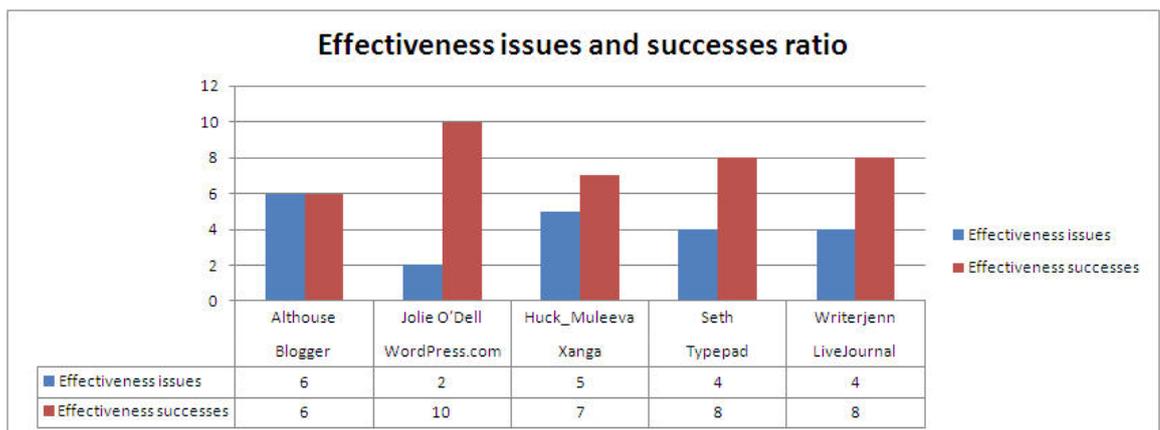


Figure 16 – Weblog effectiveness issues vs. successes ratio comparison

7.2.7 Effectiveness – successes

	Althouse	Jolie O'Dell	Huck_Muleeva	Seth	Writerjenn
Read the latest post	5	5	4	5	4
Understand how up-to-date, current and immediate information is in a post, how recent the post was posted.	4	4	5	4	4
Understand who the blogger is and if they are relevant, expert, and credible, someone you would trust	5	5	5	X	4
Understand the level of readership of the blog to determine if this is a credible blog with a following of readers	4	3	4	4	4
	Althouse	Jolie O'Dell	Huck_Muleeva	Seth	Writerjenn
Read comments from other readers	5	4	3	x	5
Comment on a post	4	3	3	x	4
Find other blogs of interest through a blog's links	x	4	x	4	5
Share information from the blog with friends and contacts, republish the content, extend your own expertise	x	x	4	3	5
The interface provides an effective homepage	x	5	x	3	x
Establish what the blog is about and how it is relevant	x	3	x	3	x
Browse the blog and find all the content on a subject of interest within the blog - find a post on one subject of interest then be able to find another post on the same	x	5	x	X	x
Subscribe to a blog's content	x	x	x	4	X

Table 4 – Weblog effectiveness goal successes

7.2.8 Effectiveness – issues

	Althouse	Jolie O'Dell	Huck Muleeva	Seth	Writerjenn
Browse the blog and find all the content on a subject of interest within the blog - find a post on one subject of interest then be able to find another post on the same subject written in the past.	1	x	0	1	2
Subscribe to a blog's content	2	2	1	x	1
The user interface does not provide an effective home page	2	x	2	x	2
Establish what the blog is about and how it is relevant	1	x	2	x	3
Find other blogs of interest through a blog's links.	3	x	0	x	X
Share information from the blog with friends and contacts, republish the content, extend your own expertise.	2	1	x	x	X
Understand who the blogger is.	x	x	x	2	x
Comment on a post	x	x	x	0	x
Read comments	x	x	x	0	x

Table 5 – Weblog effectiveness goal issues

7.2.9 Other usability goals

	Althouse	Jolie O'Dell	Huck Muleeva	Seth	Writerjen n
Usability goal: Safety – medium priority	4	3	3	2	3
Usability goal: Memorability – medium priority	3	5	3	4	4
Usability goal: Learnability – medium priority	2	4	2	2	3
Usability goal: Efficiency – Low priority	3	4	3	2	2

Table 6 – other usability goal scores

7.2.10 Summary of findings of Weblog usability

	Memorability	Effectiveness	
Weblog usability overall on average was best at			
Score	3.8	3.6	
	Mobile	Utility	
Weblog usability overall on average was worst at			
Score	2.2	2.4	
	Memorability	Effectiveness	
The Weblog which tested the best (Jolie O'Dell on WordPress.com) was best at			
Score	5	5	
	Mobile	Utility	Learnability
The Weblog which tested the worst (Huck_Muleeva on Xanga) was worst at			
Score	0	2	2

Table 7 – Summary of weblog usability findings

7.2.10.1 Blog user interface usability successes

- Weblog user interfaces are in the main providing good utility for providing information at the right time to gauge readership (comment counters, retweet counters, Facebook ‘like’ counters), clear time and date utility, enabling users to easily view comments, profile information and to leave comments.
- This means most readers in most weblog user interfaces are easily able to: find and read the latest post; understand how up-to-date, current and immediate information is in a post, how recent the post was posted; understand who the blogger is and if they are relevant, expert, and credible, someone they would trust; understand the level of readership of the blog to determine if this is a

credible blog with a following of readers; read comments from other readers; and comment on a post.

- The utility to enable users to do these things is ‘just expected’, if it’s not there, it will be to the detriment of the user experience of that blog’s user interface.

7.2.10.2 *Blog user interface usability issues*

7.2.10.2.1 *Subscribing makes users think too hard.*

All blogs had issues with the utility of subscribe functionality. All the users in this study met the profile of Hobbyist bloggers, so are actively involved in blogging and reading blogs, are members of the ‘Blogosphere’ but still had issues with RSS Feed Readers. Email subscription is preferred option; it requires the least cognitive effort by users. Blog user interfaces made users think too hard about subscribing, and too frequently buried their subscription functionality in a location that was too hidden from users’ eyes to be found.

7.2.10.2.2 *Blogs are mysterious puzzles*

Blog user interfaces do not provide sufficient information at the right time when users need it to explain themselves, too often users don’t know what they’re about, why the blogger is blogging. Titles, headings, introductory text, welcome messages are all needed and need to explain to users what is in this blog and what it is about.

7.2.10.2.3 *Long pages*

The default construction of blogs is to have long pages. Users are OK with scrolling, this doesn’t have a negative impact until scrolling involves going over 10 page folds. The blog which had the best user experience still had a very long main page, but the negative impacts of this were resolved by having good content architecture and structure in their blog using content categorisation, tagging and pages which all reduced the effort needed by the

users to scroll, they instead used the utility of these features to get to where they needed and find what they wanted.

7.2.10.2.4 Blogs need to better help users to find information – help them to search.

Blog user interfaces do not make it easy for users to find information of interest to them. Not having an effective content search function in the blog has a big impact on users' ability to find what they are looking for. But it is not enough to just provide a content search. The content search needs to be visible at the top of the first page to users. The naming and labelling of this function needs to show it is to search this blog, so users don't confuse it with searching content on the whole blogging platform or Google.

7.2.10.2.5 Blog content is disorganised and unstructured for users

Content organisation may require some effort by the blogger, but it is helpful to blog users. Linking to related articles or posts, tagging, and content categorisation will help users to find information they are looking for, but having a visible and effective search facility will make the biggest difference. For content tagging bloggers need to consolidate the number of tags so there are not hundreds. If there are too many they become 'noise' to users and ineffective at helping them to find information. Using a tag cloud or some kind of navigation menu means users can navigate the content. The blog which had the best user experience had used tags and had also used content categories and presented these in a drop-down menu. This proved very effective for users and had a big impact on their perception of the usability of this blog's user interface. The blog which had the best user experience also had very clear pages of static content.

7.2.10.2.6 Poor navigation and no 'Home'

Most of the blog user interfaces did not offer functionality and information to enable easy navigation. Many did not consider their main page to be a homepage, and did not present it as this, although this is how users perceive it.

Not providing a persistent link back to your homepage from all areas your users can access contributes to negative perceptions and some fundamental usability issues. Users get lost, have to think too hard to find their way around, and won't come back. The blog which had the best user experience had a very clear and persistent link to 'Home' and a very clear navigation bar which was very visible to users at the top of the user interface where they expected to find it, and could see it.

7.2.10.2.7 Blogs don't help users to easily share

Blog readers want to share content from blogs; it is a motivating part of their experience. The more the content of a blog gets shared, the more traffic will be driven back to it in a virtuous circle. However this circle is being broken in most cases because most blog user interfaces make users think too hard to share information from a blog. Twitter Retweet, Facebook 'Like It' and email sharing are all essential, blogs which don't provide these are causing a great deal of frustration. Twitter is not the only sharing option, users want flexibility to be in control of how they share content. The sharing functionality must feel like it is part of the blog, so users don't feel like they are being sent somewhere else to do this, where they will feel lost and out of control. The user experience of functions like TweetMeme could be improved as the screen worries users; it needs to be more self-explanatory.

7.3 Relationship between the Usability of Blogware and Weblogs

7.3.1 Usability Results compared

	LiveJournal	Xanga	Blogger	WordPress.com	TypePad Micro
Heuristic usability evaluation of Blogware (x)	2.3	3	4.2	4.5	4.3
Usability study of weblogs (y)	3.1	2.3	2.4	4.1	2.6

Table 8 –Blogware and weblog usability scores compared

7.3.2 Establishing a relationship between these results

This has been done statistically using Correlation. A correlation is a single number that describes the degree of relationship between two variables. The hypothesis was that the better the usability of Blogware, the better the usability of the weblogs they create. It has been established that there is a correlation between Blogware usability scores and the Weblog usability scores. *See Appendix 11* for correlation calculation explanation.

7.3.3 Correlation between Blogware and Weblog usability test results

Which Blogware	Heuristic usability score (x)	Produced weblog with what usability score (y)	x*y	x*x	y*y
LiveJournal	2.3	3.1	7.03125	5.0625	9.765625
Xanga	3	2.3	6.75	9	5.0625
Blogger	4.2	2.4	9.895833333	17.36111111	5.640625
WordPress.com	4.5	4.1	18.5625	20.25	17.015625
TypePad Micro	4.3	2.6	11.15625	18.0625	6.890625
SUM	18.2	14.5	53.39583333	69.73611111	44.375
N = 5	Σx	Σy	Σxy	Σx^2	Σy^2

Table 9 – Calculation of correlation between Blogware and Weblog usability

$$(5 \times 53.39583333) - (18.2 \times 14.5) = 266.9791667 - 263.4166667 = \mathbf{3.5625}$$

$$(5 \times 69.73611111) - (18.2 \times 18.2) = 348.6805556 - 330.0277778 = \mathbf{18.65277778} \times (5 \times 44.375) - (14.5 \times 14.5) = 221.875 - 210.25 = \mathbf{11.625}$$

=

$$\mathbf{216.8385417}$$

$$\mathbf{14.72543859 \text{ (Square root)}}$$

$$r = \mathbf{0.242}$$

So, the correlation is .242, which is positive relationship showing there is a relationship between Blogware usability and Weblog usability. It is a relatively weak relationship, but it still exists.

This calculation was done as above for overall and for each factor measured for Blogware usability and the usability goals measured for Blog usability.

7.3.4 Correlation between Blogware and Weblog usability test results

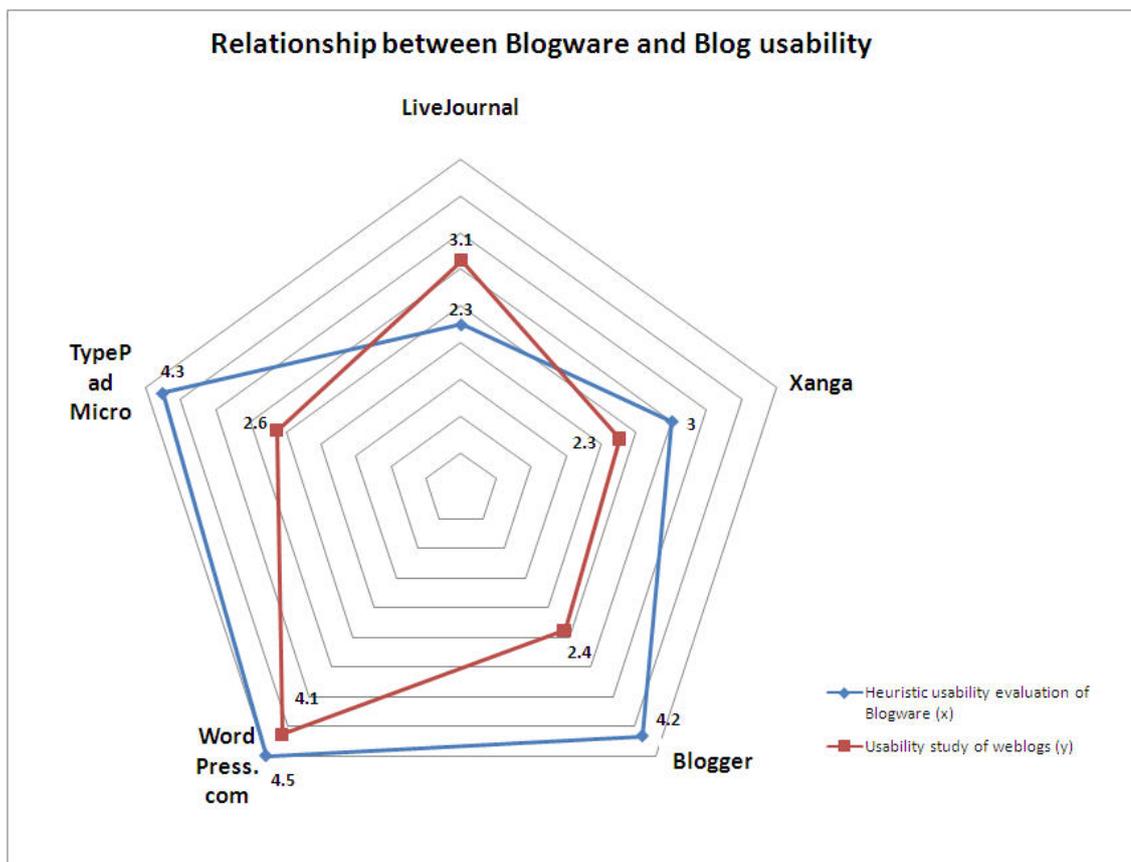


Figure 17 – Correlation between Blogware and Weblog usability

So, the correlation is .242, which is positive relationship showing there is a relationship between Blogware usability and Weblog usability. It is a relatively weak relationship, but it still exists.

7.3.5 Correlation between usability factors of Blogware and usability of blogs overall

Although some factors have a very strong relationship the overall relationship is weakened by the fact that some factors do not have a relationship at all, as follows:

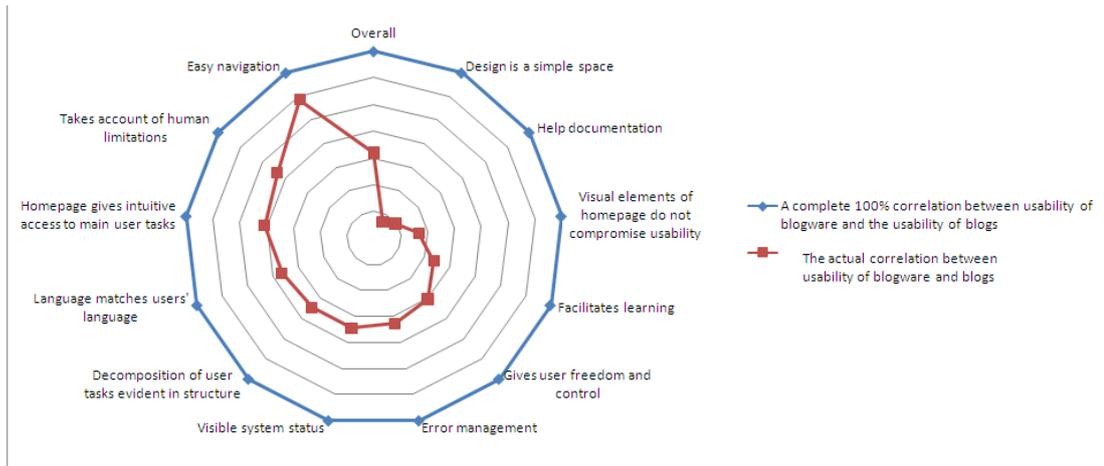


Figure 18 – Correlation between usability factors of Blogware and Weblog usability overall

Relationship between usability factors of Blogware and usability of blogs overall													
Relationship exists	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
Usability factor of Blogware	Overall	Design is a simple space	Help documentation	Visual elements of homepage do not compromise usability	Facilitates learning	Gives user freedom and control	Error management	Visible system status	Decomposition of user tasks evident in structure	Language matches users' language	Homepage gives intuitive access to main user tasks	Takes account of human limitations	Easy navigation
Correlation (r)	0.242	0.257	-0.205	0.065	0.073	0.202	0.254	0.287	0.289	0.324	0.410	0.464	0.770

Table 10 – Calculation of correlation between usability factors of Blogware and usability of blogs overall

- The main factors having the closest relationship are:
 - language matches users' needs,
 - homepage gives intuitive access to main user tasks
 - takes account of human limitations.

- The greatest link between the usability of blogware and the usability of blogs is easy navigation. There is a high correlation between this and the usability of blogs, this being the closest to +1.
- Factors which don't have a relationship, so there is no bearing between the usability of the blogware and the blogs they produce, are:
 - homepage is a simple state space or not
 - visual elements do or do not compromise usability
 - help documentation.
- The illustrative case is that LiveJournal had very poor usability on these elements, but the blog which it produced still usability tested well.

7.3.6 Correlation between Blogware usability overall and Usability factors of blogs

Relationship between Usability of Blogware and Usability goals of Blogs							
Relationship exists	*	*	✓	✓	✓	✓	✓
Usability goal of Blog	Utility	Safety	Effectiveness	Learnability	Memorability	Efficiency	Mobile experience
Correlation (r)	0.06054528	0.03050823	0.098386083	0.10129927	0.299096252	0.5053695	0.63121948

Table 11 – Calculation of correlation between Usability of Blogware and Usability goals of Blogs

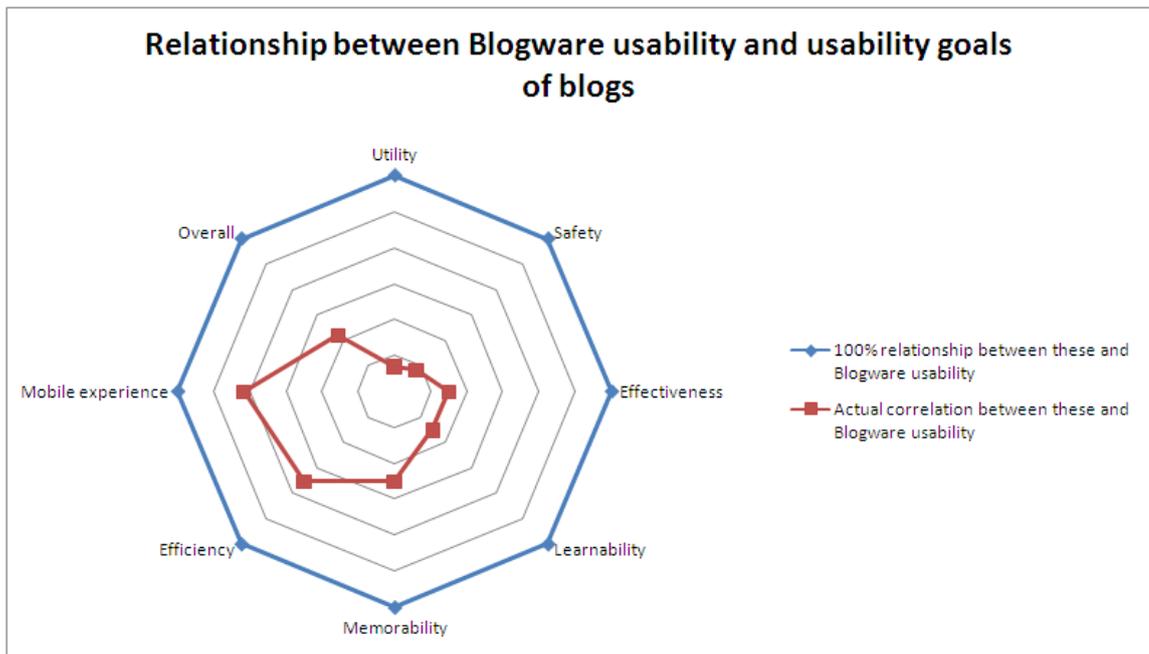


Figure 19 – Correlation between Blogware usability and usability goals of blogs

There is a relationship between the usability of Blogware some usability goals of blogs:

- how easy to learn blogs are
- how easy they are to remember to use blogs are
- how efficient blogs are to use
- the mobile experience of a blog user interface.
- The greatest link between the usability of blogware and the usability of blogs is the mobile experience of the blog. Some blogware systems make this easy for users, others don't and there is a direct impact on the user experience of the blogs being published. WordPress.com has very good usability in making it easy to make blogs mobile, and consequently WordPress.com blogs have the best mobile user experience.

There is no relationship between the usability of blogware and the following usability goals of blogs:

- Utility
- safety
- effectiveness.

Different blogware systems provide different functionality, but these are features of the Blogware rather than being the utility of the features of the Blogware. These different features e.g. provision of social networking functionality, provision of categorisation functionality, do impact on Blog usability a great deal, but there is no relationship between the usability of Blogware as a whole and these goals being effectively achieved in blogs.

7.4 Conclusions about relationship

The data from this study proves there is definitely a relationship as shown between online free hosted Blogware usability and the usability of Weblogs evaluated in this study. This project suggests that these findings are indicative of the relationship between online free hosted Blogware and all blogs. However an acknowledged limitation of this project is being able to prove this to a point where it is statistically significant (see Section 8 for Limitations).

This project concludes that there is a relationship between Blogware and Weblog usability the usability of free hosted browser-based Blogware impacts on the usability of the personal Weblogs they create.

8 Overall Conclusions

This project has shown that there is a relationship between Blogware and Weblog usability the usability of free hosted browser-based Blogware impacts on the usability of the personal Weblogs they create.

The factors that have the closest relationship between Blogware usability and usability goals of Weblogs are Memorability, Efficiency and an effective Mobile Experience in Weblogs.

In Blogware the factors that have the closest relationship to blog usability are easy navigation, whether the user interface takes account of human limitations, whether the language matches the users' language and whether the homepage of the Blogware service gives intuitive access to the main user tasks.

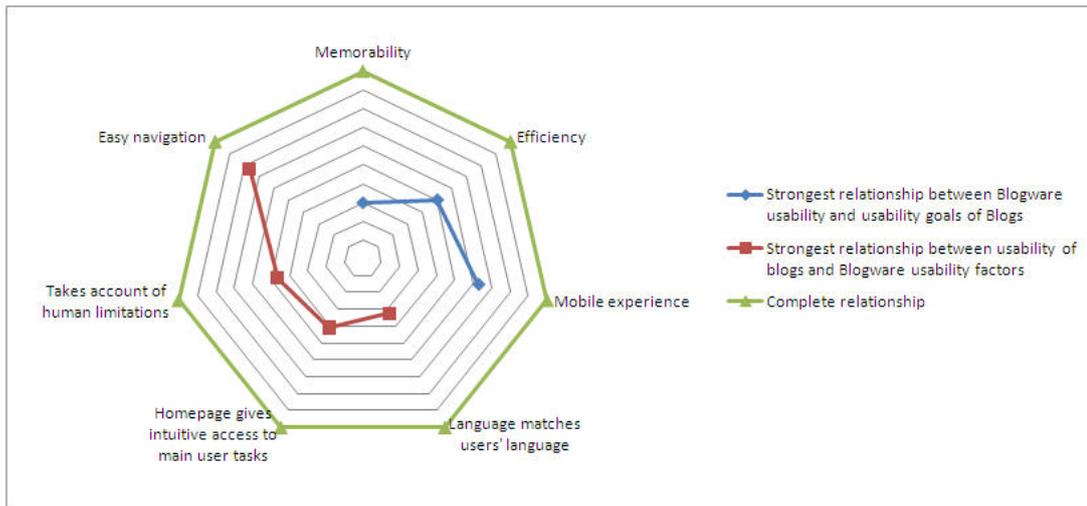


Figure 20 – Correlation strengths and weaknesses between usability of Blogware and Weblog usability

There is no relationship between Blogware usability and the utility and safety of Blogs. There is also no relationship between blog usability and whether or not the Blogware service offers a simple state space, help documentation, and whether or not visual elements of homepage compromise usability.

Blogware usability overall on average was best at supporting the user by facilitating learning (4.4), providing effective error management (4.2), taking account of human limitations (4) and providing quality help documentation (4).

Blogware usability overall on average was worst at giving the user control AND freedom (2.8) and making navigation efficient and effective (3).

The Blogware (WordPress.com) which had the best usability scored the best at having a homepage which gives intuitive access to the main user tasks (5), is user-centred, taking account of human limitations (5), the language matches the users' language (5) and was best overall at offering efficient and effective navigation (5).

Weblog usability overall on average was best at Memorability (3.8).

Weblog usability overall on average was worst at offering an effective Mobile Experience (2.2).

The weblog which tested the best (Jolie O'Dell on WordPress.com) was best at Memorability (5).

The weblog which tested the worst (Huck_Muleeva on Xanga) was worst at providing an effective Mobile Experience (0).

Consequently Blogware service providers need to concentrate on offering easy navigation, ensure their user interface design takes account of human limitations, the language matches users' needs and make sure the homepage gives intuitive access to the main user tasks. They also need to concentrate on ensuring they can support users to deliver an effective Mobile User Experience for their blogs. The better the user experience and usability of the Blogware, the better the user is supported at delivering a user experience which is easier to use – on any device.

This is not to the exclusion of all the other usability factors, but provide areas for prioritisation for Blogware service user interface designers.

The hypothesis that free hosted browser-based Blogware with good usability will be more likely to generate personal Weblogs with better usability has been proven correct. This is shown through the statistical correlation and also the quantitative and qualitative findings from the usability evaluations that have been conducted.

9 Limitations and recommendations for further research

9.1 Limitations on the statistical significance of these conclusions

The results of this study are proven to be the case for these Blogware services and for these weblogs. The usability testing involved six users, one more than the optimum number of five recommended by Nielsen and Landauer (1993). The issues and successes will therefore be found to occur with all users of this profile on these weblogs.

However to apply these findings to all Weblogs can only be indicative, the issues and principles discovered form guidelines but are not statistically significant. To claim with statistical significance these findings apply to all Weblogs more tests would need to be run on more weblogs created by these Blogware services.

Having computed the correlation coefficient (r), this study has been unable to prove that the probability of the observed correlation between Blogware and Weblog usability occurred by chance or not. Although a relationship has been shown through statistical correlation to support the qualitative findings, due to the fact that only 5 blogs have been evaluated, the results are not statistically significant. This project has been unable to determine the probability that the correlation is a real one and not a chance occurrence, to determine what the likelihood is that the r value found occurred by chance. To be statistically significant, there would be more data to create more data pairs. *See Appendix 12* for the complete background on the statistical significance testing.

To achieve statistical significance in practice each weblog would have to be evaluated using the same methodology, with the same number of users, so this would be at least 45 working days of evaluation of at least 51 additional blogs. In practice this is not feasible without a large team of people. A limitation of this project has been that the resource has been limited to one individual. For a different project funded to have a team of contributors, this may be more feasible.

If this was done additional research could continue usability testing on more blogs using same methodology and approach. Additional usability testing could take into consideration different content types, and also, still using the Technorati Rankings as the baseline choice of blogs, but testing blogs which used the different functionality provided by the different blogging platforms to greater or less degrees, so ‘best practice’ where they have used the Blogware to its full potential, vs. the opposite.

However this study augments the conclusions of “Weblog success: Exploring the role of technology” (Du and Wagner, 2006) which established there is a relationship between Weblog success and the features of the technology used to create those

Weblogs. This empirical study was a statistical examination of 126 successful Weblogs tracked over 3 months, and the features of the Blogware used to create those. The sample represents a sufficiently broad sample size to draw statistically viable conclusions from. Du and Wagner proved there was a relationship, and they suggested that usability was one element which contributed to that. This study takes their findings and shows there is a relationship, which if applied over the same number of weblogs as Du and Wagner's study, would support their findings that usability is part of the relationship.

9.2 Would the findings of this project be the same for other Blogware which wasn't in the Top 5 Most Used at the time of this study?

The findings of this project would be indicative for all other blogging services of the same time. Posterous is an example of a new breed of online browser-based hosted blogware which has focused on usability as its USP.

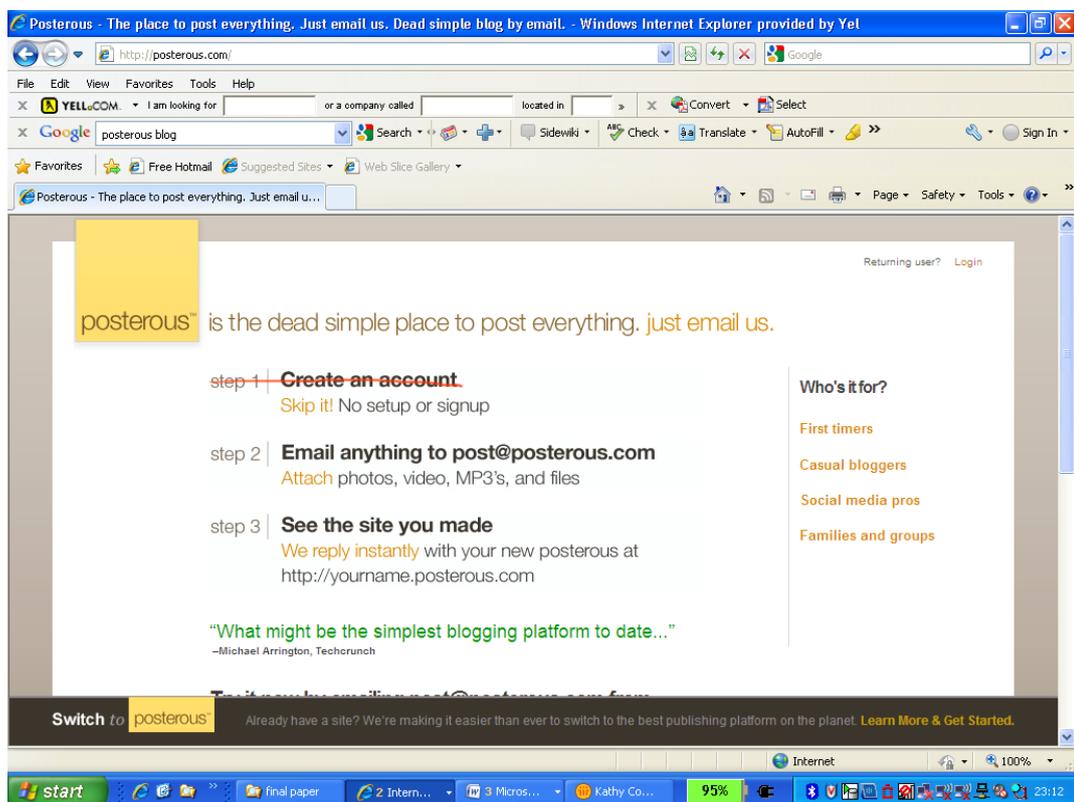


Figure 21 – Homepage of Posterous

“This [Posterous] is the best blog software on the market today,” said Peter McCormack of Rapier Ltd. It makes it very easy to blog, and easy to extend users’ network reach through easy social networking functionality built into the blogging platform, which aggregates bloggers’ reach online. Posterous has lowered a barrier to blogging by making it so quick and easy to blog that users are likely to blog more – which in turn will make them more likely to keep using Posterous. Posterous was not included in this research study because at the time of the study it was not yet in the Top 5 most used blogging platforms. A development of this project for further research could be to extend the study to other blogging platforms such as Sugar, Delicious and Posterous to investigate if the findings remain consistent.

9.3 Would the findings of this project be the same for premium blogging platforms?

The scope of this study focused on free hosted browser-based Blogware. It did not include Blogware features which users can get from upgrading to Premium paid-for services e.g. WordPress.com VIP and TypePad Pro. It did not include Blogware which users download as software to their computers. Therefore a relevant next step would be to evaluate these types of Blogware and how their usability compares to the free hosted browser-based Blogware, and if this has any impact on the Weblogs they create.

9.4 Would the findings of this project be the same for Micro-Blogging and social network platforms linked to Blogs such as Facebook and Twitter?

The scope of this project was to investigate only blogs generated by the top 5 free online web hosted blogging platforms. Would the results be the same with Micro-Blogging such as Tumblr and social network platforms? As “Twitter and other social media represent one of the most important trends affecting the Blogosphere this year” (Sussman, 2009) further research into social media and how this affects users’ experience is also an area which was out of scope for this study and would benefit from further research. Although Blogging overall as an activity is not in decline, as Technorati have identified a key driver of decreased blogging for those 30% who are blogging less is because they are devoting more time to microblogging (e.g. Twitter)

and social networks e.g. Facebook, as this project did not investigate the usability of microblogging services such as Twitter and social network sites such as Facebook, these would be useful topics for future further research.

9.5 Would the findings of this project be the same for corporate blogs and business bloggers?

A limitation is this project is it does not include Business Blogging, a growing sector. This study has focused on Personal blogs created by Hobbyist bloggers who are blogging for personal reasons. It has not evaluated the usability of blogs professionally created by professional bloggers for businesses whose goals are financial. Therefore further research could evaluate these professional types of Weblogs and bloggers. Jakob Nielsen and the Nielsen Norman Group have just published a new report “Enterprise 2.0: Social Software on Intranets” (Nielsen, 2009) and it would be a worthwhile for further research to understand the results of this study in the context of the NNG study and Business Blogs. Would the results be the same for corporate or group-contributed blogs by professional bloggers and readers who are seeking information for professional purposes?

9.6 Would the findings of this project extend into the user experience of Mobile blogging?

This project has suggested that there is a relationship between the usability of Blogware and the mobile user experience of blogs. Although the user experience of reading blogs ‘mobile’ on an iPhone was investigated, the blogware were evaluated as desktop versions on a full browser – would the results look different for blogging using an iPhone or mobile, so how the Blogware are used mobile? What is the full mobile blogging user experience? How do users consume content when mobile and where does the browser based full Blog user experience fit into this – so exploring the fuller context of the RSS-content feeds, Feed burners, Feed Readers like Google Reader.

9.7 How much do the design themes influence the usability of blogs?

Further research could include usability evaluations of blogging design themes. Choice of themes would be critical, based on most used, or most popular, or the themes which best utilise the functionality of the blogging platform.

9.8 Would the findings of this project extend to other Web 2.0 platforms beyond Blogging?

The scope of this study focused on the usability of Blogware and Weblogs they create. Further research could extend this study to look at the same picture for other Web 2.0 applications, such as Mash-up Tools.

This study is based on the previous expert field studies carried out as discussed in the literature review of this proposal. It did include interviews with users to qualify them as matching the User Persona requirements, but it did not include an original Field Study into the requirements, behaviours and motivations of bloggers and weblog users, and relies on these previous studies to provide these insights. It did not include an Ethnographic study or observation study such as Nardi et al undertook in 2004. The purpose of this would be to further validate the Hierarchical Task Analysis which all of the usability testing was based on for this user profile. However, due to the user interviews that were conducted with each user it was felt that this level of additional research, although making this more thorough, would not have helped to further prove or disprove the hypotheses posed in this study.

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13 Appendices

Appendix 1

This shows how the identification of these services as the Top 5 free browser-based web-hosted Blogware tools was done.

Top Technorati Ranked Personal Lifestyle Weblogs, showing the Blogware created by them and their current Technorati Ranking.

Blogware	Topic	Name	URL	Technorati Authority Ranking	Technorati Rank Position*
Blogger	Current affairs	Althouse	http://althouse.blogspot.com/	739	126
Typepad.com	Current affairs	J. Bradford DeLong's Grasping Reality with All Eight Tentacles	http://delong.typepad.com/sdj/	720	189
Wordpress.com	Lifestyle	Whatever	http://whatever.scalzi.com/	667	452
Blogger	Lifestyle	The Sartorialist	http://thesartorialist.blogspot.com	614	1049
Typepad.com	Lifestyle	Lance mannion	http://lancemannion.typepad.com/about.html	583	1628
Wordpress.com	Leisure: Literature	Shelf Elf	http://shelfelf.wordpress.com/	582	1650
Wordpress.com	Leisure: Sport	Blutarsky	http://blutarsky.wordpress.com/	582	1650
Blogger	Leisure: Home and crafts	The sweetest thing	http://kgiron.blogspot.com/	564	2145
Typepad.com	Lifestyle	David Armano	http://darmano.typepad.com/	557	2349
LiveJournal.com	Leisure: Literature	Bildungsroman	http://slyground.livejournal.com/	555	2410
Wordpress.com	Leisure: Food	Bittersweet	http://bittersweetblog.wordpress.com/	531	3302
Blogger	Leisure: Home and crafts	Danni's Dreams	http://dannisdreamscrafts.blogspot.com/	518	3877
Blogger	Leisure: Arts and Crafts	Carmi's Art/ Life World	http://carmicimicata.blogspot.com/	513	4107

Typepad.com	Leisure: Arts, Crafts, Cookery	Angry Chicken	http://angrychicken.typepad.com/	506	4490
Blogger	Leisure: Art	Judy Wise	http://judywise.blogspot.com/	476	6464
Wordpress.com	Leisure: Food	Feasts and Fotos	http://feastsandfotos.wordpress.com/	444	9345
LiveJournal.com	Lifestyle	Wicked Boring	http://debgeisler.livejournal.com/	438	9812
LiveJournal.com	Leisure: Literature	Elisa - My reviews and Ramblings	http://elisa-rolle.livejournal.com/	432	10314
LiveJournal.com	Leisure: Literature	The Wonder Cabinet	http://coppervale.livejournal.com/	420	12722
LiveJournal.com	Leisure: Lifestyle	Faraday's Cage is where you put Schroedinger's Cat	http://mareserinitatis.livejournal.com/	419	13067
Xanga	Leisure: Travel	Ocean Treasures	http://rustythedog.xanga.com/	92	91448
Xanga	Lifestyle	Beyond Ambivalence	http://www.xanga.com/home.aspx?user=ambivalence0	1	-
Xanga	Lifestyle	Blog.shrub	http://www.xanga.com/home.aspx?user=shrub	1	-
Xanga	Lifestyle	Linguixperiments	http://okibi.xanga.com/	1	-
Xanga	Lifestyle	Tea in the Park	http://teainthepark.xanga.com/	1	-

Blogger, Wordpress.com and Typepad have more Weblogs which are higher up the Technorati rankings than LiveJournal.com and Xanga.com:

- Blogger – 309648 weblogs ranked on Technorati with blogspot.com as part of domain name*, 23 'high ranking'
- Wordpress.com - 48148 ranked on Technorati with wordpress.com as part of domain name*, 0 high ranking, 1149 medium ranking
- Typad.com – 11319 weblogs ranked on Technorati with Typepad.com as part of domain name*, 6 in 'high ranking' 554 Medium ranking
- Livejournal.com - 5458 on Technorati with livejournal.com as part of domain name, 1 'high ranking', 42 medium ranking.
- Xanga.com - 855 xanga on Technorati with xanga.com as part of the domain name* - 0 high or medium ranking.

* Out of 853799 Technorati ranked Weblogs. These numbers are only indicative as some of these Blogware services offer own name domain names without the Blogware provider name in the domain name. We know that wordpress has the highest number of users, perhaps because of this kind of flexibility. The higher ranking Typepad Weblogs in this list may also have been created using the premium paid-for version. This project will ensure Weblog selection is based on confirmation of which Blogware was used to ensure it is the free version.

Appendix 2

Blogware Features

This lists the different types of features which can be found in Blogware

	WordPress	TypePad	Blogger	Xanga	LiveJournal
Blog Design Tools	✓	✓	✓	✓	✓
Can use CSS own style sheets	✓				✓
Customisable design templates/themes	✓	✓	✓	✓	✓
Promotion Tracking Tools	✓	✓	✓	✓	✓
Technical Help Support	✓	✓	✓	✓	✓
Template(s)	✓	✓	✓	✓	✓
Plug-ins Widgets	✓	✓	✓		
Text Editor	✓	✓	✓	✓	✓
HTML Editor	✓	✓	✓	✓	✓
Spell Check	✓	✓	✓	✓	✓
Preview	✓	✓	✓		✓
Link	✓	✓	✓	✓	✓
Emoticon	✓			✓	
Audio files	✓	✓	✓	✓	
Video files	✓	✓	✓	✓	✓
Text Files	✓	✓	✓		
Can embed music and video players	✓				
Images/ photos	✓	✓	✓	✓	✓
Post from Mobile Phone	✓	✓	✓		✓
Blogroll Links	✓	✓	✓	✓	✓
Search Box	✓	✓	✓		
Archive	✓	✓	✓	✓	✓
Profile Bio	✓	✓	✓	✓	✓
Search Comments	✓				
RSS Feeds	✓	✓	✓		
Traffic Stats	✓	✓			
Comments	✓	✓	✓	✓	✓
Referrer stats	✓				
Views	✓	✓			
Permalink	✓	✓			
Trackbacks	✓	✓			
Public	✓	✓	✓	✓	✓
Private	✓	✓	✓	✓	✓
Protected	✓	✓	✓	✓	✓
Photo Album Gallery		✓			✓
Spam Blockers	✓				
Polls	✓		✓		✓
Searchable Knowledgebase	✓	✓	✓	✓	
FAQs	✓	✓	✓	✓	✓
Tutorials	✓	✓	✓		
User Forums	✓		✓		
Storage	✓	✓	✓	✓	✓
Existing blog import	✓				

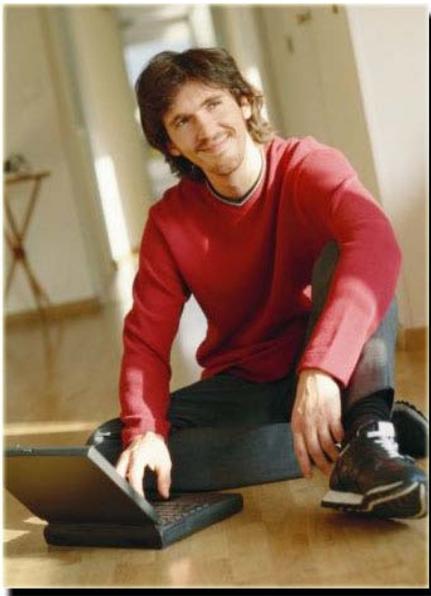
Categorisation	✓	✓	✓	✓	✓
Tagging	✓				
Management Dashboard	✓	✓			

Appendix 3 User persona.

Bob Blogger

Hobbyist Blogger – blogs and reads blogs for personal reasons and fun.

Main Goal – “Express myself”



- I am 32 years old
- Male
- Married
- Marketing professional.
- Interested in history, travel and Asian cooking.
- I vote Liberal Democrat.
- The Guardian newspaper and Wired Magazine.
- Lives and works in London, UK.
- Use Flickr, Facebook, TripAdvisor, Twitter, LinkedIn.
- Blogging for 2 years.
- Run 2 blogs
- I blog once a week
- I use other social media at least once a day.
- I own an iPhone and I post to my blog Mobile.
- I have a graduate degree.
- I earn £65k p/a
- Our joint household income is £130k p/a
- I consider myself ambitious and successful.
- I am a dad – my son is 1 year old.

Motivations – for blogging

- **Personal expression for personal satisfaction.**
- **Sharing** experiences, content (e.g. photos, videos, writing) and knowledge.
- **Self-documentation** - bloggers want to keep others posted on their up-to-date news. Bloggers, write down what happens to them and ponder things they run into in life. bloggers keep a record of what they learn, what they think, and what they find useful on the Internet. In this case, blogs function as a notebook, a tape recorder, and a bookmark collection.
- **Maintaining emotional relationships with others**
- **Self expression** - self-expression - online self-identities are created and maintained by individuals. On blogs, bloggers tell their own stories, discuss hobbies and interests, express opinions towards events and issues of personal interest, and present creative works. In addition to blogging topics, bloggers personalize the look of blogs to make them a unique aspect of self-presentation. In terms of both forms and content, personalities of bloggers are often reflected in their blogs.
- **Altruism – helping others** - "People actively participated in a blog to increase welfare of others; participating in blogs was not expected to produce direct rewards. People participating in blogs were motivated intrinsically to contribute knowledge to others because they enjoy helping each others."
- **Habit** - Frequent, habitual posting to blogs to provide fresh content for readers.
- **Building my reputation and establishing credibility** - "Even though blog users usually viewed blogs as online diaries or journals to record their daily lives and interests, our results verified that people were eager to share their thoughts and experiences with others, thereby obtaining an online reputation."

- **Gaining recognition from others in an effort to promote one's self-value** –gaining self-esteem through recognition - Seeking feedback – “publicly praising individual participant's effort can enhance attitude toward blogging.”

- **Sharing expertise**

- **Enjoyment**

- **Ease of use** – doing this is easy for me..."the easier it is for bloggers to post entries to blog, the more likely they will do it...An easy-to-use interface could influence a user's preference while difficulties can create user resistance. This reinforces the general belief that blog-hosting service providers should continue to develop tools that require minimum effort to learn and use."

- **My own personal satisfaction is how I measure the success of my blog**

- Write about a variety of lifestyle topics as a form of personal self expression

- Writing about topics I am passionate about – about me!

- Talk about my feelings and ideas.

- I love interacting with my audience and other bloggers, this is making me want to blog more.

- Document my life.

- Personal musings are my favourite topics

- I will also blog about Technology and computers, News and Politics, Music and travel.

- My blogging style is sincere and conversational.

- I blog to speak my mind on areas of interest, share expertise and experiences

- My audience was family and friends (old and new) but now it is anyone who is interested.

- I love voicing my opinions.

- Record activities and events.

- Log my being.

- A record to inform and update others of my activities and whereabouts, often sharing photos

- Keeping family and friends abreast of life events

- Rants and speculation.

- I find my voice by using blogs to express my opinions

- A personal voice

- A form of democratic self-expression

- Comment on topics I find pertinent and important

- Catharsis - an outlet for thoughts and feelings

- Thinking by writing

- I may well want to conceal my real identity as I am afraid of comeback at me, my friends or family by mad people who may take a dislike to something I say in my blog.

- Blogging has led me to become more involved with things I am passionate about.

- Blogging has had chiefly positive impacts on my personal life.

- Building chronicles of everyday events that serve to update others on my life

- Expressing opinions to influence others

- Thinking by writing as a social exercise

- Releasing of emotional tension

- I can see myself blogging even more frequently in the future.

Motivations for reading blogs

End users or visitors to a conventional Web site have a specific goal in mind. This is often not the case for a user's visit to a blog. Motivations are about information seeking and community exchanges instead, or can be similar to reading a magazine.

- Seek information to be informed, get help, seek expertise advice - I do not want to miss out on fresh information and expect to find the latest views on topics important to me. I also want to find other related information on the same subject within the same blog, from historical posts.
- Entertainment – I want to enjoy myself.
- Habit, like reading the paper or watching television.
- Gain exposure to other writing styles, which can then affect my own writing - writing-practice motivation that improvements from immersing oneself in literature via other blogs
- Identify with other social groups, by way of adopting their styles and practices and making connections with them.
- Create a virtuous circle of activity which helps to improve my own blog. Blogs feed blogs, so this helps to forge links between other blogs and my blog, and between bloggers and me.
- Read new content on the web daily (and often more frequently than that)
- Motivation and ideas for publishing my own posts to my own blog, which, in turn, provides more material for other bloggers to read.
- By commenting on others' blogs I am still expressing myself, establishing a reputation, building social capital from other bloggers, sharing information, experiences and content, which is why I blog. "Our results show that blog visit rates and the number of new comments are complementary. There were more comments in blogs that were more widely visited, and these new comments induced more people to visit the blogs" Baumer, Sueyoshi, Tomlinson, 2008
- Share information with my friends and contacts.
- Endorsement of other blogs to reflect on my own blog.
- Social communications and ex-changes where blog readers demonstrate similar motivations as the bloggers around self-expression, opinion and credibility by providing feedback or opinion on blogs.
- Easily find the information I am looking for, although information overload is not an issue. "Blogs that employed content management and navigation tools had higher visit rates. This is consistent with the view that some people visit blogs to seek targeted information." Baumer, Sueyoshi, Tomlinson, 2008
- I want the newest, freshest information first but the exact times are not important.
- I want to connect with the identity of the blogger
- I want to participate and take part in the blogs I read.

User goals and tasks for Bob Blogger - blogging

- I want to create a blog
 - I want to choose the best Blogware for me
 - I want to set up an account
 - I want to create a new blog

- I want the look and feel of this blog to express who I am
 - I want to create a look and feel that reflects me
 - I want to be in control of the design of the look and feel
 - I want to choose Colours and be able to change them
 - I want to choose Fonts and be able to change them
 - I want to add images
 - I want to choose and be in control of the Layout

- I want my blog to be read
 - I want to make it easy to read and navigate for my readers
 - I want the organisation of information in my blog to be easy to find.
 - I want to create links to relevant content that helps to enhance my own writing.
 - I want to create a Structure and layout that makes sense to me
 - I want to Create Pages
 - I want helpful Menus
 - I want features my readers will enjoy using on my blog.
 - I want content on my blog my readers will enjoy reading.
 - I want my blog to be discussed, shared, linked to.
 - I want features which will encourage my readers to share my blog with others.
 - I want my blog to be found by readers on the Internet.
 - I want to understand blog stats, views, number of visitors, where they have come from, my blog usage

- I want to express myself
 - I want to write new posts
 - I want to Manage all my Posts
 - I want to Edit old posts
 - I want to Delete posts
 - I want to Archive old posts
 - I want to add content to my site that helps add to my own personal voice and helps to amplify how I am expressing myself.
 - I want to be able to create a design/ look and feel that expresses who I am.

- I want feedback and I want my readers to be able to express themselves about my blog on my blog.
 - I want readers to be able to comment on my blog
 - I want to be in control of who can do that and how.

- I want to be in control of my blog
 - I want to be able to organise my blog contents how I want to.
 - I want to manage my settings
 - I want to Manage – edit and make changes to - my Profile so it expresses who I am
 - I want to Manage my Personal account info

- I want to feel safe blogging
 - I want to be able to log in and out
 - I want to manage permissions of who can post and comment on and read my blog
 - I want to be in control of comments to my blog.

- I want to see what I have created
 - I want to view my blog as readers will see it
 - I want to Preview posts before publishing them
 - I want to preview layout and design changes before publishing them

User goals and tasks for Bob Blogger – reading blogs

- Be informed
 - Find a blog of interest
 - Find new/ latest information in a blog
 - Be alerted to new posts on a favourite blog
 - Find information from past posts.
 - Identify when posts were written.
- Be entertained
- Consume content
 - View blog
 - View posts
 - Read comments
 - Read content
 - Watch videos
 - See pictures
 - Read blogger profile.
 - Share information from a post with my friends and contacts.
- Enhance my own blog
 - Identify writing styles I can use
 - Get ideas.
 - Create linkbacks back to my blog from posts.
- Take part
 - Comment on posts.
 - Contact the blog author/ blogger.
 - Participate in blog polls.
- Organise my blog reading
 - Add favourite blogs to Blogroll
 - Add favourite blogs to Favourites in browser
 - Add bloggers to my friends contacts

Scenario for Bob Blogger

After getting home from a full-day in the office, I prepare some supper and then while that is cooking for an hour I attend to my blog. I go into my computer, login to my blog. I have a look at the usage and comments for my blog in the past week. I accept some comments and decline others. I review the last post I wrote and decide I don't want to edit it I just want to write a new post about my favourite topic. I start to write the new post. I edit the text when I have written it, and add some images, preview it to check it and publish the post. I check my blog stats and comments most days and find out who has linked to my blog. I read some blogs which are on my favourite topics and comment on those.

A month later I get home from another full day in the office, once again prepare some supper and while that is cooking check on my blog and want to write another post. This time I want to comment in response to an RSS feed I have had about my favourite topic that another blogger has also commented on and it is being discussed in the Blogosphere. I have also decided I want the look and feel of my blog to express who I am better, so I want to change the design and layout to something that I think will work better. I change the font, colours and layout, and preview my changes before making them live on the blog. I write another post about the new design of my blog. I preview it and publish it. My dinner is ready so time for me to log out of my blog. A couple of hours later I sit down to read some other people's blogs. I've had some comments on my blog and some new linkbacks from other bloggers, so follow those to their blogs and read them. I am

very interested in a couple of posts they have published so comment on those on their blogs.

During my lunchhour at work in the office every day I read the latest posts on my favourite blogs. I notice some new comments made by other readers on some of them, and follow their links to their own blogs. By doing this I find new blogs about the topics we all share a common interest in. I post comments on some of those and create links back to my blog from those other blogs. I have a list of regular bloggers who are my regular contacts who when I find a post of interest I share it with them by emailing it to them. I also post comments and share information from blogs on Twitter, where I have a regular group of contacts who follow me, and I follow. Most of my Blogger contacts are part of this group.

The next evening I create a poll to find out what my readers think of my new design for my blog. I also add another content feed and some more links to other blogs and sites that I think my readers would find interesting because the topic is relevant to mine. I also create a link to Twitter so people can follow my blog updates on Twitter. I also add some more tags or keywords to my blog to help it get found more on the Internet. As I am starting to blog more frequently, I change the settings on my blog so that it archives more frequently. I start to write a post but my dinner is ready so that's enough for one evening, I save it to come back to another time.

I continue to check my blog each evening and I'm pleased to see an increase in usage, more bloggers are now linking to it, and I've received a lot of positive comments back about my new design. This is great, it gives me such personal satisfaction. Some of the people who have posted comments are familiar contacts I have made through my blog and have got blogs of their own, and I follow them and their posts on their blogs.

One evening I update my profile to update my photo and some info. I decide I don't like something I wrote a while ago so I decide to delete that post. I go back to another post I had started writing last week and finish it, create some tags so it will be associated with other posts on the same topic, preview and publish it.

Sources

Original:

- Interviews with 6 Hobbysit Bloggers about why they blog, how they blog, what they do.

Other sources:

- Brady (2006) 'Blogs: Motivations Behind the Phenomenon', Chimera Working Paper 2006-17, Ipswich: University of Essex.
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- Technorati 2009 State of the Blogosphere – Who are the Bloggers and The What and Why of Blogging.
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 - <http://technorati.com/blogging/article/day-2-the-what-and-why>

Appendix 4 usability goals and user experience goals.

1.1. Usability goals for reading blogs

1.1.1. Utility – High priority

- How much it provides the right kind of functionality and information at the right time so that users can do what they need/ want to do, is the set of functions appropriate to enable users to do the main intended tasks.
- How much the weblog provides the right kind of information and functionality so users can find the information they are looking for and then if they want to take part in the weblog such as comment they know what to do. It will have to provide the most appropriate set of functions to enable users to carry out all the tasks in a way they want to do them and makes it easy for them (commenting).

Examples of good - Users can find the right information and functionality to achieve their goals and do what they expect to do within the blog effectively.

Examples of bad - Users being confused, not completing tasks, not being able to publish comments, not knowing where to go in the weblog to find or to do something, not having the functionality to help them find information, and not having the functionality at the right time to share, comment or find out information.

1.1.2. Effectiveness – medium priority

- If it is effective to use, it does what it is supposed to do, it is capable of allowing users to do the main intended tasks.
- How effective the blog is to use, users know what it is for, it does what it is supposed to do, and it is capable of allowing users to do the main intended tasks.
- Users reading weblogs may not have specific goals or tasks in mind. Instead they are motivated by socialisation goals, being entertained, being informed, improving their own expertise. The weblog does not have to be task or goal orientated to users other than to meet those fundamental needs and motivations. Those tasks will be reading content, commenting and taking part in blog activities. The blog must be effective in enabling the user to complete those tasks. They want the reassurance those tasks are complete. This blog will meet effectiveness goals if it enables users to the following main tasks:

Example of good- Tasks being completed 100% by all users

Example of bad - Tasks not being completed, task fails.

Main tasks & user goals:

- Establish what the blog is about and how it is relevant

- Be able to find all the content on a subject of interest within the blog - find a post on one subject of interest then be able to find another post on the same subject written in the past
- Understand how up-to-date, current and immediate information is, Understand if you are the first to find something out from the blog – how recent a post was posted.
- Understand who the blogger is and if they are relevant, expert, and credible, someone you would trust and want to establish contact with
- Understand the readership to understand if this is a credible blog with a following.
- Share information from the blog with friends and contacts, republish the content, extend your own expertise
- Subscribe to a blog's content.
- Read comments from other readers, see who is commenting and when.
- Comment on a blog post.
- Find other blogs of interest through a blog's links.

1.1.3. Safety – medium priority

- Complete confidence in how 'safe' it is to use, they feel it is 'risk free', their perceived fears of what could go wrong don't happen, how much it shocks or surprises them, their perceived range of errors are minimal and if they do something wrong they can easily recover, how in control or out of control of it they feel.
- The only consideration would be around commenting and sharing on weblog posts as being important for them to feel safe to do this.

Example of good - Drafting and posting comments.

Example of bad - No clear control over comments and what has happened to comments.

1.1.4. Memorability – medium priority

- If it is easy to remember how to use once they have used them before, they can easily remember the sequence of operations at different stages of a task
- The frequency of use is relatively high as users are, users would want to use frequently, daily, weekly, monthly, read the weblog, so it will be important they can remember how to use the weblog. The nature of the tasks is they will be performed frequently and repetitively, especially posting comments and republishing/ sharing content from the blog.

Example of good - Leaving a task partially completed, coming back to it and picking it up again to finish it off. Users regularly doing repeat publishing tasks and not having to look for help.

Example of bad - Users coming back to complete a partially completed task or repeat tasks and not knowing what to do. Users looking for help frequently. Users having used something forget how to use it again.

1.1.5. Learnability – medium priority

- How easy it is to learn how to use, how self-explanatory they are, users can work out how to use them quickly and easily with minimal/ no help, how quickly and easily they are efficiently and effectively doing the main intended tasks, how long it takes users to become competent at carrying out main intended tasks without too much or any help or effort.
- Users are reading and viewing content, so there will be little they will have to learn. However how easy it is to learn will have a big impact on how much they want to come back and visit again. They will want to comment and republish/ share information in the blog which may require some learning of RSS and social media.

Example of good - Users know what to do straightaway

Example of bad - Users are confused and having to spend time trying to work out how to use the weblog.

1.1.6. Efficiency – low priority

- If it is efficient to use, the user can sustain a high level of productivity doing the main intended tasks.
- Users reading weblogs often do this habitually and to kill time, especially hobbyist bloggers. They do it to entertain themselves as much as get help and information. They may be doing it whilst also watching television or listening to the radio in their leisure time. Time is not a key issue for weblog readers. If they need to do it efficiently, they may be doing this using a mobile device while on a train or watching television at home, and their behaviour may switch from using the actual blog interface to consuming content through RSS feeds.

Example of good - Users not commenting on using the blog being too time-consuming. Users finding information quickly. Users being able to navigate around quickly.

Example of bad - Taking longer to read or take part in the weblog than users perceive is satisfactory and starts to affect their enjoyment. Users taking too long to find something they are looking for. The blog performance itself being slow because it takes a long time to load images and content.

1.2. Appendix 2 - User Experience Goals for bloggers and blog readers

User Experience Goal	Priority	Justification	Example good	Example bad
Enjoyable: pleasurable, entertaining, fun, emotionally fulfilling, satisfying, rewarding, desirable	High	Users are expecting to be entertained, have fun, be emotionally fulfilled and have pleasure when reading Weblogs. A Weblog needs to be desirable for them to use and rewarding so that they are motivated to reading and taking part in this.	"I want to keep coming back to read this Weblog again and again", "I want to link to this weblog", "I want to take part in this weblog"; "This is great fun, really entertaining."	"AAAArgh, this is really annoying", "This is so dull", "This makes reading a blog feel like a chore not a pleasure."
Motivating: engaging, exciting, aesthetically pleasing, useful, valuable	High	Weblogs should be engaging, so users feel they are talking to the Blogger and Blog readers and are being treated as individuals. Weblogs should be exciting for users. Making it aesthetically pleasing is an important factor so that users are engaged and their experience of is made as enjoyable as possible. Weblogs should express who the Blogger is and users should be able to identify with the blogger. Readers should feel the weblog helped them, informed them, entertained them and it was useful.	"I love this blog, it's always fresh and exciting and whenever I'm here I feel like I want to take part in it."	"This Blog is dull and useless; I wouldn't want to take part in this."

Helpful: supports creativity, enhances sociability	High	Users should definitely find Weblogs helpful, that would be a critical success factor. Weblogs should also enhance their sociability; a weblog is a social networking tool. Users should be able to connect with Blog authors and other blog readers through the Weblog. They should be able to share information. They should be able to take content from the weblog to help enhance their own Weblog and improve their own blogging experience.	"This Weblog is really helpful; I'd recommend it to friends." "I want to comment on posts on this weblog." "I want to connect with the Blogger publisher." "I want to link this Weblog to my own." "I want to take information and content from this to enhance my own blog.;" "I want to add this weblog to my Blogroll." "I can't comment on posts on this weblog."	"I wouldn't recommend this to anyone, it didn't help me, and it hindered me." "I can't tell who the blog author is or talk to the blog author." "I can't find any way to share any of the content on this blog."
Challenging: surprising, cognitively stimulating	Medium	Weblogs can be challenging and surprising and make users think.	"The content of the weblog was really interesting and thought-provoking. It was also easy to find related information and find out about the weblog and the author."	"I didn't know where to go, I got lost, every time I clicked on something I got something I wasn't expecting, it was really difficult to try and work out how to find something."
Usable: accessible, findable, credible, proactive	Medium	This is quite important. Users need to find the Weblog to be usable, to be able to access it, find what they need, believe the information being provided is credible and trustworthy, and that the weblog is proactively helping them so they don't have to think, they feel guided reading the weblog. How effective and efficient the Weblog's usability is will contribute to the users' perception of it being usable and these associated user experience factors.	"I knew exactly where to go and what to do, it just felt easy."	"I couldn't find what I was looking for. I felt I had to go hunting around looking for information, it wasn't where I'd expect it to be, it felt like they'd put masses of information on there and expected me to spend my time wading through it all, just feels like they could have made it a lot easier for me." "I couldn't find the information I was looking for in the Weblog." "It was really disorganised." "I don't trust this."

User Experience Principles	Priority	Justification
Tolerance	High	For blogware the tools need to be tolerant to users' errors so they don't publish something they don't want to, or don't publish something in a way they're not happy with, or if they do they can quickly and easily fix the issue. For weblog readers this only applies to when they take part in the weblog such as posting comments and taking part in polls.
Visibility	High	Information they need being there, visible, not having to go and look for it, what they need at their finger tips, on-screen clues and signposting and information to help them through the steps and tasks
Feedback	High	This is a critical success factor which contributes to their feeling of the website being helpful, usable, and proactive, as it doesn't leave the user guessing as it gives on-screen information to confirm actions are completed OK, and provides receipt of important information the user has provided, such as a completed tax return or payment have been received OK with confirmation of receipt.
Constraints	Low	Time and cost are not constraints of hobbyist blog readers. To a point time is a constraint on bloggers when they are posting this task needs to be as efficient as possible.
Consistency	High	Consistency is very important to contribute to learnability and it not being surprising, so information of a certain type throughout should be consistent, buttons, locations, layout, labels and naming, navigation etc. Having consistency in all elements throughout will contribute to the site being efficient to use and also the user experience being perceived as being helpful and usable.
Affordance	Medium	For Blogware the tools need to afford the utility they suggest, so users can easily publish content to blogs. For weblog readers this is a lower priority but if they see something that looks like a link it needs to work.

1.3. Jakob Nielsen's rules on good blog design

"Weblog Usability: The Top Ten Design Mistakes" by Jakob Nielsen

See source: <http://www.useit.com/alertbox/weblogs.html>

These rules, created by Jakob Nielsen following extensive usability testing of blogs, were also used as part of the evaluation criteria in this usability study.

Make sure you have or include:

1. Author Biographies

Trust, credentials, experience.

2. Author Photo

Personable impression of the author, credibility, trust - you're not trying to hide and users relate more easily to somebody they've seen. Faces work better than names for memorability.

3. Descriptive Posting Titles/ headlines in title case not CAPS.

Makes content scannable + posting's body text and important for SEO.

4. Links Say Where They Go

Life is too short to click on an unknown. Tell people where they're going and what they'll find at the other end of the link, provide predictive information in either the anchor text itself or the immediately surrounding words. You can also use link titles for supplementary information that doesn't fit with your content.

5. Open door - Don't alienate new visitors by appearing to be part of a closed clique. The Web is not high school. Give people a warm welcome, introduce yourself, and what your blog is about. Create a good first impression or users will click away.

6. Classic Hits are not Buried

Highlight best evergreen posts in your navigation system and link directly to them - sticky posts, pages, links which emphasise how to find them, link to your past pieces in newer postings.

7. Navigation which reflects content categorisation

Make sure The Calendar is not the Only Navigation. A timeline is rarely the best information architecture, yet it's the default way to navigate weblogs. Most weblog software provides a way to categorize postings so users can easily get a list of all postings on a certain topic. Do use categorization, but avoid the common mistake of tagging a posting with almost all of your categories. Be selective. Decide on a few places where a posting most belongs.

Categories must be sufficiently detailed to lead users to a thoroughly winnowed list of postings. They must filter. At the same time, they shouldn't be so detailed that users face a category menu that's overly long and difficult to scan. Ten to twenty categories are appropriate for structuring many topics.

On the main page for each category, highlight that category's evergreen posts as well as a time line of its most recent postings.

8. Regular Publishing Frequency

Establishing and meeting user expectations is one of the fundamental principles of Web usability. For a weblog, users must be able to anticipate when and how often updates will occur. For most weblogs, daily updates are probably best, but weekly or even monthly updates might work as well, depending on your topic. In either case, pick a publication schedule and stick to it. If you usually post daily but sometimes let months go by without new content, you'll lose many of your loyal — and thus most valuable — readers.

Certainly, you shouldn't post when you have nothing to say. Polluting cyberspace with excess information is a sin. To ensure regular publishing, hold back some ideas and post them when you hit a dry spell.

9. Keep on topic.

Don't mix your topics. If you publish on many different topics, you're less likely to attract a loyal audience of high-value users. Busy people might visit a blog to read an entry about a topic that interests them. They're unlikely to return, however, if their target topic appears only sporadically among a massive range of postings on other topics.

10. Don't forget That You Write for Your Future Boss

Think twice before posting. If you don't want your future boss to read it, don't post.

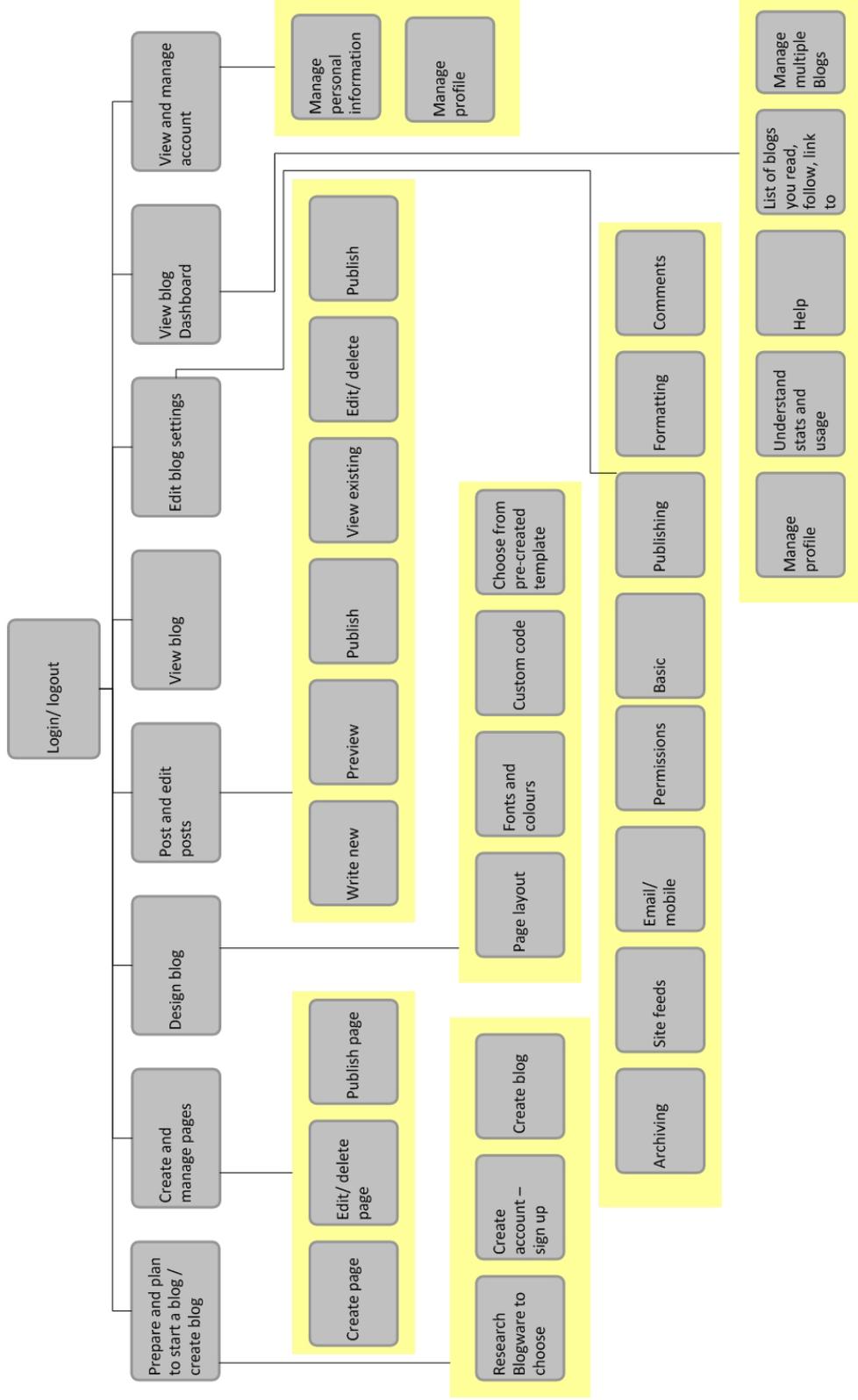
11 . Comply with the bulk of content usability guidelines:

- be as brief as you can;
- use bulleted lists
- highlighted keywords;
- chunk the material;
- use descriptive headings, subheads, and hyperlinks.
- a headline's first words are more important than its last words

Appendix 5 Hierarchical Task Analysis.

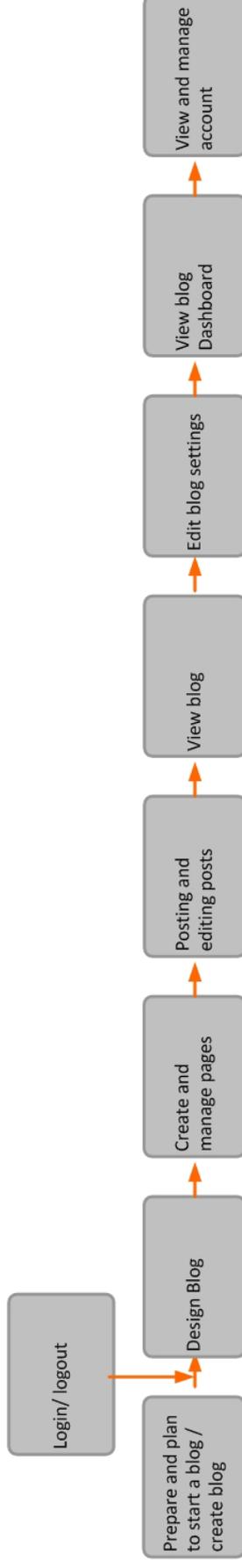
Hierarchical task analysis for personal hobbyist blogging

This document describes the key tasks and hierarchy for doing those for a Hobbyist Blogger



User Journey for personal hobbyist blogging

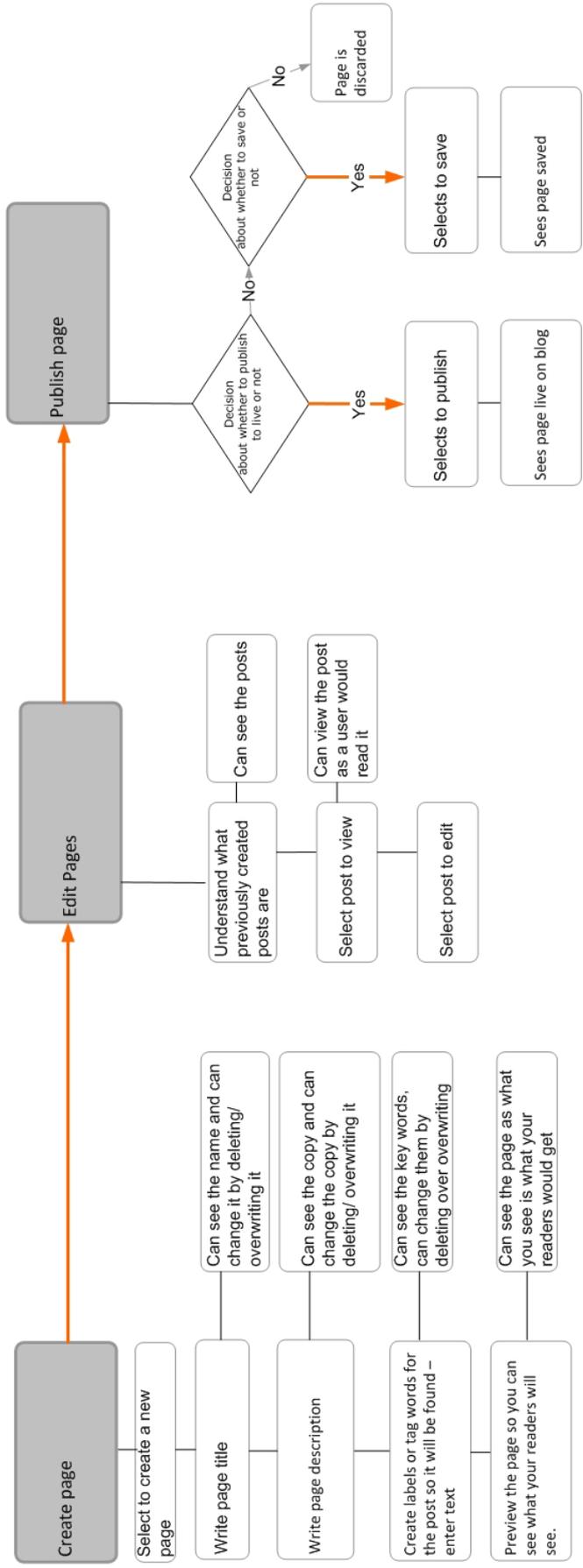
This document describes the user journey for a Hobbyist Blogger



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

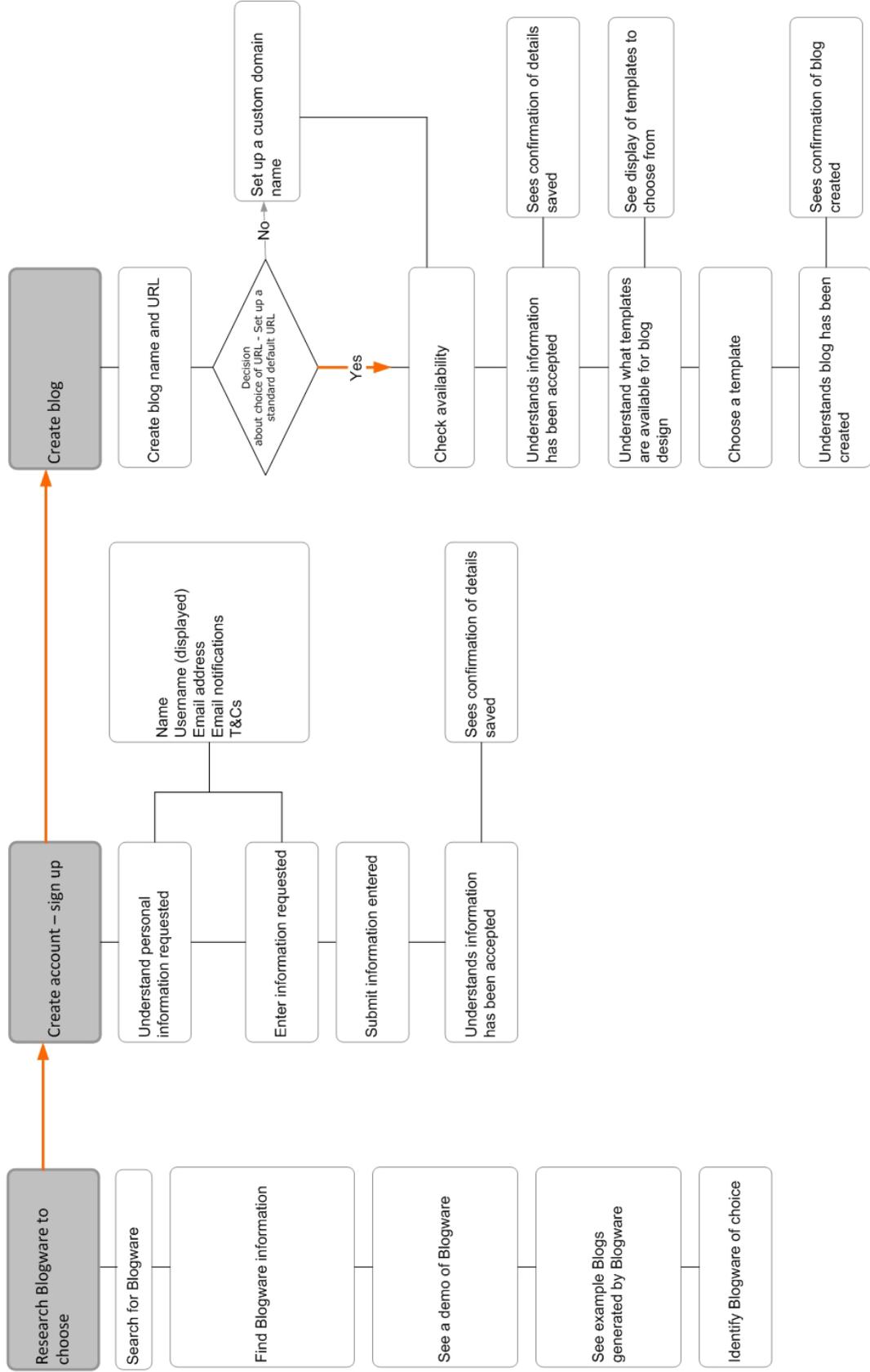
Manage pages



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

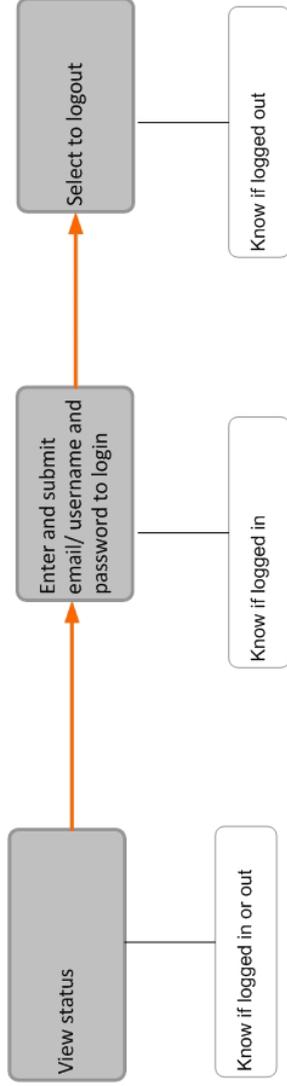
Preparing and planning to start a blog



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

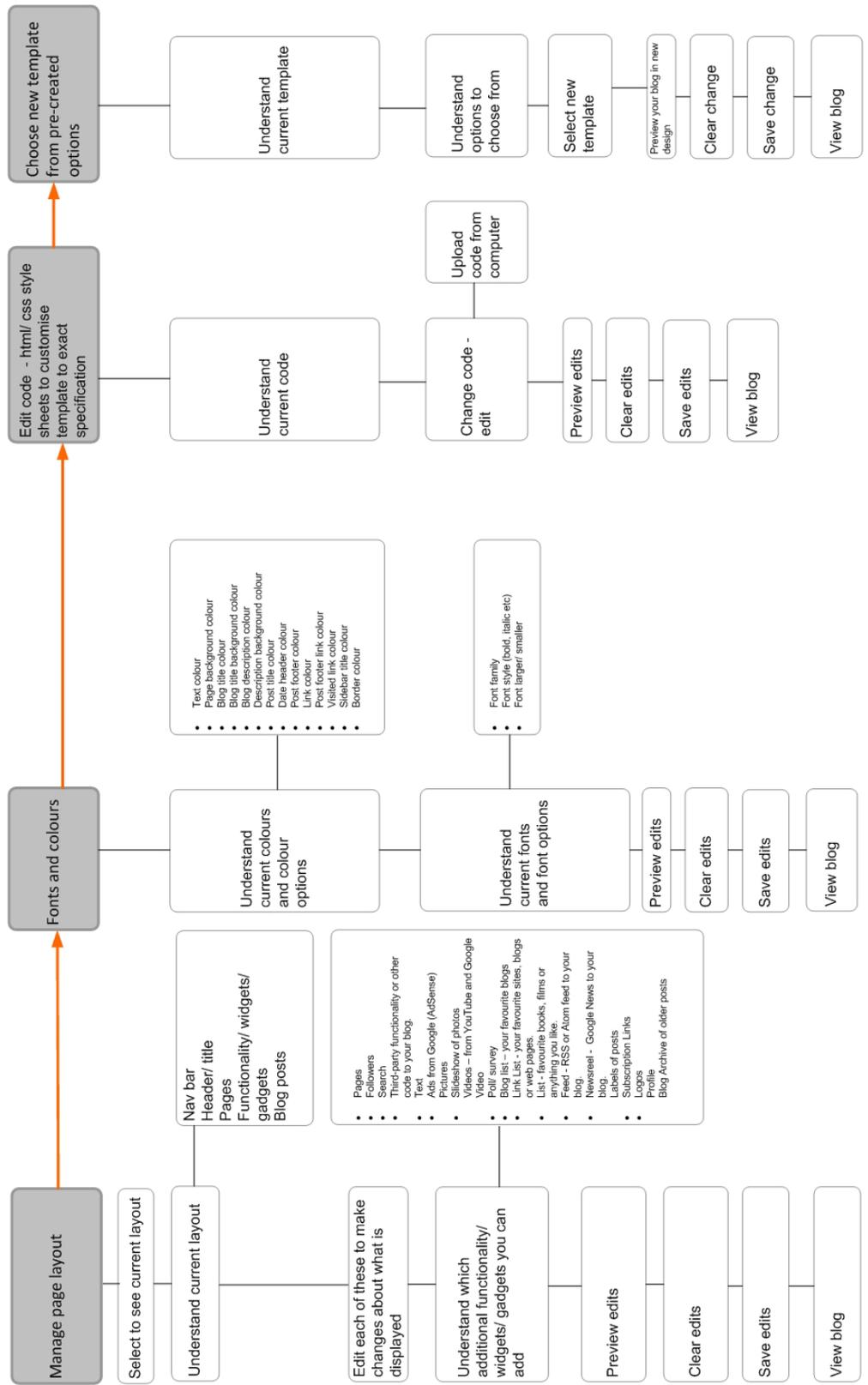
Login/ logout



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

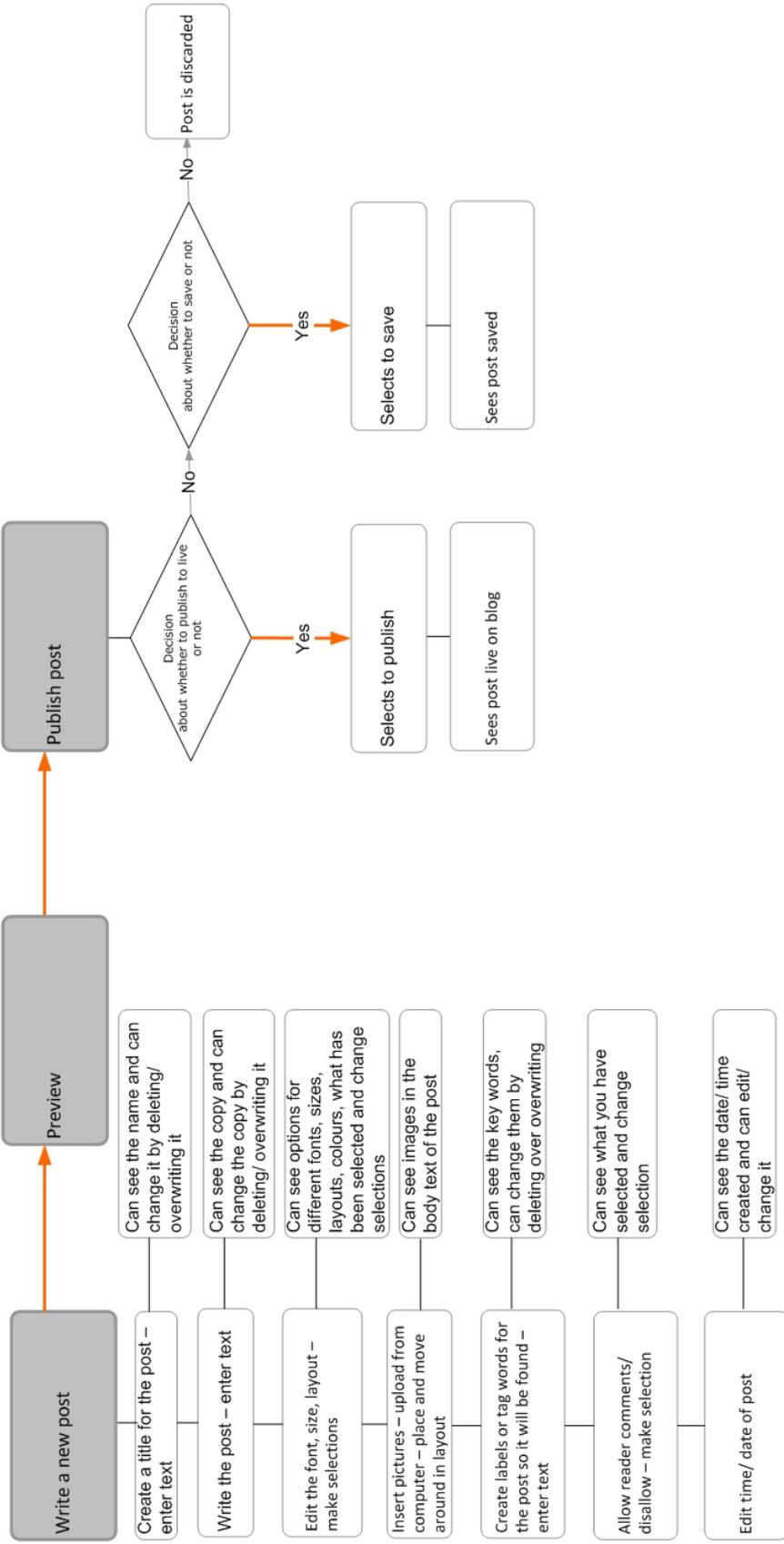
Design blog



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

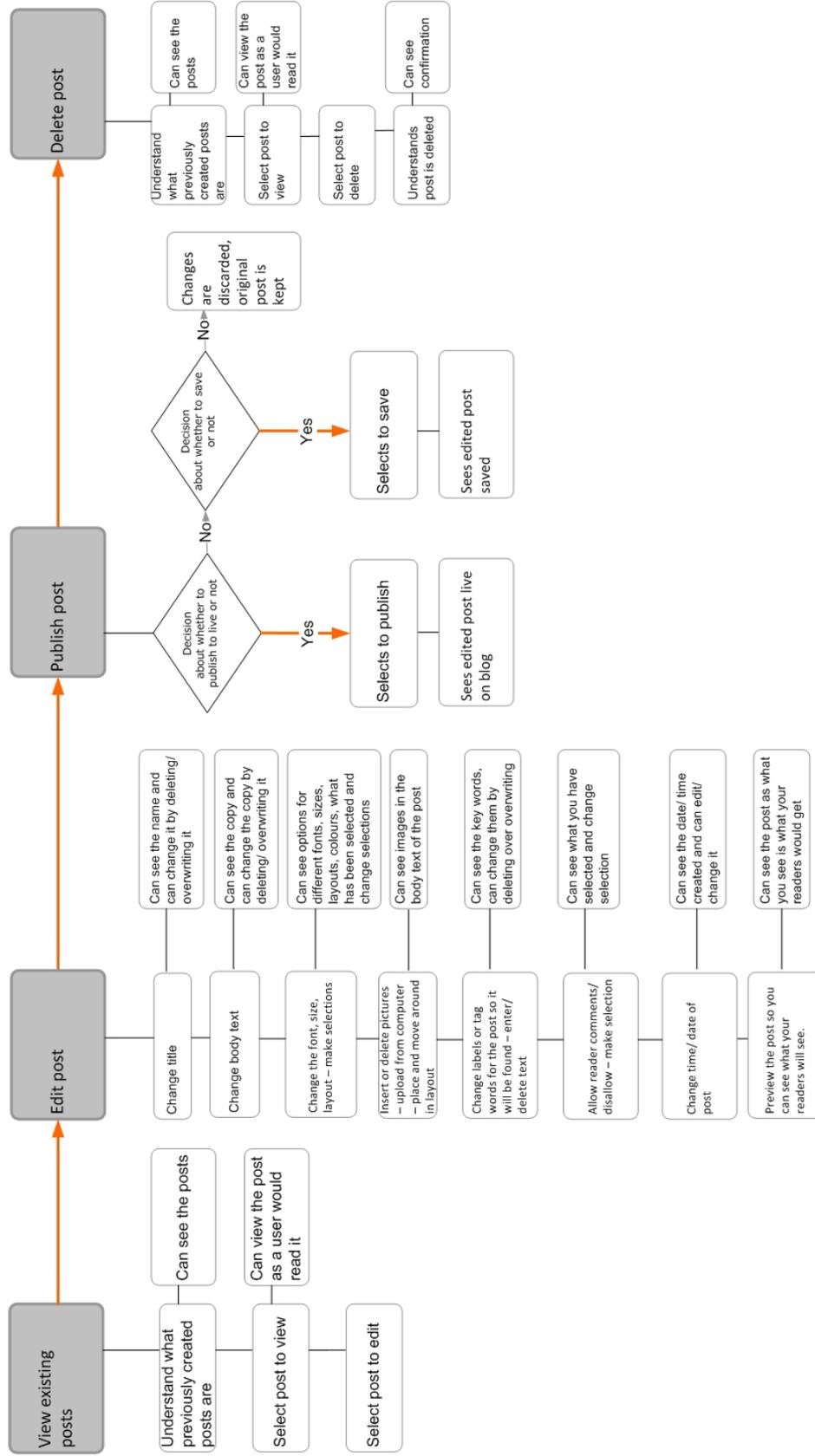
Posting - new



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

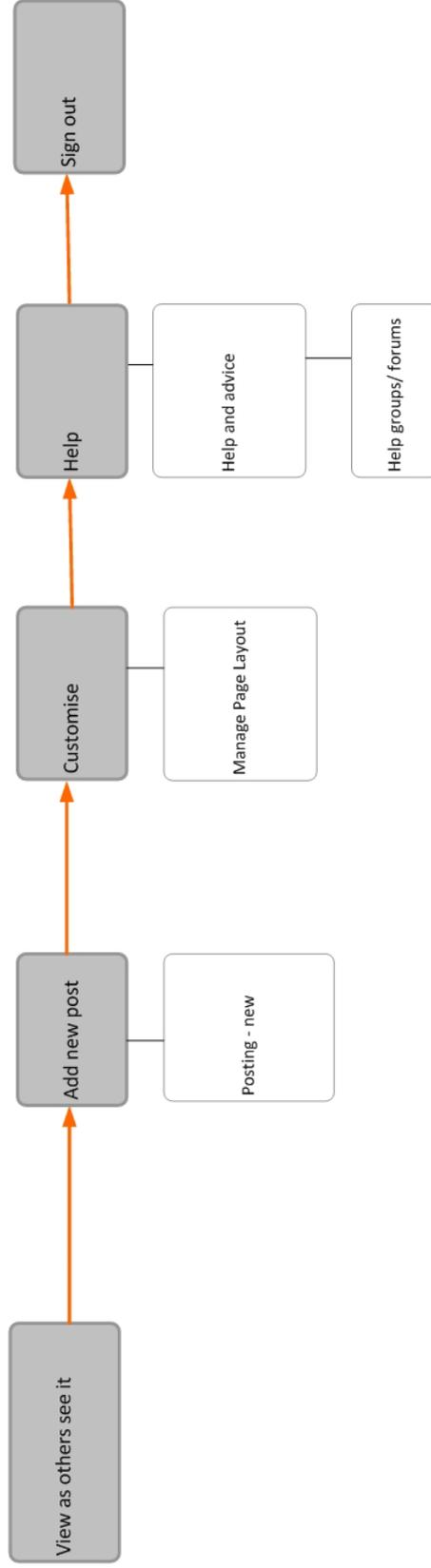
Posting – editing existing



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

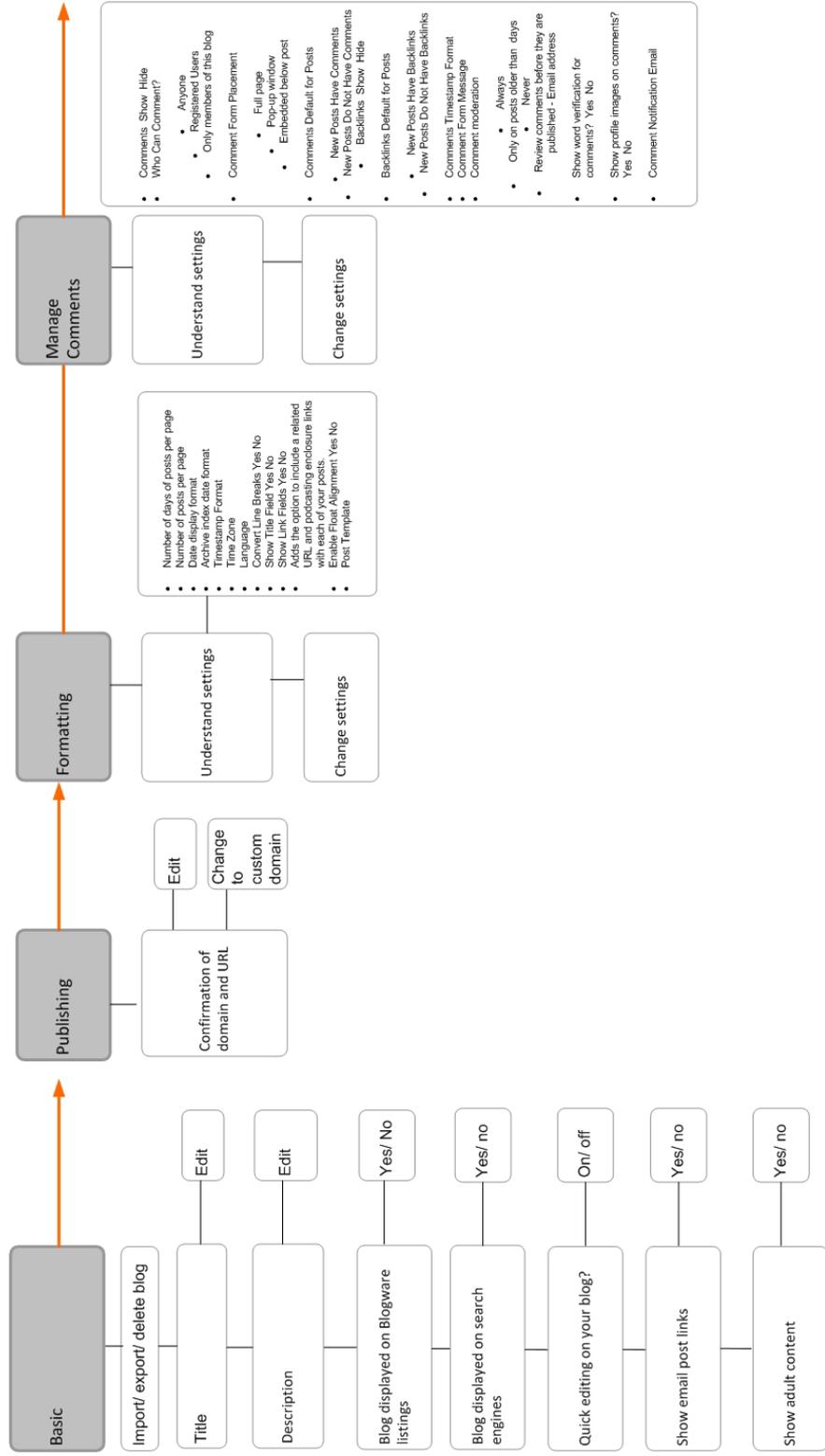
View blog



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

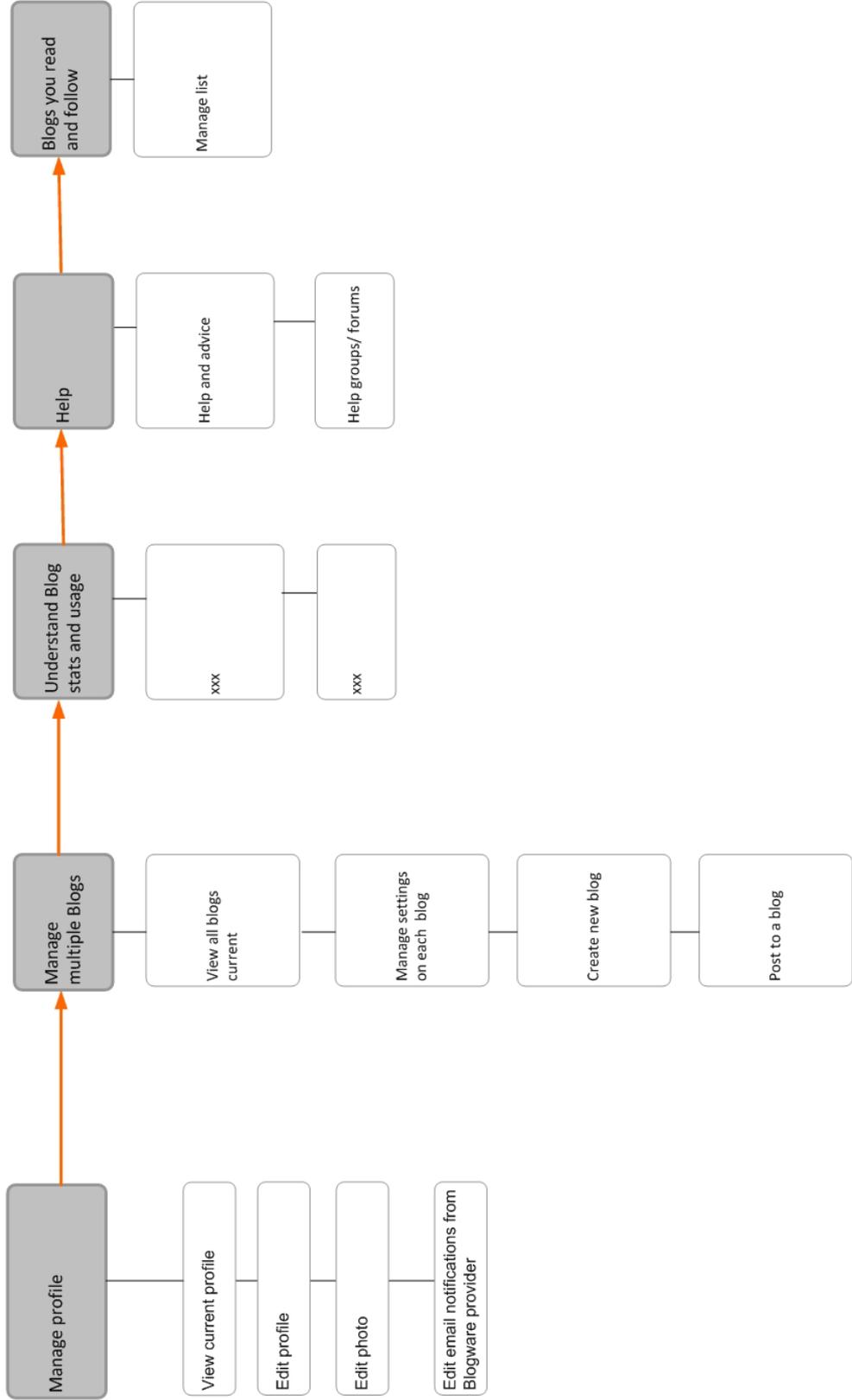
Edit Settings



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

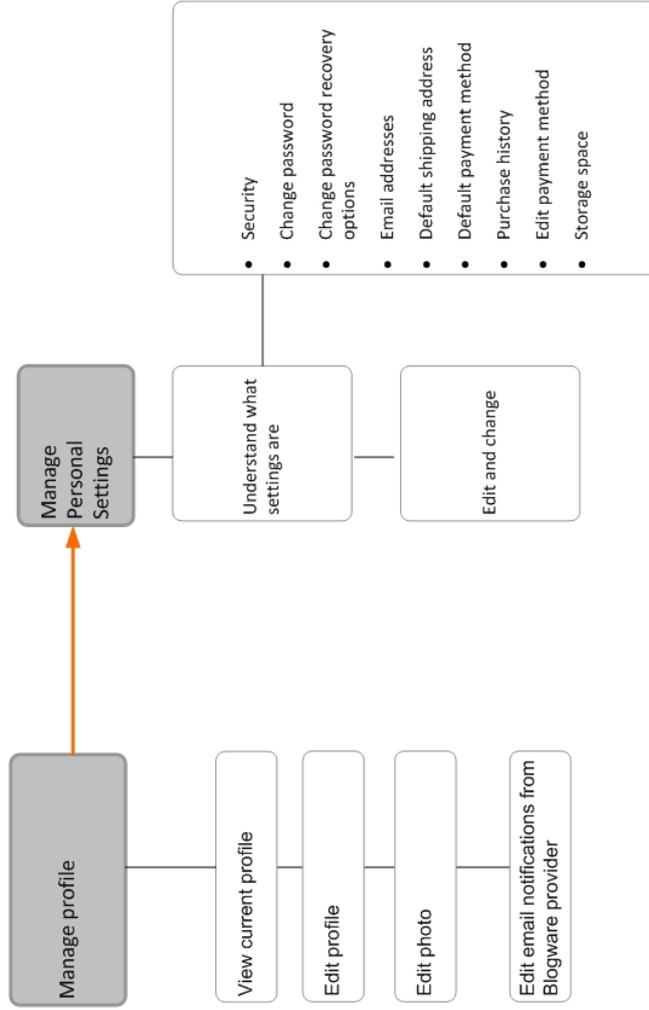
View Dashboard



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

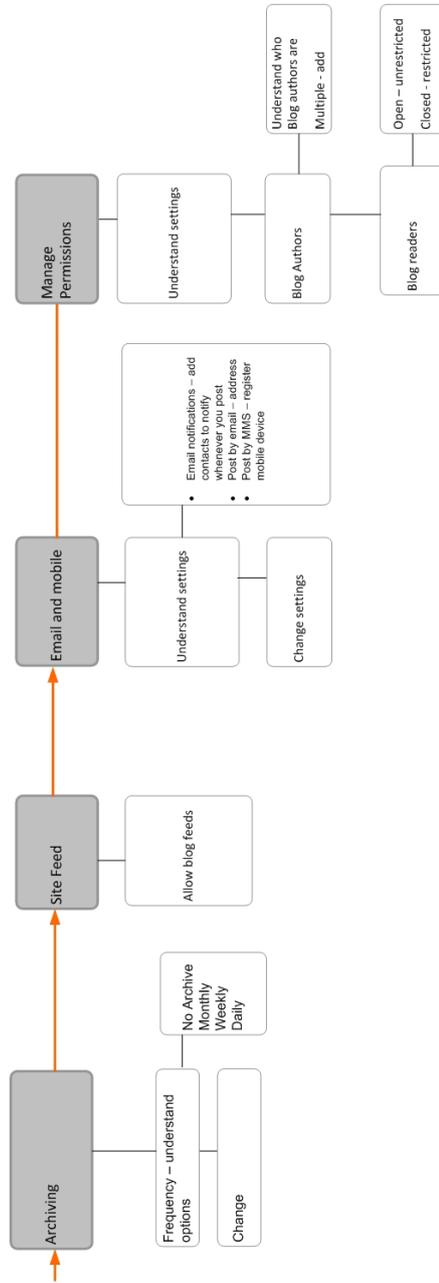
View Account



User Journey for personal hobbyist blogging

This document describes the user journey for a Hobbyist Blogger

Continued Edit Settings



Sources

Original:

- Interviews with 6 Hobbysit Bloggers about why they blog, how they blog, what they do.

Other sources:

- Brady (2006) 'Blogs: Motivations Behind the Phenomenon', Chimera Working Paper 2006-17, Ipswich: University of Essex.
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 - <http://technorati.com/blogging/article/day-2-the-what-and-why>

Appendix 6

Usability heuristic evaluation and usability testing preparation documents.

Task 1

Tell me what this blog tells you - What is it about? Tell me what information can find in this blog? What is helping you find that?

Task 2

Find a post on one topic then find another post on the same topic written in the past

Task 3

Tell me when posts were posted and how you can tell.

Task 4

Find out and tell me who the blogger is – how do you know? What kind of person do you think they are if you described them? How would you contact the blog author?

Task 5

How can you tell if this is a popular blog or not? What do you think?

Task 6

Share information from this blog with friends and contacts – use contact details as TVUStudent on Twitter, kathycook73@hotmail.co.uk Is this what you would expect?

Task 7

Subscribe to this blog use contact details as - kathycook73@hotmail.co.uk

Task 8

Read outloud comments from other readers

Task 9

Comment on a post on this blog – use contact details as TVUStudent, kathycook73@hotmail.co.uk, <http://tvustudent.wordpress.com>

Task 10

What other blogs is this linked to?

End - questionnaire

Does this have everything you'd expect or want from a blog?

5 blogs

15 minutes on each

1 hour 15 mins

2 mins quick fire questionnaire at end of each test (10 mins)

1.5 hours

Initial questions – 5 mins

How long have you been blogging?

Why do you blog, what gets you blogging?

Why do you read blogs?

How much time do you spend reading blogs? Blogging?

What do you consider to be the main tasks you'd do blogging?

What do you consider to be the main things you'd do reading blogs?

What is important to you when you're reading blogs?

What is important to you when you're blogging?

Blog 1

Task 1

Tell me what this blog tells you - What is it about? Tell me what information can find in this blog? What is helping you find that?

Task 2

Find a post on one topic then find another post on the same topic written in the past

Task 3

Tell me when posts were posted and how you can tell.

Task 4

Find out and tell me who the blogger is – how do you know? What kind of person do you think they are if you described them? How would you contact the blog author?

Task 5

How can you tell if this is a popular blog or not? What do you think?

Task 6

Share information from this blog with friends and contacts – use contact details as TVUStudent on Twitter, kathycook73@hotmail.co.uk Is this what you would expect?

Task 7

Subscribe to this blog use contact details as - kathycook73@hotmail.co.uk

Task 8

Read outloud comments from other readers

Task 9

Comment on a post on this blog – use contact details as TVUStudent, kathycook73@hotmail.co.uk, <http://tvustudent.wordpress.com>

Task 10

What other blogs is this linked to?

End - questionnaire

Does this have everything you'd expect or want from a blog?

Blog 2

Task 1

Tell me what this blog tells you - What is it about? Tell me what information can find in this blog? What is helping you find that?

Task 2

Find a post on one topic then find another post on the same topic written in the past

Task 3

Tell me when posts were posted and how you can tell.

Task 4

Find out and tell me who the blogger is – how do you know? What kind of person do you think they are if you described them? How would you contact the blog author?

Task 5

How can you tell if this is a popular blog or not? What do you think?

Task 6

Share information from this blog with friends and contacts – use contact details as TVUStudent on Twitter, kathycook73@hotmail.co.uk Is this what you would expect?

Task 7

Subscribe to this blog use contact details as - kathycook73@hotmail.co.uk

Task 8

Read outloud comments from other readers

Task 9

Comment on a post on this blog – use contact details as TVUStudent, kathycook73@hotmail.co.uk, <http://tvustudent.wordpress.com>

Task 10

What other blogs is this linked to?

End – questionnaire - Does this have everything you'd expect or want from a blog?

Blog 3

Task 1

Tell me what this blog tells you - What is it about? Tell me what information can find in this blog? What is helping you find that?

Task 2

Find a post on one topic then find another post on the same topic written in the past

Task 3

Tell me when posts were posted and how you can tell.

Task 4

Find out and tell me who the blogger is – how do you know? What kind of person do you think they are if you described them? How would you contact the blog author?

Task 5

How can you tell if this is a popular blog or not? What do you think?

Task 6

Share information from this blog with friends and contacts – use contact details as TVUStudent on Twitter, kathycook73@hotmail.co.uk Is this what you would expect?

Task 7

Subscribe to this blog use contact details as - kathycook73@hotmail.co.uk

Task 8

Read outloud comments from other readers

Task 9

Comment on a post on this blog – use contact details as TVUStudent, kathycook73@hotmail.co.uk, <http://tvustudent.wordpress.com>

Task 10

What other blogs is this linked to?

End – questionnaire - Does this have everything you'd expect or want from a blog?

Blog 5

Task 1

Tell me what this blog tells you - What is it about? Tell me what information can find in this blog? What is helping you find that?

Task 2

Find a post on one topic then find another post on the same topic written in the past

Task 3

Tell me when posts were posted and how you can tell.

Task 4

Find out and tell me who the blogger is – how do you know? What kind of person do you think they are if you described them? How would you contact the blog author?

Task 5

How can you tell if this is a popular blog or not? What do you think?

Task 6

Share information from this blog with friends and contacts – use contact details as TVUStudent on Twitter, kathycook73@hotmail.co.uk Is this what you would expect?

Task 7

Subscribe to this blog use contact details as - kathycook73@hotmail.co.uk

Task 8

Read outloud comments from other readers

Task 9

Comment on a post on this blog – use contact details as TVUStudent, kathycook73@hotmail.co.uk, <http://tvustudent.wordpress.com>

Task 10

What other blogs is this linked to?

End – questionnaire - Does this have everything you'd expect or want from a blog?

Appendix 7

Heuristic evaluation template used.

1. Introduction

This document provides a heuristic evaluation of the blogging service (online free hosted service)
xxxxx

2. Hueristic Evaluation

SECTION 1 – Heuristic Evaluation Details

Site name	xxxxx
Name Home page URL	Thames Valley University MSc Computing Interaction Design, Dissertation Kathy Cook http://www.xxxxxxx

Expert's evaluation details (provided by Kathy Cook)

Usability Consultant Name and ID	Kathy Cook Kathycook73@hotmail.co.uk
Date and time of heuristic usability evaluation	xxxxx
Location of heuristic usability evaluation	Reading, UK.
Browser(s) used	Internet Explorer 8 Google Chrome 4.1.249.1064 (45376) Mozilla Firefox 3.6.3 Safari 4.0.5
Additional comments relating to usability test	This is a heuristic evaluation of the Blogware xxxxx located at www.xxxxxxx Main user persona, goals and tasks are attached separately. Prioritised usability goals for blogware: <ul style="list-style-type: none">● Utility - high● Effective - high● Safe - high● Learnability - medium

- Memorability – medium

- Efficient – medium

Prioritised User experience goals:

High

- Enjoyable: pleasurable, entertaining, fun, emotionally fulfilling, satisfying, rewarding, desirable, Motivating: engaging, exciting, aesthetically pleasing, useful, valuable, Helpful: supports creativity, enhances sociability

Medium

- Usable: accessible, findable, credible, proactive

Low

- Challenging: surprising, cognitively stimulating

Prioritised usability principles:

Tolerance High

Visibility High

Feedback High

Constraints Low

Consistency High

Affordance Medium

SECTION 2 - Heuristics

Category A

Provide an effective home page

A	Provide an effective home page	
A1	A1 Ensure intuitive access to main user tasks	
✓	Grade	Overview of heuristic
	0 usability catastrophe	<ul style="list-style-type: none"> a) Home page should offer intuitive access to the key tasks. b) Appropriate metaphor for navigation from the home page c) Clear cue-card or tab metaphor can prove to be usable d) Image map acceptable? clickable regions clear e) Terminology relate to user tasks not marketing speak.
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
<p>Evidence and comment:</p> <p><u>New bloggers</u></p> <p>Usability successes</p> <p>Usability issues</p> <p><u>Existing bloggers</u></p> <p>Usability successes</p> <p>Usability issues – areas for improvement</p>		
A	Provide an effective home page	
A2	Ensure visual elements do not compromise usability	
✓	Grade	Overview of heuristic
	0 usability catastrophe	<ul style="list-style-type: none"> a) Appropriate mix of visual attractors and distractors b) Key user tasks are not compromised c) Visual presentation should focus on the message d) Consider home page composition - crucial areas e) Images / graphic simple, uncluttered not overused f) Use of animation – distracting?
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
<p>Evidence and comment:</p> <p>Public homepage</p>		

Usability successes
Usability issues
Signed-in users
Usability successes
Usability issues – areas for improvement

Category B Match structure with user needs

B	Match structure with user needs	
B1	Ensure decomposition of tasks evident in site structure	
✓	Grade	Overview of heuristic
	0 usability catastrophe	a) Structure should match a well-defined task specification b) User tasks, after leaving the home page, natural / intuitive c) Natural hierarchical decomposition of all key user tasks
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
Evidence and comment:		
Usability successes		
Usability issues – areas for improvement		
B	Match structure with user needs	
B2	Design a simple state space	
Areas for Improvement		
✓	Grade	Overview of heuristic
	0 usability catastrophe	a) Fewer user actions per task the better. b) Breadth rather than depth in menu/page hierarchy c) Manage long pages effectively – not too long – use of hypertext navigation - structuring
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
Evidence and comment:		
Usability successes		
Usability issues – areas for improvement		

Category C

C	Provide usable e-functions	
C1	Visible System Status	
✓	Grade	Overview of heuristic
	0 usability catastrophe	a) Is it clear to the user what is going on? b) Is appropriate feedback provided in reasonable time? c) Form design – is data required clear to user? d) Are actions performed consistently?
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
Evidence and comment: Usability successes Usability issues – areas for improvement		
C	Provide usable e-functions	
C2	Does it give the user control and freedom?	
✓	Grade	Overview of heuristic
	0 usability catastrophe	e) Is it easy to make serious errors? f) Collect the minimum amount of data g) Can the users escape from places they don't expectant to find themselves?
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
Evidence and comment: Usability successes Usability issues		

C	Provide usable e-functions	
C3	Does it offer effective error management?	
✓	Grade	Overview of heuristic
	0 usability catastrophe	h) Error detection - suitable field lengths, additional user-check after submission i) Error correction - error messages in plain language, precisely indicate the problem, and constructively suggest a solution
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
Evidence and comment Usability successes Usability Issues		

Category D

Make the site user-centred

D	Is the site user-centred?	
D1	Take account of human limitations	
✓	Grade	Overview of heuristic
	0 usability catastrophe	a) Design for recognition rather than recall – default values. b) Design for short-term memory. c) Feedback within reasonable time. d) Support for a strong sense of structure and place
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
Evidence and comment: Usability successes Usability issues		

D	Is the site user-centred?	
D2	Does it match language with target client group needs?	
✓	Grade	Overview of heuristic
	0 usability catastrophe	a) Speak the users' language
	1 serious usability flaws	b) Avoid information that is irrelevant or rarely needed
	2 significant issues	c) Text should be concise - 'say more with less'.
	3 minor concerns	e) Effective headings / sections text structure
	4 generally usable	f) Lists should be presented as vertical columns
	5 exemplar for usability	g) Fonts and font sizes
Evidence and comment: Usability successes Usability issues: Areas for improvement		

Category E

E	Enable easy navigation	
E1	Does it make navigation efficient and effective?	
✓	Grade	Overview of heuristic
	0 usability catastrophe	a) Navigation should be both effective and efficient.
	1 serious usability flaws	b) Textual context informative – graphic links usable
	2 significant issues	c) Persistent link to home page and key pages
	3 minor concerns	d) Number and positioning of links on page
	4 generally usable	e) Consistency - links and page titles
	5 exemplar for usability	f) Page length is an associated issue here
<p>Evidence and comment:</p> <p>Usability successes</p> <p>Usability issues - Areas for improvement</p>		

Category F Support the user

F	Support the user	
F1	Does it Facilitate learning?	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	a) Internet platform conventions b) Internal consistency – including visual identity, use of text c) Support user control and freedom. d) Support undo and redo
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
Evidence and comment: Usability successes Usability issues/ areas for improvement		

F	Support the user	
F2	Provide quality help and documentation	
✓	Grade	Overview of heuristic
	0 usability catastrophe	a) Easy to search help system b) focused on the user's tasks c) Provide some form of <i>contextual help</i> - links from the main sections into specific help and vice versa.
	1 serious usability flaws	
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
Evidence and comment: Usability successes Usability issues – areas for improvement		

SECTION 3 – Individual usability issues

Please add below individual **usability** issues that are **not already addressed in the heuristics** . Add extra rows to the table if necessary.

n/a

Issue	Comment
Other main users	n/a

3. Summary of Hueristic Evaluation

A	Provide an effective home page	
A1	A1 Ensure intuitive access to main user tasks	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	Home page should offer intuitive access to the key tasks.
	1 serious usability flaws	Appropriate metaphor for navigation from the home page
	2 significant issues	Clear cue-card or tab metaphor can prove to be usable
	3 minor concerns	Image map acceptable? clickable regions clear
	4 generally usable	e)Terminology relate to user tasks not marketing speak.
	5 exemplar for usability	
A	Provide an effective home page	
A2	Ensure visual elements do not compromise usability	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	Appropriate mix of visual attractors and distractors
	1 serious usability flaws	Key user tasks are not compromised
	2 significant issues	Visual presentation should focus on the message
	3 minor concerns	Consider home page composition - crucial areas
	4 generally usable	Images / graphic simple, uncluttered not overused
	5 exemplar for usability	f) Use of animation – distracting?
B	Match structure with user needs	
B1	Ensure decomposition of tasks evident in site structure	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	Structure should match a well-defined task specification
	1 serious usability flaws	User tasks, <i>after leaving the home page</i> , natural / intuitive
	2 significant issues	c) Natural hierarchical decomposition of all key user tasks
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
B	Match structure with user needs	
B2	Design a simple state space	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	Fewer user actions per task the better.
	1 serious usability flaws	Breadth rather than depth in menu/page hierarchy
	2 significant issues	c) Manage long pages effectively – not too long – use of hypertext navigation - structuring
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
C	Provide usable e-functions	
C1	Visible System Status	

Tick	Grade	Overview of heuristic
	0 usability catastrophe	Is it clear to the user what is going on?
	1 serious usability flaws	Is appropriate feedback provided in reasonable time?
	2 significant issues	Form design – is data required clear to user?
	3 minor concerns	d) Are actions performed consistently?
	4 generally usable	
✓	5 exemplar for usability	
C	Provide usable e-functions	
C2	Does it give the user control and freedom?	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	Is it easy to make serious errors?
	1 serious usability flaws	b) Collect the minimum amount of data
	2 significant issues	c) Can the users escape from places they don't expectant to find themselves?
✓	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
C	Provide usable e-functions	
C3	Does it offer effective error management?	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	Error detection - suitable field lengths, additional user-check after submission
	1 serious usability flaws	b) Error correction - error messages in plain language, precisely indicate the problem, and constructively suggest a solution
	2 significant issues	
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	
D	Is the site user-centred?	
D1	Take account of human limitations	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	a) Design for recognition rather than recall – default values.
	1 serious usability flaws	b) Design for short-term memory.
	2 significant issues	c) Feedback within reasonable time.
	3 minor concerns	d) Support for a strong sense of structure and place
	4 generally usable	
	5 exemplar for usability	
D	Is the site user-centred?	
D2	Does it match language with target client group needs?	
	Grade	Overview of heuristic
	0 usability catastrophe	a) Speak the users' language
	1 serious usability flaws	b) Avoid information that is irrelevant or rarely needed
	2 significant issues	c) Text should be concise - 'say more with less'.
	3 minor concerns	e) Effective headings / sections text structure

	4 generally usable	f) Lists should be presented as vertical columns
	5 exemplar for usability	g) Fonts and font sizes
E	Enable easy navigation	
E1	Does it make navigation efficient and effective?	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	a) Navigation should be both effective and efficient.
	1 serious usability flaws	b) Textual context informative – graphic links usable
	2 significant issues	c) Persistent link to home page and key pages
	3 minor concerns	d) Number and positioning of links on page
	4 generally usable	e) Consistency - links and page titles
	5 exemplar for usability	f) Page length is an associated issue here
F	Support the user	
F1	Does it Facilitate learning?	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	Internet platform conventions
	1 serious usability flaws	Internal consistency – including visual identity, use of text
	2 significant issues	Support user control and freedom.
	3 minor concerns	d) Support undo and redo
	4 generally usable	
	5 exemplar for usability	
F	Support the user	
F2	Provide quality help and documentation	
Tick	Grade	Overview of heuristic
	0 usability catastrophe	Easy to search help system
	1 serious usability flaws	focused on the user's tasks
	2 significant issues	c) Provide some form of <i>contextual help</i> - links from the main sections into specific help and vice versa.
	3 minor concerns	
	4 generally usable	
	5 exemplar for usability	

4. Conclusions of Hueristic Evaluation

Appendix 8 – user interview data

	User 1	User 2	User 3	User 4	User 5	User 6
Gender	Female	Female	Female	Female	Male	Male
Education	University degree educated	6 th Form/ High School educated, planning on going to university.	6 th Form/ High School educated, planning on going to university.	University degree educated	University degree educated	University degree educated
Age	32 years old	18 years old	18 years old	30 years old	34 years old	35 years old
Relationship with blogs being evaluated	Has heard of one of the bloggers	Has not heard of or subscribe to any of the bloggers.	Has not heard of or subscribe to any of the bloggers.	Subscribes to one of the bloggers.	Subscribes to one of the bloggers.	Subscribes to one of the bloggers.
Job	Marketing Manager	Student	Student	Online content manager for website – works in professional online media	Online content manager for website – works in professional online media	Online content manager for website – works in professional online media
Geography	Lives in the UK (South East/ Thames Valley)	Lives in the UK (South East/ Thames Valley)	Lives in the UK (South East/ Thames Valley)	Lives in the UK (South East/ Thames Valley)	Lives in the UK (South East/ London)	Lives in the UK (South East/ London)
Time blogging and reading blogs	Blogging since March 2010, so a new blogger.	Blogging for 2 years	Blogging for 2 years	Blogging and reading blogs for 'several years' and is a follower and reader of Seth Godin's blog. Works with blogs on a professional basis but is also a hobbyist blogger.	Blogging since November 2009, so quite new to blogging. Reads blogs all the time – will do Google searches for them. Works with blogs on a professional basis but is also a hobbyist blogger.	Works with blogs on a professional basis but is also a hobbyist blogger. Started own personal blog 18 months ago.
Blogs about	Blogging Bride – blogging about planning her wedding.	Media course and blogging as a student – blogging about being a student, coursework.	Media course and blogging as a student – blogging about being a student, coursework.		First time Dad – blogging about this experience.	Blogs about marketing but tweets and Facebooks about personal things.
Reasons for blogging	It's fun, entertaining, I enjoy writing, I do it for entertainment, expression, having a laugh, I enjoy writing things, and I always wanted to be a columnist in another life, a Carry Bradshaw in another life. I write with a sense of humour, the main thing is to have fun doing this. I am planning a wedding and documenting my experience. I really want to make people laugh and entertain people.	Tracking progression on a course, a course diary, life stuff.	Tracking progression on a course, a course diary, life stuff.		Cathartic, diary of feelings, journal writing, getting things off my chest.	Has always been a writer, was a comic writer at uni, writes articles on tv and music and is a marketer who enjoys writing. Blogs to improve writing skills wants to write a book eventually and commented from Seth Godin: "Artists ship stuff". Blogs on a personal and marketing basis has their own Project Digital and enjoys investing money in gadgets and trying to learn and getting to

						know about technology and marketing. Expertise and developing their expertise is important. Blogs for enjoyment as well, wants to write and improve their writing skills. Sees a differentiator in Marketing is being able to write well. Reads blogs and forums on football and music, blogs from newspapers and magazines, and things really took off when started using the new smart phones, when learned could get blogs and RSS feeds on phones and got interested in Tom Peters, Michael Porter and Richard Branson's' blogs.
Barriers to blogging	Time pressures are an issue blogging, having to think and plan what to write, to 'craft' a post, having to commit to writing, and then responding to comments – it can get very time-consuming. The biggest challenge with blogging is having the time to blog and would love to have more time to do this.	Has had a really bad experience of someone being able to get into their account and copy all their work pretending to be them – security.		Difficult to keep it up, having to keep content going, time pressures.	Time – it's difficult to do it regularly, it's a real commitment, time is an issue, I used to do it on a 1 hour train journey commute I used to have to do, but I no longer do that so I don't have that time now available to me to write the blog posts, so it's fallen by the wayside recently.	The main problem with blogging is SEO, you have to write everyday to keep it up and its really hard, its really tough and hard to become a good blogger, you have to have such commitment to quality and I'd rather write 1 good piece, about a course or a meeting, some interesting thing I've learned, than write every day, but that means I write less frequently and don't get the SEO up.
What's important when blogging	Being anonymous not having to use real name, likes that as likes being a persona can write behind. Really likes feedback to know have entertained people, likes the comments on the blog and Facebook. It's important that each blog is a story and is relevant to its subject, and tells the story.	Writing, videos, content, security and safety.	Writing, videos, content, security and safety, posting pictures.	Being able to get content feeds. The content. It must be engaging, well written, and relevant. Engagement is the key, engaging content, engaging readers. People scan a lot when they read online so the content needs to be well laid out and easy to find and	Being able to get content feeds. Open, opinionated, maybe influenced by news and events but voice their own opinion and contribute to the debate and stimulate debate in them. A blog must develop an argument, not just voice an opinion, it must add something new, not just regurgitate what's elsewhere. Staying on topic. You can tell the difference between a	Being able to read it on-the-go on his mobile. Being able to get content feeds. The immediacy of blogging, feeling special because you are developing the expertise being the most in the know and being a specialist so you are the first to know something and then being able to retweet enhances your own credibility. So, the immediacy and speed of the media are really important. A good blog has charm, the personality of the

				<p>follow.</p> <p>Themes and templates are important to give a blog personality, really important, contributes to how it looks.</p> <p>Being able to share blogs around and posts is really important, I'd probably email them or tweet them, most likely tweet them if I found them interesting.</p>	<p>blog where someone has thought 'professionally' and have a clear content plan, plan their posts and writing, almost keep to an editorial brief to keep on topic and keep a consistent tone of voice, and manage their content in their blog as if thinking properly about content management, and those who don't. And those who do are much better. Veering off topic doesn't help.</p> <p>Blog design isn't particularly imaginative, and doesn't often make good use of the page. As a rule I've not come across many blogs that are particularly attractive or well structured, but I'm sure that's as much a part of the editorial systems, like WordPress, that they use, as it is about the choice of the Blogger.</p> <p>Reads Seth Godin's blog, blogs which are on the same topic as he writes about (parenting).</p>	<p>person, a bit of wit, anger, whatever it is but it's the expression of their personality, people like Stephen Fry and Seth Godin put their feelings across and expression and are not heavy, they have a lot of personality. It's different from journalism which is heavy, carefully crafted, totally objective, has no expression of personal feeling. Expertise is really important; a charming expert is the ideal blogger. Mobile functionality and feeds are important, to be able to read feeds on trains, watching the telly at night, so the portability is interesting. Some blogs auto format to mobile and some don't. Being able to republish, retweet, reshare the content to say 'this is great' and enhance your own credibility is really important. I don't actually comment often but I do like it when people do comment. It's always nice as a blogger to get positive feedback, but it's not the most important thing. The most important thing is to think I have 'shipped' something, and I'm proud of what I wrote and not embarrassed about the content and quality, and if someone says "I like your blog post" that's nice, but the quality of what I have done is the most important thing to me. The most important thing to me is to produce quality writing I'm proud of.</p> <p>It's important that blogs give me something I didn't know before.</p>
--	--	--	--	---	--	---

What's not important	If it's not engaging or different why would anyone want to read a general stream of consciousness? Blogs can be quite dull.			<p>Blogs can be really messy and you don't always get the jist of what they're trying to give to you.</p> <p>I'd never comment on blogs themselves, I'd only comment on social networks like Twitter.</p> <p>Blogging is more the blogger is giving you something, not necessarily about two-way interaction. I'd never comment on a blog; however I do enjoy reading other people's comments.</p>		<p>I take an interest in the usage of my blog but it's not the most important thing, I may track my usage every once in a while to see how many views I'm getting per week. SEO can get the ratings up but it's not the main driver. Bad blogs are poorly written with poorly thought through articles. A blog that doesn't give you anything you don't know already means every time you read you're disappointed. When it's all about me, me, me, me, like a woman's magazine, too much about them rather than a topic.</p> <p>I hate busy blogs and clutter, they're frustrating, like a 14 year old using PowerPoint or the old early Internet, the worst blogs are like bad PowerPoint. The best blogs however are good at helping you to read in the electronic format, well constructed, clean. It's not what you put in it's you leave out. Really precise, crafted, up-to-date, informative blogs with good links are much better than loads of pictures and pointless whizziness.</p>
Social media	Links it to Facebook when does updates. Isn't into Twitter yet. "Don't really get it, I don't do status updates on Facebook, I don't have time for all that, it's very time-consuming, I don't regularly update people on my daily activities so don't see the point in Twitter."	Uses Facebook and Twitter.	Uses Facebook.	Twitter, Facebook, blogs	Twitter (sometimes although I find that the time pressures get in the way of that like blogging), Facebook (I'm on there every day all the time), blogs, Linked In (from time to time).	Linked In Twitter (multiple accounts) Google Reader Facebook Blogs
Frequency of blogging -	Once a week.	Was blogging nearly every day but since issues has stopped blogging.	Once a week	Once a month.	Once a month	Once a month, checking blog subscription feeds daily.
Blogging	- WordPress (org)			Tyepad – was		Wordpress.org

tool used	<p>“WordPress is quite easy to use, you just copy from word into notepad and then paste into WordPress, select tags and that’s it, pretty straightforward.”</p>			minimal effort to give it a go.		
Main tasks when blogging -	<p>Laying out a blogging/ writing plan – what topics to cover, sequential order, the flow. Remembering anecdotes and notes to write about, remembering stuff that’s happened. Writes it in Word first, copy from word into notepad and then paste into WordPress, select tags.</p> <p><u>Reading blog content.</u></p>	Sharing the information on Facebook and Twitter	Sharing the information on Facebook.	Reading the content on-the-go, being able to write blog posts on-the-go (on a train), being able to read posts, being able to share on Facebook and twitter, being able to find other blogs and bloggers of interest and relevance, being able to subscribe to content feeds.	Reading the content on-the-go, being able to write blog posts on-the-go (on a train), being able to read posts, being able to share on Facebook and twitter, being able to find other blogs and bloggers of interest and relevance, being able to subscribe to content feeds.	Writing. Reading the content on-the-go, being able to write blog posts on-the-go (on a train), being able to read posts, being able to share on Facebook and twitter, being able to find other blogs and bloggers of interest and relevance, being able to subscribe to content feeds.

Appendix 9 – SUMI Questionnaire

Questionnaire for end of session (2 minutes after each blog test asked in 'buzz test' quick-fire to get user's instinctive perception)

So we can gain an idea of how easy you found this to use, please answer the following questions....

1. Did you find using it easy or difficult?

- Very easy
- Moderately easy
- Moderately difficult
- Very difficult

2. Please describe any difficulties that you experienced...

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3. Do you have any comments, criticisms or suggestions relating to the - ease of use - of this?

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Very quickly, respond without thinking too much:

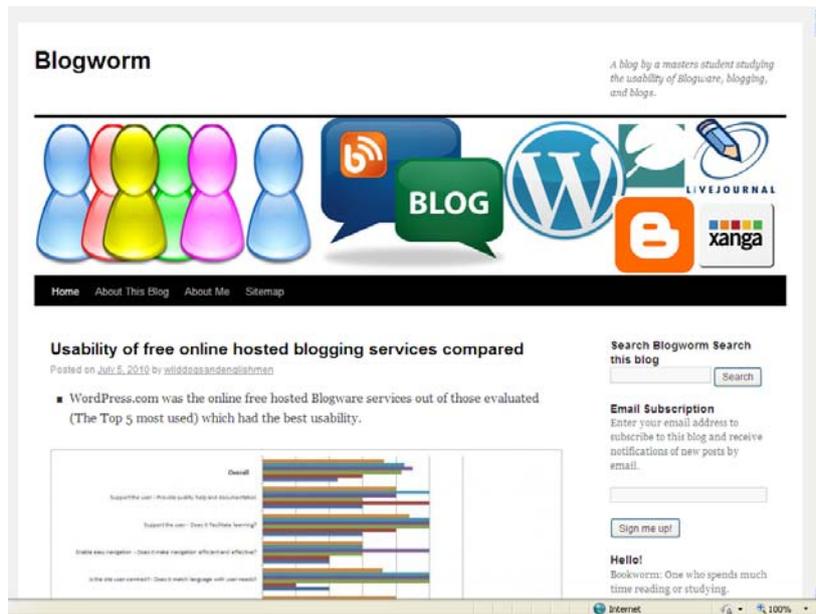
		Disagree	Undecided	Agree
1	It responds too slowly when I do something			
2	I would recommend this to my friends and family.			
3	It helpfully prompted me.			
4	At times it stopped me unexpectedly			
5	I believe learning to use this will be full of problems			
6	I sometimes don't know what to do next with this			
7	I enjoyed using it.			
8	Learning to use this will take too long			
9	I sometimes wonder if I'm using the right command or thing on the screen			
10	This is self-explanatory			
11	The way that information is presented is clear and understandable			
12	I feel safer if I use only a few familiar things in this			
13	It seems to disrupt the way I			

	normally like to do things when I'm sharing my photos			
14	There is never enough information on the screen when it's needed.			
15	I feel in command of this when I am using it			
16	I prefer to stick to the facilities that I know best			
17	I think it is inconsistent			
18	I would not like to use this every day			
19	I can understand and act on the information provided by this			
20	There is too much to read or take in when I use this			
21	Tasks I need to do can be performed in a straightforward manner using this			
22	Using this is frustrating			
23	When I wasn't sure how to do something or had a problem when I was using it, it helped me to solve those problems			
24	The speed of this is fast enough			
25	There have been times in using this when I have felt quite tense			
26	The organisation of the menus or information seems quite logical			
27	There are too many steps required to do my task			
28	This will make me have headaches			
29	It is easy to make it do exactly what I want			
30	I will never learn to use all that is offered in this			
31	It didn't always do what I was expecting			
32	It has a very attractive presentation			
33	It is relatively easy to move from one part of a task to another.			
34	It is easy to forget how to do things with this.			
35	It occasionally behaved in a way which I didn't understand			
36	This is really very awkward			
37	It is easy to see at a glance what the options are at each stage			
38	I want to look for assistance when I use this.			
39	It was always obvious what I should select			
40	This will help me to achieve my goals when sharing photos			
41	It had everything I expected to complete the tasks			
42	Everything is clear and easy to understand			
43	It is easy for me to find what I am looking for			

44	A month from now I would still be able to use this to find the information I was looking for.			
45	I am able to efficiently complete my tasks using this			
46	I like this			
47	It feels familiar.			
48	I would find this a valuable tool to do my photo sharing.			
49	This is really entertaining			
50	I think this is delightful to use.			

Any final comments or details to note

Appendix 10 – Results Blog



All the related background research documentation such as the complete heuristic evaluations of each Blogging platform, the complete Weblog usability report and all related documented are published online at this blog which was created as part of this project by the author:

<http://tvustudent.wordpress.com>

The specific usability reports are found at this same site at each of these shortcuts:

TypePad Micro heuristic usability evaluation report:

<http://tvustudent.wordpress.com/2010/06/29/heuristic-usability-evaluation-of-typepad/>

LiveJournal heuristic usability evaluation report:

<http://tvustudent.wordpress.com/2010/07/03/livejournal-hueristic-usability-evaluation/>

Xanga heuristic usability evaluation report:

<http://tvustudent.wordpress.com/2010/06/01/xanga-com-usability-evaluation/>

WordPress.com heuristic usability evaluation report:

<http://tvustudent.wordpress.com/2010/05/26/wordpress-com-heuristic-usability-evaluation/>

Blogger heuristic usability evaluation report:

<http://tvustudent.wordpress.com/2010/05/17/bloggerheuristicusabilityevaluation/>

5 Blogs usability testing report:

<http://tvustudent.wordpress.com/2010/06/28/blog-usability-study/>

Appendix 11 correlation calculation explanation.

This is to calculate the correlation value. The formula for the correlation is:

$$r = \frac{N\Sigma xy - (\Sigma x)(\Sigma y)}{\sqrt{[N\Sigma x^2 - (\Sigma x)^2][N\Sigma y^2 - (\Sigma y)^2]}}$$

Where:

- N = number of pairs of scores
- Σxy = sum of the products of paired scores
- Σx = sum of x scores
- Σy = sum of y scores
- Σx^2 = sum of squared x scores
- Σy^2 = sum of squared y scores

Example:

$$r = \frac{20(4937.6) - (1308)(75.1)}{\sqrt{[20(85912) - (1308^2)] [20(285.45) - (75.1^2)]}}$$

$$r = \frac{98752 - 98230.8}{\sqrt{[1718240 - 1710864][5709 - 5640.01]}}$$

$$r = \frac{521.2}{\sqrt{[7376][68.99]}}$$

$$r = \frac{521.2}{\sqrt{508870.2}}$$

$$r = \frac{521.2}{713.3514}$$

$$r = .73$$

We use the symbol r to stand for the correlation. r will always be between -1.0 and +1.0. If the correlation is negative, we have a negative relationship; if it's positive, the relationship is positive.

Appendix 12.

Statistical significance testing

The alpha level, which is how willing this project was prepared to be wrong when it is stated that there is a relationship between the variables measured is .05. By setting the alpha level to .05, this is willing to be wrong 5 times out of 100 or at least 95 times out of a 100 the relationship found with this sample probably also exists in the populations from which this study drew the sample. On the other hand, the relationship found in the sample might occur by chance 5 times out of a 100 times. The table used to test this is the Critical Values of the Pearson Product-Moment Correlation Coefficient.

This means that a test where the odds that the correlation is a chance occurrence is no more than 5 out of 100. The df or degrees of freedom is equal to $N-2$ which is $5-2 = 3$. Two-tailed significance:

- the significance level ($\alpha = .05$)
- degrees of freedom ($df = 3$)
- type of test (two-tailed)

Critical Value is .878

For this study if the correlation is greater than .878 or less than -.878 the odds are less than 5 out of 100 that this is a chance occurrence. Since the correlation $r = 0.242$ is lower, this study cannot conclude that it is not a chance finding and that the correlation is "statistically significant" (given the parameters of the test).

However some of the relationships proved to be more statistically significant than others.

The relationship between Blogware easy-to-use navigation and blog usability was the most statistically significant aspect of the relationship between Blogware usability and the usability of blogs. The mobile experience was the factor of the blog user experience most closely related to Blogware usability, this had the most statistical significance.

In order to prove or disprove all these findings to be statistically significant more usability tests on more blogs would be needed to generate more data for the Pearson Product-Moment Correlation Coefficient to have more statistically valid data pairs. As the correlation less than .878 this can't conclude that the odds are less than 5 out of 100 that this is a chance occurrence, and therefore cannot conclude that it is not a chance finding and that the correlation is "statistically significant" (given the parameters of the test). Therefore the findings can only be read as being indicative, and not statistically significant. To make them statistically significant another phase of research would be needed with the following activities. In order to prove that the correlation is not a chance occurrence need to run more usability tests on more Weblogs. By increasing the odds/ risk to being less than 10 out of 100 that this is a chance occurrence, fewer tests would be needed.

The following additional quantity of blogs would need to be usability tested in order to have sufficient data for the findings to be statistically significant:

	Correlation	Additional blogs to test at 5% risk	Additional blogs to test at 10% risk
Visual elements of homepage	-0.065	100	100
Utility	-0.061	100	100
Safety	-0.031	100	100
Facilitates learning	0.073	100	100

Learnability	0.101	100	100
Effectiveness	0.098	100	100
Help documentation	-0.205	60	40
Design a simple state space	-0.257	60	40
Overall	0.241	60	40
Decomposition of tasks evident in structure	0.289	60	40
Visible system status	0.287	60	40
Gives user freedom and control	0.202	60	40
Error management	0.254	60	40
Memorability	0.299	45	30
Language	0.324	35	25
Blogware homepage	0.410	20	15
Takes account of human limits	0.464	20	15
Efficiency	0.505	19	10
Mobile experience	0.631	8	6
Navigation	0.770	5	3