PROCEEDINGS OF THE
10th ANNUAL CONFERENCE
ON WORLD WIDE WEB APPLICATIONS

3-5 September 2008
Cape Town
South Africa

Editor:
P.A. van Brakel

Publisher:
Cape Peninsula University of Technology
PO Box 652
Cape Town
8000

Proceedings published at
http://www.zaw3.co.za

ISBN: 978-0-620-42642-8
TO WHOM IT MAY CONCERN

The papers accepted for the 10th Annual Conference on World Wide Web Applications held on 3-5 September 2008 in Cape Town have been peer-reviewed by the following external reviewers:

Prof J Brits (PhD)
Faculty of Information Sciences
University of Wisconsin
Milwaukee
USA

Prof M Erasmus (DBA)
Erasmus Associates
Pretoria

Mr AM El-Sobky (MA)
RITSEC
Cairo
Egypt

Dr A Koch (PhD)
Cape Peninsula University of Technology
Cape Town

Prof J le Roux (PhD)
University of Zululand
Empangeni, KwaZulu-Natal
South Africa

Dr J Mostert (PhD)
Chief Economist Unit: Economic Affairs
Kimberley, South Africa

Dr David Raitt (PhD)
European Space Agency
Noordwijk
The Netherlands

Prof PA van Brakel (PhD)
Cape Peninsula University of Technology
Cape Town

The evaluation process was as follows:

Phase 1: A Call for Papers was published and abstracts received.

Phase 2: Abstracts were evaluated by an international committee and authors of selected abstracts invited to submit the full text of their papers.
Phase 3: Full text papers were received and blind-reviewed according to a set of criteria.

Phase 4: Authors of those papers selected were notified that their papers (with or without amendments) were added to the final programme of the Conference.

Phase 5: Papers were reformatted to PDF and published digitally in the permanent Conference Website (http://www.zaw3.co.za).

Further enquiries:

Prof P.A. van Brakel
Conference Chair
Annual Conference on WWW Applications
Cape Peninsula University of Technology
Cape Town
+27 21 469-1015 (landline)
+27 82 966-0789 (mobile)
Blogging as a change agent to empower citizens in communities with tension

M.B.Parker
Faculty of Informatics and Design
Cape Peninsula University of Technology
Cape Town, South Africa
parkerm@cput.ac.za

J.P.Pereira
Faculty of Informatics and Design
Cape Peninsula University of Technology
Cape Town, South Africa
juanmorallez@gmail.com

Abstract

The power of the internet as a facility is that it has allowed many people worldwide to use it without feeling the real bite of the term ‘cost’. It comprises of numerous technologies that create an interesting question: How far has the information technology world come in terms of development? The introduction of a Web 2.0 technology known as weblogs or blogging has fast become a popular choice of application used on the internet (Dearstyn, 2005). Blogging, in the literature, proved to have both major advantages and disadvantages when used in the business environment. Not much research has been conducted on the personal impact blogging has on individuals. An issue that this paper addresses is in determining how helpful blogging can be when used by a group of individuals that are in the phase of drug rehabilitation. Ex-drug addicts and gang members from the Cape Flats in Cape Town were used as a case to investigate how much of an impact blogging had on them on a personal level, in their everyday lives and others that surround them. Interviews were conducted for the purpose of evaluating their insight and opinions. The paper concludes with discussion and findings that could support people who are aiding individuals in the reconstruction of drug and gangster rehabilitation phase. Blogging could be an alternative assisting or possibly empowering individuals in communities with tension allowing them to express themselves and see the world from a new perspective.

Keywords: Blogging, web 2.0, community with tension, reconstructed, drug rehabilitation

1. Background

The increase of gang and drug activity on the Cape Flats in the Western Cape is
causing tension within communities (Plüddermann et al., 2007). These activities have a negative impact on citizens in these communities and contribute to a sense of helplessness. Communities are defined as a “Coherent area of social existence identified by a sense of locality and community sentiment” according to Day (1999:10). This sentiment is adopted in this paper that a community is a social existence that shares a common thread, ownership or participation. A community with tension can be described as “a community where the wellbeing of its citizens is threatened”. Reconstruction or rehabilitation of ex-drug addicts and ex-gangsters are challenging due to communities with tension not being able to empower these citizens or not willing to be rehabilitated. This presents the opportunity for the use of technology as part of the reconstructing of these citizens.

2. Introduction

From a worldwide perspective, Web 2.0 is a formed collection of newly usable web applications. These applications have been constructed for user-added content in an ever changing data and technology environment. The term “Web 2.0” was generated by Dale Dougherty, vice president for technology publisher O'Reilly Media Inc, in 2005. As an organisation, they stated, "You can visualize Web 2.0 as a set of principles and practices that tie together a veritable solar system of sites that demonstrate some or all of those principles, at a varying distance from that core" (Peek, 2005).

Web 2.0 focuses on being a medium to share views and information by self-publishing using fully established tools. Blogs, also known as “Weblogs”, are one of these available tools that have become one of the more used and popular Web 2.0 applications. Blogs also form as a technological component of social networking that let users interact, share and create content as they please (Dearstyne, 2005).

The “web” as a whole has established itself as a solid platform for Web 2.0 applications hence the rapid usage and growth. The other effect is that there are many free or low-cost versions available which are being utilised by almost everyone that has access to the internet (Lane, 2007; Peek, 2005).

The “blogosphere” is common terminology associated with blogs and blogging. It simply expresses the virtual world that exists by bloggers tracking and posting information on blogs (Stanfield, 2007).
Figure 1 illustrates a graphical representation of the blogging environment and incorporates the blogosphere and the various roles played by users (Holahan, 2007).

Figure 1: The Blogging environment

3. Social networking

Social Networking Technologies also known as Social Networking Services (SNS) essentially entail the use of websites that allow people the opportunity to share, network and create content about themselves. The internet communities form what is called “social networks” where people can keep in touch with each other, meet new people and develop virtual friendships. Examples of social network technologies include chat rooms, community sites and bulletin boards. Individuals can interact with each other by chatting, messaging, file-sharing, voice chatting and blogging. The uniqueness of social networking is that it permits individuals to construct social networks of their own and interact with each other using new methods and technologies that continue to develop and evolve (Goodings et al, 2007; Kay, 2007).

People on such sites are more interested in communicating with people that are already part of their social network or community. According to Kay (2007), from the early evolution of social networks, blogging was the technology that showed the most rapid growth. Early blogs were used as online diaries but today they have can be used in several different forms and are used for both public and private purposes. Some sites
that have been a great success in the implementation as part of social networks are Facebook and MySpace according to Kay (2007).

4. Blog uses and users

Blogs as discovered have become a part of many people’s lives that associate themselves with social networking. In saying that, reasons or more so, motivations for blogging exist. A positive point about blogging is that it permits the representation of data in different manners or scope (Gallagher, 2005). The following paragraphs describe a few of the different ways in which blogging is used by individuals.

4.1. Documenting your life:
This form of blogging, involves recording things such as events that have taken place or possibly an activity one has done in their everyday life. Information presented in this nature can be seen as being reasonably personal as it involves the author actually putting down his or her experiences and things that provide a direct view of their life.

4.2. Commentary:
Some opt to use blogging as a facility to express one’s opinions whether it is a subject or issue that they raise or sharing their opinions or possible experiences on another subject or blogger’s view. Hence, commentary essentially involves expressing opinions and views on topics that entail more that just using a blog as a medium to chat.

4.3. Catharsis blogs:
Blogging is also seen as an alternative approach for expressing one’s feelings or thoughts. Blogs that are used for this purpose specifically, usually involve personal content and fundamentally are utilised as an outlet to obtain some form of relief.

4.4. Blogs for thinking:
Many have found that in order for them to think, they must write. A lot of people who aspire to move in this direction make use of blogging in this way. This form of blogging, allows facilitating an environment where one can test their ideas by presenting them to several other bloggers that function as an audience. In effect for those that reflect by writing, two key benefits are generated being that an audience is readily available to present the writing to and a collection of posts is on hand that could potentially be used at a later point for something else (Nardi et al, 2004).
4.5. Blogs used as community forums:
Some utilise blogs in a community environment expressing collections of diverse views to one another. One area identified may well be the use of blogging in the work-place essentially supporting workgroups (Nardi et al, 2004).

5. Benefits blogs and blogging fabricate:

Besides the fact that blogs can be used in several different ways, there are numerous benefits that are brought about by this technology. A great advantage is the ability to provide and make information available instantly also tying in with the easy process of retrieving information.

Blogs are still a very new technology to some, yet the procedures to make use of it are simplistic hence it should not be seen as an intimidating component of technology. The fact that it can be a provider for various types of information brings the point of blogs being versatile in the sense that bloggers that put up posts are not restricted to what they want to talk about whether it be something for discussion or some personal or an emotional experience. These are valid types of topics and information that can be present on blogs. Obviously, some blogs are dedicated to presenting specific types of information (Dearstyne, 2005).

Blogs act as broadcast facilities that people can respond or not respond if they wish to. This leads on to another great feature of blogging as people don’t have to respond to posts hence it isn’t intrusive. People are not obligated to take notice to what information the blog presents (Nardi et al, 2004).

From a business perspective, blogs can aid being the intermediary between your business and others. The dialogue created on a blog is better than that on a static site and in essence, is more interactive for individuals. Blogs can be a method in promoting businesses or organisations to many people and the fact that a blog can be created quickly and easily could be an option for many businesses that aren’t already using this technology. Blogs can be created using software programs for example WordPress and Blogger.
The structure of blogs consisting of the original post and comments following each other ordered by latest post, makes it easy for visitors to blogs to find a particular topic and once they start blogging, it makes them feel as though they are apart of a continuous dialogue.

To the absolute core, blogging is about providing valuable or interesting information to internet users. The amount of people that visit blogs or post on specific blogs depends on the content of a blog. Not necessarily putting as much information up as possible but more valuable information which will result in more people seeking a specific blog (Stanfield, 2007).

6. **Drawbacks of blogs and blogging:**

Unfortunately in terms of the use of blogs and blogging, individuals must understand that there are disadvantages that are brought about. For example, a noticeable feature on a lot of blogs is the use of sloppy writing. Blogging encourages this style of writing by using things like abbreviation of words (e.g. ‘message’ typed as ‘msg’ which is used a lot with the mobile short messaging service (SMS) facility) and incorrect grammar. The writing style used on blogs has also been utilised by the development of ‘moblogs’ or mobile weblogs which allow users to perform the same activities that are carried out on blogs accessed via a computer only that a mobile phone is used as the medium. The use of mobile phones to blog rather than computers facilitates convenience for the user. The fact that the SMS facility is a major feature of mobile technology, it seems clear that the “SMS style” of wording would be adopted by those that blog from their mobile phones (Doring & Gundolf, 2006).

Another issue that people using blogs must come to terms with is the fact that a lot of information on blogs is the opinions of people and not all of it is true. People need to understand that some information available is biased and when reading should be careful of what to believe.

In some cases where blogs are open to the public, bloggers that initially put up posts for the purpose of getting others opinions or reactions might receive hurtful feedback in the form of comments. This builds on the argument whether the freedom of speech associated with blogging is actually good. So even before you start posting information
on public blogs, you should be aware that the potential to receive personal or hurtful comments is a possibility. The ability to post anything certainly has two sides (Davies, 2005; Vaughan, 2006).

Roth (2004) wrote a paper on how journalists saw the blogosphere. Opinions of journalists were discussed on the advantages and disadvantages of blogs and blogging. The disadvantages were surveyed more extensively by the journalists stating that the information on blogs lacked accuracy; blogs were dominated as they were used for speculation and rumours and the lack of ethical standards in this blogosphere allowed this free-for-all environment once again bringing the point whether it really is a good thing to be able to post whatever you want. One journalist mentioned that anyone with “no evidence, or false information, can publish” (Roth, 2004).

As some blogs are made public, this illustrates a lack of security in terms of the information that bloggers put up on the blogs as anyone has access to that information at any given time (Al-Fadhli, 2007).

As a summary of blogging, it should be clear that the technology does have positive and negative features for those that are exposed to it. One characteristic that identifies it well is the fact that you can post any form of information and use the blog in different ways suitably those that benefit the individual the most. So posting information of different forms to the blog can be seen as an interesting feature unfortunately, not all the information posted is of great quality and “good” as sometimes, it can be harmful to others from a psychological point of view.

From a more optimistic view, the following case looked at the positive impacts of blogging on a group of individuals. The next section gives you background on the case that was used to determine the effects that blogging had on them.

7. Development: case study

The case study involves a group of individuals (units of analysis) living on the Cape Flats in Cape Town. The individuals consisted of ex-drug addicts and ex-gangsters in the reconstructed phase and the rest comprise of persons present for the sole purpose of support for their peers and educating themselves about the environment that surrounds these reconstructed individuals. The case study involves an NGO, Impact
Direct Ministries, who are working with these individuals and equally interested to discover what would develop from this research.

The individuals are presently in the "reconstructed" phase as in the past, they had been the casualties of a harmful environment that consisted of drugs, gangs and the fact that they reside in communities with tension gives more reason in understanding why these individuals have been vulnerable to what they have experienced and still continue to fight against it.

The medium between the group of individuals and technology is the use of blogging and other social networking mediums. A sample blog was developed by them for the investigation. The investigation is to be conducted over a period of several weeks with individuals receiving training using Web 2.0 technologies and requested to put up posts, add comments and visit the blog as often as they can. By using the blogging technology, potentially it will enhance their Web 2.0 knowledge and computer literacy.

Ehrmann’s triad model (1998) was used as an overview to understand the case study.

Figure 2: Triad model adapted from Ehrmann (1998)

With regard to Erhmann’s triad model and its relation to this study, the technology aspect illustrated in the model is the use of web logs. The activities are related in the form of self-expression such as the individual’s feelings, stories and testimonies through the motion of blogging. At the end, an outcome will be generated focusing on empowering the individuals.
Sample blog (see figure 3 and figure 4 below) used for research: http://www.thereconstructed.blogspot.com

Figure 3: Sample blog - Start-up Page

Figure 4: Sample Blog – Dashboard
Essentially, the primary objective of the case study is to ensure that the group of individuals become occupied with using the internet technologies to allow for a clear evaluation when the time arrives to conduct interviews to obtain their feedback and recent experiences with the blogging technology, Facebook and just their interactions with technology and Information Technology in general.

8. The Research method

The main objective of this study was to determine whether blogging as a technology could empower individuals in communities with tension and if it could act as a change agent in their lives.

A qualitative approach was used as this methodology allows for the study of meanings and experiences rather than with a quantitative approach that deals essentially with numbers. Hence, this approach is part of an inductive research that moves from individual observation to discovering general patterns. Inductive research entails generating theories and hypotheses on the basis of studying specific cases. For this reason, a case study was used as a research method.

As defined, a case study involves the intense observation of a limited amount of units of analysis. As it involves the investigation of groups, it makes use of fieldwork which involves conducting the study under the natural circumstances of the specific case. (Welman et al, 2005). In this case, the individuals were 12 young men, ex-gang members and drug addicts, from the Cape Flats, Western Cape in South Africa (see figure 5).
The case study would be used as a medium to examine the individuals and determine the effects on them when exposed to the blogging technology and other social networking facilities. The qualitative approach adopted for data collection would be the use of semi-structured in-depth interviews. The use of this type of interview could be justified as unlike structured interviews, sensitive and emotional questions can be asked to the individuals resulting in a greater wealth of data. The interviews would be conducted on a one to one basis or in random groups of 3 or 4 providing data from different perspectives which would allow for discussion of opinions and experiences (Welman et al, 2005).

The interview consisted of questions that enquired:

- What the individuals thought about blogging as a technology?
- What they accomplished and how they benefited from blogging?
- General questions such as how often they visited the blog and how often they put up new posts or comments were also asked.

Ethical considerations for each interview would be established such as:

- Informed consent – the necessary permission from interviewees.
- Right of privacy – interviewees are assured of the data collected in the interview.
- Protection from harm – interviewees are indemnified against physical and emotional harm.
9. **Findings**

A total of 12 individuals were interviewed. One focus group interview was conducted with 4 individuals selected randomly and the other 8 were interviewed on a one-to-one basis.

9.1. **Interpretation of blogging technology:**
- Facility that allows you to update what you are currently doing
- An international diary
- An outlet for expression (how you feeling or what is on your mind)
- An outlet for messages (hope, GOD)
- Providing information that possibly could assist those that are reading the posts

9.2. **Content of posts:**

Their first post gave some background about themselves. The posts that were then put up after the initial post consisted of information such as self-expression concerning the individuals' feelings, the activities that were going on or what the individual was doing every day.

9.3. **Likes and dislikes about blogging:**

<table>
<thead>
<tr>
<th>Likes</th>
<th>Dislikes</th>
</tr>
</thead>
<tbody>
<tr>
<td>-allowed individuals to write about anything</td>
<td>-individuals had to use computer technology and for some of them this</td>
</tr>
<tr>
<td>-allowed them to help others by providing encouragement or guidance</td>
<td>meant they had to step out of their comfort zones</td>
</tr>
<tr>
<td>through the use of scriptures from the bible (e.g. help someone</td>
<td>-the fact that blogging is reliant on the use of a computer and their</td>
</tr>
<tr>
<td>that is down determined by their status on facebook (“I’m having a</td>
<td>centre was not that well-equipped</td>
</tr>
<tr>
<td>bad day”)</td>
<td>-might be bad if young people read some of the experiences and try to do</td>
</tr>
<tr>
<td>-meeting new people (all over the world, different cultures, diversity)</td>
<td>the same</td>
</tr>
</tbody>
</table>
9.4. The feeling of blogging?

“Relief and Happiness” was the image built in mind when the individuals were asked how they felt about blogging. All individuals felt good when blogging in the sense they might have wanted to talk to someone but there was no one available. The blog gave them an outlet to express anything and by doing this, they gained a sense of relief once they had put down all they felt. To a number of them it was exciting blogging and a great feeling by not only representing themselves but also Jesus Christ their hope. One individual felt nervous at the thought of putting posts up that could be read by potentially millions of people around the world.

9.5. Benefits to Individuals:

Individuals felt they benefited as they could express and pour out their feelings without being judged by anyone or feeling guilty about anything. They felt that the blog provided allocated “space” for them which acted as a form of representation of each individual. One individual as quoted said “just having something positive next to your name on the blog, brought some satisfaction for me”. The majority felt that by receiving comments from other bloggers, it helped whether the comments were good or bad. Just the interaction produced showing that someone wanted their opinion or understood what they were talking about through the posts they had put up.

9.6. Computer literacy from regular blogging:

All individuals obtained the basics such as operating the computer (on, off, navigation, use of the mouse, keyboard). They learnt the fundamental programs such as Microsoft Word which allowed them to spell check the information they would put on the blog before they actually posted it. A few of them did not struggle as they had already been exposed to computers from a young age so knew about the basics already (See figure 6).
9.7. **Objective of posts and comments:**
- To present hope in any situation (their stories give other young people, parents and family members hope that they can overcome the problems they are experiencing due to drugs and gang activity)
- To inform others what the individuals were doing at the Impact Centre in terms of how they were impacting people’s lives (as up-to-date as they possibly could)
- Expressing themselves
- To help people (by hearing someone else’s view, it might aid them whatever problem they may be battling with)

9.8. **Why encourage others to blog?**
- They can express their feelings
- They can learn how to encourage others by reading the posts
- They can attempt in getting a positive reaction from others
- Can post or add comments anonymously
- People can learn about things they didn’t already know about themselves
- You can become more computer literate
- You can learn more about people (different cultures, religions and beliefs)
9.9. Technology:
Most of the individuals knew the basics of a computer but some had never even used one before. These individuals found the general use of the computer a challenge in itself as it was something new for them. The rest were confident and found the opportunity to learn more especially other internet and mobile-based technologies exciting.

9.10. New posts and blog visits (Period of 3 months)
With regard to the number of times the individuals visited the blog, during the first week, they visited the blog every day, twice a day and posted one thing each time. At the moment, three months later, they visit the blog once a week and some once every two weeks due to problems with availability and capability of technology e.g. bandwidth at the centre. The individuals attempt to post something every week or whenever they get access to a computer. At the moment, there are over 140 posts on the blog after 3 months.

9.11. Blogging experience and new possibilities
The usage of the blogging technology allowed the individuals to explore various aspects of the internet. Common technologies or more internet applications that the individuals started using were Twitter, Google, Facebook, YouTube and Flickr. Besides learning new technologies, some individuals even felt that they would want to start their own personal blog. Lots of them also learnt to blog using their mobile phones which was not taught to them. It was something that evolved from their interaction and challenges with accessibility to the internet. YouTube came across as quite an exciting prospect for a lot of them as many of them wanted to create videos with their stories and testimonies and upload them to YouTube for people to see. They felt that it would be a more interactive experience and those watching the video clips would get a better understanding of what they were trying to portray or the message they wanted to deliver.

10. Discussion of findings:
The following paragraphs discuss the findings and any limitations that were encountered during the case study.

The results generated from the case study illustrate some form of “growth” for the individuals. Growth in this context is how these individuals have developed their
capabilities and knowledge of Web 2.0 technologies and computer literacy. As stated before, some of the individuals had not even used a computer before, yet in the 12 weeks they were under investigation, they learnt how to navigate through the various computer programs and established a structure before posting information on the blog by typing it up in Microsoft Word and using the spell check utility to correct any mistakes. For many people, this may be seen as something easy as they have been exposed to computers in their everyday lives. What must be understood about these individuals is that some of them had dropped out of school at early ages but even still, with the scary thought of using the computer, their motivation to write about their stories and experiences must be seen as a great achievement for them as this entailed them moving out of their comfort zones. The blogging activity could be seen as a need that developed facilitating some form of relief or improvement for each individual on a particular personal level. This progress has also encouraged some of them to return to education and reconstruct their lives.

The access to reliable facilities for them to blog was always going to be a problem as they were limited by the number and availability of computers and the issue of bandwidth was something they had to deal with as it restricted them in fully engaging with the technology. Even so, by persisting, they got what they desired and overcame limitations such as these and even learnt to blog using their mobile phones. This can be seen as another aspect of growth as this is something they taught themselves.

From them being able to interact with computer facilities and the internet, apart from blogging, they were able to develop their skills regarding social networking. They discovered Facebook and found out how useful Google can be which provided them with a new internet facility to work with whilst they blogged. This led them to acquiring the knowledge of other internet based technologies such as YouTube, Flickr and Twitter. Just by interacting with the computer and the various internet facilities, some form of inspiration and bravery was established as some of them wanted to start their own blogs, whilst others wanted to upload videos of their testimonies and stories on YouTube to encourage others who are facing the same obstacles that they overcame. Some of them have already ventured into uploading their testimonies on YouTube.

As much as the blog was being utilised for them to express themselves, a lot of them displayed messages of hope in their posts. The messages were an attempt to help those in need and offer a form of encouragement. To add, the blogging technology could be seen as something new and exciting for the individuals that they actually
persuaded others not in the case study group to join and see what they were doing. It worked like a chain reaction as one person brought another person in. One individual mentioned that he enjoyed blogging so much that it almost felt like an “addiction” but a good one away from the negative aspects of drugs and gangsterism.

From the findings, it can be deducted that the blog was used as a catharsis. As mentioned earlier in the literature review, this form of blogging is where one uses the blog to express feelings and thoughts usually personal content. In this sense, the stories and feelings posted on the blog are personal to each of the individuals and they must be commended for doing so as it may not have been easy to express themselves using typed words. Catharsis blogs fundamentally are an outlet for relief which is another use of the blog. They felt better by talking about what was on their minds to others who mostly understood what they were experiencing. The blog was also used to document their lives by providing information on what individuals were doing on a daily basis.

11. Conclusion

In conclusion, the positive feedback from the individuals’ interviews illustrates that blogging could possibly be a useful and effective medium in the reconstructed phase of people who have been addicted to drugs or involved in gang activities. A greater push for the use of blogging in this type of scenario can be justified by the responses of all the individuals who felt that they gained a form of satisfaction by being allowed to express exactly how they felt without having to worry about being judged. This is one aspect that demonstrates the positive impact that blogging has had on these individuals.

The availability for something that allows them to express themselves in which they can talk about their current feelings, life stories and past experiences exhibits the constructive features that blogging can provide. Not only did the blog benefit the individuals but also could potentially help others through the messages of hope that were put up for readers who were and continue to look for ways out of the dark reality of drugs and gangsterism.

The fact that this case can be described as a pilot study and seeing the results and impact in such a short period, it presents the opportunity for further research to be conducted in this area.
12. References

Al-Fadhli, M. 2007. Web 2.0 + Library = Library 2.0 / What is Library 2.0?. University of Sheffield, Department of Information Studies.


**Acknowledgements**

The authors would like to acknowledge Cape Peninsula University of Technology, Impact Direct Ministries and colleagues for contributions towards this paper.