

Web 2.0 features on South African business websites: Missing a business opportunity?

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Abstract

The purpose of the study was to indicate to South African business that by including Web 2.0 features on their sites, they could benefit from the business potential that Web 2.0 offers. In this research project, an empirical study has been done to determine the extent to which South African business websites have Web 2.0 features.

A literature survey has revealed that the World Wide Web has evolved from Web 1.0 which is essentially a passive-user state, to Web 2.0 that is an interactive user experience. This has encouraged a phenomenon known as Digital Social Networking (DSN) where like-minded users share amongst others, information, pictures and movies. This has given rise to the popularity of several DSN sites like Facebook, MXit and Myspace. While much of this DSN has been used for recreational purposes, various international businesses have adapted their conventional websites into interactive DSN websites. These businesses have also indicated some business benefits that they have derived from their transformation to Web 2.0 features.

The research methodology included a survey of relevant literature and an empirical study of South African business websites. The sample consisted of the top 100 South African businesses based on their turnover and status in their respective sectors.

The results of the survey indicated that 91 of the top 100 companies had websites. Of these 91 companies, only 5.5% had at least one Web 2.0 feature on their website. This survey proves that despite the apparent benefits which can be derived from Web 2.0 applications, South African businesses have been tardy in adopting these technologies.

As a conclusion, the study has shown that South African businesses lag behind their international counterparts in transforming their conventional websites into interactive DSN websites. Furthermore, the research has also indicated that as a result of their

delay in adapting their websites, South African business has not benefited from the business potential which Web 2.0 offers.

Keywords: Web 2.0, business, digital social network, website, blog

1. Introduction

O'Murchu, Breslin & Decker (2004) stated that the World Wide Web has enabled a communication revolution over the last few years. Online information and communication have become part and parcel of our daily lives.

MacManus and Porter (2007) indicate that traditionally a limited number of technically adept developers designed webpages for a large number of users. Consequently, users could get information by going directly to its Internet source. Recently, however, more and more Web users started writing content in addition to reading it. As personal publishing became more prolific, it became apparent that the Web 1.0 paradigm had to change. This ushered in the entry of Web 2.0, a vision of the Web in which information is broken up into "microcontent" units that can be distributed over numerous domains. Web 2.0 also involves the average user in creating and sharing content on the Web, which was previously reserved only for webmasters and designers.

The Web of isolated documents has merged into a Web of interactive data. Users are no longer just looking to the same sources for information but instead are looking to a new set of tools to aggregate and remix microcontent in new and useful ways.

These socially interactive interfaces are changing the way information is stored, shared and accessed. In the Web 2.0 realm, it doesn't really matter what domain the content comes from. The true value of this is that content can be merged or personalised with other data to create much more useful applications.

Boulos, Maramba, & Wheeler (2006) believe that research should be conducted to determine the best ways to integrate Web 2.0 into medical systems so that the medical industry could derive benefit from its potential.

2. Literature survey

A literature survey has revealed that not much has been written about Web 2.0 as it is a relatively new phenomenon. Particularly the business value thereof has not been addressed in academic literature. Much of the information that is available on the topic is to be found in online articles, blogs and on websites.

2.1 Web 2.0

The emergence of Web 2.0 has enabled Web users to publish and share more freely than ever before. What used to be the province of Web experts and developers, has now become accessible to ordinary users.

Musser and O'Reilly (2006) state that they realised the Web was on the brink of a new age, setting off a rush of prospects and innovation. As an enabler of this new age, O'Reilly Media launched a conference that showcased the innovators who were spearheading it. When O'Reilly's Dougherty came up with the term "Web 2.0" during a brainstorming session, they knew they had the name for the conference. It could not be expected that the industry would embrace the Web 2.0 concept and that it would come to represent the new Web.

Essentially the Web has evolved from a way of reading information into an interactive, personalised, programmable medium. Anderson (2007) states that the advent of fast Internet connections at home, work and from mobile devices, means that personal computing is no longer just about a beige box on a desk. This author states that the Web has become participative and the implications are far-reaching, indicating that Web 1.0 was the era of Britannica Online, and Web 2.0 the era of Wikipedia.

2.2 Digital social networking (DSN)

Social networking in itself is nothing new. People have been networking socially over centuries when they meet at book clubs, youth meetings, sporting events, places of worship, etc. In essence social networking occurs when like-minded people interact with each other over a topic of interest shared by other members of the network.

What is new to social networking is the concept of being able to do so digitally via Information Communication Technologies (ICT) like computers that are linked to the Internet. DSN applications provide an opportunity for one to contribute one's thoughts, opinions, and interests to a particular community on the Internet via a blog. DSN has been made possible by the introduction of Web 2.0, which is the next-generation Internet.

These DSN websites can be an online magazine, a newspaper, journal, diary or address book. These are conglomerations of all the connectivity of e-mail, traditional mail, instant messages, phone calls, pictures and movies. DSN's are electronic soapboxes allowing for all the freedom of expression, opinion, and voice through online journals, chatting with friends, etc. A DSN is a bulletin board with a steadily increasing number of users.

DSN communities have become more than teenage phenomena; they are now part of how many segments of society communicate, get information, and live. Channelling new technologies, these communities have made possible

new ways of meeting people, checking in on loved ones, and spreading ideas, all from the comfort of home or work computer (Post, 2007).

Francke and Weideman (2007) indicated that a South African DSN application known as MXit, has expanded at a rate of between 9 000 and 12 000 new registered users daily. Since its inception in May 2005, the IM (instant messaging) service company has shown significant growth and, by 31 January 2007 it had signed three million subscribers. Heunis, MXit founder and CEO, believes that their numbers are to increase substantially as they embark on an international launch.

O'Murchu, et al (2004) argue that social networking sites should implement more Web 2.0 technologies including RSS feeds and weblogs to add value to its users.

McGee (2008) relates a small business marketing success story of a Georgian guitarist by the name of John Tuggle. Tuggle has been playing guitar for 17 years, and giving private lessons for 14 years. Two years ago he authored an instructor's book and built an e-commerce website to sell it. He managed to sell five books in 18 months and he was ready to quit teaching and instead play gigs and be a studio engineer.

Figure 1: Learning Guitar Now – John Tuggle



However, based on his understanding of Web 2.0, he contacted a Web developer and together they transformed his website. Figure 1 illustrates the

result of this dramatic update. The website has a blog, podcasts, YouTube videos, digital downloads and live Skype lessons (a software program that allows users to make calls over the Internet to other Skype users free of charge). Another author defines a podcast as a recording of a radio programme that one can copy from the Internet and play back on a computer or on an MP3 player which is a small electronic device for playing sound files (Anon 2008f).

In a few months his strategy has already worked. Gibson Guitars found Tuggle on YouTube and added him as a recommended instructor on their website. John teaches more than 40 students, including one in Portugal who is learning via Skype videoconferencing, and has another 10 students on a waiting list.

The lesson to be learnt from the Tuggle case is that music teachers tend to focus on finding students in the local area. The problem is that there are only so many people one can teach in a local area. Book sales on his traditional website were not successful. He transformed his website into a Web 2.0 enhanced site with a blog which had to be an integral part of the site. He wanted updates of music and interaction with his clients all attainable with Web 2.0.

His new site received more website traffic in one day than the other site got in six months. His subscribers grew from five to 250. His podcast has been downloaded about 6,000 times in the last few months. After he uploaded his first few YouTube videos, he immediately got e-mails for more lessons and Internet-based lessons. He never planned on doing Skype guitar lessons, but someone e-mailed him and wanted some as soon as possible, and he decided to create a service based around it. He will be teaching guitar to the captain of a US Navy ship and has already taught a client in Portugal.

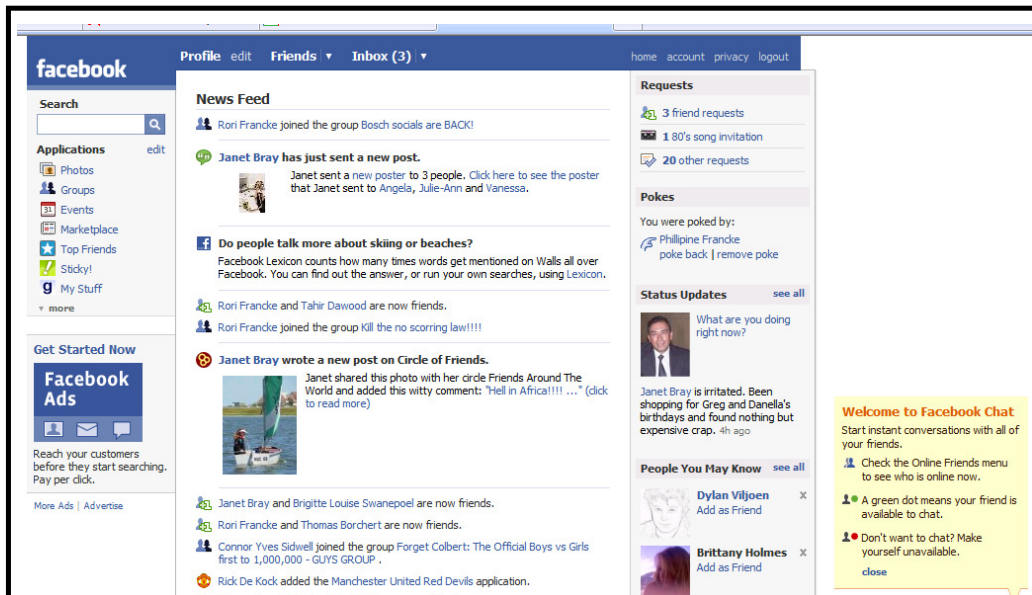
2.3 Popular DSN applications

One author (Anon, 2008c) states that with the free social networking website called MySpace, users can chat with friends, make new friends and find people who share similar interests. MySpace has become synonymous with chat rooms and circles of friends with over 70 million members worldwide. MySpace is not used only by teenagers but older users also share ideas, participate in serious discussions or start a romance. MySpace has a variety of features for creating a customized profile page and plenty of extras like listening to the latest music or watching the last episode of your favourite TV show.

Figure 2 illustrates a free social networking website known as Facebook, which is made up of hundreds of separate networks. In his keynote address, Murphy (2007) mentioned that the average Facebook user spends about twenty-one minutes plus per day at the online social network. The average Facebook user visits four times per day. Facebook is adding about three hundred and fifty thousand new users every day. In October 2007 Facebook

surpassed fifty million worldwide community members and its size doubles every six months.

Figure 2: Facebook



According to another author (Anon, 2008b) it is a free social networking website that allows its users to track down someone from their past. It allows them to use the Internet's most comprehensive People Search service to find old friends, family, classmates, or co-workers. Users can stay connected to the people they care about with access to millions of members and billions of records. Reunion.com makes it fast and easy to share photos, interests, updates, contact info, blogs and stories.

Table 1: A comparison of three popular DSN applications

	FACEBOOK	MYSFACE	REUNION
USES	No. 1 photo sharing application on the Web	50 million mails per day (more than Yahoo, Hotmail, or Google)	Help members find and keep in touch with friends, relatives and lost loves.
	Photo application draws more than twice as much traffic as the next two sites combined	10 billion friend relationships	The online leader in helping people search, find, and keep in touch.
	More than 14 million photos uploaded daily	1.5 billion images with 8 million images being uploaded per day	Find old friends, classmates, family, or co-workers and reconnect with them
	More than 6 million active user groups on the site	60,000 new videos being upload to MySpaceTV each day	Keep in touch by sharing stories, photos and news
REGISTERED USERS	More than 50 million active users	MySpace has more than 110 million monthly active users around the globe	Over 32 Million registered members, and growing
	An average of 350,000 new registrations per day since Jan. 2007	The USA's most trafficked site on the Internet	70+ million site people searches actively tracked
	An average of 3% weekly growth since Jan. 2007	On average 300,000 new people sign up to MySpace every day	7+ million avg. unique visitors monthly
	Active users doubling every 6 months	4.5 billion page views to the site in one day.	700,000+ paying subscribers
TYPES OF USERS	Over 55,000 regional, work-related, collegiate, and high school networks	85% of MySpace users are of voting age (18 or older)	Caters to an older crowd
	More than half of Facebook users are outside of college	Primarily aimed at youth	Users seeking to connect with each other from school, childhood, work, or locations
	The fastest growing demographic is those 25 years old and older	More than 8 million artists and bands	Critical mass of post-Facebook members, with 90% over 25 years old
	Maintain 85% market share of 4-year U.S. universities		

2.4 Uses of DSN

The current generation of DSN applications are used principally for recreational purposes. This may be a reflection of various failings. It could be the fact that these applications are not yet robust enough to be ready for heavy-duty business use. Beyond the above frustrations, playing around with some of these applications is fun for users. That, combined with humankind's need for social interaction and the increasing isolation of the Western culture, accounts for the immense popularity of many of these applications (Anon, 2008b).

Yukihiro (2007) introduces the notion of Enterprise 2.0 and defines it as "a mechanism for promoting information sharing inside and outside an enterprise by adopting the technologies and concepts of Web 2.0." This author argues that Enterprise 2.0 is a relatively new but due to the increased usage of blogs and Wiki it will become more prominent in the business world. While usage of Web 2.0 is particularly focused on the younger user, it has become a daily habit among the generation that will be future employees in the near future.

Some small businesses have discovered that a Web 2.0 feature like a blog can provide real business value as a communications tool that helps define their image and bring them closer to their customers. A case in point is an international small business called VerticalResponse, who has reaped the benefits of launching their own blog. They believe that business can derive benefits like competitive positioning, customer relations, search engine marketing, brand building and media relations from the use of a blog (Anon, 2008e).

Boulos, et al (2006) indicate that several online health-related professional and educational services have adopted Web 2.0 technologies. They claim that these technologies provide means for easy and powerful information collaboration due to the rapidity of deployment and simplicity of use. Furthermore, if effectively deployed, these technologies could provide ways to enhance students', clinicians' and patients' learning experiences, and deepen levels of learners' engagement and collaboration within digital learning environments.

Giustini (2006) argues that Web 2.0 information pushing devices, like RSS feeds, afford incessant instant alerting to the most up-to-date information in medicine. Podcasts are becoming progressively trendier in medical schools and medical journals. Medical blogs like Clinical Cases and Images contain a loaded compilation of "presurfed" material for busy clinicians and features interactivity and appropriate debate. Besides case discussions it provides links to daily medical headlines from Reuters and clinical images via a dynamic, free photo sharing tool called Flickr.

According to Anon 2008a, the car manufacturer Daimler has recently published its first corporate blog, subtitled "Insight into a corporation". The employee blog aims at increasing the transparency of the company for the general public. Some employees have already presented themselves and

their work on the new online platform. As indicated in Figure 3, the new Daimler weblog is a good illustration of another benefit of corporate blogs, namely public relations (Anon, 2008a).

Figure 3: Daimler Blog



In the literature review, it appears that some international businesses have transformed their websites with Web 2.0 features, but nothing could be found on South African business.

3. Research methodology

The research methodology included a review of relevant literature and a survey of 100 of the top 300 South African companies by inspecting their websites. Table 2 represents these companies with an annual turnover of more than R100 million and who are market leaders in their sector (Anon, 2008d).

Table 2: The top 100 South African companies

1-20	21-40	41-60	61-80	81-100
Airports Company South Africa	Ernst & Young Services Ltd	Medihelp Medical Scheme	Real People Investment Holdings	The Kit Group
Arthur Kaplan (Pty) Ltd	First Technology Holdings	Mediterranean Shipping Company	Rectron (Pty) Ltd	The Power Group of Companies
Afripack (Pty) Ltd	Foskor	Mercury Media (Pty) Ltd	Rolls-Royce Motor Cars Sandton (Pty) Ltd	Thebe Tourism
Aspen Pharmacare Holdings Ltd	Geda	Metropolitan Holdings	SA Eagle Insurance Company Ltd	Transnet Ltd
Basil Read Holdings (Pty) Ltd	Gijima AST Holdings	Microsoft SA	SA French (Pty) Ltd	Truworths International
Berco Express (Pty) Ltd	GlaxoSmith Kline	Moreland Developments	SA Rugby (Pty) Ltd	UAP Crop Care
Bestmed Medical Scheme	Hetzner	Motorite Insurance Administrators (Pty) Ltd	SABC	Universal Footwear & Trading Company
Beyond Outsourcing (Pty) Ltd	ICC Durban	Motorola SA	Safrican Insurance Company Ltd	Vered Estates
Blue Financial Services	Indgro Holdings	Nashua Ltd	Santam	Vodacom Group Ltd
City of Johannesburg Metromunicipality	Ingersoll Rand Company SA	Nasou Via Afrika	Schindler Lifts (SA) (Pty) Ltd	WSP Group Africa
Club Leisure Group (Pty) Ltd	Innovation Group (Pty) Ltd	Peugeot Motors (Pty) Ltd	Seda - Small Enterprise Development Agency	Xstrata South Africa (IPty) Ltd
Compair SA (Pty) Ltd	J Van Der Sluys	Pfizer Laboratories (Pty) Ltd	Sita (Pty) Ltd	
Cricket SA	Kirsch Pharma	Planet Fitness Holdings	Sizwe Ntsaluba VSP	
Debis Fleet Management	Kone Elevators SA (Pty) Ltd	Premier Soccer League	South African Civil Aviation Authority	
Deloitte	Kwezi V3 Engineers	PSG Konsult Management Services	South African Express Airways	
Development Bank of SA	Longain Group trading as Flexicell	Pyromet	South African Post Office	

4. Results

The results of the study seem to indicate that international businesses have transformed their traditional websites with Web 2.0 features. Some small businesses have discovered that a Web 2.0 feature like a blog can provide real business value as a communications tool that helps define their image and bring them closer to their customers. VerticalResponse has proven that there are benefits to be derived from business blogging by way of competitive positioning, customer relations, search engine marketing, brand building and media relations. (Anon, 2008e).

In the case of Daimler, they have derived public relations benefit from their corporate blog through the interaction of its employees with their clients. (Anon, 2008a).

In the survey of the top 100 South African companies, 91 of the companies actually had websites. Of these companies only 5.5% had a Web 2.0 feature on their website. The SABC was the only one that incorporated a blog, as depicted in Figure 4.

Figure 4: The SABC website



Table 3: South African companies with Web 2.0 features

Company	Website	Web 2.0 feature
Deloitte (SA)	http://www.deloitte.co.za	• Podcasts • RSS Feeds
Ernst and Young (SA)	http://www.ey.co.za	• Podcasts • RSS Feeds
SABC	http://www.sabc.co.za	• Podcasts • RSS Feeds • Blogs
Geda	http://www.geda.co.za	• RSS Feeds
City of Johannesburg Metromunicipality	http://www.joburg.org.za/	• RSS Feeds

5. Interpretation of results

The survey proves that only 5.5% of business sites in the South Africa employ Web 2.0 features on their websites. Therefore, despite the apparent benefits which can be derived from Web 2.0 applications, South African businesses have been tardy in adopting these technologies. South African businesses are not realising the potential business value of Web 2.0, by omitting interactive DSN features from their websites.

6. Summary

Based on this survey it appears that there is a distinct absence of Web 2.0 features on South African business websites. This therefore implies that South African businesses are not realising the potential business value of Web 2.0, by omitting interactive DSN features from their websites.

Those companies who have implemented Web 2.0 features have realised an array of business benefits.

7. Conclusion

The fact that we are able to send and retrieve information virtually everywhere has altered how, when and where we work and the way we live. It would appear that as ICTs advance, they present new opportunities to business. The pursuit and proper adoption of real business opportunities lead to increased profit, which in turn lead to business sustainability that ultimately lead to wealth maximisation for its stakeholders.

The latest opportunity is the fact that there is true business potential in Web 2.0. This study has proven that South African businesses have not made use of this Web 2.0 business opportunity yet.

Tapscott and Williams (2006) argue that the economy of "the new Web" depends on mass collaboration. They regard it as important for new companies to find ways of generating profit with the help of Web 2.0. The prospective Internet-based economy that they term "Wikinomics" would depend on the principles of openness, peering, sharing, and acting globally.

The question that faces business strategists is therefore, how can South African business capitalise on the potential of Web 2.0 by transforming their websites into interactive digital social networking applications? Further research should be done on the various business models in the Web 2.0 economy. Other research could also focus on why business might be reluctant to add blog features to their websites. Is it that senior management might be too concerned as to what content will be shared and displayed on these blogs?

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