Social Networking Sites: A Premise On Enhancement

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Abstract
This article address five concepts that are paramount toward continued evolution of social networking sites (SNS), - stabilisation, visual, language, security and flexibility.
These constructs add to our proposed framework. Firmly grounded research on social networking sites and literature, we propose that user feedback is the critical component that stimulates the development and growth of social networking sites online. We offer a framework that can aid new and current social networking sites toward success. We conclude that the management of social networking sites should be treated as a process that is pragmatic and, paradoxically, be stimulated.

Keywords: Social Networking Sites, Decision Making, Leadership, User feedback,

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INTRODUCTION

As highlighted by numerous scholars, the way we communicate in our daily lives is an important factor to consider (Awad & Ragowsky, 2008; Riding et al., 2002; Hsu et al., 2011). Social networking sites (SNS) can ensure continued survival only by attracting users to their domain; this can be done with various means.

SNS following suit of this pattern, can reside with some confidence of success in an unknown future. From this perspective SNS must invest in activities that will enhance continued use (i.e user satisfaction). Although SNS belong to the cyber market on-line, it is still arguably a competitive arena; (e.g., Delone and McLean, 2003; Acquaah, 2011, Wu, and Wang, 2000). The likely hood of an SNS to survive is based upon investors (Singh et al, 1986) and can be a main contribution to its success in terms of survival and growth (e.g., Delmar & Shane, 2004, Aldrich & Foil, 1994).

There is limiting knowledge into why SNS have failed if we are to take the notion of user retention as a benchmark. Thus our work is focused primarily on a) analysis of current literature and subsequently b) an analysis of most influencing SNS to date. Reflecting on both means of research, a framework is developed from an administrative viewpoint.

As noted above, the purpose of our paper is to develop a model, which lends itself towards practical utilisation along side theoretical contribution. This research affords an opportunity and insight to better understand SNS in terms of its origins, and future trajectory in relation to strategic organisational longevity. The paper thus widens the potentially limiting growth of SNS and their success allowing room for the constructs to be dynamically intertwined.

BACKGROUND

The process of communication is of complex means. It is not in the way we speak but in the way we convey our message that resounds in our society today. Equally this is a task that is faced with most keen entrepreneurs that deviate from the norm with their unique and often off the wall idea. Scholars refer to this as vision (Vernekar and Venkatasubramanian, 2010).
“Why does vision matter?” to answer this we use Mark Zuckerberg the creator of Facebook. With his vision he has changed the world in which we communicate on the Internet. Using this concept, SNS have changed the way we use the Internet (e.g., Pollet, et al, 2001), and it demonstrates efforts towards increased social interactions via the world wide web. Though rapid growth has occurred, equally has the issue with concerns related to privacy. Such concerns are based on trust and security that SNS adhere to (e.g., Boyd and Ellison, 2008). SNS administrators adapt their sites to deter potential security lapses. If this is made apparent the user feels more trust (Vance, et al, 2008) and where the user feels that no clear efforts are made to uphold security concerns, - the potential to discontinue their use arises (e.g., Gosh, et al, 2012). In both cases, what the user decides to share on-line will stay on-line. An adverse affects include potential employers searching for user profiles this is because the technology is easily accessible and it could affect future job prospects. However users should feel safe, and there is growing concerns over how much profile visibility is available to the general public. Therefore the SNS should follow basic principle of on-line interactions (e.g., Delone and McLean, 2003) but administrators (those that manage the SNS) face an epic task where they must find creative way for users to come back (i.e continual use).

Social Networking Definition

The current research defines social networking sites (SNS) as “a means to where individuals are able to communicate in any manner they deem fit with the on-line community” (e.g., Boyd and Ellison, 2008, Li and Bernoff, 2008, Nielsen, 2009, Weber, 2007). To further supplement my definition, SNS allow individuals to communicate in creative ways and are based on the perception of both sender and receiver in the on-line realm. This is dependent on which level, the information was given.

These levels can be classed into the following three:

- The constructs (i.e. what tools can control the viewable information) that is decided upon by the end user for their “on-line friends” to view; this is influenced by the networks servers capabilities.
- The limits that are set forth allows effective control and better management of information for the end users “friends”.
- The means to express ones emotion in a virtual community regardless of perceived value and understanding in an offline environment.

Identifying the components for success.

Before proceeding, it is important to clarify social networking sites that have been developed to date. Therefore to organise the proposed model, we highlight successful and non-successful social networking sites. Further, we add scope to the analysis by addressing components that materialise. We then introduce the model, followed by a meta-analysis of literature supporting the suggested components that I have highlighted for the model. The propositions in the model will leave room for discussion and we will explicitly express its relevance.
Analysis of Social Networking Sites

Social networking sites (SNS) can be considered as a means to end in the way people communicate. However little work has materialised in this arena (Boyd and Ellison: 2008). Therefore we draw back on a site known as Community Memory. Which can be considered the first attempt at an SNS. The origins of the site belonged to the culture of free speech and anti-war movements (Bell, Loader, Pleace, & Schuler: 2004). This site was the first to have a business model that generated money from its users (Schuler: 1994). To date this site has failed to expand, and therefore lacked “flexibility” as users were given limited accesses from one stand alone computer, equally this caused inconvenience. However the site was “stable” and because of the limited access and early developments of the Internet “security” was also a factor that helped this site.

Though Community Memory was the first of its kinds, The Well is considered the oldest known social networking site (Hafner: 2004). It was found in 1985 and it is a acronym for “Whole Earth Lectronic Link”. Suggesting that social networking is an exchange of ideas, sharing of interests, and exposing our thoughts. It was inventive, as it allowed music groups to promote their shows on line, and users were able to follow such updates (The Well: 2012). “Stability”, “security” and “visual” are factors that measured its successes throughout its life.

Further, research indicates that Sixdegrees, demonstrates having factors of “stability” and “visual”. As this site allowed users to categories their friends and families. Furthermore the site permitted users to view friends of friends; feature that would hinder “security” for this site. The site lacked in the ability of allowing users to share photos. If we are to understand why this must be the case, perhaps the truth is in the fact that digital camera and high speed Internet were non-existent at that time. Therefore the site lacked “flexibility” to change with external influences. Thus lacking foresight.

Because popularity was growing around SNS, Asia saw its own concept of SNS appear. In 1999, Cyworld was launched. This site originates from South Korea. The concept gave users a virtual space (Schnofeld: 2006), and allowed them to customise their profile making for a sim-world like experience. Cyworld boasted high “security” levels, but lacked “flexibility” to expand into the Western makrts, and “language” was fundamentally a reason that hindered this process of growth. Cyworld US, had bad English and US users were unable to connect to friends (Koreans) using the site within South Korea. As stated “security” was of the most stringent of its kind. As users had to prove their identity, with passports and/or government ID cards. This was to counter react on-line bullying and harassment. However Cyworld was not fully prepared for cyber attacks, where data from more than 33 million users were stolen by Chinese hackers (Mandalia: 2011).

The factors highlighted thus far did not go unnoticed, and its casual relations saw a SNS known as Friendster to appear in the market in 2002. The site allowed users to network effectively as the site promoted the notion of on-line dating. Friends, of friends and their friends were adding each other into this site, hence its rapid growth. Problems at this time were of technical and managerial concerns. Friendster went through four CEOs, all the technology was re-written, and the site was dormant for almost for two years, thus losing its ability to react to external forces. Friendster was unable to see the competitive threat that Facebook would bring. Currently Friendster claims to be a leading global on-line social network with 95 million members’ worldwide (Burgos, 2011).
In contrast MySpace was considered a leader in the social networking revolution (Cellan-Jones: 2011). The creators of the site were the same firm that helped develop Friendster in the early stages, the firm was known as eUniverse. MySpace was originally exclusively available for the Los Angeles party community. The creators were interested in music and parties, following a similar business model as “The Well”. eUniverse were able to recognise patterns and trends that were popular with Friendster. MySpace then allowed a feature where users could create their own backgrounds, this fundamentally slowed down the speed of the server, affecting the “visual” factor. Newscorp brought MySpace for $580 million in 2005 (Halliday: 2012), however due to rapid developments on the Internet, the technology MySpace had was outdated. Newscorp spent time and money having to re-build it several times. Indicating factors related to the sites “flexibility” and its “stability”. This continual rebuilding and user expressing individuality put strain on the server, as it was not prepared for such demands. Thus equating to slowed web browsing experience and therefore affecting user satisfaction. In 2011 NewsCorp sold MySpace for reported $35 million (Fixmer: 2011) to Specific Media & Justin Timberlake (music entertainer), Newscorp will still maintain a 5% share with the company. To date it has established ties with Twitter and Facebook, and ensured itself as one of the largest free music website on the Internet (Halliday: 2012).

In 2003 Campus network then named CU Community (Beam, 2010) was started by young gentleman called Adam Goldberg. Mr Goldberg wanted to bring his school together (Columbia University) on-line. The notion of exclusivity played its part as it was only open to students from Columbia, quite similar to the approach Facebook used in the beginning. It became a huge success. It lacked some technological advances and contained HTML coding errors, which limited its progress and highlights a factor such as “stability”.

Bebo was lanuhced in 2005, Bebo is an acronym for “blog early, blog often”. The sites interface allows users to view other users friends and leave comments, and relates to the “visual” factor. The creators recognised that MySpace was a great idea, but its delivery for the end user was non satisfying (Glazowski: 2008). The growth of Bebo was organic, as friends of the creators were inviting their friends, who invited their friends ten fold. This notion relates to the sites “stability”. Its success was huge in schools both in England and Ireland. Concerns grew about bulling on-line, as parents expressed outrage, and tried to ban Bebo. However with its bad publicity it was brought by AOL for $850 million (Brooke: 2008).

Through the Internets duration, the distinction was made that the need to communicate was of growing interest and in 2006, Facebook was launched. To date it is the most popular social networking site in history. The original concept was its exclusivity following the same pattern as Campus Network, as it was only open to Harvard students. In time the site started to grow as to its popularity, to complement growth the site then appealed to top Ivy League colleges in the USA. To date it has 845 million registered users on-line (Protalinski: 2012). A main source of its success remains in its simplicity and ease of use. This is how how information is shared. Factors such as" language", “stability”, “visual”, “security” and “flexibility” are all indicated in the sites current success. Facebook has secured its foreseeable future by developing itself, with the times. This is the case where the site introduced newsfeeds. A newsfeed allows users to see what people were saying in a time line manner. Mark Zuckerberg the creator of Facebook upholds the long-term view that his single mindedness has led
Facebook to where it is now. “Vision” and continual developments have ensured Facebook does not become static, and it remains pro-active.

Twitter was launched in 2006. Twitter is a social networking site that allows the user to send and read comments. Its user community label them as tweets. A set limit of 140 characters are permitted to the user, they are forced to be creative with whatever there tweet maybe. Equally abusive language plays a great part of tweeting (Barford, Bell, & Everitt: 2012). The moment a user posts a tweet, it gets delivered to the user’s subscribers known as followers. The message is delivered in a sms style format allowing instant and more up-to-date notifications. In 2009, the Moldova revolts were an example where young activists, were able to communicate to the vast followers. In turn their influence was able to overturn election results, thus changing the fate of a small country just by using tweets (Pack, 2009). Twitter is more mobile and allows a more up close feel, especially between celebrity’s and their fans (Barnett: 2012). Factors such as “stability”, “visual”, and “language” are indicated for its current successes.

Foursquare was launched in 2009. The site allowed the user to turn their location, into a real life video game, highlighting “visual” aid and the absence of a “language” barrier had helped with its success. The site makes monetary gains from local businesses that want to advertise themselves in a virtual realm, bringing a new concept to advertising highlighting “flexibility” in the server that the site provides. The concept of the site for its users is to find interesting locations, then the user “checks in” and several things happen (Gallo, 2011). These include unlocking points, badges and rewards. The more often you check in, the more chance you have becoming the mayor of this particular location.

In 2010, Google.com/buzz was established and launched as the newest social networking site. Its main premise is to integrate the Google’s web-based program, G-mail. However in 2011 it was shut down, and was only offered as a read only version for former posts. In the same year Google Plus otherwise known as G+, was launched. In 2012 it was reported that G+ had exceeded 90 million users (Brown, 2012). Organisations can use Google+ (G+) to position themselves better to reach their selected consumer base. Factors such as “stability”, “security” and “flexibility” have helped this site grow steadily.

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<th>Social Networking Sites</th>
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<th>Friendster</th>
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Figure 1: Summary table of sites that relate to success factors
Through the analysis of social networking sites, several factors have been established (see figure 1). The factors are dependent on the core server. The core server itself must be adaptive. The adaptability of the server is essential if these factors are to function and sustain an effective social networking site. The five factors described (see figure 2) require continual development. The adaptability of the core server creates the “Social Network”. The social networking site delivered is what the end user perceives it to be, leading to satisfactory use. Satisfaction can be measured in numerous ways as previous studies have indicated (e.g., Au et al, 2008; Wixom and Tood, 2005, Etezadi-Amoli and Farhoomand, 1991). Therefore I suggest that perception has relation to satisfactory use. Feedback from the end user is essential; this is to further stimulate the process of development and improvements in growth. The entrepreneur/creator should ensure and maintain a two way link with their vision and with constant changes that are being made in order to keep the end state in clear perspective.

**A META-ANALYSIS OF CURRENT LITERATURE**

The study shall encompass upon academic literature for further validation of factors that could be employed into the model. The following section deepens our understanding of the following factors, stabilisation, visual, language, security, and flexibility.

**Stabilisation**

From an administrative perspective I refer to stabilisation as, the robustness of the server in terms of how the social networking site is able to deal with potential growth.
Stabilisation is the animated effect on performance in relation to the SNS, similarly I borrow the notion stabilisation from IT artefacts. Issue on the importance of IT artefacts has been vastly researched (Markus and Silver, 2008; Orlikowski, and Iacono, 2001). The study by Al-Notour and Bensat (2009), found that “Technology advancements and the escalation of users’ requirements and expectations have resulted in artefacts that perform multiple functions and offer alternatives in how these functions are performed”. From an administrative perspective, the social networking site should intentionally contain constructs that will anticipate the site to meet any unforeseen demands that the external environment may introduce. In order for stabilisation to be fully be appreciated user feedback is of vast importance (see figure 2). Currently entrepreneurs may create a social networking site with ease, for example ready-made packages and themes that grant them the means to do so. Boonex have created a site for entrepreneurs to buy a package that would allow them to create their own niche social networking site for close friends, or even business network ties. However entrepreneurs should take note, that this would be lacking stabilisation, since they would ultimately rely on a third body server. When the entrepreneur is to create their own social networking site, they should keep in mind, technological advancements, as previously mentioned by Al-Notour and Benbasat (2009). We take the example of Friendster, who were lacking in technological advances leading to limiting growth. Stabilisation is a form that will govern how the social networking site changes with as market conditions and possible threats from rivals.

Language
Research has addressed the need for organisations to take note of the language they use to develop and communicate across to the end user via the Internet (Shapiro, 2009). Administrators from social networking sites should keep be aware that during the expansion into different regions of the world, language adjustments should be undertaken to allow room for rapid growth, as is the case with Facebook. Using English as a common denominator does not always address the problem (Charles, 2007) of slow growth. We have differentiated language into two different schools, one as spoken and the other as the computer programing language. English language fundamentally is at the forefront in breaking the initial barriers of growth. From an administrative perspective a universal framework should be conceived, where all regions can adapt it for example XML (Wilde and Glushko, 2008). XML enhances and plays emphasis on simplicity, generality, and how the end user experiences the Internet. XML is being used because of the simple visual aid, XML also allows the input of schemas and query languages (Termehcy and Winslett, 2011). Wilde and Glushko (2008) stated that “XML has succeeded beyond the wildest expectations as a convenient format for encoding information in an open and easily computable fashion. In return, the social networking site must ensure, that all tasks and commands transcend into an understandable and concise manner for the end user”. We argue this to be a platform for advancement, and to help aid administrators of SNS in identifying potential growth avenues.

Security
Zittrain (2007) stated “Openness in systems has increased and as it involves the prominence of use it has made it more vulnerable”. Current research also indicates the importance of security (Myers, 2009). Vaidyanathan and Mautone (2009) developed a security framework for developers to follow. The authors comment that “All Web architectures need to specifically address the security practices necessary to support the sensitivity of the data of their particular sites”. This being said their framework highlights-
security being addresses at all level, even at the application stage. Consequently this paper exemplifies security, as the extent on how end users add promiscuous friends. Security should highlight how robust the site is in prevention from accounts being hacked. This will enhance trust and studies have shown that this would lead to user satisfaction (Soumya, Terence and Kim, 2011) thus influencing growth and popularity of the site. Examples can be taken from Cyworld (O’Brian and Torres, 2012). It is suggested that the work of Boncella (2004) be considered when security is a concern and its relation to the Internet. His work highlighted the malicious hackers, industrial espionage and fraudsters would cause havoc to a site. Thus the importance of security is to be considered at all levels and correct protocols should be in place, not only for the end user but equally for the web developers, entrepreneur and the administrative team creating the social networking site.

Flexibility
To break down the notion of flexibility, we use the term “packages”. Packages are referred to, as the packaged software application. The study by Strong and Voloff (2010) played close attention to packages in enterprise systems. They state, “enterprise systems are designed to support generic rather than specific requirements, and hence are likely to be an imperfect fit in any particular instance”. Their study highlighted the fit of such packages for the organisation, whilst taking into account the many dimensions that entail i.e. its internal culture. Therefore we argue that SNS should provide packages for future outside developers to add value to the social networking experience. Equally we claim that these packages available should allow the SNS to be more effective and efficient. Thus flexibility is how SNS’s grant outside contributions from developers on a global level. This is a slight adjustment from the notion of open sources (Singh et al, 2011). We claim that it is the SNS’s best interest to allow developers to meet the needs of their situated environment, whilst earning possible revenue. This in turns stimulates growth of the SNS. Facebook uses this notion to allow developers to construct games. This ensures high levels of user satisfaction and contributes hours spent online. The importance of flexibility is of concern and should be noted in the early development stages. It is a component that can help the social networking site grow.

Visual
The visual construct is closely linked with the term “IT artefacts” (Vance, et al, 2008). We argue that term visual relates to simplicity. Claiming that SNS’s should not over complicate their interface for the end user. As previously mentioned the study by Vance et al, (2008) used navigational structure and visual appeal as system quality perceptions and claimed that “visual appeal perceptions will positively affect perceived ease of use”. Arguably his study was linked to m-commerce; however it highlighted that navigational structure of the site and trust of the IT artefacts would positively influence intention of future use. EBay is a prime example, where end users are able to have fun in their interactions, because of the simplicity of the site (Ignatius, 2011). Keeping the social networking site simple allows for faster browsing experience, causing the server not to inhibit slowness in speed. Myspace allowed users to individually customize their page, MySpave continual kept re-building the sever due to un-expected growth rates. As result equating to slowness it therefore highlights the empowering need for visual aids and interfaces.
DISCUSSION

This paper has identified and described constructs that are considered to successfully enhance SNS’s. The initial start-up of SNS has traditional fell upon the “entrepreneur” and their vision (Savage, 2011). Equally the entrepreneur should guide the SNS toward their envisioned state (Christenson and Walker, 2004). Therefore continual development should be of key importance (Hall, 2010). The Kaizen approach toward continual development is best applied toward SNS’s (Clayton, 1995; Whittle, 2011). The implementation of such improvements is decided by the entrepreneur as feedback obtained from user satisfaction will be of importance in the decision making process (Cveykus and Carter, 2006).

Continual development is a lengthy process in a business that relies heavily on a systematic flow on information, however we have identified that stabilisation, visual, language, security and flexibility (see figure 2) are the fundamental constructs that contribute toward success on how information flow will adversely encourage growth. Both the entrepreneur and the management team require focused attention. Equally the constructs identified are to be considered during the decision making process in relation to the SNS framework. The decision maker, otherwise known as the entrepreneur in this case, should adhere to the adaptability of the server that is sustaining the SNS and how each construct affects longevity of the site.

It is proposed that when all contracts in our framework are working together in a harmonious manner, a stimulating affect may occur. A stimulating affect, that allows information to flow and progress in a non-static manner efficiently around its network. Market conditions fluctuate as certain needs and demands must be met. This is evidently true also for SNS’s that must take steps in harnessing a system for potential growth. This study concludes that feedback from end user is the most critical component that will ensure success of the SNS (Lawrence and Low, 1993; Au, Ngai and Cheng, 2008; Tarafdar, Tu and Ragu-Nathan, 2010). The system and protocol that will facilitate this process will either enhance or hinder adjoining constructs in the framework. Effective communication throughout the system will ensure the SNS is innovative.

CONCLUSION

The study has several contributions, theoretically it contributes and extends knowledge in the social networking domain, it also addresses issues that are not often captured and articulated in such a manner as the framework that is presented in this study. Thus its practical implications indicate that the framework can be used to create, sustain and develop successful social networking sites for present and for future use. Future research should be concerned with how SNS develop a robust business model to create sustainable revenue. An example of this would be Groupon, as they have harnessed collective buying online, resulting in the end user acquiring large amounts of discounts.
REFERENCES


Hafner, K, (2004). The Epic Saga of the Well: The worlds most influential online community (And its not AOL). WIRED. http://www.wired.com/wired/archive/5.05/ff_well_pr.html (Date accessed 17th 2012)
Orlikowski, W., and Iacono, S., (2001) Research Commentary: Desperately Seeking the IT in IT research: A call to theorizing the IT artefact. Information Systems Research. Vol 12, Issue, 2. 21-143


Pollet, T., Roberts, S., and Dunbar, R., (2011) Use of social networking sites and instant messaging does not lead to increased offline social networks size, or to emotionally closer relationships with offline network members. CyberPsychology, Behavioural & Social Networking. Vol, 14., Issue, 4. 253-258.

Protalinski, E., (2012) Facebook has over 845 million users. ZDnet.


Vernekar, S., and Venkatasubramanian, K., (2010) Celebrating the Spirit of