1 INTRODUCTION

The Internet and the World Wide Web has profoundly changed society and business – in education, healthcare, research, defense and economy. The underlying computing and communication infrastructure which has enabled these changes is now being used to support a “service-oriented” computing economy. The resulting markets that we envision will enable both owners of home computers and established business to trade their excess capacity for a variety of incentives (such as monetary rewards, service credits, software maintenance contracts, advertising revenue etc) and enable the creation of capability by aggregating software services from multiple providers. In the same way, economic models associated with social media on the Internet have been driven by user numbers; hence the greater the number of individuals that can be attracted to visit a Web site, the greater the likelihood that an advertiser will be able to attract them to their own Web portal. Whereas search engines have primarily focused on associating advertisements with responses returned from user queries, social networking sites are able to take advantage of interconnectedness between users and the various information that users selectively reveal about their interests to the social network site.

According to a report by the Office of Communications (Ofcom) in the UK (Ofcom, 2008),
adult social networkers use a variety of sites, with the main ones being Bebo, Facebook and MySpace. The report indicates that it is common for adults to have a profile on more than one site – with each adult having a profile on 1.6 sites on average. Of the social networking sites surveyed in the report, it was found that 39% of adults have profiles on two or more sites. Half of all current adult social networkers say that they access their profiles at least every other day. The site people choose to use varies depending on the user. Children are more likely to use Bebo (63% of those who have a social networking site profile), and the most popular site for adults is Facebook. There is also a difference between socio-economic groups: ABC1s with a social networking profile were more likely to use Facebook than C2DEs, who were more likely to have a profile on MySpace. According to Alexa.com the top social networking sites are Facebook, QQ (from China) and Twitter.

Major software vendors such as Microsoft and Google are adopting the “social” model of interaction within their software. For instance, Microsoft Office 2010 integrates “social connections” with on-line services. Integrating enterprise computing software with mobile devices (such as Google’s Android phones) also facilitates social collaboration between users in a way that was not previously possible with enterprise management systems, and provides a useful model of feedback and interaction between employees of an organisation. In the same context (Black & Jacobs, 2010; Black et al., 2010) provide case studies to demonstrate how social media may be used to improve software quality – where “quality” can be measured in a number of ways – and includes: fitness for purpose, on time and budget delivery, user interaction experience, delivery in accordance with project management process, and new understanding gained from engagement with the project. They demonstrate how user interaction design (during software development and beta testing) can be used to generate better customer satisfaction, and in particular how social media enables an organization to build a distributed knowledge base and increase employees’ sense of connection to the company’s initiatives and each other.

2 EMERGENCE OF SOCIAL NETWORKS AND CLOUD COMPUTING

Social networking has become an everyday part of many peoples’ lives as evidenced by the huge user communities that are part of such networks. Facebook, for instance, was launched in February 2004 by Harvard undergraduate students as an alternative to the traditional student directory. Intended to cover interaction between students at Universities – Facebook enables individuals to encourage others to join the network through personalised invitations, friend suggestions and creation of specialist groups. Today Facebook has a much wider take up than just students at Universities. Facebook now facilitates interaction between people by enabling sharing of common interests, videos, photos, etc. Some social network populations exceed that of large countries, for example Facebook has over 350 million active users. Social networks provide a platform to facilitate communication and sharing between users, in an attempt to model real world relationships. Social networking has now also extended beyond communication between friends; for instance, there are a multitude of integrated applications that are now made available by companies, and some organizations use such applications, such as Facebook Connect to authenticate users, i.e. they utilize a user’s Facebook credentials rather than requiring their own credentials (for example the Calgary Airport authority in Canada uses Facebook Connect to grant access to their WiFi network). This ability to combine a third party application (including its local data) to authenticate users demonstrates the service-oriented approach to application development. By tapping into an already established community around a particular social networking platform, it becomes unnecessary to require users to register with another system.
Social Networks and Collective Intelligence: A Return to the Agora
www.igi-global.com/chapter/social-networks-collective-intelligence/75889?camid=4v1a