

## HARNESSING THE POWER OF THE CROWDS WITH CORPORATE SOCIAL NETWORKING Tools: How IBM Does It1

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### SOCIAL NETWORKING WITHIN CORPORATIONS

Corporate social networking is the use of technology to help employees identify, in the interest of furthering the business of the firm:

- 1. Who knows what.
- Who is interested in what.
- Who wants to contribute to what.

There are a wide variety of tools that corporations use for social networking, including:

- Profile-based Web sites similar to the public sites of Facebook or LinkedIn.
- Informal online meeting places such as virtual worlds and discussion forums.<sup>2</sup>
- Tools that analyze e-mails, instant messaging, and virtual space usage to identify social network and value-added networks.
- Tagging tools to see how people categorize documents, events, and colleagues.
- Mashup tools for combining and presenting information drawn from many sources.
- Quick connection tools for information sharing, such as Twitter, instant messaging, or presence awareness.
- Co-generation tools such as wikis or virtual worlds.
- Expertise location and sharing tools.

Despite the plethora of tools, the value of corporate social networking is determined not by the tools but by how tools are harnessed for value creation. For example, one company could implement virtual worlds for the purpose of connecting people, while another company may implement virtual worlds not for social networking but for training and new hire orientation. A company might use tagging tools to identify who is interested in what, while another company uses tagging tools not for social networking but for making document search in repositories more efficient.

The value of social networking tools stems from the principles inherent in what has been referred to as "mass collaboration" or the "collective wisdom of the crowds."3 These principles can be briefly summarized as:

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The Society for Information Management's Advanced Practice Council (APC) held a session in January 2009 to discuss the potential business value of social networking. The second author of this article was the featured presenter at that session, describing how IBM harnesses social networking tools for business value.

<sup>2</sup> Ives, B., and Junglas, I. "APC Forum: Business implications of virtual worlds and serious gaming," MIS Quarterly Executive (7:3), September 2008, pp. 151-156.

<sup>3</sup> Tapscott, D., and Williams, A.D. Wikinomics: How Mass Collaboration Changes Everything, New York: Penguin, 2006. Surowiecki, J. The Wisdom of Crowds, New York: Random House, 2005.

- Grassroots Passion. When people are interested in something, they are more likely to engage in it voluntarily. Therefore corporate social networking involves making it easier to determine what people are interested in and then connect together those who share similar interests. Interests that are more salient for corporate settings include advances in domains that people might be interested in, current projects that people are working on, or any topic that people might be interested in that might have some relevance for someone's work.
- Self-Serve Co-Generation. Co-generation of ideas occurs in mass collaboration by people willing to "serve themselves" by voluntarily adding information to a community Web page, willingly reconfiguring an application to make it work for themselves and sharing it with others, or tagging documents so that others can see their cognitive maps of the world. Corporate social networking initiatives are intended to promote this self-serve ability by making it easy to add and share information, thereby making it easy to co-generate with others.
- Planned Serendipity. Diverse people do not find connections simply by milling around in the same space. Efforts are engaged in to ensure that people, data, and applications are circulated and tagged so that under-explored relationships will surface. In corporate social networking initiatives, efforts are made to provide easy ways to find connections, such as through tagging, interest groups, or shared community spaces.

These principles, when followed in the pursuit of business value, lead to a wide range of uses for corporate social networking tools. In a marketing department, marketing campaigns for a new product may use social networking to raise attention to the new product. In a human resource function, social networking tools might be used to find and evaluate potential recruits and then for training and orientation. A corporate knowledge management function might use social networking tools to help identify who knows something about something. An engineering division might use social networking tools to build cross-functional communities around new technologies. Social networking tools might be used by a community of sales people or financial advisors for quick response problem solving. Finally, corporate-wide social networking tools might be used to stimulate new ideas, experimentation, and feedback.

# WHY IS IBM USING SOCIAL NETWORKING TOOLS?

IBM has pursued the use of social networking tools for several reasons. A major driving force was the need to keep members of a huge company connected. With more than 380,000 employees (of which almost 50% are mobile) and 200,000 contractors in 170 countries at 2,000 locations, keeping employees connected is not easy. It's not only size, though, that drives social networking. The company has made over 70 acquisitions since 2002, resulting in 50% of employees having less than five years of experience with the company. Therefore integrating new employees into the firm is a critical business driver.

Another motivation is the changing demographics within the firm. There are now three distinct generations of workers in the company:

- Mature workers who feel comfortable connecting with others through e-mail,
- Mid-career workers (known as Generation X) who are comfortable with using instant messaging for connecting, and
- The newest generation of workers (known as Millennials) who are not only familiar with social networking tools, but enter the company with expectations that they can use these tools to develop new connections with others.

Social networking tools were therefore also introduced at IBM as a way to bridge the generational gaps by providing a way for newer and more senior employees to connect.

Finally, and perhaps the most important motivator for social networking tools at IBM, is that innovation through collaboration is a key strategic and tactical driver for the company. Social networking tools for IBM are a way to facilitate mass collaboration across time, distance, function, and interests.

IBM uses a variety of social networking tools to facilitate mass collaboration. Below, we discuss three of these: ThinkPlace, SmallBlue, and Beehive.

#### **ThinkPlace**

IBM introduced ThinkPlace to make IBM's innovation process more transparent and openly

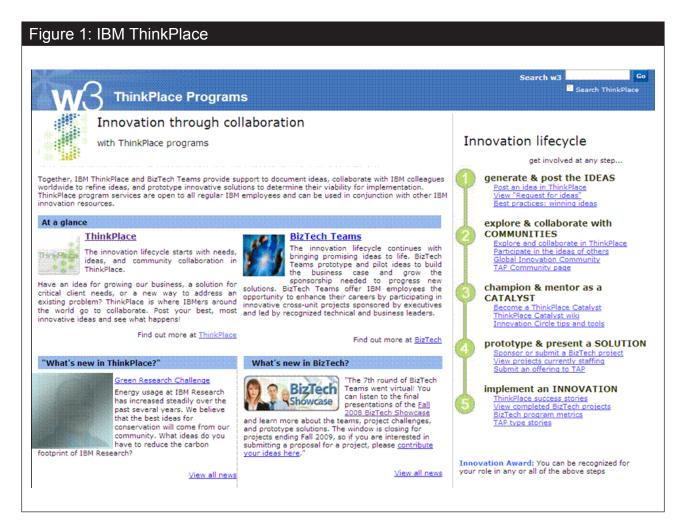
participative. ThinkPlace began as an exploratory IBM Research pilot consisting of a virtual space where anyone in IBM can collaborate around ideas. The research pilot quickly evolved into the current company-wide program, where ideas mature into solutions that can be rapidly developed and deployed.

ThinkPlace is an open intranet forum where ideas can be suggested, commented upon by others, modified, rated, sorted, and routed—all in the presence of any viewer (see Figure 1). IBMers world-wide can submit ideas for how to improve any business, consulting, administrative, or engineering process; go after a market opportunity; or even address a societal challenge. Once an idea is posted in ThinkPlace, it is immediately available for comment by others, including suggesting ways to further develop and implement the idea. ThinkPlace is administered by a few dedicated people and lots of volunteers who browse through the ideas to see which ones are "bubbling up" based on the comments, scoring, and how the idea is being morphed into something implementable. Behind the scenes, data mining tools are used to track the most promising ideas (based on ratings and comments), shepherding them through a formal review process. Human "innovation catalysts" help carry the idea forward to implementation by bringing it to the attention of various people in IBM who might have the necessary expertise or resources to implement it.

Since its launch in 3Q of 2005, ThinkPlace has attracted more than 160,000 users, who have generated over 18,000 ideas. More than 350 of these ideas have already been adopted, creating an estimated impact of over \$500 million in a number of different ways:

- 52% percent introduced time savings improvements.
- 44% made cultural improvements.
- 29% were directed at cost savings.
- 17% focused on new revenue opportunities.

Most of the financial impact has been with small, less expensive ideas that were morphed into inexpensive implementable ideas based on comments of ThinkPlace participants. An example of such a



morphing in ThinkPlace was a need posed by an employee: when an IBM employee leaves IBM, individually acquired third-party software licenses that are not part of the IBM standard software package are often lost because they are not consistently tracked. This makes it difficult to transfer licenses no longer needed by one employee to a colleague who requires them. Comments by ThinkPlace participants morphed this suggestion into the need for a formal license tracking process. As the idea was further discussed in ThinkPlace, it became clearer among the discussants that the idea could potentially be implemented as a mashup. The idea was brought to an IBM director responsible for the Situational Applications Environment who agreed to sponsor the implementation of the mashup. The implemented solution has been deployed for use by any IBM organization within the United States.

When ThinkPlace was first rolled out corporate-wide, concern was raised that ideas would be simple complaints or personal frustrations, such as "fix my computer." By making the idea-posting and commenting process visible to all viewers, these diversions are usually responded to by other IBMers with "Oh, come on." or "Here's the FAQ that fixes your problem," thus establishing and informally enforcing a norm for value-added commentary. To further encourage value-added inputs, a variety of incentives have been provided, including money to implement ideas and an Innovator Award valued at up to \$10,000 in cash that can be received by individuals or teams who have been able to implement ideas that delivered the highest business value.

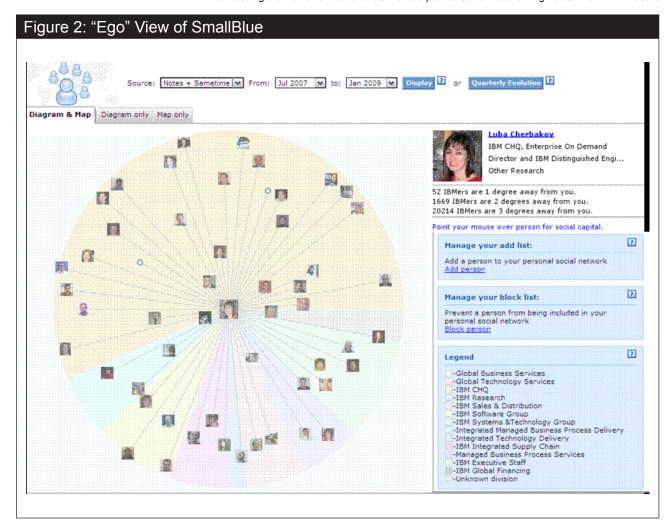
Committed to an on-going evolution of ThinkPlace, IBM took the ThinkPlace external in early 2007 by launching its first-ever public "ThinkPlace Challenge," a three-week open forum designed to foster global collaboration on innovation opportunities and economic development issues facing the African continent. The top ideas generated through this challenge helped shape the agenda for IBM's Global Innovation Outlook (GIO) focused on Africa and provided longer-term input for IBM's World Development Initiative. In late 2008, the IBM CIO office launched the next generation of the ThinkPlace application—ThinkPlace Next. ThinkPlace Next idea pipeline management through visualizations, enabling repeat users and catalysts to be more effective. It also integrates ThinkPlace into other social networking tools (described below) such as Beehive and SmallBlue via plugins, extensions and widgets.

#### **SmallBlue**

SmallBlue, an opt-in social network analysis tool, provides business intelligence of who knows what, who knows whom, and who knows what about whom within IBM. It helps employees visualize their own network of connections by analyzing one's own and others' e-mail and instant message transcripts to determine the social network and infer expertise. E-mails and chat transcripts containing keywords such as "private" or "confidential" are excluded from analysis; the user can add additional stopwords as needed.

SmallBlue computes each employee's social network for a particular topic and calculates degrees of separation between the employee and all others in her network. For example, an employee interested in virtual worlds would click on SmallBlue, type in "virtual worlds" and see the network of connections between the employee and others at IBM on the topic of virtual worlds. From this visualized network, the employee may learn that someone sitting in a cubicle down the hall or a team member on a different project or a person in another division is interested in virtual worlds. With the degrees of separation, the employee can go to a person to whom she is directly connected to get an introduction to the person several degrees of separation removed. In this way, SmallBlue breeds new connections.

There are four views in SmallBlue. The "find" view allows users to search for people with a desired knowledge or skill. The search can be limited to a specific line of business, country, or degrees of separation within a personal network. The "net" view of the tool visualizes the community around a topic of interest, and key influencers and brokers. The "reach" view enables the searcher to validate a person's expertise—as defined within their corporate profile (BluePages) and the communities to which they belong, as well as their recent public postings (i.e., blogs, forums, tags). The "ego" view provides a visualization of a user's personal social network as well as the social capital of each contact. Social capital is defined as the number of new contacts that a user can be introduced to through their direct connections. The "ego" visualization is private and is only known to the user herself. Figure 2 shows an example of the "ego" visualization for one of the authors.



#### Beehive

Beehive is an enterprise social networking site for IBM employees similar to public sites such as Facebook and MySpace. A survey of IBM users indicated that they use Beehive for several reasons, including reaching out to colleagues they don't yet know, humanizing the workplace, advancing their careers within IBM, and promoting their projects. In Beehive, there are picture facts, the ability to invite people to events, visualization of connections, photos you want to post about yourself, and any other information the IBMer chooses to include. Top-five lists, called "hive5s" are particularly popular. Users can include five short statements about themselves or share their thoughts on any topic they are interested in, including, for example, "5 things I like about my job," "5 things I'm reading," "5 favorite Web sites," etc. The intent is to help IBMers feel like they are members of a small community. Initially, when Beehive was rolled out, the expectation was that IBMers would only share work-related information. Instead, Beehive is used to share both work and nonwork related artifacts and events.

Another popular use of Beehive is to make new connections with strangers. IBM research on Beehive users has found that IBMers who make connections through Beehive tend to establish stronger relationships quicker than when they are introduced using other methods. A story was told of an IBMer calling another newly connected IBMer to obtain help on solving a problem; while talking on the phone, they scanned each other's Beehives, immediately finding common ground.

Beehive was started in September 2007; as of mid-January 2009, 50,998 IBMers had joined. While there is a diversity of users, engineers constitute the largest group of users (27%), with VPs and directors constituting the second largest group of users (10%). Figure 3 displays a screen shot of Beehive.

#### SUCCESS FACTORS

Several factors appear to contribute to the success of social networking tools at IBM. One such factor is the business focus of the CIO at IBM. The CIO is



typically a two-to-three year assignment for a manager rotated in from a business unit. By rotating in from outside the CIO office, IBM ensures that the focus stays on business needs, not on technology. In fact, one of the recent IBM CIOs referred to himself as Chief Innovation Officer rather than Chief Information Officer. Social networking tools, then, are not seen to be about technology, but about business value.

Another key to success is the integration of the Internet into the way IBM does business. Since employees are usually connected to the internet, it is just a click away to check someone's Beehive or click through a SmallBlue network.

Another success factor is a culture focused on employee outcomes—particularly innovation—rather than tightly monitoring employee activities. Time spent airing concerns on ThinkPlace or developing one's Beehive is not perceived by managers as unproductive or non-work related since the expectation is that innovative outcomes will result.

A final success factor is the integration of social networking into IBM's core business strategy. With a focus on innovation through mass collaboration, IBM's business strategy is completely aligned with the use of social networking tools.

#### CONCLUSION

IBM is harnessing social networking to foster innovation, effectiveness, and efficiency. The applications not only match, but also help shape, the culture of the firm. Any organization facing environmental turbulence and technologically savvy employees will likely also find business benefits from applying similar tools in innovative ways.