

Social Sciences Will Become More Important Than IT to IT Departments

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IT is becoming a fundamentally social medium in which the technology itself will be transparent to users. Boosting social interactions (along with changes in the nature of work occasioned by earlier IT investments) holds out the promise of dramatically raising organizational effectiveness.

Key Findings

- A smart implementation of a social environment on the enterprise's intranet can have a dramatically positive impact on enterprise performance.
- People work with other people – they interact and there are social aspects to those interactions.
- Facilitating social interactions speeds innovation, problem solving, consensus building and decision making (among other things), particularly in enterprises in which some participants (including suppliers, agents and partners) are not co-located and long-term coworkers.
- The true value of IT will not come from the information side (as in information theory or information management – worthy topics in their own right) or technology side (as in the devices and software that make the machines work) but the social side.
- The result of the true value of IT is not social technology because that places the emphasis on the wrong factor.
- A great frontier – a social one – is being crossed, in which IT becomes the substrate that enables and enhances social activities, just as telephony enables and enhances talking and listening over large distances and timepieces enhance the precision of our sense of time.

Recommendations

- IT organizations must identify their sources of expertise on social interactions – in-house or otherwise – and ensure that those resources are involved in planning and executing a social facilitation strategy for their enterprise.

ANALYSIS

A collection of converging forces are placing a renewed focus on social science-related skills (such as sociology, psychology, cultural anthropology, social communications and the analysis of networks of people – not machines). Enterprises are taking advantage of more-standardized business process platform technologies than ever. Most easy automation objectives have been hit. E-mail (and soon instant messaging) is a universal tool. Collaboration support via document sharing, team rooms and similar tools is a mass-market phenomenon that most enterprises are already investing in. Social software, emerging from the primordial ooze of Web 2.0 startups and mashups, is on the radar of most vendors and

many enterprises. And technology-based communities and environments (such as Facebook) are in common use among consumers. Most targets for IT execution are tied somehow to helping people find, communicate with and engage in an ever-broader range of social interactions with others (whether they are in the enterprise or broader business ecosystem).

This is not an environment in which IT professionals who provision a leading technology can sit back and assume that they've done their job. Technology is only one of several domains of expertise that are key to success. IT organizations will need some staff – in-house or outsourced – who understand interpersonal relationships, bonding in a business context, consensus building, trust, the construction of communities and ways to lead teams consisting of people who don't even know each other. (In our IT professional outlook research, we call out four areas of expertise: technology, information, process and relationships. This pertains specifically to understanding how to facilitate the creation and use of relationships in a business context).

Social interactions can be enhanced by using IT paraphernalia (storage, networks, displays, processors and the software that makes it all work) to enable or enhance how people find each other, get along and get work done (whether that work is the work of the enterprise, their church group or their children's dance club). Older IT disciplines, such as text mining and information management can be of great value, but a transformational change is occurring in how people work. IT has become a broadly accepted, virtually ubiquitous substrate, underlying (and enabling) people to get to know each other, communicate with each other, share goals, aspirations, backgrounds, interests, hobbies and other personal information, find others with similar interests, backgrounds or needs, build teams and communities, share best practices, and engage in a whole range of social interactions. The emergence of tools that enhance social interactions parallels other revolutionary changes in the nature of work itself (much of which has been driven by the emergence of IT and the Internet), and the two phenomena taken together constitute a major opportunity for change.

MySpace is a great and extreme example of a collection of social interactions facilitated by IT paraphernalia. MySpace is not about IT. It is about people, many of them adolescents acting out the way they would at a local shopping mall, showing off (to attract others or compete with them), sharing their secrets, and seeking consolation, encouragement or other forms of emotional satisfaction from members of some peer group. Unlike predecessor Internet communities that were tightly bounded by a particular interest or point of view (such as Intermedia Publications' ScubaBoard), MySpace and other social sites such as Facebook are open, free, unconstrained and (oftentimes) lawless.

Most professional IT practitioners, of course, do not think about MySpace or other social environments in the context of their enterprise IT strategies (except to block user access to the Web sites). The failure to consider the impact of social enhancement technology on the performance of the enterprise is a big mistake.

A smart implementation of a social environment on the enterprise's intranet can have a dramatically positive impact on enterprise performance. It's the next stage in the (technology-driven or technology-enabled) changing nature of work.

The Changing Nature of Work

Since the 1950s, IT (and data processing before it) was primarily used to automate routine processes, lower the cost of operations, standardize processes, replace human capital with computer capital and minimize risk. Scratch beneath the surface of most IT professionals, and the prime mover they think of to justify IT investment is cost reduction and efficiency.

The IT industry has done a great job of eliminating routine work. Most employees no longer face endless days of mind-numbing routine. Instead, they are asked to be more agile, take on additional tasks and responsibilities, and work on numerous simultaneous task forces. Many of the bureaucracies of the world have been replaced with ad-hocracies," an Alvin Toffler term in which individuals are no longer responsible for the career-long entitlement that came with "the job." Instead, they move across numerous and simultaneous ad hoc project assignments. Terror-inducing assignments have replaced mind-numbing jobs.

Most companies (and many government agencies) themselves are disaggregating, that is, focusing on their core competencies and relying on others in the business ecosystem to provide commodity goods and services as components in more focused (and hopefully profitable and agile) business activities. Organizations are cutting layers of middle management (and support staff) and pushing more decision making to the individual contributors in the organization.

Changing Technology

These changes in the nature of work have occurred in parallel with – sometimes causing, other times being caused by, and, in most cases, feeding off of – enhancements in IT capabilities. The IT enhancements of note include seemingly ubiquitous connectivity, automatic wireless session setup, easier-to-use graphical (typically browser-based) interfaces, the World Wide Web, powerful search engines seemingly capable of indexing almost everything, mashups and other emerging scripting and composition environments, gigabytes of memory, and terabytes of disk storage almost for free.

Changing Relationship Between People, Work and Technology

People, particularly younger ones, have come to expect the Internet to work as reliably as a wired telephone – and for it to cost nothing. Recent college graduates expect the social tools they use to just be there. They have come to rely on social tools such as instant messaging, Short Message Service on their phones, Google for checking out prospective dates, social Web sites for sharing often-intimate details about their lives, community sites for bonding and sharing, and, some of the time, e-mail in their pockets on a BlackBerry, Treo or other mobile device.

But this is not just about youth. Even the elderly are using Internet-based social tools. People of any age have the expectation that this technology always works. And they are beginning to make social interaction using IT an automatic, reflexive part of their lives. Humans are amazing in terms of their ability to incorporate external technologies and make them part of a normal routine.

Two illustrations are seeing with your tongue and extending yourself with a watch (Dr. Paul Bach-y-Rita's research at the University of Wisconsin and Dr. Andy Clark's "Natural Born Cyborg" analysis).

Bach-y-Rita

Erik Weihenmayer, blind since the age of 13, volunteered as a subject in Bach-y-Rita's lab, in which they were testing a tactile display unit that transformed visual images (from a camera strapped to the subject's head) to tongue stimulation. Within 15 minutes, Erik was identifying objects, and within the hour he was performing such complicated hand-eye coordination tasks as catching a rolling ball. Bach-y-Rita's research helps illustrate how humans might expand their behavioral repertoire by incorporating externalities with their routine life.

Clark

In this book, Clark argues that people are already cyborgs that have extended themselves by integrating tools and supporting cultural practices with their own senses of self. The answer to the question "Do you have the time?" presupposes such a technological extension.

Technology – IT and telecommunications – can augment people's capabilities without replacing them as they transition from procedural automation to behavioral augmentation and collaboration support.

Technology Intrinsic to Social Interaction

Technology can augment people's social interactions. Most people have gotten emotional talking to a telephone (or, more properly, to the person who is metaphorically on the phone with them). Users of these technologies do not care about the technologies. What may have been available a decade or two ago to a privileged few, has become (or will shortly be) viewed as a natural right – to be used without even thinking about it.

Do you ever marvel at electric light? Yet without it, we couldn't have most of the social events that are commonplace in the Western world. Do most people talk about social interaction facilitated by light emission devices? Then why do we talk about computer-enhanced collaboration support?

Do you ever marvel at how a telephone works? How often do you consider the vast array of equipment that exists in the bowels of the modern world that make telephony practical? Do most people talk about the impact of electronic routing and switching of voice packets on deal closure at quarter's end? But what would commerce be like if we could not close some business deals on the phone?

Impact on IT Professionals

The technology underneath telephony has continued to evolve during the past 130 years. We have gone, for example, from small numbers of manually switched, hardwired circuits to huge numbers of automatically (packet) switched networks of wireless devices and telecommunications that continue to evolve. The initial concerns of telephony scientists and engineers were signal quality and conquering distance. But the real benefits of telephony (and telecommunications) have come from its extension to the repertoire of methods that people use to communicate, share, cajole, persuade, anger, love and otherwise interact.

The technology underneath IT has likewise been evolving during the past 60 years, and the initial concerns of computer scientists and engineers – development and implementation of algorithms and increasing standardization to improve interoperability – remain, in a sense (the recent focus on service-oriented architecture being the nth generation of concepts trying to address those needs). IT itself evolved from data processing (which evolved from automatic calculation) as we realized the need to move beyond tabulating data to manipulating, retrieving and reusing information typically derived from data.

It is time for a quantum leap in the thought process. The true value of IT will not come from the information side (as in information theory or information management – worthy topics in their own right) or technology side (as in the devices and software that make the machines work) but the social side. And the result of the true value of IT is not social technology because that places the emphasis on the wrong factor.

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In the end, brakes on autos exist to let cars go fast. And IT will underpin many social interactions – not because of information to be managed but because it lets people interact with each other more effectively.

For the IT professional, the transformational question becomes: What are you doing to improve or enhance social interaction in your enterprise, across your business ecosystem and with your firm's customers?

This sounds strange, of course, because computer science and electrical engineering programs tend to avoid such things as social interactions. It sounds strange to people who study accounting – "What value do we assign to our social interactions from last year?" – and many other traditional business disciplines.

To maximize long-term career potential, IT professionals must begin to understand the impact of their work on social activities and the impact of social activities on the ability of an enterprise to survive, compete, thrive and dominate business activities – either that or they must begin to team with others with those skills (that is, people they can learn from).