

COLLABORATION IN THE CONTEXT OF SEPTEMBER 11TH

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The recent tragedy of September 11th not only exacted a profoundly disturbing human toll but also highlighted the fragility and vulnerability of many businesses to disruptions in physical property and the dislocation of personnel. With the loss and displacement of people came the loss of the knowledge and intelligence necessary to conduct every day business transactions. Especially those in service businesses where moment to moment intelligence remains with the people doing the work, personal tragedies were often compounded with the need to rapidly re-create ad hoc networks to cover the loss of tacit knowledge. We have lost not only people but also the hard earned *knowledge, experience and ability* those people embodied.

As companies struggle to repair the damage, many organizations focus on the need to strengthen and reinforce databases and servers where crucial business documents and information are stored. While this is a necessary and important step, it only secures the explicit, tangible assets of the company. It is the intangible assets, the tacit knowledge, the “DNA” of the company that has lasting, intrinsic value. These are the most difficult to replace because the knowledge is in people’s heads and typically won’t get translated into a form in which it can be captured and stored. Over time, employees develop knowledge about how to avoid common organizational roadblocks to get work done. They develop highly nuanced understandings of their client, vendor or partners organizations as well. When employees leave, their knowledge goes with them. Companies who have gone through the conventional business cycles of retirement, downsizing, mergers and acquisitions, have experienced this loss. Some organizations are now vulnerable because of the exodus of highly trained talent who are on a path to retirement in the next 5 years and an inadequate plan to transfer that knowledge to younger employees.

The more sustainable response is for companies to embrace and support the creation and sharing of tacit knowledge through (1) renewed organizational forms that emphasize the direct, flexible “peer to peer” or “edge based” connections between people, (2) the use of

technology to facilitate finding people with the needed knowledge, skills and background; (3) technology infrastructure and processes to support virtual teams; (4) processes and programs to encourage brokering, mentoring and other forms of human mediation.

Networks

This is not the first time that external threats have motivated the evolution of networks. In the late 1960's it was a computer network, the ARPANET, funded by the Advanced Research Projects Agency of the Department of Defense. This network was first conceived during the Cold War with the goal of creating a distributed communications network that could survive a nuclear attack. It was initially rolled out in 1969 linking four computers; at the University of California at Los Angeles, SRI (in Stanford), University of California at Santa Barbara, and the University of Utah. The objective was to develop communication protocols that would allow networked computers to communicate.

This time the focus is developing human networks, especially those that are structured in the spirit of a peer-to-peer network. For instance, in the case of computer networks, a peer-to-peer network is one in which communication and information flow directly from node to node without the need for an intervening central server as an information repository or controlling device. Moreover, the information does not merely pass through a node on its way to the intended destination, but at each step of the way information is exchanged between nodes. This leads to a robust, flexible network. The absence of a central server reduces the single point of failure.

Concerning the human dimension, the spirit of a peer to peer network is one in which people are connected and communicate directly with each other without needing to go through a central authority. The intent of these networks is that there is a frequent, high level of information exchange such that key tacit knowledge is in the heads of many people rather than just a few and getting to the needed knowledge can be accomplished quickly and seamlessly. We certainly don't advocate comprehensive duplication of

information, yet there is tremendous value in ensuring that critical knowledge is rapidly shared and disseminated across a group of people to counteract the fragility of having too much knowledge reside in the heads of just a few people

In practice, these kinds of networks might take the form of teams of people who are organized around information or knowledge initiatives rather than organized by task or goal. They might take the form of communities of practice composed of people from across the organization who share a common set of practices, beliefs and values.

Conversations and other interactions that take place within the context of a community serve to deepen employees' skills and knowledge, and as a resource for warranting expertise. Networks also take the form of informal social networks that connect people to each other based on common background or beliefs, mutual trust and reciprocity.

Once established, these new organizational forms can function semi-autonomously as knowledge "cells" in which each group can act independently yet in concert with other similar groups inside and outside the company. The ownership of only a portion of the overall knowledge means that leakage from any one group or "cell" does not endanger the whole operation. Terrorist groups such as the bin Laden network are reputed to combine this kind of decentralized knowledge network with a strong central leadership and shared mission, making them very effective against more conventional hierarchical organizations.

The kind of network that emphasizes the rich, multi-faceted connection between people has also been called the fishnet organization. In the mid 1990's, the Institute for the Future (ITF) coined the term "fishnet" organization to describe a type of group that was driven by market needs and responded to the growing requirement imposed by globalization of teams to work in a virtual environment. Not only were the boundaries of the organization more diffuse but also an individual could and would be a member of multiple groups, leading to the need for what is now termed "contextual collaboration".

This new style of network is fueled by a communication style that focuses on informal exchanges of information such as story telling that can be effective devices for putting core information in a human context. And increasing the strength of connections amongst people inside and even outside the organization has the side benefit of increasing and improving the social capital of a company.

Role of technology

Technology plays an important enabling role in fostering and enhancing these human networks. Several key technology initiatives stand out.

1. Expertise Locator

The best way to find someone who has qualified knowledge is to tap into one's personal network of friends and colleagues. But in large, global companies, a personal network can't reach to all the people who could be helpful. One way of expanding and indeed growing a social network is for a company to develop technology that lets people find others based on knowledge, skills, background and experience. It is still up to the individual to make use of the expertise locator by engaging in a conversation with the new colleague or friend, but the technology can help broaden the reach.

2. Virtual Teams

In a distributed company, the people who need to communicate and work together could be in any part of the world and working at any hour of the day. Whether these groups are structured as traditional task forces or in looser ways, technology to support them lets each person collaborate synchronously and asynchronously with the others in the group. There are a variety of technology platforms and products available to support such groups. Whichever one is used, however, there is a corresponding need to establish processes that ground the group in its norms of working, to make sure there is equal participation and status between local and remote participants and to provide a way to make it easy to create, co-create and share documents and other material.

Closing

A challenge with these networks, especially when they function as semi-autonomous knowledge “cells” is to strike the right balance between the need for security – ensuring that information is only accessible to those who are in a position to use it productively and beneficially – and the need for the kind of openness that encourages spontaneous conversations. However these and other issues get resolved, it is clear that networks represent a potentially potent and effective form of social organization. Social networks are being debated across the academic and business landscape by social scientists of many backgrounds and persuasions. The dialog is likely to continue for the foreseeable future.

The Authors

Chris Newell leads Viant's effort to evolve its knowledge management strategy and process, leveraging the firm's intellectual capital and fueling its growth.

Dr. Newell has extensive experience in organizational development and workgroup technology. At Lotus Development, he was the founder and Executive Director of the Lotus Institute, an action research center that developed teaming and distance learning solutions. He was also Co-Director of the IBM Institute for Knowledge Management, a customer-sponsored consortium that researched a wide array of social and technical knowledge management issues. Dr. Newell spent six years as the Director of Organizational Development/Management Development at Lotus and held a similar position at Prime Computer.

Dr. Newell holds a B.A. in Psychology from Wheeling Jesuit University, a M.S. in Counseling Education from Suffolk University, and a Doctorate in Psychology from the Massachusetts School of Professional Psychology.

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Kate Ehrlich is responsible for thought leadership and subject matter expertise in the areas of collaboration, peer to peer and usability testing at Viant. She applies her knowledge and experience of human and social behavior to inform the design of solutions that meet individual and organizational needs while also leveraging technology.

Dr. Ehrlich has more than 15 years of experience in the design, development and evaluation of software for individual use and group collaboration. As senior research scientist at Lotus Development, she led the development of an expertise locator and the initial phases of deployment of the technology at several FORTUNE® 100 companies. As adjunct scientist to the IBM Institute of Knowledge Management she co-directed a sponsor-led project on the role of intermediaries in organizations. Dr. Ehrlich has written and spoken at numerous national and international conferences on topics of expertise location, knowledge management, peer to peer collaboration and user-centered design.

Prior to joining Lotus, Dr. Ehrlich held senior management positions in user centered design at Sun and Symbolics.

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