

A Framework for Thinking about Collaboration within the Intelligence Community

*By Joan McIntyre
Douglas Palmer
Justin Franks*

This article appeared in “Collaboration in the National Security Arena: Myths and Reality – What Science and Experience Can Contribute to its Success” in June 2009. The article is part of a collection that was published by the Topical Strategic Multilayer Assessment (SMA), Multi-Agency/Multi-Disciplinary White Papers in Support of Counter-Terrorism and Counter-WMD in the Office of Secretary of Defense/DDR&E/RTTO.

Introduction

The Director for National Intelligence (DNI) envisions a globally networked and integrated intelligence enterprise created by integrating foreign, military, and domestic capabilities through policy, personnel and technology actions to provide decision advantage to policy makers, warfighters, homeland security officials and law enforcement personnel.ⁱ The DNI Vision 2015 states that to meet the demands for greater forethought and strategic agility the Intelligence Community must “evolve into a true Intelligence enterprise established on a collaborative foundation of shared services, mission-centric operations, and integrated mission management, all enabled by the smooth flow of people, ideas, and activities across the boundaries of the Intelligence Community members.”ⁱⁱ Underlying this vision is the goal to create a culture of collaboration and an integrated Intelligence enterprise.

Over the last few decades, the term collaboration as it has been used within the Intelligence Community, academia, and the organizational literature has been associated with a host of related terms such as teamwork, horizontal integration, communities of interest (or practice), jointness, netcentricity, and multi-INT fusion. Each of these terms provides a somewhat different take on the concept of collaboration. More recently, the emergence of new virtual collaboration capabilities is broadening the depth and scope of collaborative activities. This paper seeks to provide a framework for understanding the various concepts associated with collaboration and to propose a common lexicon to enhance discussion about collaboration.

Defining the Terms Associated with Collaboration

Webster's Dictionary defines **collaboration** as working jointly with others, especially in an intellectual endeavor. Most definitions of collaboration embed and embellish on this concept of joint interaction. The MITRE Corporation, in a 1999 baseline study of collaboration in the Intelligence Community defines collaboration as "the interaction among two or more individuals and can encompass a variety of behaviors, including communications, information sharing, coordination, cooperation, problem solving, and negotiation."ⁱⁱⁱ The DDNI/A's Collaboration Consulting Team defines collaboration as "the interaction among members of the Intelligence Community and their partners—exploiting their diverse expertise and organizational resources to create higher value intelligence than an agency or officer can do individually to achieve the mission of the Intelligence Community." In all cases, collaboration is defined as a behavior between individuals and is most closely associated with concepts as **teams** and **teamwork**. **Multi-INT fusion**, a distinctly intelligence concept, also entails such collaboration but with the emphasis on bringing together diverse data sets into a common environment.

Although often used interchangeably, collaboration should not be confused with **information sharing**. As a colleague puts it, information sharing is when I give you a recipe for apple pie and you give me the name of a good mechanic. The exchange does not necessarily lead to a higher value of output as a result. Information sharing or, more to the point, access to the same body of information is a necessary precondition for collaboration to occur. In fields such as Intelligence and other knowledge-based disciplines, the task of ensuring that the appropriate people have access to information should not fall on the shoulders of those attempting to collaborate. Those collaborating on a particular issue should share private knowledge and insights, but responsibility to ensure that the appropriate information is shared belongs to the organization..

In contrast to the definition of collaboration, **integration**—defined as the act or process of incorporating into a larger unit—is a more abstract, impersonal concept describing structure within organizations or society. **Vertical integration** generally describes the Industrial Age command and control structure with communications and interactions flowing up and down a hierarchal organization. **Horizontal integration** emphasizes an organizational structure that fosters relationships and interactions that cuts across departmental and even organizational boundaries and is much more dependent on collaborative, non-authoritative behaviors. As popularized in books such as Thomas Friedman's ***The World is Flat***, the increased complexity of problems and the emergence of technologies have greatly expanded the speed of doing business and mechanisms individuals use to connect. This is

driving organizations, including the Intelligence Community, to shift toward more horizontally integrated organizations.^{iv}

Netcentricity, to use the term coined by academia, focuses on the underlying networks that connect individuals and facilitate communications and trust. Networks are common features in biology (neural networks), infrastructure such as power grids, computer networks, transportation systems, and social networks. Our understanding of networks is benefiting from comparative and multi-disciplinary assessments. The phenomena described in Malcolm Gladstone's book, *The Tipping Point*, are driven by interactions between networks of individuals^v, and Duncan Watts' book, *Six Degrees: The Science of a Connected Age*, provide multiple examples and the theoretical underpinnings for concluding that the more interconnected a network is the more agile and capable of dealing with outside shocks.^{vi}

The recognition of the important role networks play has increased as organizations have shifted from vertically to horizontally integrated structures. One outgrowth has been an emphasis on **Communities of Interest** or the increasingly popular term **Communities of Practice**, defined by Eggers and Goldsmith as "groups of people linked by technology and informally bound together by a common mission and passion for joint enterprise."^{vii} The concept of **jointness** or **joint duty**, successfully implemented in the military and now being introduced in the Intelligence Community is based on the concept that such assignments break down organizational barriers and broaden individual networks to the benefit of the overall organization and community.

Finally, much of the literature evaluating successes and failures and advising organizations on how to promote effective collaboration have focused on characteristics within the **collaborative environment**.^{viii} Factors such as strategic vision, organizational policies and culture, rewards and incentives, training, and technical infrastructure all coalesce to create an environment which either fosters or impedes effective collaboration. A key point to stress is that collaborative technologies and tools can enable collaboration, particularly between individuals and groups separated by time and distance, but by themselves are unable to create the conditions conducive to effective collaboration. For the most part, the disconnect resulting from organizations residual vertically integrated infrastructures and the business imperatives and technological possibilities for horizontal, collaborative business practices are at the root of most failures to foster collaboration and a **collaborative culture**.

Types of Collaboration: The Wisdom of Teams versus the Wisdom of Crowds

Collaborative activities take place along a continuum, depending on the organizational structure and formality. At one end of the spectrum are teams and working groups that have been formally tasked to work together on a particular

problem or issue and can persist for an indefinite time period. Less formal are teams that come together voluntarily or on an ad hoc basis to address a common issue and remain as a group only as long as the problem persists. At the other end of the spectrum is “tacit” collaboration that occurs when individuals make their thoughts and results of their work available for others to respond to or build on without formally coalescing into a structured team, although more conscious interaction and collaboration can emerge through such actions.

An extensive body of research and literature exists that examines teams from a variety of aspects to understand how to create and sustain effective teams, including:

- Stages of team building: “forming, storming, norming, and performing.”
- Roles on teams, including how to effectively lead teams.
- Synchronous versus asynchronous and co-located versus geographically dispersed teams, and their different requirements for business processes and tools.
- Trust building and other interpersonal aspects of team building.

With the emergence of Web 2.0 technologies, such as wikis, blogs, social bookmarking, and prediction markets, the potential for and realization of tacit collaboration has grown (See box on Web 2.0 tools). Advocates of this form of collaboration in books such as James Surowiecki’s *The Wisdom of Crowds* point to how groups of unconnected but knowledgeable individuals acting independently are more likely to be right than any one individual, including an expert.^{ix} Moreover, this research indicates that this form of collaboration can overcome some of the pitfalls, such as group think and lack of creativity, that more structured collaboration can fall into.

Some Thoughts on Structuring a Collaborative Environment

Current trends in the literature are focusing on the aspects of collaboration related to tacit collaboration and the role networking plays in fostering collaboration. Little has been done to integrate the lessons learned from research on teams into what is currently being discovered by the latest round of research. However, each type of collaboration has unique benefits and they are not mutually exclusive. Some questions to be asked when thinking about the value of and leveraging the different forms of collaboration include:

- What functions and activities are more suitable for the more traditional, formal forms of collaboration as opposed to emerging tacit collaboration?
- What business processes, rules of engagement, and organization goals and objectives— aspects normally elements incorporated into successful teams—

need to be built into the collaborative environment to ensure that tacit collaboration is aligned with the organizational mission?

- How can networks be grown and utilized to ensure that collaboration in whatever form benefits from creativity and a diversity of perspectives?
- How can organizations best structure their collaborative environment to ensure that the workforce is able to seamlessly self-organize into the appropriate type (or types) of collaboration to respond to constantly changing circumstances?

Likewise, the availability of a growing variety of collaboration tools within the work environment can support a diversity of collaboration activities. Selecting the best tool, or in many cases the best suite of tools, however, must be tailored to the mission objectives and desired business processes. While much is yet to be learned on how to leverage such tools most effectively to collaborate, early experience and limited research suggests certain possibilities.

- **Instant messaging and persistent chat rooms** allow for groups to maintain near real-time communications and facilitate information sharing and coordination of activities particularly in rapidly changing circumstances. According to research, students found using these tools more satisfying even when other tools proved more effective in achieving their goals, suggesting that these tools are also effective at building a sense of trust and community.^x
- **Virtual meeting platforms**, which often include application sharing, virtual whiteboarding, and audio and video conferencing, provide an alternative venue when face-to-face meetings critical to trust building and efficient formal collaboration are not possible. With some accommodations for the lack of direct interactions by participants, standard guidelines to effective meetings apply.
- **Discussion threads** permit participants within a community to pose questions, share information, and discuss ideas and insights on a topic of interest. According to the research cited above, students using discussion threads were generally more efficient in completing group assignments than was achieved using chat capabilities.^{xi}
- **Blogs** provide for an exchange of views similar to threaded discussions but the topics and agenda are driven by the blog owner—either a group or individual. Blogs can be a good way of sharing information and opinions and getting feedback from readers.
- **Wikis** support the co-creation of content, permitting the consolidation and sharing of the collective knowledge of a group and facilitating the linking together of a large body of related information. Wikis such as Wikipedia and Intellipedia, the Intelligence Communities version of Wikipedia, can support both formal and tacit collaboration. The Intelligence Studies Program at Mercyhurst College has used wikis to create custom intelligence products for decisionmakers in national security, law enforcement and business and estimative products as student assignments, which have been embraced by both students and clients.^{xii}

- **“Live” documents** such as google docs permit individuals to jointly create a document much like with a wiki but are more self-contained and probably more suited to producing standalone products for well-defined collaboration efforts.
- **Social Networking** capabilities similar to Facebook or Linked-in allow users to identify colleagues with similar or complementary expertise and to develop and maintain their professional networks, enhancing their ability to quickly reach out for needed skills, expertise, or information and to form ad hoc or formal teams to address mission-driven activities.
- **Social bookmarking** (tagging or folksonomies) allows users to organize information found in a web environment by bookmarking information and adding tags and comments to be able to easily retrieve and use the information at a later date. Users benefit by seeing how others have tagged the same information and can find additional information tagged by others, both enhancing their ability to find information and identifying other users to add to their networks.

Finally, these collaboration capabilities can be accessed through self-contained Communities of Interest or organizational structures with membership limited to defined communities or they can be open to all users on a network. Again, organizations can benefit by having both forms of collaboration capabilities available to users, allowing mission to drive the use of one or the other form. Self-contained communities appear best suited to formal collaboration efforts where the community, objective, and business process are well-defined, particularly when the activities or information involved is highly sensitive and needs to be kept close hold. However, open collaboration capabilities are imperative to fostering ad hoc and tacit collaboration and permitting networks to develop and groups to form quickly and agilely to meet constantly changing demands on the mission.

ⁱ Office of the Director of National Intelligence website, <http://www.dni.gov/mission.htm>

ⁱⁱ Office of the Director of National Intelligence, [Vision 2015](#) "A Globally Networked and Integrated Intelligence Enterprise", 22 July 2008

ⁱⁱⁱ Mitre study

^{iv} Thomas Friedman, *The World Is Flat*

^v Malcom Gladwell, *The Tipping Point*

^{vi} Duncan Watts, *Six Degrees: The Science of a Connected Age*

^{vii} Eggers and Goldsmith (*Governing by Networks: The New Shape of the Public Sector*, 2004

^{viii} See for example, Jon R. Katzenbach and Douglas K. Smith, *The Wisdom of Teams: Creating the High Performance Organization*, HarperCollins Publishers, Inc, New York, NY, 1999.

^{ix} James Surowiecki's *The Wisdom of Crowds* and *Wikinomics*

^x Cite article

^{xi} Ibid

^{xii} Kristan Wheaton, *A Wiki Is Like A Room...And Other Lessons Learned From 15 Wiki-based, Open Source, Intelligence Analysis Projects*, presentation at the International Studies Association 2008 Annual Conference, San Francisco, March 26, 2008
http://www.allacademic.com/meta/p253710_index.html