

# Collaborative Communities of Interest

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## Introduction

Since September 11, 2001, many federal agencies, including those in the Intelligence Community, the Department of Defense (DOD), the Department of Homeland Security (DHS), and the Department of Justice (DOJ) have been charged with improving inter- and intra-departmental communication. This is needed to counter threats to homeland security and requires the involvement of state and local government and the private sector as well. Additionally, it requires information sharing and collaboration. And while information sharing has improved, real-time collaboration to geographically distributed organizations and individuals has only realized minimal improvements. Over the years, several networks have emerged to share information such as Law Enforcement Online (LEO), Homeland Security Information Network (HSIN), Regional Information Sharing System Network (RISSnet), Anti Drug Network (ADNET), and Intelink. Each of these provides email services and/or web sites for sharing of information. However, these networks fall short of real-time collaboration.

Federal agencies or communities of interest frequently find themselves in positions where timely and informed decisions must be made, and information needed to make those decisions is not always readily available in the right context. Information in its raw form, without context can be misinterpreted, resulting in flawed decisions. A collaboration process linking numerous users could provide the means to acquire timely information in the appropriate context. For instance, a discussion with subject matter experts around a conference table is extremely valuable for decision makers. Collaboration among subject matter experts is invaluable when analyzing data and events for senior leadership.

For communities to communicate securely and rapidly with various personnel at distributed locations, a new model for collaboration is needed. This paper addresses that model by defining communities of interest, addressing traditional means of communication, identifying differences between communication and collaboration, and identifying how the model applies to enterprise transformation.

## Communities of Interest (COIs)

COIs, sometimes referred to a Shared Interest Groups (SIGs), are developed to share information and expertise in order to meet a common objective. Members from different organizations, bring different expertise, resources, and perspective to the effort. COIs differ from working groups in that they function over a longer period of time and are generally not co-located. The evolution of the Internet and security technologies have provided an ability to expand participation and access more information, thus making COIs more productive. To serve the community and achieve objectives in the most efficient and effective manner, information must be provided with context. Such context may be provided within systems, but most often it requires

real-time human interaction with subject matter experts to fully understand the context and determine its relevance.

### **Traditional COI Communication Involves:**

***In-person:*** COIs may come together regularly or as needed to communicate, share information, and make decisions. This in-person communication may occur during periodic meetings, conferences, and/or conventions.

***Audio or Video Conferencing:*** Audio or video communication can occur while the participants are geographically disbursed. These are typically regularly scheduled, with the option to convene for special events.

***Email:*** Email allows for one-to-one or one-to-many communication. With the use of attached documents or links to web sites, it can be an effective way to provide information to a COI.

***Web Sites:*** Web sites are an effective way to publish information with the capability for multi-media components, enhancing the experience for a COI. Security features further protect distribution of information to the intended audience.

***Collaboration Tools:*** Collaboration tools may include shared documents, chat, whiteboards, presence awareness, paging, web conferencing, and/or audio-video conferencing. Collaboration may involve one or more of these components, may be a comprehensive application of communication options, and may be real-time. Effective collaboration can greatly improve the productivity of a COI.

***Merely establishing the COI will not cause a transformation; nor will implementing collaboration tools. The organization must have an executive sponsor that will lead the enterprise through the transformation.***

## **Collaboration and COI**

Collaboration and COI are not synonymous. "Collaboration" is defined as "people working together on non-routine cognitive work." Collaboration can occur between two people with one encounter. Whereas, COIs generally function with many people over an extended period of time. Collaboration facilitates COI functionality by enhancing effectiveness and efficiency.

Effective collaboration requires human interaction to support cognitive work. Most COIs function without the benefit of comprehensive collaboration tools. Most use web sites and email for communication and coordination. Some employ audio and video conferencing. Few are able to maintain a real-time common operating picture,

improving the quality and speed of decision making. A new collaboration model with proper implementation of process, procedures, and technologies will allow communities to function as one team, rather than a collection of individuals. The new collaborating model for COIs can accomplish things that are impossible or impractical for individuals or individual components.

For instance, LEO and HSIN service similar constituents and have similar functionality. Each has defined COIs or SIGs. Information is published within the areas defined for the respective COIs and/or information is exchanged between the parties to the COI via email. Real-time human interaction is missing. Thus, questions of relevance may go unanswered, understanding may be delayed, and worse, decisions may be flawed.

Without effective collaboration, communication is a function of publish and wait. With effective collaboration, information may be evaluated in the proper context, resulting in more timely and better decisions.

## **A New Collaboration Model and Enterprise Transformation**

The “enterprise” may extend beyond a business or organization. A new collaboration model for the COI may in fact be a new “enterprise.” Many organizations have implemented technology to improve business processes very successfully, resulting in “business process reengineering.” Business processes can be changed without technology, but certainly technology provides new opportunities. Transforming the enterprise is a different matter. Transformation goes beyond the existing business processes. As noted above, collaboration involves “non-routine” cognitive work. Effective COIs, taking full advantage of this innovative collaboration model could experience enterprise transformation.

Leadership’s vision is critical to achieve transformation. Often, it requires a facilitator from outside with a different perspective to develop a “different” way of doing business, rather than simply a “better” way. As noted, the COI includes people from different organizations, with diverse experiences and perspectives; they should leverage their respective capabilities, enabling accomplishment of things together that could not occur individually. In order to do so, the COI must have the right tools.

A key to successfully establishing a COI and implementing supporting technologies is to understand the objective and the make-up of the COI membership. The objective will determine who must participate. The participants will determine what content is relevant. Leadership will ensure there is a coordinated effort among its members.

Merely establishing the COI will not cause a transformation, nor will implementing collaboration tools. The organization must have an executive sponsor that will lead the enterprise through the transformation. According to Forrester Research, the executive sponsor should:

- Establish collaboration as a priority for the company or COI
- Sell collaboration to its constituents
- Sign off on projects
- Possibly fund projects
- Enforce project timelines<sup>ii</sup>

Building a collaborative culture takes commitment. A collaborative culture is one in which people are used to sharing their knowledge and working together in teams to accomplish business tasks, and individuals are recognized and rewarded for team successes. Communities of people within an organization share a common purpose, goals and vision. <sup>iii</sup>

Vision and innovation are keys to such leadership. Business leaders must take the initiative to transform the enterprise. Business consultants can be employed to facilitate innovative thinking by the business owners. Information technology companies can enable transformation.

Collaboration tools may provide for the creation of virtual campuses, defining COIs as virtual buildings, floors, and rooms where members can meet and share information, thus, defining the COI. Defining the communities that meet and share information within those virtual spaces may take several forms. They may replicate an existing organizational structure or be organized according to some programmatic alignment. For instance:

**Organizational Structure** The *campus* may describe the organization (i.e., FBI). The *buildings* may be the Field Offices; the *floors* may be the investigative programs (i.e., violent crimes, organized crime, drugs, white collar crime, counterterrorism, counterintelligence); the *rooms* may represent the squads, task forces, major cases, or an initiative.

**Programmatic Alignment.** The *campus* may describe an inter-organizational effort (i.e., Homeland Security). The *buildings* may be individual elements of homeland security (i.e., Critical Infrastructure, Border Security); in the case of Critical Infrastructure, the *floors* may represent sectors (i.e., transportation, oil and gas) with government and private sector membership collaborating in those spaces. The *rooms* may be where information about intelligence assessments, suspicious activity, and incident response is collaboratively resolved.

With the advent of Service Oriented Architecture (SOA), Enterprise Content Management (ECM), Knowledge Management (KM), Portals and other technologies and techniques, collaboration and COIs will enable advanced decision support systems and situational awareness. The timely collection and logical presentation of key facts to decision-makers, create situational awareness, thus improving decisions.

Whether you are playing team sports, involved in automotive repair, or operating a business, you must have the right tools and also understand how to use them to be effective. The tools for managing an effective COI include collaboration technology, good communication skills, and content management. Knowing how to use them requires leadership; leadership with vision and an ability to bring together the right human resources; leadership from the business, consultants, and information technology.

The most effective COI will have:

- Leadership with a vision of what is possible
- Participants capable of transforming the enterprise
- Real-time collaboration tools

Transformation has occurred in the way the U.S. Government has evolved since September 11, 2001. With the formation of the National Counterterrorism Center, numerous Joint Terrorism Task Forces, and the Department of Homeland Security, executive leadership has led such a transformation. COIs are communicating and sharing information in ways never been done before. Enhanced by collaboration, a second generation transformation is possible, affecting not only homeland security, but all levels of law enforcement and intelligence.

## Conclusion

Every COI can benefit from this innovative collaboration model. It provides a timely and secure means of communicating with various participants at different locations. With effective collaboration, information can be presented and used in the proper context. COIs formed to enhance homeland security, which are currently sharing information on LEO, HSIN, RISSnet, ADNET, and/or Intelink, can quickly and easily take full advantage of collaboration tools without having to change the current infrastructure. The current practice of sending and responding to emails, sending intelligence assessments and soliciting comment, co-locating personnel, and/or meeting periodically can be greatly enhanced with real-time collaboration tools. The established networks, which connect individuals and organizations can be utilized, enabling them to meet as needed without unnecessary expense and time delays. It's a model that yields quality information quickly for decision makers when the hard decisions have to be made.

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<sup>i</sup> Gartner Research, 15 July 2005, *How to Define a Collaboration Strategy That Drives Business Value*.

<sup>ii</sup> Forrester Research, June 29, 2005, *A 10-Step Collaboration Strategy Workplan*.

<sup>iii</sup> Forrester Research, October 11, 2005, *Culture and Security are the Leading Barriers to Team Collaboration Adoption*.

### **About CollabraSpace**

Headquartered in Annapolis, Maryland, CollabraSpace is an authority on web-based collaboration solutions for a wide variety of customers with dispersed workforces. These customers include large government organizations such as NSA, NGA and Defense Department elements, as well as large commercial accounts. The company develops and provides secure web-based collaboration systems that include audio/video sharing, document sharing and storage, whiteboarding and instant messaging, as well as a J2EE application development platform. More information about CollabraSpace can be found at [www.collabraspace.com](http://www.collabraspace.com).

### **About Strategic Analysis**

Strategic Analysis, Inc. (SA), a small service-disabled, veteran-owned professional services company, was founded in 1986 to provide U.S. government and private sector clients with the best in scientific and engineering services, policy studies and analysis, strategic planning, and program management support. The company's core business is in supporting research and development in the national defense and homeland security communities for identifying and deploying new capabilities and concepts. Strategic Analysis currently encompasses five professional service areas: Management and Programmatic Services; Policy and Strategy Services; Science and Technology Consulting; Information Technology Projects and Services; and Systems Engineering.