

# Collaborative Knowledge Networks (CKN) Invitation to Sponsors

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#### Overview

The CKN project is a major multi-year research initiative co-located at the MIT Sloan Center for Coordination Science and the Dartmouth Tuck Center for Digital Strategies in collaboration with other research centers. The mission of the project is to discover and understand novel ways of how people join and work together in self-organizing groups that we call "Collaborative Knowledge Networks" (CKN). Collaborative Knowledge Networks are groups of self-motivated individuals from various parts of an organization or from multiple organizations, empowered by the Internet, who work together, driven by a common vision and goals.

The objective of the CKN initiative is to develop a deep understanding of the working of CKNs and a set of diagnostic and metrics tools to identify and measure the success of CKNs in and across organizations, as well as measure the readiness to support and benefit from the work of CKNs.

## What are CKNs

Collaborative Knowledge Networks are a novel concept for entities that have always existed in and across organizations: groups of self-motivated individuals driven by the idea of something new and exciting - a way to greatly improve an existing business practice, or a new product or service that they see a real need for.

In the last five to ten years, Collaborative Knowledge Networks have obtained a great boost by combining the power of virtual communities with Internet portal and content management technologies to share, access and manage the tacit and explicit knowledge within and across organizations. CKNs are a special kind of web-enabled communities of practice, where like-minded people collaborate and work together towards a common goal, sharing the same vision and values. For an eminent example, look at the way how the Web itself arose as a CKN, driven by visionary leaders: The community of early Web developers exhibited all the characteristics of a successful CKN at work, forming an intrinsically committed, dedicated community. Members joined out of their free will and collaborated not for immediate monetary gain, but because they shared the same values and beliefs. In the meantime the Web has become one of the main drivers of change for our economy, creating billions of dollars of wealth during this process. Even today thousands of dedicated volunteers work together in numerous CKNs to further drive the development of the Web. But CKNs are by no means limited to the development of the Web:

CKNs abound in today's corporate environment. Enabled by the explosive growth of the Internet, people located anywhere on the globe can instantaneously collaborate and form virtual communities at almost no cost. Companies that foster the right culture and provide



an adequate IT infrastructure to empower CKNs can experience tremendous benefits in improved agility, efficiency, and innovation.

CKNs cannot be mandated into action; in fact, ordering a CKN into existence is against the very foundation of how CKNs operate. People join and work in CKNs not because they have been told to do so by their superiors, but because they are personally motivated by and convinced of the vision and goals of the CKN community. CKNs are often spawned within an organization, but they quickly break organizational boundaries to include members from outside, bringing in new insights and knowledge otherwise not available within the organization. CKNs involve individuals not necessarily related in terms of the corporate hierarchy; the corporate hierarchy is formed to support *what is*; CKNs are all about *what should be*. CKNs usually cut across existing hierarchies, and involve individuals with disparate skills and knowledge. CKNs are an under-recognized source of innovation within organizations; identifying and supporting CKNs should be a primary goal of every organization.

## **CKN Initiative Project Goals**

The CKN initiative focuses on three areas of research: (1) It is developing a deep understanding about how CKNs work and a set of diagnostic and metrics tools to identify and measure the success of CKNs in organizations, as well as measure the organization's readiness to support and benefit from the work of its CKNs. (2) It will flesh out organizational imperatives for high-functioning CKNs by analyzing the historical, sociological, and ethical foundations of communities. (3) "We walk the talk" by researching, developing, and using an advanced Internet collaboration portal in our own CKN research community on CKNs.

The three aspects of the research project are now described in greater detail:

## (1) CKN Diagnostic and Metrics

We are using an exciting new methodology to compute metrics of a CKN's efficiency and its implications for an organization's performance by mining email archives to trace the emergence of CKNs and their development over time. The initiative is developing a computer-supported system for the automatic extraction of CKN structures based on corporate email logs and other records of interactions. Our system computes and visualizes the structure of existing CKNs in organizations, augmenting data from the email records with additional information on the CKN collaboration structure obtained by interviews and other assessments. This approach allows us to obtain many of the insights that are gleaned through cumbersome interviewing done in social network analysis, but much more quickly and efficiently, and also with the ability to observe network dynamics as opposed to the snapshot view provided by traditional social network analysis. We will also make use of some of the insights about networks recently developed by mathematicians, physicists and researchers in complexity theory. We will then compare the different types of CKNs with other corporate performance metrics such as new



product output, share price, or profitability. This will allow us to draw conclusive evidence of the impact of CKNs on the performance of the organization.

## (2) Organizational Imperatives for High-Functioning CKNs

We will be examining the development of CKNs over time to learn about how they form, what works and what doesn't, and to discover the underlying principles behind them, which in turn will deliver additional input for the development of diagnostics and tools. Looking back in history from the medieval banking empires of the Medici in Italy and the Fugger in Germany to the way the World Wide Web was created and Microsoft operates, we will develop lessons learned, guidelines and benchmarks for today's large corporate, governmental, and other non-profit organizations on how to best tap into the power of CKNs.

#### (3) CKN Collaboration Portal

We will build a prototype collaboration portal, which will combine the accumulated experience of the CKN initiative core team in collaborative technologies. The portal will be a test bed for global collaboration research while at the same time being actively used for online communication: It will be the experimental Web workspace for our initiative supporting three distinctive user communities: (1) the CKN core research team, (2) the CKN sponsor members, and (3) other researchers and practitioners interested in our work. It will be employed to deliver virtual brownbags and research seminars, and to set up personalized project workspaces for team members, project sponsors, and guest researchers.

## Sponsors

The initiative invites industry sponsors to team up with the CKN initiative. There are two levels of sponsorship available:

1. Member Sponsors: Member Sponsors get full access to all activities of the CKN initiative. They will be invited to contribute information about the communication flow inside their organization. In return sponsors will get the results of their CKN assessments and performance measurements. They will also get access to the CKN collaboration portal and to all collaborative e-learning and research events organized by the CKN initiative. Member Sponsors contribute \$50,000 per year.

2. Research Sponsors: in addition to all the benefits listed above Research Sponsors get the opportunity to set up a dedicated research project. Research Sponsors contribute \$150,000 per year.

## Main Contacts

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