Chapter IV

Collaborative Sensemaking Support:
Progressing from Portals and Tools to Collaboration Envelopes™

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Abstract

Sensemaking involves incomplete discovery, inaccurate interpretation, and imperfect action that will fail in someway and likely alter the situation in some unknowable way. Sensemaking demands intense, deep collaboration with participating agents, who many times are physically distributed and come from different groups and organizations. Incorporating collaboration functionality in a piece-meal approach in different ways as add-ons within a portal-based architecture can place heavy demands on users to learn, organizations to train, and ultimately limit the potential of collaboration technology to achieve organizational goals. It is proposed that individual and group sensemaking is a better starting point from which to build architectures to mitigate socio-cognitive limitations of participating agents collaborating to make sense of things. Three levels of Collaboration Envelopes™ are presented and architectural considerations presented to guide development of technology to better support collaborative sensemaking.
Introduction

... we expect KM (Knowledge Management) to become more people-centric as the recognition spreads that it is networking of competent and collaborating people that forms the basis for the behavior and success of any organization. ... People are the real intelligent agents, those that see and act on new opportunities that really are creations of the mind. (Wiig, 2000)

By their nature, innovative, forward-thinking organizations must empower their people and key stakeholders to engage in collaborative sensemaking. In collaborative sensemaking, participants accept that data discovery will be incomplete, their efforts to comprehend, interpret, and integrate data will be difficult and inaccurate to some degree, and their actions that emerge from sensemaking will fail in some ways and alter the situation in some unknowable way (Weick, 1979). In the future, organizational success will depend on how well organizations exploit synergies while minimizing risk in collaborative sensemaking.

The way to build better sensemaking technologies is to understand the strengths and limitations of human sensemaking, in other words, the strengths and limitations of how participants discover the right signals at the right time, make sense of them, and transmit signals to other participants at the right time as they collaboratively construct sufficient meaning to act.

Incorporating collaboration functionality in a piece-meal approach in different ways as add-ons within a portal-based architecture can place heavy demands on users to learn, organizations to train, and ultimately limit the potential of collaboration technology to achieve organizational goals. It is proposed that individual and group sensemaking is a better starting point from which to build architectures to overcome socio-cognitive limitations of participating agents, both human and non-human, collaborating to make sense of things. The notion of Collaboration Envelopes™ that wrap around sensemaking processes is introduced as a way to build more cohesive architectures to fully support sensemaking processes. First, sensemaking is explained through a framework of sensemaking cycles and linkages. Second, using this framework, three levels of Collaboration Envelopes™ are introduced. Third, some architectural considerations are introduced to better support collaborative sensemaking anytime, anyplace.
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