

Human Interaction Management Systems (Technology is Human again...)

Introduction

Technology has been to get people to communicate more efficiently and has today created a maze of communication devices and channels for us which has set an expectation of implied collaboration – e.g. email, fax, phone, reports, mobile, blogs, social networks, instant messaging, chat, video conferencing etc. To fulfill our task obligations, we depend on other technology based systems that are either designed as information collectors, processors, messengers etc – which we commonly know as ERP, CRM and BPM etc.

The current system has far too many linkages for it to be effective to the end user and has actually created more confusion rather than simplifying the human work environment. This article discusses the current debate on 'Human Interaction Management Systems' (HIMS) and a couple of technology leaders who are trying to change the way people interact using technology.

Definitions and Concept

Human Interaction Management refers to a set of methods that combines disciplines such as role activity theory, social systems theory, learning theory and several computer science disciplines into a common approach for human collaborative work covering both human resource utilization and managing any human driven business process. Contextually, HIM is being currently positioned as an extension of business process management or BPM from a technology perspective.

HIM is based on five main features of human working activity that can be described briefly as follows:

Connection visibility – Refers to meaningful collaboration between people whose skills, responsibility, authority and resources are unique rather than the focus on the 'data rationalization' approach that is currently followed. HIM uses Role Activity Diagrams to depict processes graphically that can be understood by anyone.

Structured messaging – Email management today is the simplest example of how unstructured messaging can get. HIM uses structured messaging to imposing structures that help people communicate across processes – in a sense messaging is not discreet but a part of the processes which is how people do it naturally when they interact face to face.

Support for mental work – A large part of work people do often does not have concrete output that is easily measured and thus managing knowledge workers can be a challenge. Yet, the time and material involved by a knowledge worker to research, compare, consider, decide and respond to information. HIM allows for such complex tasks to be managed as smaller discrete groups and measured more accurately.

Supportive rather than prescriptive activity management – Humans do not sequence their activities like a procedural computer program – they respond to the tasks on hand based on the resources and information that they possess. HIM supports this in a simple way by defining pre and post conditions for a process as per set business rules so that the process does not gets derailed.

Processes change processes – Human activities often relate to problem solving or initiating an action. A process therefore leads to another process and can influence and change the next process since tasks are typically event driven. HIM distinguishes management control (related to the task) from executive control (related to the policy) thus allowing for better consensus.

Technology examples

The discussion on HIMS was triggered off by BPM companies including large organizations like IBM and SAP which published a paper called BPEL4People addressing a people and task concept. Microsoft and Oracle also mention similar concepts in their recent research. A good way to understand HIMS is to study the concepts of HIM brought into a set of tools by the organization called www.humanedj.com. Other relevant examples are to look at include www.procession.com a UK based company that talks about Task Oriented Architecture (TOA) as against SOA. Another good example is www.zoho.com and other similar personal productivity tools that are removing the dependency on the tool focus and instead bringing in the task and collaboration focus – e.g. zoho expects you to go online and then work collaboratively to create your documents, spreadsheet, manage your project etc. It is still early days yet – however, there are technologies that are clearly demonstrating HIMS in a practical sense.

Challenges going forward....

Knowledge management has always been an intriguing subject and HIMS takes the whole subject to a new level where there is a definitive push from transaction to tacit interactions. While BPM has traditionally focused on process management alone, looking at processes from a human perspective lends a new dimension to the thinking. The HIMS approach focuses on bringing the human interaction into sharper focus as the basis for technology deployment rather than the older approach that focused on making organizations less people dependent. This has happened primarily because technologies have evolved faster to create more channels of communications for human interaction that ever before and traditional IT frameworks have been relegated to either decision support or information warehouses.

Visibly, one can see the focus of organizations in the Internet 2.0 era as seeking to bring more clarity and order and empower human interactions. Increasingly technologies are going to follow human interaction and one can see it in new generation devices such as mobile messengers, push email, wireless handheld devices, on demand productivity tools and optimization of communication technologies to make larger data sets to move faster. So maybe extending George Orwell, we could say that Big Brother is not only watching but also following us!

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