Cognitive Work Analysis for More Practical Progress in PIM
Anne R. Diekema (Utah State University) & Barbara H. Kwaśnik (Syracuse University)

Introduction
At the PIM 2012 workshop Diekema (2012) discussed the dichotomy in PIM research between researching people and building and studying systems. She observed that not many PIM studies “appear to make strong, explicit connections between descriptive studies and resulting PIM tools” (p. 1). To bring research and practice closer together a bridging methodology was suggested, among other things, to translate research findings explicitly into design criteria. Could Cognitive Work Analysis be the framework to accomplish exactly that?

Cognitive Work Analysis (CWA) is a framework which helps analyze human information behavior in context and helps translate this analysis in system design requirements (Fidel & Pejtersen, 2004; Sanderson, 2004). Albrechtsen and Pejtersen (2003) describe CWA as a work-centered design approach, which appears to be a really good fit for PIM. After all, PIM activities typically originate in a certain context (often work related) and are the result of (work) tasks originating from this context. The philosophy behind CWA is that to design a system that will work well one needs to understand the work in context and the related tasks and activities. For example, how do we translate the following into system design:

- A document may be used for more than one kind of task – a song may appear in two playlists: one for road trips and one for party dancing;
- A document may have a public and a private significance – an article on a given topic meant as a contribution to the field, and also as part of a personal tenure portfolio;
- A document may have several manifestations – paper, on computer, in the cloud.

Workshop goals and plans
During the workshop researchers with background in PIM research and practice will lay out a starter set of guidelines (best practices) for using CWA or components thereof in PIM research and vice versa. These practices should demonstrate how research findings on PIM behavior can translate to actionable PIM system design criteria. Participants will be working with an existing PIM dataset to test these best practices. While participants will mostly be working on their own devices, butcher paper and markers might be helpful for use during discussions.

The goal of this workshop team is to work actively on bringing PIM information behavior research closer to PIM system-design research. This we hope to achieve by eventually creating a set of best practices for Cognitive Work Analysis and publish these guidelines for further dissemination. The immediate impact of this workshop
will be an exploration of CWA for PIM resulting in a set of publishable best practices. The long term impact of the workshop will be cross-fertilization and collaboration between information behavior and system researchers and the design of PIM systems that are going to be more in tune with the context of their use.

**Workshop team**
Barbara Kwaśnik is one of the early PIM researchers with studies on how faculty members organize their offices (1989a, 1989b, 1991). Barbara is interested in how classifications intersect with everyday human endeavor -- for example, how they are translated from one culture or application to another. The purpose is to help support increasingly diverse contexts.

Anne Diekema is a more recent PIM researcher who has studied PIM in the context of K-12 teachers (Diekema & Olsen, 2011, 2012; in press). Anne is interested in how people manage information, especially how they make their information discoverable for possible future use. She is currently working on a PIM manuscript describing the role of context in teacher PIM using Cognitive Work Analysis.

Both team members are planning on attending the workshop. Additional people are welcome to join this workshop team. A background in PIM research, PIM system design, information behavior research, or Cognitive Work Analysis would be ideal for a participant.

**References**


