Role of artifacts for reconfiguring working spaces and information systems

Mónica Pinheiro*
Supervisors: Maria Joaquina Barrulas & João Álvaro Carvalho
* monica.pinheiro@lneg.pt

Problem
Individuals, like organizations, need to manage information for work (and non-work) related activities, on a daily basis. In order to extend their communication and fulfill information needs, people use artifacts (man made objects), that became increasingly technological, and in turn, these very technological artifacts are increasingly more dependent upon other supporting technologies, widely referred as infrastructures. In order to design information systems that support workers’ needs, what do we know about their use of artifacts? Across time? Inside and outside their organizations? And on the move?

Seeing with layers of methods
In order to uncover the use of artifacts across individuals’ working contexts, a longitudinal qualitative design was drawn, aiming for diversity of cases (13), in different working settings (organizational, home and on the move). To guide observation, the researcher focused on the artifacts used for personal information management (PIM) since they support space transitions of individuals, while performing work in different locations. The photographs and images were framed (decision of what to capture) by the researcher (etic view) and by the agents in the study (emic view). Besides photographs, data collection methods included interviews, observations, field notes, and information exchanges (digital and physical), during a period off 3 years. In a second phase, in order to zoom in (for added context of artifacts use, while following the actors), one of the 13 workers was chosen for an in-depth study, during one complete year, using participant observation (ethnographic approach).

Preliminary results
Organizational infrastructures can create deliberate constraints to their workers (ex: security reasons) or other non anticipated (ex: blocking access to social networking). To overcome this constraints, workers develop strategies to «getting around the system» and reinforce the use of self owned artifacts to get work done. Individual strategies give way to permanent reconconfigurations of working spaces beyond the organizational boundaries that are supported by deliberate mix of information artifacts, which seem to be determined by:

- familiar or unfamiliar places;
- anticipation of needs;
- travel transportation used for physical mobility;
- distance covered;
- duration of travel; and
- individual or collaborative work.

What we have seen reinforces the myth of the paperless office and seems to contradict the idea that we should aim for technological solutions that substitute paper artifacts: paper is present, manipulated and created by all the individuals, regardless of sophistication artifacts owned (or available).

Expected contributions
General: this work reinforces the need to use slow methods in personal information management (PIM) studies, and giving an active voice to the observed professionals. Specific: to build a model of information artifacts’ use that incorporates information strategies in different working contexts, inside and outside organizational boundaries, in order to inform the design of supporting information systems.

References

Acknowledgments: this work as been supported by a doctoral grant attributed by the Portuguese National Science and Technology Foundation (FCT, SFRH/BD/31839/2008), and by the National Laboratory of Energy and Geology (LNEG).