

A Qualitative Approach:

Using Ethnography to Inform

System Planning and Deployment



Luminous Group Consulting LLC

Why Ethnography?

System requirements, deployment and successful adoption are critical success factors for modern organizations. Failure to understand what technology you really need and then deploy the right system in the right way can have catastrophic and long-term repercussions. At Luminous, we understand and are able to support the analysis of requirements and the deployment of complex technical systems. More importantly, we also understand that with most complex systems, human interaction and cooperation is as critical to successful deployment and adoption as technical correctness. We employ Ethnography to unearth requirement and deployment issues before they happen, to bring greater alignment and consensus to the system planning process, and to foster feedback and ownership from the body of users who ultimately make a system successful. We also find Ethnography very effective at discovering new opportunities for innovation in your organization, whether this may involve technology or work processes or both.

Organizational technology consists of more than just software and hardware. It also consists of human beings woven into a network of social relationships. To deploy a solution without first assessing the hardware on which it is intended to run is an open invitation for failure. At Luminous, we see a human parallel: we feel it makes sense to decide on and implement a solution only after assessing the social environment in which it is intended to operate. Failure to make such an assessment is the reason why so many otherwise well-designed and aggressively-implemented systems don't deliver on their promises.

What is Ethnography? Ethnography is a qualitative research approach, developed within the disciplines of cultural or social anthropology, used to explain human social phenomena.

In the most general sense, Ethnography is the direct observation of a social context that describes the social norms, values and beliefs that drive decisions and behaviors. Ethnographers immerse themselves in that context as much as possible, learning the local language and participating in everyday activities. This includes observing social rituals (such as meetings) and interviewing individuals in their place of work in order to gain a deeper understanding of their perceptions, motivations, and concerns.

An important aspect of this type of research is that the individual being interviewed provides descriptions of their *perception* of their experience. That perception may or may not be accurate, but it is, nonetheless, their perception. It is also important to discover the shared practices people use to accomplish their work – how it actually gets done, versus how it is represented on organization charts or work flow diagrams. By gaining a clearer understanding of the practices of a team or group and the

perceptions that guide them, we are in a much better position to plan and deploy a system that considers these perceptions and behaviors, thus increasing the likelihood of successful system deployment and adoption.

How Does It Work?

Organizations have strategic goals. These goals are translated to departmental goals & objectives. Departmental goals, in turn, are translated into individual goals & objectives. Seen from this perspective, when the overwhelming majority of people in an organization understand how their goals & objectives align with the organization's, we say that there is a high-degree of *organizational alignment*.

This is a highly desirable strategic state because misalignment between goals & objectives at various levels of an organization causes friction, dysfunction, and waste.

In the best case, technological systems are a way to support an organization to reach its strategic goals. If there is a high-degree of *organizational alignment* behind the planning and deployment of technological systems, the results produced by these systems will be superior to those codifying misalignment.

The Ethnographic process works because it engages the existing social system in the organization, developing feedback loops to help clarify misalignment going down the chain, starting from Senior Management. It also provides invaluable information that can help an organization refine or develop its system strategies through a more thorough understanding of the needs and priorities of the people who actually do the work, whom the systems are meant to help. Not only does the Ethnographic process yield information, it also fosters system ownership even before the system is deployed.

The Luminous Approach

Luminous Group helps companies run more efficiently and profitably. We provide organizations with guidance, tools, and support tailored to aid teams in realizing their most important goals. These in turn illuminate the technological choices that are right for an organization and the level of support required to maintain them. We work equally well with people and computers, bringing the two together to achieve the kinds of results that can be enlightening.

We support companies in developing a strategic vision for their business, help articulate the work habits and systems of practice that are supported by the teams and existing culture, with a view towards scalability. Technology systems play an important role in enabling the next level of business sophistication. In our experience, our clients get the best return on their technology investments when the stakeholders are clear about the strategic vision for the investments, when they respect the people and work culture that makes them great, and when the people who will be affected by the technologies are involved in the decision making process.

To find out how Luminous' Ethnographic Approach can improve your system planning and deployment process, contact us at ethnography@luminousgroup.net or 866-495-7354.

References

- Adams, A., Blandford, A., Budd, D. and Bailey, N. Organizational Communication and Awareness: a novel solution for health informatics. *Health Informatics Journal*, 11 (3). 163-178.
- Amerongen, T. Hitting the Mark With CRM (<http://hosteddocs.ittoolbox.com/TA061503.pdf>), Electronically accessed on 6/12/2006, 2004.
- Barthelmeiss, P. and Anderson, K.M. A View of Software Development Environments Based on Activity Theory. *Computer Supported Cooperative Work (CSCW)*, 11 (1-2). 13-37.
- Collins, P., Shukla, S. and Redmiles, D. Activity Theory and System Design: a view from the trenches. *Computer Supported Cooperative Work (CSCW)*, 11 (1-2). 55-80.
- Fjeld, M., Lauche, K., Bichset, M., Voorhost, F., Krueger, H. and Rauterberg, M. Physical and Virtual Tools: activity theory applied to the design of groupware. *Computer Supported Cooperative Work (CSCW)*, 11 (1-2). 153-180.
- Geertz, C. *The Interpretation of Cultures; selected essays*. Basic Books, New York, 1973.
- Glaser, B.G. *Theoretical Sensitivity: advances in the methodology of grounded theory*. Sociology Press, Mill Valley, CA, 1978.
- Glaser, B.G. and Strauss, A.L. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine Pub. Co., Chicago,, 1967.
- Gold, R. Desire in Context (<http://hci.stanford.edu/cs547/abstracts/02-03/021011-gold.html>). Winograd, T. ed. *Stanford Seminar on People, Computers, and Design*, Stanford University, Stanford, CA, 2002.
- Kaptelinin, V., Nardi, B.A. and Macaulay, C. Methods & Tools: the activity checklist: a tool for representing the "space" of context. *Interactions Journal*, 6 (4). 27-39.
- Korpela, M., Mursu, A. and Soriyan, H.A. Information Systems Development as an Activity. *Computer Supported Cooperative Work (CSCW)*, 11 (1-2). 111-128.
- Laurel, B. and Mountford, S.J. *The Art of Human-Computer Interface Design*. Addison-Wesley Pub. Co., Reading, Mass., 1990.
- Leont'ev, A.N. *Activity, Consciousness, and Personality*. Prentice-Hall, Englewood Cliffs, NJ, 1978.
- Lewis, B. The 70% Failure Survival Guide (<http://www.infoworld.com/articles/op/xml/01/10/29/011029opsurvival.html>), Electronically accessed 06/12/2006 *InfoWorld*, 2001.

Lonkila, M. Grounded Theory as an Emerging Paradigm for Computer-Assisted Qualitative Data Analysis. in Kelle, U., Prein, G. and Bird, K. eds. *Computer-Aided Qualitative Data Analysis: theory, methods and practice*, Sage Publications, Thousand Oaks, CA, 1995.

MacLean, A., Carter, K., Lövsstrand, L. and Moran, T.P., User-Tailorable Systems: Pressing the Issues with Buttons. in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems: empowering people* (Seattle, WA, 1990), ACM, 175-182.

Nardi, B.A. Beyond Bandwidth: dimensions of connection in interpersonal communication. *Computer Supported Cooperative Work (CSCW)*, 14 (2). 91-130.

Nardi, B.A. *Context and Consciousness: activity theory and human-computer interaction*. MIT Press, Cambridge, Mass., 1996.

Nardi, B.A. *A Small Matter of Programming: perspectives on end user computing*. MIT Press, Cambridge, MA, 1993.

Nardi, B.A. and Johnson, J.A. *User Preferences for Task-Specific vs. Generic Application Software*. ACM Press, Boston, Massachusetts, United States, 1994.

Nardi, B.A., Whittaker, S. and Schwarz, H. NetWORKers and their Activity in Intensional Networks. *Computer Supported Cooperative Work (CSCW)*, 11 (1-2). 205-242.

Szymanski, M. and Whalen, J. (eds.). *Making Work Visible: Ethnographically Grounded Case Studies of Work Practice*. Cambridge University Press. Cambridge UK, 2010.

Strauss, A.L. and Corbin, J.M. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Sage Publications, Thousand Oaks, 1998.

Suchman, L.A. *Plans and Situated Actions : The Problem of Human-Machine Communication*. New York, Cambridge Cambridgeshire, 1987.