



Dr. Gabriela Avram

Project Leader	Liam J. Bannon
Research Area	GSD4
Project Title	Social, Organisational and Cultural Aspects of Global Software Development (socGSD)

Standpoint

- ❑ Software engineering as human, social and organizational activity as well as a technical activity
- ❑ Looking at the global from a local perspective



Approach

- ❑ Differs from studies undertaken from a macro-economic or strategic perspective by looking at participants in real workplaces in various global software development settings.
- ❑ Complements existing quantitative studies with rich descriptions based on detailed observations of participants in real workplaces

Aim

- ❑ To provide a bridge – from making work practices visible to developing effective work support (socio-technical)

Strands of work

- ❑ Knowledge Management practices in distributed work settings;
- ❑ Situated learning/mentoring;
- ❑ Coordination challenges in Global Software Development;
- ❑ Tools supporting collaboration, with a particular focus on defect tracking systems and the local cultures built around them;
- ❑ Cross-cultural issues in outsourcing.



Our field studies encompass several sites:

- ❑ the Irish subsidiaries of two multinational companies;
- ❑ an open source community
- ❑ Irish and Romanian SMEs involved in outsourcing.

Interdisciplinary background

Software Engineering & Global Software Development

- ❑ Strategic, cultural, and technical issues; knowledge, project and process management; inadequate communication (Herbsleb & Moitra)
- ❑ Software engineering seen as: knowledge work (Rus & Lindvall), “the work of producing and reproducing the knowledge” (Schultze)

Computer-Supported Cooperative Work

- ❑ CSCW studies on: articulation and coordination work, Common Information Spaces, organizational memory, knowledge management practices (Bannon, Schmidt, Bodker)
- ❑ Software cultures (Wagner)

Work Practice Studies

- ❑ Focusing on “what people do, i.e. their work practices, rather than on what they know” (Blackler)
- ❑ Working and learning in Communities of Practice (Lave & Wenger, Brown & Duguid); the importance of “knowing in practice”
- ❑ Studies of work practices in software engineering (Singer, Lethbridge, Robinson, Sharp, Segal)

Organizational Studies & Management Science

- ❑ Coordination Theory (Crowston)

Contribution

- ❑ Identifying and analysing current practices in Global Software Development and the perceived challenges “at the code face”;
- ❑ Our contributions to the field are directed toward:
 - Reflecting our understanding of practice back to the practitioners so that they can learn from it;
 - Informing design, contributing to the methods for studying Software Engineering, and supporting policy making;
 - Emphasizing the need for flexibility, socialization, informal communication.

Selected Publications

- Avram G. "Of Deadlocks and Peopleware: Collaborative Work Practices in Global Software Development", The International Conference on Global Software Engineering 2007, 27-31 August 2007, Munich, Germany
- Sigfridsson A., G. Avram, A. Sheehan, & D. K. Sullivan "Sprint-driven development: working, learning and the process of enculturation in the PyPy community" Third International Conference on Open Source Systems, Limerick, Ireland, June 11-13 2007.
- Wiredu, G. O. "Coordinating Global Software Development Activities: Requisite Variety in Information Systems as a Dependent Variable", IFIP 8.2 & 9.5 Conference on Virtuality and Virtualization. Portland, Oregon, USA, 2007
- Avram G., Sheehan A., Sullivan D.K "Defect Tracking Systems in Global Software Development-a work practice study", The Challenges of Collaborative Work in Global Software Development Workshop in conjunction with ECSCW'07, 25 Sept 2007, Limerick, Ireland