Global Software Development Workshop ICSE - 9 May 2003

Experiences in Distributed Development: A Case Study

Lori Kiel
University of Alberta, Edmonton, Canada
Ikiel@ualberta.ca

The Case Study

- Offices in four countries & three continents
- Modifying an existing product to create a base product
- Development team split between Canada and Germany
- 10-20 in Canada/10 in Germany
- Primary language of the company was English

Research Method

- Qualitative research: interested in experiences and multiple perspectives
- Primary data collection: interviews
- Conducted and transcribed 17 interviews
- Representation from both Canada and Germany
- Programmers, team leads, managers, business analysts, trainers...

Results of the Project

Distribution of this software project failed

Several conflicts arose

Substantial communication problems

Results: Themes and Practices

Themes

• time, culture, power, trust, language

Practices

 e-mail, telephone, teleconference, face-toface meetings, group size, experience level, process, tools (online translation tools, issues management, revision control system, intranet)

Themes: Time

"And there's nothing like letting it simmer for an evening to really get somebody choked about it and antagonistic for the next day...So I spend the evening thinking about issue X...By the time I get in the next morning you know I'm pissed off about it and I just want it fixed, so now I'm not being so nice anymore."

Themes: Language

"...I'll be in a meeting and somebody's going a mile a minute...and then there's silence at the other end of the phone because nobody in Germany has understood what they said. And they don't even realize it, and on they go to the next topic."

Themes: Culture

"I think this is probably a very big part of the problems we had...that people are quite different."

Themes: Power

"From our perspective here, it was actually the feeling that the Canadian office wants to make the decisions. They just tell us after the fact, how we do things. And they didn't really involve the knowledge of the people here in the decision making process, or if people were involved, their comments were often disregarded. At least that was the feeling here."

Themes: Trust

"And I know being both in Germany and Canada, there was a lot of that feeling: 'They don't know what they're doing. So, we'll just ignore them, and we'll do it our own way."

"...ultimately it was pretty militant between the two groups...We never really got by that."

Successes

- Some aspects of the project worked well
- Face-to-face meetings "like gold"
 - Better communication
 - Created common ground
- Intranet with photos- decreased social distance
- Management in both offices

Questions?