

RIGHT PROJECT

Finding the Right Context in Globalizing Software Development

Lappeenranta University of Technology (LUT)

South Carelia Polytechnic (SCP)

Presented By Alexander Bern, Project Manager (LUT)



Overview of the RIGHT Project

- ρ Practically oriented research project examining software development processes and methods in a real business environment
- ρ Co-operation project between Lappeenranta University of Technology (LUT), South Carelia Polytechnic (SCP) and nine industry partners.

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Background: The Changing Business Environment of Software Development

- ⌞ Recent changes include e.g.
 - ⌞ IT outsourcing
 - ⌞ Off-shore software development
 - ⌞ Near-shore software development
 - ⌞ Open source software development
- ⌞ Software organizations must either
 - ⌞ Benefit from these changes or
 - ⌞ Find other ways to be efficient and profitable in the changed situation
- ⌞ The changes are profound and require reorganization/redesign of
 - ⌞ Development methods
 - ⌞ Development processes
 - ⌞ Business models and business networks

Right Goals

- ⌘ The goals of RIGHT include
 - ⌘ Understanding the linkage between the context (i.e. the situation and its contingencies in business and development) and software development processes
 - ⌘ Selection or development of context dependent methods and processes for software organizations
 - ⌘ Guidelines and criteria
 - ⌘ Organizational analyses
 - ⌘ Analysis of what kind of processes are effective in a given company context

Right Objectives

- p To study the dynamics of software development
 - n To provide more understanding of how development processes and methods are dependent on the business & development context (i.e. the situation and its contingencies in business and development) and its changes
 - n To develop a framework of contexts, which will characterize different situations and contingencies the systems development organizations face in their daily work
- p Help and support participating companies in developing and selecting right systems development methods and processes according to the changing business environment
- p Develop networks and practice cooperation between ICT companies, LUT and SCP

Research Questions

- ⌘ The aim of this research project is to answer to the following three research questions:
 - n How to characterize the contexts of software development?
 - n What kind of competences, processes and methods are needed in different organizational contexts? What kind of processes and methods are suitable in each context?
 - n How can software organizations cope with changes in development contexts?
 - ⌘ An organization may e.g. participate to global projects, move to open source development, or outsource parts of development. How do these changes affect the processes and methods organizations use in their daily operations?

Project participants

- ρ Lappeenranta University of Technology
 - ρ Prof. Kari Smolander (Responsible leader at LUT)
 - ρ Dr. Uolevi Nikula (Researcher)
 - ρ MSc. Alexandre Bern (Project Manager, Researcher)
 - ρ MSc. Aparna Pasi (Researcher)

- ρ South Carelia Polytechnic
 - ρ Head of Technology, Dr. Antti Lehmusvaara (Responsible leader at SCP)
 - ρ Dr. Päivi Ovaska (Researcher)
 - ρ MSc. Pasi Juvonen (Project Manager, Researcher)

- ρ Industrial partners
 - n 6 companies with organizational analyses and improvement plans
 - n 3 companies utilizing the research results

Industrial Partners

- ρ Apex Offshore Development Oy, Lappeenranta
- ρ Ardin Software Oy, Lappeenranta
- ρ Euroelektro International Oy, Joutseno
- ρ Informa Oy, Espoo
- ρ IT Optimo Oy, Helsinki
- ρ Proagria Maatalouden Laskentakeskus, Helsinki
- ρ Qentinel Oy, Espoo
- ρ Savcor Forest, Imatra
- ρ TietoEnator Forest & Energy Oy, Imatra

Associated Research Partners

- ρ Helsinki School of Economics, Prof. Matti Rossi
- ρ Technology Business Research Center, GNM project, Prof. Sami Saarenketo, MSc. Sami Jantunen
- ρ Waterford Institute of Technology, Ireland, Dr. Larry Stapleton, Prof. Karamjit Gill
- ρ Rīgas Informācijas tehnoloģijas institūts, Ms. Darja Smite
- ρ Binghamton University, NY, USA, prof. Donald C. Gause

Project Phases

p PROJECT PLANNING

- n Detailed plans and objectives of the project

p GENERAL DATA COLLECTION

- n Context analysis
 - p Analysis of the current situation and problems

p ACTION PLANNING

- n Cooperative improvement plan in cooperation with the companies

Project Time Table

| RIGHT project timeline | 2006 | | | | | 2007 | | | | | | | | | | | |
|---|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Project Startup | █ | | | | | | | | | | | | | | | | |
| Analysis of current research | | █ | | | | | | | | | | | | | | | |
| Analysis of contexts & current practice | | | █ | | | | | | | | | | | | | | |
| Problem analyses and action planning | | | | | | | | █ | | | | | | | | | |
| Closing Phase | | | | | | | | | | | | | | | █ | | |

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15.8. - 26.09.2006 / PO,
UN, AB, AP, KS

Further Information

Project website

- n <http://www.it.lut.fi/RIGHT>
- n Contact information of all research personnel

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Based on:
Rajala et al 2001,
Balance Score Card,
Whitten 1995,
intuition and
experience ;)

