

Project Management (PRO)

Kandidatkursus CS/INF



Lecture 10: Handover and Operations

Part 2: Implementation

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A person in a dark suit is seen from behind, standing in front of a chalkboard. The chalkboard is covered in white chalk drawings and formulas, including circuit diagrams, mathematical expressions like $\frac{100}{200}$, and various symbols like ϵ and γ .

After this lesson you will

- Know about different ways of implementing systems in the organisation
- Be able to select among these
- Know about different problems / risks
- Be able to design an implementation strategy

Implementation strategies (1/2)

Big Bang

- ❖ The entire target group shifts to the new system all at once on a given date

Parallel application

- ❖ The old system continues to function for a certain period after the new system has been launched

Phased introduction

- ❖ The system is divided into phases:
 - Either the entire target group starts to apply part of the system and then gradually other parts of the system
 - Or part of the target group applies the entire system and the rest of the group gradually follows

Experimental diffusion

- ❖ The system is tested by part of the target group. Then it is decided how it should be diffused to the rest

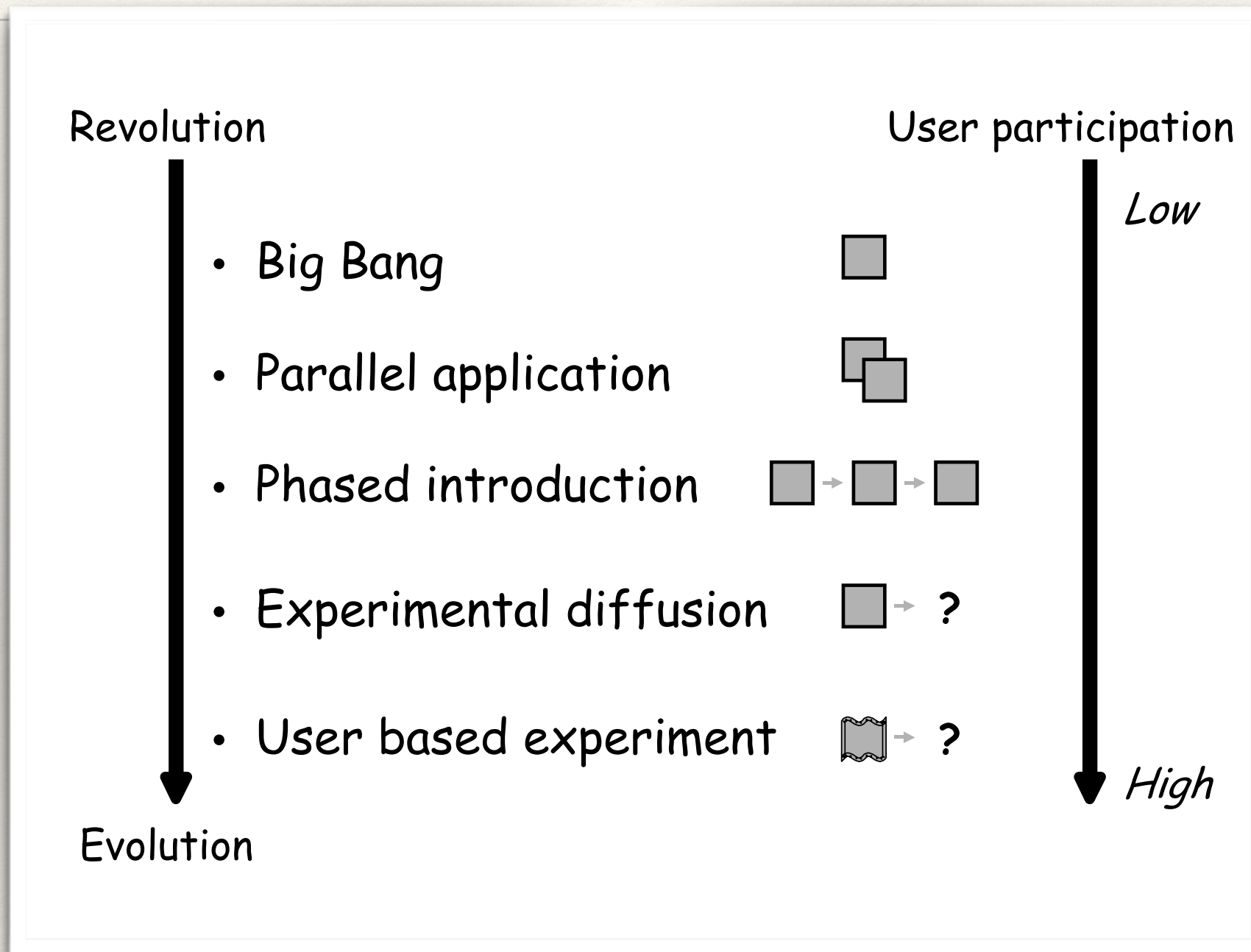
User-based experiment.

- ❖ Part of the target group tests the system to determine what they can achieve using it



[Eason K. (1988), *Information Technology and Organisational Change*, Taylor & Francis]

Implementation strategies (2/2)



Pries-Heje, J. & S. Tryde (2001), *Diffusion and adoption of IT products and processes in a Danish bank*, In: Ardis, M.A. & B.I. Marcolin (Eds.), *Diffusing Software Product and Process Innovations*, IFIP TC8 WG 8.6 Fourth Working Conference, Banff, Canada

Implementation plan contents

- ❖ **What is being implemented**

- ❖ Name of the individual elements, short description of these, where are they transferred from, and where are they transferred to

- ❖ **Assumptions, dependencies and constraints**

- ❖ What must be in place for the system to be put into operation, f.ex. other systems or other projects, that the implementation must be coordinated with

- ❖ **Risks**

- ❖ Potential risks with the implementation

- ❖ **Checks**

- ❖ Which checks should be performed before / after the implementation

- ❖ **Schedule for the implementation**

- ❖ Start and end date for the individual activities, who is responsible for the execution, who should be involved / approve / heard / informed

- ❖ **Procedure for roll-back**

- ❖ How and when should be reacted, if the new system fails and roll-back to the previous state is necessary

Implementation tools

- ❖ **Examine users' current knowledge and skills**
 - ❖ Determine their educational needs
- ❖ **Select effective implementation tools, f.ex:**
 - ❖ Seminars, workshop and courses
 - ❖ User documentation and media
 - ❖ Train-the-trainer
 - ❖ On-the-job training
 - ❖ Super users
 - ❖ Change agents (ambassadors)
 - ❖ Job rotation
 - ❖ Hot-line support for a period after start-up
- ❖ **Involve the users actively in the implementation, possibly user-driven**
- ❖ **Follow up on the implementation**
 - ❖ Identify and remove barriers for the implementation
 - ❖ Change strategy and tools if they turn out not to be efficient



Implementation roles and responsibility

Use a stakeholder analysis to identify:

- ❖ Who should be involved
- ❖ How (informed / heard / approve)
- ❖ When
- ❖ Resistance and other barriers

Define roles and responsibility for the implementation for e.g.:

- ❖ Management (own as well as client organization)
- ❖ People with domain knowledge
- ❖ People with knowledge about the new system
- ❖ Change agents (ambassadors)
- ❖ Users / clients
- ❖ Supporters
- ❖ Operations

Follow up on roles and responsibility for the implementation

- ❖ Identify and remove barriers for the implementation
- ❖ Change strategy and tools if they turn out not to be efficient

Problems/risks for the implementation

- ❖ Lack of backing from **management** (owners)
- ❖ Insufficient **resources**
- ❖ Lack of **motivation** in the target group
- ❖ **Resistance** to change amongst the target group
- ❖ Target group feels that the product **does not include existing organizational knowledge and experience**
- ❖ Lack of product **quality**
- ❖ Lack of **budget** for support during and after implementation
- ❖ Target group feels that their **efforts exceed the outcome**
- ❖ There is **no real need** for the product
- ❖ The product **depends on other products / systems / structures** not in place

Use a risk analysis to assess the risks

- ❖ $\text{Priority} = \text{Probability} * \text{Consequences}$

Why do many implementations fail?

Source: Kotter (1996): Leading Change.

See also Kousholt (2012e: 405)

EIGHT STEPS TO TRANSFORMING YOUR ORGANIZATION

- 1** Establishing a Sense of Urgency
 - Examining market and competitive realities
 - Identifying and discussing crises, potential crises, or major opportunities
- 2** Forming a Powerful Guiding Coalition
 - Assembling a group with enough power to lead the change effort
 - Encouraging the group to work together as a team
- 3** Creating a Vision
 - Creating a vision to help direct the change effort
 - Developing strategies for achieving that vision
- 4** Communicating the Vision
 - Using every vehicle possible to communicate the new vision and strategies
 - Teaching new behaviors by the example of the guiding coalition
- 5** Empowering Others to Act on the Vision
 - Getting rid of obstacles to change
 - Changing systems or structures that seriously undermine the vision
 - Encouraging risk taking and nontraditional ideas, activities, and actions
- 6** Planning for and Creating Short-Term Wins
 - Planning for visible performance improvements
 - Creating those improvements
 - Recognizing and rewarding employees involved in the improvements
- 7** Consolidating Improvements and Producing Still More Change
 - Using increased credibility to change systems, structures, and policies that don't fit the vision
 - Hiring, promoting, and developing employees who can implement the vision
 - Reinventing the process with new projects, themes, and change agents
- 8** Institutionalizing New Approaches
 - Articulating the connections between the new behaviors and corporate success
 - Developing the means to ensure leadership development and succession

Exercise 1: Implementation

Talk together in pairs

- ❖ (Re)read the SAP case in Kousholt (2012e: 44 & 52)
- ❖ Which implementation strategy do you suggest?
- ❖ Which implementation tools will you use?
- ❖ Who should be involved in the implementation (roles and responsibility)?
- ❖ How will you follow up on the implementation?
- ❖ How will you avoid the implementation failures reported by Kotter (1995)?

Summary in the plenary