

Change Management



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Content

- Need for a change
- Barriers in change implementation
- Reengineering
- PDCA, Kaizen
- Getting support for a change



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Need for change

- Changes in external environment
- Changes in internal environment

(= need for external and internal environment analyses)



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Barriers in change implementation

The resistance to changes comes out from

- the need to invest effort for adaptation to thenew state
- the fear of losing position or job
- the attitude "if it worked until now, why should it not work further"

"Better the devil you know than the devil you don't know"

Resistance to changes (Kubíčková, Rais)

- 1. Fear of unknown
- 2. Interruption of stereotypes and customs
- 3. Sense of being manipulated
- 4. Unclear objective of the change
- 5. Fear of failure
- 6. Benefits from the change implementation will not compensate the invested effort
- 7. Undue satisfaction with the current state
- 8. The change proposer does not have respect of subordinates
- 9. The change means higher personal involvement
- **10.** Traditions are valued = permanence

Business process reengineering (BPR)

- "fundamental", "radical", "dramatic", "on a greenfield site"
- focuses on a workplace, a process or whole company
- started in 1990, boom in '90s, decline later
- founding authors: Hammer, Champy, Davenport

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BPR: Reasons of BPR adoption (Thorton, G.)

| Reason | % |
|------------------------------------|----|
| Cost cutting | 84 |
| Quality increase | 79 |
| Speed (throughput) increase | 62 |
| Overtaking the competition | 50 |
| Change of organizational structure | 35 |
| Other | 9 |



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Typical characteristics of BPR

- Top-down
- Greenfield (from scratch)
- Reduction of tasks, workplaces, and staff
- Creating reengineering teams



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BPR failure factors

Some sources state that may be more than 50 % of reengineering project fail. Reasons are:

- Too ambitious goals
- Insufficient involvement of top management
- Insufficient communication to affected parties
- Failure to engage the middle management
- The project takes too long



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Critique of BPR

- Too mechanistic thinking re-introduction of Taylorism
- Too focused on staff reduction
- Loss of knowledge base due to middle management reduction

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Continuous improvement - PDCA Plan be improved Act Do Indicator to Check Plan Act Do Check Time

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PDCA more detailed (another example here)

Plan 1 Define an improvement opportunity

- 1.1 Identify the process
- 1.2 Identify the customers and resources of the process
- 1.3 Identify other interested parties
- 1.4 Describe the current process
- 2 Visualize the current process
- 2.1 Describe the ideal output
- 2.2 Identify differences
- 2.3 Construct (map of) real and ideal diagrams of inputs and outputs
- 2.4 Find key start events of tasks and processes
- 3 Measure the current process
- 3.1 Ask questions
- 3.2 Collect data
- 3.3 Describe variability at chosen check points of the process
- 3.4 Describe patterns in the observed variability
- 4 Plan the change
- 4.1 Propose an improvement
- 4.2 Summarize the proposed changes
- 4.3 Suggest person responsible for carrying out the changes
- 4.4 Suggest a plan of the improvement project

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PDCA more detailed

Do5Carry out the plan5.1Implement the improvement project according to the plan5.2Monitor the implementation

Check 6 Verify the achieved results

- 6.1 Verify the methods of collecting data about the new process
- 6.2 Study the effect of executed changes

Act 7 Act based on the findings

- 7.1 Update documentation
- 7.2 Build next sequence based on the implemented improvement: was the change successful, keep it, was it not successful, reject it. Will you build another PDCA cycle based on this change or not? Can be this change implemented elsewhere in the company?
- 7.3 Standardise successful change



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Sigma = standard deviation

Six sigma = situation, when it is achieved a quality level of 3.4 defects per million opportunities (so called <u>DPMO</u> metric)

In other words, the variability of the process compared to set requirements on the process (e.g. quality of the process output) is so low, that twelve standard deviation of the measured characteristic still meets the requirements on this characteristic.

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Variability in a process



Requirement = 10.0 Upper limit = 10.1 Lower limit = 9.9 Real average = 9.9933 Standard deviation = 0.109 **Result?** MASARYKOVA UNIVERZITA EKONOMICKO-SPRÁVNÍ FAKULTA

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Normal distribution and standard deviation





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DMAIC procedure

- 1. Define
- 2. Measure
- 3. Analyze
- 4. Improve
- 5. Control

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- A method or a philosophy?
- Continuous improvement
- Originated in Japan
- Involves all employees at all levels

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 The goal is to reduce waste of time or material, that means, besides other things, to reduce defective work



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Kaizen - selected tools

- Quality circles
- Stopping the production (line) in case of abnormality
- Rewards for implemented proposals



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Advantages of Kaizen

Changes implemented in the kaizen spirit are better accepted, because:

- those, who are affected by the change, did mostly initiate it (bottom-up)
- the changes are small, therefore they do not create such high stress
- the changes are continual (allegedly, human brain gets used to it)

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Disadvantages of Kaizen

Disadvantages can be seen in difficult implementation of this system, if the organizational culture is not suitable. For example, consider different typical situations in:

- 1. Japan
- **2.** USA
- 3. CZ



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Comparison

A comparison of continuous improvement methods and radical changes methods (Řepa, V., extended)

| Level of Change | Continuous | Radical | | | | |
|-----------------|-------------------------------------|-----------------------------|--|--|--|--|
| Starting point | existing process | from scratch | | | | |
| Frequency | one-time/continuous | one-time | | | | |
| Time needed | short | long | | | | |
| Participation | bottom-up | top-down | | | | |
| Typical extent | limited, inside one functional area | broad, between functions | | | | |
| Risk level | middle | high | | | | |
| Primary tool | classic - statistical control | information technologies | | | | |
| Type of change | cultural | cultural/structural | | | | |
| Acceptance | high | low | | | | |
| | | | | | | |



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Gaining support for a change

- Analysis of impact, attitudes, and support (stakeholder analysis)
- Communication
- Involvement of affected groups (like in Kaizen)



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Methods of gaining support for a change (Kubíčková, Rais)



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