USING AGILE METHODOLOGY IN ERP-SYSTEM IMPLEMENTATION PROJECTS

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1. Introduction

Fig. 1. Classical implementation models

1. Cascade

2. Iterative

3. Spiral
2. Problem statement

The purpose of study is analyzing Agile based methods can be used in ERP-system implementations to reduce project costs, man-days and duration. Following tasks will be performed to achieve the goal:

– considering differences between corporate information systems and other applications;
– exploring incremental and spiral implementation approaches;
– mapping Agile principals with ERP-system implementations.
3.1. Overview of ERP-systems

Fig. 2. Levels of implementation ERP-system
3.2. Overview of Agile methodology

Fig. 2. Agile values and principals
**Statement 1.** Earlier, regular and workable delivery principals of Agile methodology are not relevant for rollout and from the scratch ERP-projects. However, it can be applied in evolution ERP-projects, where core system has already been deployed and fine-tune modification needed. In this case Agile can drive fast and flexible solution delivery.
Statement 2. Due to restricted number of business objects used for ERP-system developing and limited variations how requirements can be customized, continues demonstration of product will not bring much value for any type of ERP-project.
4.3. Implementation of Agile principals in ERP-projects: changes are allowed and encouraged

**Statement 3.** Changes in requirements are not encouraged in ERP-projects from the scratch and rollouts. Due to ERP is a core system, to make it run only obligatory requirements will be realized.
5.1. Using one and multi-pass models in ERP-projects

<table>
<thead>
<tr>
<th>ERP project type</th>
<th>Number of projects</th>
<th>One-pass</th>
<th>Multi-pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the scratch</td>
<td>3</td>
<td>3 (100%)</td>
<td></td>
</tr>
<tr>
<td>Rollout</td>
<td>5</td>
<td>5 (100%)</td>
<td></td>
</tr>
<tr>
<td>Evolution</td>
<td>3</td>
<td>2 (66%)</td>
<td>1 (34%)</td>
</tr>
</tbody>
</table>
Statement 4. Agile methodology can be widely used in ERP-projects only if it’s adopted for rollout and from the scratch projects. Currently it’s too expensive to drive rollout and ERP-projects from nothing based on waterfall implementation model, then transform team for evolution projects, where Agile is used nowadays.
6. Conclusions

- In this paper we have considered Agile methodology and its usage in ERP-system implementation projects. Key differences between ERP-system and other applications were discussed.

- A brief review of multi-pass methods was done to underline its strong points. Key Agile principals were mapped with ERP projects to understand if multi-pass model was applicable.

- It was shown the original idea of Agile was far away from complex ERP-system implementation. As a result, about 10% of ERP implementation projects are driven by Agile-based methods, mostly for modification of already existing system.
Thank you!

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