

# Industrialisation beats personnel cost advantages

› The relocation of application management into "Leading Cost Countries" has costs advantages but also organisational disadvantages. With an industrialisation approach, the former can be strengthened and the latter reduced.

by Malte Klassen



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For years, the key message was that [SAP Offshoring](#) was worthwhile especially with larger projects. Because the Offshore hourly rate frequently amounts to only a fraction of the German remuneration for an SAP Consultant. The ratio purports that through this cost advantage, set-up costs, frictional losses through different time zones and cultural differences as well as the resulting inefficiency are overcompensated. The management, the development and the customising of SAP applications, in short: [SAP Application Management](#), is therefore one of the "classics" of [Offshoring](#).

However, times have changed. European providers are catching up in that they are increasingly industrialising application management processes, for example, through the automation of the change, release and transport management. Step for step, they reduce cost residue through increased productivity vis-à-vis the competition from far away countries. That in turn, places the Offshoring specialists under pressure. Once again, they are required to increase their productivity – while maintaining guaranteed delivery quality.

## » Two-fifths development overhead

In a world increasingly based on the division of labour, the attention is shifting in terms of productivity potentials: With regard to SAP projects, that means: Decisive factors are no longer just the efficiency and effectiveness of the pure development, but also to an increasing extent, the administrative processes. They can constitute up to 40 percent of the [activity of a software developer](#).

A study by Bell Labs estimates a 32-percent share in "[work-related communication](#)". According to studies by Tom de Marco and Timothy Lister, the proportion of undisturbed work, meaning pure programming activity in relation to the presence of the developer on the job is only 40 percent. And Herwig Mayr, professor at the School for Information Technology at the Technical College in Hagenberg, estimates the management overhead for projects at between 20 and 40 percent based on empirical studies.

In the framework of SAP development and customising, it is therefore important to design the change, release and transport management (in brief: CR&T) as efficiently and effectively as possible. Because within these actions the administrative activities that eat up a large part of developer working hours are concealed. What is it all about? In a nutshell: It is imperative to evaluate, to prioritise user requests to the SAP, to estimate the effort, to convert it into an IT request and to distribute this to the correct SAP consultants.

Different changes should be bundled in "Releases" here. In addition, various test phases are to be validated in changes in order to distribute them then correctly, completely and on schedule from the SAP development environment first into the test environment and then into the productive environment. Depending on susceptibility to errors, the entire process can pass through several iterations between the development team and operating department or internal customer.

## The requirement checklist

### Functional CR&T targets

- » Adaptation of the CR&T solution through simple customising, meaning without programming, to the approved and certified processes of the IT organisation (not conversely);
- » Implementation of transparent, automated processes for the change, release and transport management;
- » Automated linking of SAP test tools in the IT workflow;
- » Auditable archiving of Change Requests and Releases;
- » General automation of transport management over the entire software change process including strong overtaker management for changes of various time patterns (e. g. hofixes vs. standard changes)";
- » Extensive reporting at the push of a button on different management levels;
- » Bidirectional process integration with company-wide change managements and ticket/helpdesk systems by means of an efficient program interface (API).

The industrialisation of the CR&T [Management](#) is thus an opportunity to reduce the approx. 30-percent administrative overhead and to increase the productivity. The target is oriented towards automotive production: away from the "manufacturing", in the direction of development based on a flexible, synchronized "assembly line".

### » Various educational level and fluctuation of personnel

In Europe, this SAP industrialisation is increasingly an important topic due to the high labour costs. But also for the [Offshore activities](#), automation is at an uppermost position although for other reasons: The comparatively various educational level of the SAP consultants and the relatively high fluctuation of personnel significantly reduce the labour costs advantages. In the Leading Cost Countries, in brief LCCs, it is therefore essential to quickly bring the SAP developers up to speed in a special work area - in the ideal scenario, without requiring a large administrative development overhead and a IT process accompanying training.

Tibor Piroth, CEO of Siemens IT Solutions and services (SIS) Thailand, learned that four years ago: With 400 SAP professionals and about 15,000 Change Requests annually for more than 30 SAP systems, SIS Thailand was one of the larger Siemens SAP application management centres; later it was acquired by [Atos Origin](#). Through the use of modern CR&T management tools, the administrative costs could be reduced by double digit percent range for every Change Request.

## » According to the example of the automotive industry

In the past ten years, the East European automotive industry has based the costs and quality of its plants on the Operational Excellence methods and Lean Management Principles of the "Toyota Production System". At the same time, SIS Thailand has launched an Operation Excellence Program for the SAP CR&T Management according to a value stream mapping.

### Lessons learned

1. CR&T management must be understood as an "Operational Excellence" project. Best Practices can be taken out of other functional areas such as automotive production. Tested methods from Lean Management and the Six Sigma, such as zero-defects target or the seven types of waste are easily transferable to CR&T projects.
2. Strong management support is important. As in every automation project, all IT managers must stand united behind the project.
3. Just as important is the "buy-in" of the employees. Any doubts and anxieties can be countered a priori with persuasion work when introducing automation and rationalisation measures.
4. It concerns the processes: Value Stream Analysis and Value Stream Design are the keys to success. A detailed process analysis using standard methods such as Refa and a clearly outlined process design target image are the prerequisites to be able to raise the ratio potentials.
5. KPI's are to be defined a priori - and managed a posteriori. A stringent target specification such as "ze-ro-defects" or "Six Sigma" helps to concentrate on the essential value drivers here.
6. Form follows function. Tool re-engineering should also be an opportunity for process engineering.

In order to assess the eligible suppliers, SIS Thailand generated a check list for the requirements of an efficient and effective CR&T management. Based on the standard solution Conigma by the Galileo Group AG, a "software assembly line" finally was introduced for SAP change and maintenance.

## » Think globally, start local



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As SIS Thailand had learned from earlier projects, the orientation when evaluating the business case is best directed towards tested Operational Excellence methods such as the Value Stream Analysis (VSA) and the Value Stream design (VSD). In the framework of the SAP CR&T analysis, the entire value stream from development and customising is subdivided into four main blocks: **Change management**, implementation, testing and transport handling. These blocks are broken down again into single task steps.

Based on time analyses and with MTM/Refa-analogous methods, SIS Thailand outlined an actual value stream which formed the basis for the value stream analysis. With the help of Best Practices from Europe, Asia and America, the service provider then outlined a target value stream for the industrialisation of the SAP maintenance processes jointly with the Galileo Group. An optimal clocking of the processes was to combine

speed with consistently high output quality. The definition of a business case with saving potentials and ROI specifications accompanied this approach.

The insights obtained from the value stream analysis and design were then implemented with the existing servicedesk. This was a solution for Change Request and Incident Management as well as customer communication which SIS Thailand developed based on the SAP support line feedback and SAP customer service. The CR&T tool Conigma was adapted to the effect that it depicted the target value stream.

Out of previous change, release and transport management projects, SIS had still learned one thing: "Think global, start local". After a pilot phase, the structure and the functions of the system were re-sharpened as part of the PDCA cycle (Plan - Do - Check - Act). For example the team changed the hierarchy structures for Change Requests so that the large amounts of data could be better handled. Moreover, role-specific status views were introduced for the Change Requests to arrange the work list access more efficiently. An automated repackaging should improve the running time behaviour in the productive import. Ultimately, the new target value stream current became binding as the "standard" for all 400 SAP professionals.

### » The wages are rising in Asia too

Looking back, the SIS Thailand Managing Director Piroth is glad to have relied on productivity potentials early on. Before, when he began to break through the cycle of the continuously decreasing hourly wages, he was not taken seriously. Today the "continuous improvement process in the automation area" is a real advantage in view of increasing wages also in Asia.

The results are actually quite respectable. The process times can be reduced to the double-digit percent range. In the project investment cycle, savings in the seven-digit euro range were possible. And most importantly: Despite lower costs, the quality to the customer increased significantly - up to a **hundred percent fulfilment of the SLAs** as well as the **compliance** and quality standards of the customer.

#### **Three questions for Tibor Piroth, CEO of SIS Thailand**

? What induced you to set up a servicedesk integrated with a tool for the change, release and transport management?

! The quantity structure of the SAP changes with corresponding transport volumes which we guided through could only be handled manually with disproportionately high effort. Added to the documentation requirements of our customers, we simply spent too much time on unproductive activities. Moreover, we had the target of maintaining the hundred percent SLA fulfilment even with increasingly degrees of complexity.

? Which challenges did you have to solve during the launch of the tool combination?

! We previously had an elaborate and documented IT process which was also approved by our team leaders. As part of the tool introduction, we, however, discovered that this process was not always carried out as agreed for various reasons. A tool, however now ensures the process compliance; therefore we had to reciprocally re-adjust here.

? To what extent were your target concepts met with the use of the tool combination?

! We further expanded our productivity advantage while not forfeiting any of our service quality. New employees find their way around more quickly in our ITS process standards than before the tool was introduced. The number of Change Requests per employee increased vis-à-vis the comparison period by a two-digit percentage.

1 <http://www.computerwoche.de/karriere/karriere-gehalt/565804/>

2 <http://www.computerwoche.de/karriere/freiberufler/2369779/index2.html>

3 <http://www.computerwoche.de/hardware/data-center-server/2280966/>

4 <http://www.computerwoche.de/karriere/karriere-gehalt/2499766/>

5 <http://www.computerwoche.de/netzwerke/2501770/>

6 <http://www.computerwoche.de/management/>

7 <http://www.computerwoche.de/mittelstand/1938231/>

8 <http://www.computerwoche.de/management/it-services/2489570/>

- 9 <http://www.computerwoche.de/management/it-services/2369789/index6.html>
  - 10 <http://www.computerwoche.de/management/compliance-recht/2490638/index4.html>
  - 11 <http://www.computerwoche.de/management/it-strategie/2351902/index3.html>
  - 12 <http://www.computerwoche.de/management/compliance-recht/>
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