

Continuous business improvement with Reverse Business Engineering

The Road Behind

In order to continually optimize SAP systems, some key maintenance questions must be answered: What is the most efficient way to carry out maintenance analyses? What are the ideal maintenance cycles for SAP installations? The Reverse Business Engineer (RBE) tool has the answers.

Companies are subject to both cyclical and spontaneous organizational changes arising from internal or external factors. External changes can be driven by innovative technologies or changing market conditions. On the other hand, company mergers or modifications to products and services can lead to internal reorganizations.

The degree to which the company's IT systems are affected depends largely on the time constraints and complexity of the restructuring. If the company is simply expanding its established struc-

ture, the new organizational units – such as an additional sales organization – have to be reflected in the existing software.

However, when a company division is restructured completely, it has far-reaching effects on the structure of the SAP system. Many users hesitate to put great effort into changing their systems; others try to employ short-term workarounds because they are ill-prepared for massive system changes.

However, the necessary changes for both minor and major reorganizations

can be kept to a minimum if the SAP application's engineering is analyzed at regular intervals and the live processes are adapted accordingly. This way, small to medium changes – as well as gradual shifts – in the use of SAP systems can be identified and reviewed. As a welcome side effect, the company gains a full inventory of the various processes' usage.

Similarly, major changes to a system cannot be carried out without a complete overview of how the system's structures and processes are used. If



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▶ this information is not available, a tedious manual analysis is necessary, since the initial situation must be clarified before a project can be defined. Based on this overview, the system can be tailored more precisely. These changes should be documented to serve as the basis for future restructuring.

Without recurring diagnostics and quality assurance, it is difficult to fulfill organizational requirements – and the overall cost of information processing rises. What is true for cars is also true for IT systems: Regular checkups can dramatically reduce future maintenance.

Using RBE for diagnosis and process optimization

The only way to analyze SAP systems efficiently is to use a tool- and knowledge-based method. SAP and the IBIS Prof. Thome enterprise software institute (Institut für Betriebswirtschaftliche Informations-Systeme) developed Reverse Business Engineer (RBE) as a promising approach to automated business analysis.

RBE Plus offers an additional knowledge resource of nearly 10,000 RBE check steps. Using this information, organization, transaction, customizing, and master data is read from the SAP systems. Intricate rules uncover any problems in process flows and data quality. For example, RBE Plus can determine how often delivery schedules were created, changed, or displayed. This data is then enhanced with data on the number of actual deliveries which resulted from the delivery schedule during a given time frame. Customizing, master data, and system usage can all be examined in detail.

Furthermore, the enhanced RBE process-analysis functions can examine single documents for exceptions and time-oriented data – which determines the runtime of processes on the document chain. This analysis can highlight such problems as how long orders are overdue or the discrepancy between the requested delivery date and the actual delivery. Exception analysis identifies business incidents outside the expected range of behavior. Regular analyses are especially important for improving quality, since the main ways to achieve better quality are to avoid exceptions and to improve essential key figures.

Depending on the subjects being examined, the ideal maintenance intervals for business content lie between six and 12 months. For example, master data can be analyzed to determine if the reconciliation account in the customer master record corresponds to the customer's account group. These results can help locate or prevent incorrect postings.

Constant scrutiny of system usage

Two examples demonstrate how regular maintenance can ensure the effective use of SAP systems and highlight unexploited potential:

A rollout takes place in the public sector. Regular checks are carried out to ensure the long-term efficiency and effectiveness of the SAP systems:

- Do the existing settings still fulfill all requirements?
- Are the existing processes and functions being used, and are they being used effectively?
- Should the system settings be updated to reflect internal or external changes?

Failure to inspect system usage regularly can lead to a decline in quality of both organizational processing and information processing.

The analysis of a midsize automobile component supplier's systems reveals the following processing problems:

- The system includes no procurement of external processes, no contracts, and no quotations or offers. SAP R/3's strengths are not being exploited
- A high proportion of document processing is done manually. It should be automated.
- Although the system maintains data for scheduling shipping, the delivery scheduling function is not used. Major potentials are not being exploited

Analyses are repeated at a later date to see if the problems have been rectified and if the potentials have been exploited for greater gain.

RBE is a work in progress. IBIS Prof. Thome AG continuously adapts its contents and evaluation functions to reflect changing SAP environments, such as new releases or industry and mySAP solutions, all of which can also be analyzed with RBE.

For more information about RBE, visit www.ibis-thome.de/rbe

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