

VALUE ADDED THROUGH SAP BEST PRACTICES

- **Shorter project times**
- **Lower total cost of ownership**
- **Greater satisfaction**
- **Lower risk**
- **Enhanced project value**

Empirical international study with users of SAP Best Practices

Study by Prof. Dr. Martin Selchert
Ludwigshafen University of Applied Sciences
on behalf of SAP

1. Management Summary: Enhanced Project Success by Using SAP Best Practices

The increasing challenges companies of all sizes are facing – stagnating markets, accelerated technological innovation, and the internationalization of competition – are placing more sophisticated demands on information technology (IT). In order to provide an appropriate, flexible, and cost-effective range of functions, it is necessary to continually optimize the implementation methodology as well as the IT application portfolio. SAP AG responds to these challenges by systematically recording data pertaining to implementation experiences and making it available to its customers and partners. “SAP Best Practices” are part of this offering.

SAP Best Practices consist of technical and business documentation for central business scenarios within a sector or a functional application area, such as Customer Relationship Management, for example. Also available are executable preconfigurations tailored to the particular area and a methodology for pragmatic and effective application over the entire life cycle. SAP business partners can leverage SAP Best Practices as a platform for developing mySAP All-in-One solutions. At the same time, SAP Best Practices are used in companies of all sizes to accelerate decision-making processes and implementation projects.

Using comparable systematics, this benchmarking study determines the **effect the deployment of SAP Best Practices has on project success, in terms of time, cost, and quality**. The study was conducted by Prof. Dr. Martin Selchert from Ludwigshafen University of Applied Sciences on behalf of SAP.

About the Benchmark Study

During the course of the study, we contacted all the companies worldwide that requested SAP Best Practices from August 2001 through to August 2003 and whose complete contact data was available. 64% responded. Since almost 100 respondents had not tested SAP Best Practices and 44 had not implemented them after testing, the results are based on **52 surveyed users**. These are representative of the population as regards sector, corporate size and global region. Slightly more than 50% of the users surveyed had implemented ERP using SAP Best Practices. Other applications used by participants included CRM/BI, SCM/SRM, and PLM IT Asset Management; one participant implemented PLM EH&S.

Methodology

Methodically, the results are initially based on a detailed record of the operational effects of using SAP Best Practices, which were determined together with the respective project managers in the course of telephone interviews backed up by questionnaires. The project managers are ideally suited for such a task since they have detailed knowledge of the project, on the one hand, and, on the other, a sufficient overview of their impact. Furthermore, they do not have a vested interest in attributing a project’s success to SAP Best Practices and, therefore, are credible for the purposes of this study.

The operational enhancements were aggregated using a systematic metric and evaluated in a dynamic cash-flow based business case. Finally, key financial data was derived, such as the net present value.

Results

Firstly, it was established that, by using SAP Best Practices, the unweighted average **project time was cut by 22%**. All project phases (structured in accordance with the Accelerated SAP methodology) benefited by varying degrees: ranging from a 15% time cut for Project Preparation and Final Preparation, a 17% decrease in the Preliminary Project phase, a 20% reduction for Realization, through to time savings of 24% for the Business Blueprint phase. Seeing as phases overlap and due to some aggregated input regarding the entire project, the total value is not identical to the time-weighted average of the single phases. The most substantial time savings, on average 25%, were experienced for ERP project timeframes, whereas the lowest reduction, namely 10%, was recorded for PLM IT Asset Management implementations. This is due to the fact that with PLM many wait times arise, which cannot be shortened, even with SAP Best Practices, because other projects had higher priorities.

On average, an implementation project realized using SAP Best Practices had an **absolute duration of twelve months**. Despite achieving the above-mentioned largest time savings in terms of percent, ERP projects still require the most time (on average thirteen months). By comparison, SCM/SRM implementations – at 9 months – are the shortest.

Project time is not **reduced** at the expense of **the introductory phase**, in other words, workloads are not simply transferred to the period after the live date. Deploying SAP Best Practices did not change the duration of the introductory phase in the majority of cases; however, it did shorten it by up to 75% in some instances. This is mainly due to using a solution that was simplified by SAP Best Practices – compared to the result that would have been achieved with the customer's own configurations.

Since the project costs for SAP Best Practices projects largely stem from time-related personnel expenses incurred for the internal team and external consultants, it is not surprising that decreasing project times in the unweighted average across all applications **reduces project costs by 20%**. In this respect, ERP solutions (22% reduction in project costs) and SCM/SRM implementations (25%) are above average, whereas CRM/BI (16%) and PLM IT (16.5%) are below average. In addition to these time savings, the decrease in project costs is also boosted by the enhanced productivity of the resources deployed: accordingly, the number of consultants deployed per time unit fell by 20% as a result of using SAP Best Practices, whereas the time and effort involved in course preparation, documentation, and testing were cut by approximately 15%, and the internal team size per time unit by 10%. On average, the blanket project costs saved across all applications amounts to a cash value of € 660,000.

If the project time is shortened, the live date occurs earlier and the operating time increases as the calculation period is fixed at three years. However, if the operating time increases, **operating costs** automatically rise, even under otherwise identical conditions. Besides the adverse effect time has on operating costs, SAP Best Practices also enhance productivity after the live date, which is remarkable given that they are no longer actively used during this phase; they contribute to the improved quality of the project results. Consequently, the

time and effort required for adjustments after the live date fell by 34%. The average for other productivity enhancements, such as the reduction in user outage in the implementation year, the costs for IT maintenance and external consulting, and so on, was generally in the one-digit percentage range. Still, the increase in productivity cannot compensate for the negative effect of a longer operating time. Therefore, the unweighted average of present values for all costs incurred after go live over a 3-year period rises by 13.5%, which is equivalent to a weighted average increase of EUR 415,000. It should be borne in mind, though, that a longer operating time also leads to a higher benefit, which has been taken into account when it comes to the overall value added through the use of SAP Best Practices.

If the changes in project, introduction and operating costs as a result of deploying SAP Best Practices are combined in an unweighted percentage average, **an 11% decrease in the Total Cost of Ownership (TCO)** is obtained **for the three year period**, which, in turn, corresponds to a weighted average of € 245,000.

In addition to time and cost, the **quality of the project results** is also positively influenced by the deployment of SAP Best Practices. This is broken down into three interrelated components: enhanced functionality, reinforced utilization of functionality and greater satisfaction of project stakeholders. The following was determined with respect to the functionality of the application:

- 40% of all participants confirmed that functionality changes were experienced as a result of deploying SAP Best Practices (actually 60% in the case of ERP projects), 60% merely observed that the process was influenced by SAP Best Practices, but that the outcome was the same with or without them. This **“extension” of the functionality spectrum** exclusively refers to an increased awareness of suitable options, since all the functions were already available in the application.
- Furthermore, the participants rated **on a scale of one to ten that tuning of the finished solution had improved by 41% on average**. A greater improvement, namely 50%, was recorded for ERP projects.
- 87% of the modifications in SAP Best Practices projects can be updated; this percentage rate rose only marginally.
- In SAP Best Practices projects, the amount of **incomplete documentation** was only 19.5% off the desired target. This represents on average a 33% reduction compared to projects effectuated without SAP Best Practices.
- On average, **86% of user requirements were known prior to the live date**. Of this, 85% of the range of functions that all project participants regarded as useful was incorporated. Just over 50% of participants believe that both percentage rates were increased as a result of deploying SAP Best Practices seeing as more time was available for accommodating users.

The satisfaction of the following project stakeholders was recorded: management, business partners (customers, suppliers), average and key users, works council, and the IT department. On a scale of 1 (= "very dissatisfied") to 10 (= "very satisfied"), satisfaction levels of 6.5 to 7.8 were determined for the unweighted group average. **On the whole, the satisfaction of project participants increased by 28.5% due to using SAP Best Practices.** At 34%, the most significant augmentation was gauged among management (46% with ERP projects) and business partners (at 32% overall and 35% with ERP), while average users and the works council experienced an increase of "merely" 22% and 18% respectively.

In projects deploying SAP Best Practices, the third component of project result quality – **functionality utilization** – always met 80 to 90% of expectations, and was, consequently, very high. This applies to both the number of actual users in relation to those expected and to application access frequency, as well as to the range of functionalities used. In most cases, however, deploying SAP Best Practices served only to marginally improve these values.

Advantages stemming from the deployment of SAP Best Practices, such as enhancements achieved in relation to project time, costs and result quality, have already been discussed. Another potential advantage is that SAP Best Practices could lower the project risk, more specifically, the risk of not realizing one or more objectives. To this end, the project managers surveyed were asked to rate the **subjective risk "experienced"** on the basis of a scale from 1 to 10; they confirmed that, on average, the subjective risk fell by 26% in projects using SAP Best Practices.

The **objective risk** was understood to be the risk of failing to meet individual time and cost targets. In actual fact, targets were also missed in many projects using SAP Best Practices. On average, target project times were exceeded by 25%, whereas the costs budget was only overshoot by 7%. This applies to all applications. ERP projects were below average, with a time excess of 19% and a budget deviation averaging only 2%. As a result of SAP Best Practices, the objective risk, in other words, the difference between actual fulfillments and individual goals fell by 71%.

Operational improvements, such as shorter project times and the enhanced quality of project results, also brought about a greater reduction in process costs and, although seldom, a greater potential for revenue increase. In this context, process cost reduction refers to cost reductions that are attributable to the application implemented with SAP Best Practices in the processes supported by it. Since the project time has been shortened, the application benefit – namely, process cost reduction – can be realized earlier. Due to the enhanced quality of the project results, the process cost reduction potential also increases per time unit. These two effects mean that, on average in every project, the cash value of **process cost reductions stemming from the deployment of SAP Best Practices increased by € 1,175,000.** This represents approximately 20% of the overall cost reduction value

achieved by the project over a 3-year period since the project started. If SAP Best Practices are used in ERP projects the cost reduction potential increases by as much as 40%, whereas in the case of non-ERP applications, the increase ranges from 7-10%.

Of course, an application's **potential to increase revenue** can also be improved by deploying SAP Best Practices. However, only three participants were aware of their project's possible impact on revenue. The effect of SAP Best Practices was very substantial in this area, but it was presumed to be zero for the majority of participants, due to the lack of transparency. In terms of revenue, the value added as a result of SAP Best Practices was on average € 305,000, which, due to the problems ascertaining this effect, is not representative of the value to be expected from any of the companies under normal circumstances.

If the weighted average TCO decrease is added to the average value added of the additional process cost reduction and revenue increase, then an **average, absolute, total value added of € 1,725,000 is obtained as a result of deploying SAP Best Practices**. In other words: on average, the decision to deploy SAP Best Practices in the project created this additional cash value for the company using it. Of this, the project cost reduction only constitutes approximately 15%. This means that, for many implementation projects, "the reinvestment" of productivity enhancements gained by SAP Best Practices in the improved quality of project results is more valuable than cutting project costs. The total value added through SAP Best Practices per user of the installed system amounts to an arithmetic mean of € 18,600 and a median value of € 2,200; the difference is due to some projects with very high value added per user. As regards the projects involved in the study, the value added achieved by SAP Best Practices resulted in an average increase in the project's cash flow return on investment of eight percentage points, as well as to an approximately four month reduction in break even.

Success Factors

A range of possible success factors for deploying SAP Best Practices were examined. Company-specific factors, such as sector, corporate size, SAP experience prior to the project, or culture group, are not statistically regarded as success factors, irrespective of how the success was measured. The facts do not substantiate the widespread opinion that SAP Best Practices are only suitable for small, inexperienced companies: large and small, experienced and inexperienced SAP users can achieve similar success using this methodology. Another interesting aspect is that standard, project-specific success factors such as managerial support, common and clear objectives, and so on, do not have any significant influence on the success of deploying SAP Best Practices in terms of statistics. Consequently, using this tool in both favorable and problematic project situations can bring about success. After all, project success does not depend on the number of components used that were supplied with the SAP Best Practices package.

Guidelines for the Deployment of SAP Best Practices

What does, however, significantly influence success is the proportion of solutions pre-configured by SAP Best Practices that are included in the integrated solution implemented. To increase this quota, several important guidelines for the deployment of SAP Best Practices can be derived from the experiences of the participants in this study:

- Evaluate SAP Best Practices – irrespective of preconceived views about their applicability
- “SAP Best Practices follow strategy”: clarify your own expectations before examining the potential value added to be gained from deploying SAP Best Practices
- Carry out a systematic assessment at an early stage, at least in accordance with the principle of dual control, and allow for approximately 2 weeks planning
- Bring about and document a conscious decision
- Come to a joint decision with the consultant as opposed to blindly following his advice
- Be “perceptive” when deploying SAP Best Practices
- Regularly review the deployment of SAP Best Practices during the project
- SAP Best Practices reduce the involvement of consultants, but do not replace them
- Carefully check “reinvestment” of the productivity gain due to SAP Best Practices in order to improve the quality of the project result

Conclusions

On the whole, SAP Best Practices shorten project time, cut project costs, reduce TCO and project risks, increase project benefits such as process cost reductions or revenue increases, and, therefore, create substantial total value added for the company using them in the implementation project. Consequently, it is hardly surprising that all but one of the participants stated that they would deploy SAP Best Practices again. To achieve the above-mentioned benefits in future applications, the guidelines for deploying SAP Best Practices should be observed, in other words, users should examine the benefits systematically and at an early stage, make a conscious decision to use them, and actively manage their deployment during the project.