

Defend the Template – Supporting the Standardisation and Harmonisation of Process Change Programmes with SAP templates

Markus Grube

VOQUZ IT Solutions GmbH
Hamburg, Germany
email: markus.grube@voquz.com

Abstract – Many companies are aware of the benefits of using a template in SAP implementation. This research paper deals with the question of how a company uses a template in a business process management environment and, above all, what happens when there are requests for changes to the template. Based on a literature review and personal interviews, this article describes the promises that manufacturing companies make about the template implementation within SAP business process management and why an overarching goal could be: ‘Defend the template’.

Keywords – SAP; ERP; BPM; Business Process Management; Template; Process change.

I. INTRODUCTION

During this research on the relationships between Business Process Management (BPM), maturity models and the utilisation in the environment of SAP Enterprise Resource Planning (ERP) systems, one of the interviewees provided the following slogan regarding the introduction of SAP business processes and the usage of templates: "Defend the template". The application of this slogan was described by the interviewed expert as a fundamental principle for process standardisation and process implementation in his company. In general, templates are used when implementing SAP business processes. There are numerous examples in the literature, and the author is also aware of this from practical experience in SAP projects.

Foth [1] defines a template as a unified set-up containing the necessary documentation and programmes for construction of a new system. The use of a template offers numerous advantages, for example:

- reduction in costs of system development [2]
- re-use of processes among various enterprises
- reduction of required manpower [3]
- increased level of conformity and data consistency [4]
- greater stability of business processes
- quicker worldwide process improvements [1].

The given slogan of "Defend the template" raised the question of how the defence of a template can support the use of process templates in business processes. This paper considers the slogan and examines how templates are used by the interviewed experts in standardising and harmonising business processes.

Following this introductory section, Section 2 discusses the relevant literature and develops the research question for this paper. Section 3 describes the research methodology. Section 4 provides a summary of the findings. Section 5 contains an analysis for the research question, and finally, Section 6 presents the conclusion and suggestions for possible future research.

II. LITERATURE REVIEW

With the globalisation of business activities, there is a growing need to structure and shape business across an enterprise. For example, when setting up an overall process, binding corporate rules should be integrated [5].

In general, ‘the main goal of process standardisation is the development of one standard or best-practice process to be used as a template for all instances of the process’ [2]. Gavidia [4] illustrates that it is common practice to develop a template as the base configuration for all areas and locations of a company to increase compliance and data consistency. This new template will then have a consistent set of reports and will be adapted to the existing business processes within the company.

Systems like SAP ERP offer a variety of "best-practice" processes that exist for different industries and business processes. However, for various reasons, the suggested best practice does not work for most companies: thus many companies define their own BPM templates to meet their specific needs [6]. In addition, it may be necessary to distinguish between a global template and local requirements, and to define mechanisms that solve the problems resulting from these differences [7].

From an Information Technology (IT) perspective, it makes sense to standardise business processes and their configurations and transactions. Costs are reduced if IT processes do not have to be changed and if the business can adapt to the IT, rather than vice versa [8]. However, this approach is criticized in the literature. For example, Gavidia [4] reports that blanket implementation of a uniform template reflects at the failure of management and does not ensure that the process fits with existing customer relationships. A process template can only be effective if it takes into account the knowledge and requirements of all areas of a company. It is not sufficient for the template development to only consider a basic IT process or system from the parent company.

For successful template implementation, all employees and groupings must be included. Only then can productive implementation be carried out successfully, with employees understanding the benefits and accepting the changes. A company should also consider that a template rollout requires a long-term implementation phase, which can take 2–5 years, and may require a budget of \$10 million or more [7].

The enforcement of a template is a practical difficulty in the process rollout. Often, this causes problems for a company gets stuck and business goals are affected. A global template must be approved and accepted by all companies and employees. This requires discipline from all employees involved in the implementation of the template, because things may be repeated during the rollout or there may be resistance against the implementation [5].

The literature describes what a template is and how it can be defined. Additionally, statements in the existing literature show that the implementation of a template can be quite difficult. We must consider: what instructions should be given to a team introducing a template? What different personal recommendations can respondents give in addition to the literature? The literature recommends the use of templates: however, can a slogan like "Defend the template" support the introduction of a process template? Based on these issue, the research question (RQ) of this paper can be defined as:

RQ: How and why can the slogan "Defend the template" support the use of process templates?

III. RESEARCH METHODOLOGY

The research philosophy for this paper adopts a post-positivist position and is based on the perspectives of Ryan [9] and Guba [10]. The goal of research from the post-positivist perspective is to generate new knowledge that other people can learn from and on which they can base their own decisions [11].

For this research, semi-structured and in-depth interviews are used to gather practical experience of companies that use SAP templates and BPM. These interviews are followed by an analysis of the best explanation regarding the collected facts, and this is done within an abductive approach [12].

As an explanatory study, described by Collis and Hussey [13], this research uses interviews with experts who have already gained practical experience in the areas of BPM in ERP projects and the use of SAP templates. It is quite possible that the inclusion of other experts would have led to a different result, but from the post-positivist position, this research understands that the world is much more complex than the opinions of some experts suggest.

To address the research question, this research combines two research methods. Semi-structured interviews are conducted with experts in their field. In addition, a brief literature search is carried out. The goal of this combination is to achieve greater depth within the research and the complex environment being studied [14]. The following Figure 1 illustrates the research strategy and the different sources used for this research:

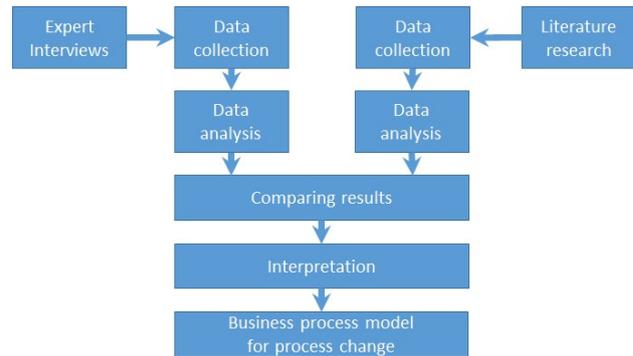


Figure 1. Method of data collection and analysis

The time horizon for this research is a cross-sectional snapshot study [15]. The research analyses the current practical situation and evaluates the state of affairs at the time of the study [16].

For the interviews, an expert is defined as a person who has experience in the areas of SAP and BPM. As a prerequisite to be an expert in this context, practical experience of approximately ten years or more in the mentioned areas is expected. Due to the small number of interviews, this research does not differentiate between which module of SAP these experts use or within which industrial sector they currently work. This research paper has the general objective of analysing the slogan "defend the template" in term of the general standardisation and harmonisation of process change programs within SAP environments.

Respondents were selected with the aim of gaining as much expert knowledge as possible from practice. Using semi-structured interviews provided flexibility to scrutinise the understanding and explanation of the experts' opinions [17].

The qualitative data analysis and the comparison of the transcribed interviews were supported by using the software tool MAXQDA. The coding functionality of the MAXQDA tool was used to analyse the experts' answers. The software was used to manually encode the qualitative data within the interviews and to obtain an overview of all the experts' answers based on the encodings.

Due to the small number of interviews, the aim is not to reach an overall and general conclusion for all industries, organisations or SAP modules. However, the results of this research paper could be used as part of the theoretical grounding for further research projects.

IV. FINDINGS

The search for potential interviewees was conducted within the author's personal network of business and personal contacts in Germany, Austria, and Switzerland. A total of 64 people were identified as potential experts in the business process and SAP environment. These people were then invited for an interview. From this initial pool, 11 people confirmed that they were willing to be interviewed. The personal, face-to-face interviews revealed the following findings, which the

experts have identified in their day-to-day business when using SAP and business process templates. All statements and insights described here are the personal opinions of the experts. Due to the total duration of the interviews being over 14 hours combined, only excerpts can be presented here.

The experts explained within the interviews that the SAP ERP system offers a variety of "out-of-the-box" business processes for the general SAP system, as well as for special sectors, such as real estate or the pharmaceutical industry. With these basic processes, a company can cover almost all of its standard process cases and can set up a solid basis for its daily business processes. Such SAP processes support a company in standardising its processes and implementing them relatively quickly. For example, sales processes are similar in different companies and across different industries. It is helpful to use a standard SAP template for the best-practice approach as starting point, and to show all the steps that belong to a process sequence. In this standard SAP process template, there is a lot of industry expertise that has been accumulated from various industries and many projects. However, this does not mean that this template has been optimised for a particular company, nor that the company's own process steps have that have been developed and implemented in-house, cannot deviate from the SAP process specifications. The experts pointed out that such an approach with given SAP processes is usually only used if a company has no existing processes or IT infrastructure.

Normally, a company has already gained its own experience and has established its own process flows. Therefore, it would not fully use the SAP "best-practice" standard template, instead developing its own process template. This template must then have a certain degree of flexibility. A tax-paying process in Germany is different from on in, say, Brazil or India. Therefore, process templates must be generated that can be applied globally across all countries. These processes must have a certain amount of local variation because of the different rules. Local adaptation must only be set up where a process, or a process step, is genuinely local and cannot be supported by a global SAP template. However, this means that the development of a company's own solution has nothing to do with the global template, and thus a shadow process is created, which is only used for local requirements. The disadvantage is that process adaptation then becomes more difficult because the adaptation is known only locally, on the level of one company or business unit.

A process template should be as flexible as possible from the beginning of the set-up. It should be scalable and applicable to specific local needs. In the interviews, the experts mentioned this as the biggest challenge for a process template. It must be considered whether new requirements that emerge can still be incorporated into the applied process template, and how quickly changes can be implemented company-wide. Therefore, a process template must allow for a certain amount of agility.

Regarding the use of standard processes, one expert mentioned the practical problem that business consultancies

frequently use standard SAP templates without examining the individual processes within a company. This means that templates are established without optimising the existing processes to suit into the special behaviours of each company.

The experts also want to achieve harmonisation and standardisation of the process world through the introduction of a process template. This means that not every local manufacturing facility conduct its business according to a business process it wants and likes, but that a company-wide standard is set up and must be followed. The more complex and individualised the established processes are, the harder it is to run the business on one new company-wide process template. Uniform processes can create synergies and clarity, and a process template should help to minimise fragmentation and process variations in the company.

One expert explains that, when the processes are described in much more detail, it is no longer a template description, but more like a localisation. Localisation of processes is a challenge because it can only be developed in collaboration with the local business departments. One expert highlighted that the business must then maintain the processes, because only the local team knows how they really work. Another expert declared that the aim is to provide a standardised process template that is not a localisation and could be protected against further splitting and any diversification within the organisation.

Based on the previously discussed findings, one interviewee mentioned the slogan "Defend the template". The goal of the slogan is that a business should no longer be able to make decisions on process changes. Another expert also declared that a template should be a leader for all processes, with functional processes introduced via a company-wide, valid template. The question is then no longer how the individual divisions or areas carry out task; instead, one valid process is established throughout the whole company. A process in the enterprise can then only be arranged based on these template specifications; however, there exist a number of different variations, which are offered by a catalogue structure within the template. By minimising process diversity, companies expect enormous savings potential.

The goal of a process template must be to offer stable and mature process solutions for a company. These processes are then rolled out company-wide, and it is ideal to undertake a process without local on-site adaptation, because these local adaptations cost in term of time, money, and manpower.

One difficulty is to avoid being too detailed in process description for a template. The more detailed the description of a process, the more likely it is to be a description of localised or specific particularities. The goal must be to develop an enterprise-wide process template that works equally well in a five-person facility as for a business unit with 800 employees in another country.

It is important that a business should learn that not every process has to be individualised, and that specific and individualised processes are rarely the best solution for a company. Using fewer individualised solutions and more

standard process templates means that process changes can be implemented more quickly. Every process change, every system transport, and every release change could collapse and thus carries a significant risk, which is reduced if there are fewer variations in the template catalogue that need to be taken into account.

The slogan "Defend the template" aims to encourage the optimal use of process templates. With this harmonisation, businesses should and can be convinced that the use of standard processes is not a negative approach.

Even if a template is to be defended, it must be possible to change it; however, such a change should never be decided by a business entity itself. The sovereignty over processes must be located with a superordinate process organisation, which consists of, for example, process owners and process managers. Only this process organisation can decide whether and to what extent processes can be changed or whether a business unit may use a local adaptation.

V. ANALYSIS

The defined research question for this document is: How and why can the slogan "Defend the template" support the use of process templates? From both the literature review and the expert interviews, a generalised answer to this research question can be proposed as follows:

Both research methods have shown that there is a risk of a lack of standardisation and harmonisation of process templates leading to too much diversification. A company must be careful to avoid this. Applying the slogan "Defend the template" can encourage companies to realise that a new deviation in the standard process template can lead to difficulties with future system changes.

Companies need to be aware that harmonising and optimising global business processes in an SAP landscape is an extensive project that can last for years. If a template has more variations, it will be more difficult and time-consuming to maintain this template, and to manage every future changing process within it. Companies should search for the lowest common denominator and defend the existing template as far as they can.

If there is a great need within a company to capture and document processes, then the company should set up business process management. Within the change process, the company can visualise, sort and structure its BPM. During this reorganisation, it can often be identified that processes in different business units are similar. A process template must be built from these documented and structured processes, including all recognised process flows, and, if appropriate, excluding certain process features and declaring them invalid. In the practical implementation and introduction of the newly developed processes, the process team then has the task of establishing and defending these process templates and processes, even if they encounter resistance. Just because a process has been carried out in a company for years in a particular way does not mean that this approach was the optimal solution for the business. However, when such a traditional and established process is changed, it is important to clarify why the new solution is a more effective approach, and to present its benefits to all parties involved. Especially in such a case, the new process template must be defended, even if there may be strong resistance to it.

The slogan "Defend the template" is only one essential step in a procedure for investigating process change requests. The difficulty is estimating the extent to which a template should be defended, as there can be legitimate doubts that a particular process template is the optimal solution for a company. In this case, a process owner or a process organisation must decide either to change the process, or to apply a local adaptation. Decisions in such exceptional cases should not be made by a business unit itself, but by a superior process organisation, which is responsible for the process and thus has to approve a change or local adaptation.

After analysing the literature and the expert interviews, this research developed a procedure for changing a process template. The goal was to develop an easy-to-handle business process model to defend possible process changes. Such a procedure could consist of the steps shown in Figure 2. This figure contains two important gateways for a process change. First, the process organisation must be informed about a desired process change. If the process organisation already knows about the desired process change and has opted for another solution, then this alternative solution must be defended. The same applies to the second gateway. If the central process organisation does not accept a new change request, this decision must be defended by the process organisation against any resistance that may arise.

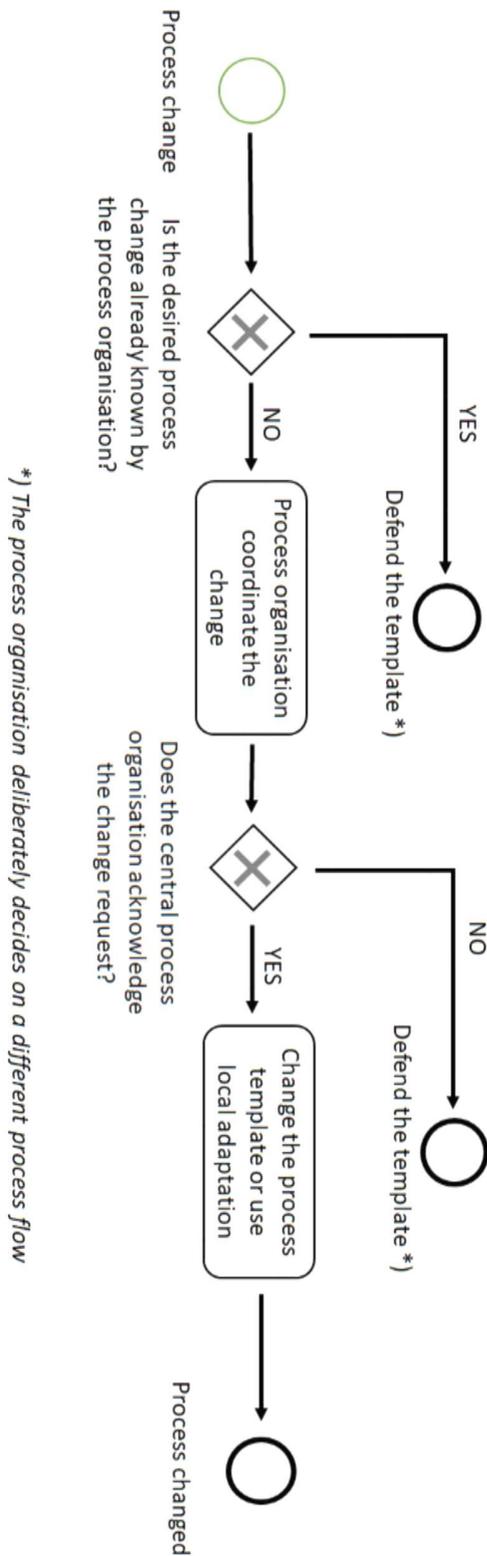


Figure 2. Business process model for process change

The process steps described in Figure 2 demonstrate that a template can be defended in several different locations within a process change. The advantage of this rigorous approach is that an escalation in local adaptations and shadow processes can be avoided.

VI. CONCLUSION AND FUTURE WORK

The results of the literature review and the expert interviews suggest that a suitable compromise must be found between standardisation, (i.e., the usage of templates) and flexibility to adapt to local requirements (by coordinating with the organisation). The practical experience of the experts interviewed in this research demonstrates that the slogan "Defend the template" can also be useful. The recommendations of the literature and the respondents should be followed, and the processes of all units within a business should be considered before a process template is created. Despite this preliminary work, a process template may have to be adapted later, but this adaptation must be coordinated by the process organisation and must not be decided locally by a single business unit. As long as an adaptation is not supported by the process organisation, the slogan "Defend the template" applies, as exemplified in Figure 2.

This investigation has only interviewed a small numbers of experts. It is quite possible that the inclusion of other experts or diversification into different industries, organisations, or SAP modules would have led to different or additional results. Future research should closely examine the argument of this paper and also consider diversification across different areas and industries. In addition, further research with more participants could significantly increase responses and lead to more diverse outcomes and analysis.

Future work could confirm the results of this research paper by conducting an online survey to check whether the illustrated process steps are acceptable to the participants in the business practice. An online questionnaire would, allow the collection of a larger amount of data from more participants in a shorter time and a more flexible manner than personal face to face interviews [15]. Participants should include a variety of people, such as users, process managers, researchers, and consultants for SAP and/or process management.

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