

## BeOne SPA: Integrating Risk Management and Project Planning

### Abstract

Based on its gained project experience BeOne Consulting has transformed its approach in project and risk management into a method. The application of the structured method “BeOne Smart Pointer Approach”, briefly BeOne SPA, guarantees the reliable detection of project risks, the integration of necessary actions into the project schedule and the efficient controlling of resources. Therefore, it has been applied several times in electronics development projects of the Porsche AG, among others. Due to its application in various industry sectors the method has been advanced constantly. The special value of BeOne SPA lies in its effective focus on critical project-specific work results and its accentuated integration of risk management into project management. Thus the method achieves that existing resources are applied exactly where they are required most urgently in the project. The result is a higher efficiency of the resources dedicated to risk management. The term “Smart Pointer Approach” is derived from the method’s pro-active project and risk monitoring, which contains an intelligent selection of critical project results (primary pointers). On this basis, secondary pointers for risk-driven actions are developed.

### Context

Irrespective of the project environment, demands for innovation, growing complexity or cost reduction and shorter developmental periods result in increasingly narrow time frames in which projects have to be accomplished. Consequently, not all events occurring in the course of the project implementation can be planned entirely in advance. In other words, it is known from the beginning of the project that partly significant risks can occur on the way to the finish line. In order not to endanger the project’s success after all, effective risk management becomes more and more important. In many product and software development projects risk management is conducted ad hoc and its acquired results (quantified risks and actions) hardly reach all the people involved in the project. The integration of risk management and project monitoring as applied in BeOne SPA assures the necessary flow of information to project participants.

### Method

The approach described here consists of five steps:

- Analysis of requested project results in order to define primary pointers
- Analysis of primary pointers in order to determine prioritised risks
- Definition of actions
- Scheduling of actions in order to define secondary pointers
- Tracking of risk-related activities



### Defining primary pointers

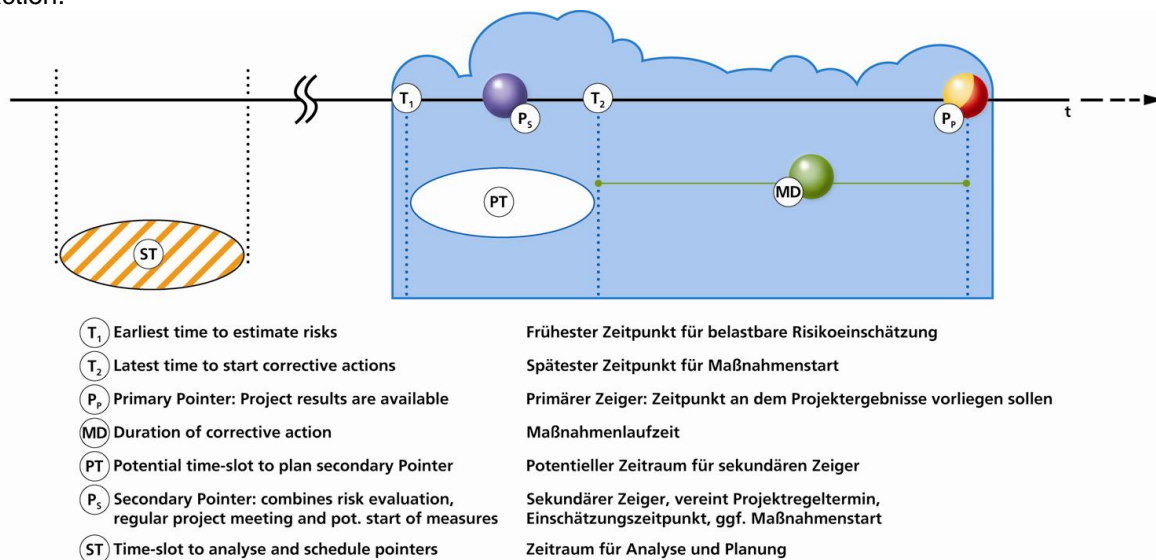
A prerequisite for the first step of BeOne SPA is a documented agreement on what is to be achieved in the project and which means and resources are provided to do so. On the basis of the requested results and the required time of delivery, primary pointers (a collection of results at a point in time) are determined. They are defined by the project manager with regard to their criticality. It is vital to keep in mind that the possible number of primary pointers is limited by the available capacity for subsequent analyses. As a result, it also becomes transparent which effort is necessary to analyse and eliminate risks.

## Analysis of primary pointers

As a starting point the BeOne SPA-method takes up the requested project results of the primary pointers. In order to deliver these results, (implicit) prerequisites from the project environment have to be given and results as well as procedures have to be developed by the project team. If these elements are lacking, risks are on hand. With the help of a checklist including risks of previous projects, the user is guided to the actual challenges in the project. Especially risks which have their origin in project organisation or in technical details and are closely related to project-specific results are considered in the analyses. The necessary expert knowledge is usually existent in the development projects. After their identification, the risks are prioritised in order to transfer the available capacity ideally on a subset of the risks. This is accomplished, for example, by evaluating the occurrence rating and the severity rating. Both parameters are aggregated into a risk number which determines the prioritisation. The point in time at which such an evaluation can be conducted has a large influence on the resilience of the risk estimation and on the effort of resolved corrective actions.

## Defining actions

In order to reduce selected risks, actions are developed – including the description of the action, the assignment of the responsible project collaborator and the calculation of the effort and duration of the action.



## Scheduling actions, secondary pointers

Two points in time help to schedule a secondary pointer. First, there is the date (T1) marking the earliest time possible to resiliently estimate risks. Then there is a date (T2) derived from the duration of the risk-oriented action. It defines the latest point in time when an assessment has to be made on whether the risk will occur or not. The above-mentioned dates determine a time-slot, in which a secondary pointer can be placed (e.g. during an already scheduled meeting of the project team at that time). If no time-slot opens up (T1 occurs after T2), the action can either be revised (reducing its duration) or the reliability of the risk estimation can be improved (additional trials, earlier tests). With the help of secondary pointers, necessary interface results or prerequisites are collected. At the same time there are courses of action available to influence the outcome of the project. Hence, a noticeable problem is prevented in advance; the effort of stressful “fire-fighting” is significantly reduced. These secondary pointers are selected in a way that reliability and costs are in an optimal balance.

## Tracking of risk-mitigation actions

The secondary pointers are defined, integrated into the existing project schedule and reviewed in the course of project monitoring. Consequently, the integration of risk management (tracking of risks and determined actions) and project monitoring is guaranteed.

## Reviewing primary pointers

In the course of project implementation another prioritisation of risks or a realignment of primary pointers might be required. Consequently, the subsequent steps are revised and, if necessary, updated or complemented. All previously mentioned activities are conducted at an early stage in the project. This ensures their highest effectiveness. Applying the method later in the project is possible; however, the options for activities (potential actions) are limited, as the ideal point in time for some secondary pointers may have passed already.

## **Process framework**

It is a precondition for the application of the BeOne SPA-method that project objectives and milestones have been documented and agreed upon. Project participants are asked to centrally administer and evaluate assessed risks in order to secure the same level of information for all involved in the project. In the course of introducing the method, a temporary increase in work load occurs which is rapidly compensated: the prioritisation of risks is determined (hence, a new discussion is not necessary before new events occur); the points in time when a risk is inspected more closely are defined (an extensive analysis at several points in time is not necessary); the procedure is agreed upon by all people involved (a certain risk or necessary actions are discussed only once) and results are documented.

## **Practical experience from previous application at the Porsche AG**

The Porsche AG has applied BeOne SPA in different electronics development projects. This is a particularly ideal use case of BeOne SPA since an anticipating attitude is essential in the planning of the development of new automobile components. Considering the high complexity and the innovation of the development, project planning is complicated by the dynamic change of requirements.

Technical requirements of product development, process security in production and logistics, but also project organisation each contain risks which only become sufficiently noticeable and assessable when the project progresses. Among others, risks in the following areas are considered:

- Interfaces with other components, electrical as well as mechanical
- Product validation: required depth of test results in the respective development status
- Definition of the mass production process, interfaces between suppliers
- Process design in logistics and production, including the required quality management

In development projects like these, BeOne SPA has proven to be suitable and efficient by recognising project risks, assessing them at the appropriate point in time and confronting them with adequate actions. Since detected risks as well as the determined actions and their schedule are available for all participants, no redundant effort of analysis takes place. Especially the project managers at Porsche, as well as the suppliers, benefit from decreased work-load by the integration of risk monitoring into project monitoring and by increased stability in project decisions. The course of action is transparent which leads to fast acceptance. When the method was introduced in projects at an early stage, risks were analysed and necessary actions for the case of an incident were developed, factors influencing the project across company boundaries became obvious. Thus, the consequences of new risks could be assessed faster and eliminated earlier by adjusted actions.