Active Risk Manager
Quantitative Analysis for Projects

ARM
Embracing Risk Management

SWORD
ACTIVE RISK

Organizations are facing greater challenges than ever before when it comes to delivering their capital and R&D projects against key performance objectives (typically cost, time and technical specification).

With mega projects spanning not only years but decades, involving hundreds of thousands of activities, often occurring in multiple locations, dependent on countless staff, numerous sub-contractors and multiple project plans - it's no surprise to find that Program and Project Managers face huge challenges providing the necessary confidence in the project plan that key stakeholders seek.

All it takes is one major "surprise" and the underlying confidence of the customer, the profitability of the project, and in some cases the entire feasibility of the program can become compromised. In some cases this has significant impact on not just the organization executing the project, but their customer and unfortunately in many of the industries Sword Active Risk operates in, significant impact on human life and the environment we live in.

Increasingly therefore, project based organizations are turning to Risk Management to help identify and manage uncertainty in the project plan.

And let's be frank here, uncertainty exists in all projects. As we have seen recently, even small projects can topple hard won market reputation and company value - even risking criminal prosecution of lead executives.

Therefore, leading project organizations apply this process from initial bid, to execution, to maintenance and decommission phases of the program to help ensure uncertainty is addressed and communicated at all levels and stages of the project.

Advances in best practice guidelines from the likes of the PMI and APM, coupled with the increase in complexity of the projects being delivered and interest by regulators and industry watchdogs, have led Project Risk Managers to purchase a variety of specialist tools for their kit bag to help forecast project costs, simulate schedule delays and manage project risk. Yet these stand-alone solutions, although well designed for the individual user, fail to provide a central repository for project information. Therefore, they are unable to provide decision makers with the essential information as to what could happen to their project objectives, and what options they have for investing in plans for dealing with unacceptable levels of business impact.

If risk management is about understanding objectives and uncertainty, then the analysis of risk needs to be a collaborative process - not an isolated one. While you have silo'd information in your project information systems, you have an ungoverned process.

We often hear companies saying that they are doing risk management on their projects, when in actual terms they are only running uncertainty simulations on their project schedules. This is not risk management as defined by standards and guidelines such as ISO31000, the APM and PMI BoK, and on its own will not deliver the benefits risk management has to offer.

ARM's new and enhanced Quantitative Analysis module is designed to provide customers with a **single application for Cost, Schedule & Technical Risk Analysis, governed and integrated fully into the wider Project Risk Management process.**

ARM Schedule and Cost Analysis Features

In order to achieve the ambition of a single Program wide Risk Management solution, including Cost and Schedule Analysis, we obviously need to offer our customers cost and schedule risk analysis functionality that they have in their cherished stand-alone risk analysis tools. Sword Active Risk has therefore studied the market and talked to our customers about what they need from a project risk analysis solution. The following features available in ARM 9 have been delivered specifically to enable the transition from stand alone risk analysis tools running on individual laptops, to a single enterprise wide solution for all of your program and project risk management needs - thereby delivering the full benefits of risk management, not just quantitative risk analysis.

ARM's built in Schedule Check facility analyzes your project structure against multiple industry standard checks to produce an exportable snag list that can be shared with your scheduling team in order to prepare your project plan for in depth cost and schedule analysis.

Distribute Risk information from your project register across large project plans easily in one operation using **ARMs Multi Copy facility**, saving time and minimizing errors.

Perform **Advanced Analysis functions** to determine which project activities are most sensitive to delay, leveraging flexible outputs to produce reports that allow you to advise the project team on which sensitive activities they should focus on. Statistical simulation histograms and cumulative S-curves, Sensitivty Tornedo charts, Criticality and Cruciality analysis based on uncertainty, specific risk events and proposed and completed mitigation strategies.

Produce **Risk Adjusted Gantt Charts** to advise senior levels in the Project office where risk and uncertainty is impacting the schedule, and drill in to inspect the mitigating actions that need to happen to keep the schedule on track.

Make your schedule and cost analysis process repeatable **by saving analysis options and result data** in ARMs secure database, allowing greater visibility and ensuring analysis results can be re-visited and shared easily with the appropriate project team members.

Compare different risk management scenarios using **ARMs Cost and Schedule Comparison functionality** comparing how different scenarios can be assessed to increase your organizations ability to execute the project on time and to budget.

Assess risk and opportunities in both the bid and execution of the project against **individual impact drivers for schedule, cost and technical performance** – all with their own breakdown structures thereby allowing customised risk analyses against relevant structures, not just the WBS.

Link mitigating actions back into the schedule for resourcing and tracking percentage of completion - thereby managing mitigating tasks the same as any project activity.

Using **ARMs powerful filtering functionality** coupled with its ability to import custom project fields, filter your project activity structure to easily risk assess and produce monte carlo analysis forecasts for the activities that are important for your project.

Build up a picture of your project forecast results over time with **ARMs unique Schedule and Cost Risk Analysis Trend reporting**. Present a clear picture to your seniors on the changes in the forecast since the last reporting period, to support better decisions on how to move the project back to baseline.

Use **ARM's Dashboard and report builder** to produce your own reports for communicating information and better analysing potential plan variance. For instance, you may want to have internal and customer based reporting that presents different views of the same information.

Leverage and share ARM's qualitative risk information in your quantitative models and use your quantitative analysis to inform the qualitative risk reporting process.

Drive Management Reserves and mitigation strategies from the Risk Analysis process, adding accountability for the management of risk rather than simply the assessment of risk.

All integrated into the de-facto standard software solution for the management or program and project risk

Active Risk Manager.

Active Risk Manager – Project Risk Management Feature Data Sheet

Capability	Project Scheduling Tools	Active Risk Manager	Specialist Risk Analysis Tools
Schedule Integration	N/A	Standard Integrations	Standard Integrations
Import of user defined fields for uncertainty and risk categorisation	✗	✓	✗
Project Integrity Checker	✗	✓	✓
Project Uncertainty Modelling	✗	✓	✓
Discrete risk and opportunity events	✗	✓	✓
Schedule and Cost Quantitative Analysis	✗	✓	✓
Technical Impact Analysis	✗	✓	✗
Separate OBS, WBS, CBS and RBS breakdown structures	✗	✓	✗
Sensitivity, Criticality and Cruciality analyses	✗	✓	✓
Risk Adjusted Gantt Charts	✗	✓	✗
Configurable risk management process to support customer and internal reporting	✗	✓	✗
Risk clusters, Parent/Child and Risk Connectivity™	✗	✓	✗
User defined Dash boarding and reporting	✗	✓	✗
Maintain Data History and Simulation Trending	✗	✓	✗
Cross Project (Portfolio) Risk Analysis	✗	✓	✗
Project Risk Management as defined by ISO31000, PRAM guide, APM and PMI BoK.	✗	✓	✗
Integrated Internal Control, Losses and Audit Management	✗	✓	✗
Pro-active roadmap for evolving project risk analysis	✗	✓	✗
Integrated security model to protect project and cross project data and audit trail to prove governance	✗	✓	✗
Robust scaleable browser based user interface hosted or in-house with full API integration.	✗	✓	✗

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