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Analyse. Evaluate. Decide.

Identify opportunities and risks in an application architecture with a Software Architecture Evaluation

Architecture evaluation

Carry out a Software Architecture Evaluation (SAE) to safeguard planned or actual investments in your software or enterprise architecture. Determine the degree of coverage of your business goals.

In an ideal world, software system requirements driven by the business goals will be neatly captured and documented and held for maintenance and support of the system. On this basis, operation, further development and maintenance can be planned to the satisfaction of the end-customer or service recipient and even economically implemented with higher-quality service structures. The continuity of this logical progression from business goals to an appropriate enterprise and software architecture can be tested with the SAE. In the event of differences, risks can be assessed and measures systematically identified to modify the software to meet the business goals.

## Use cases

You are about to plan and implement

- a due diligence project,
- an insourcing project,
- the introduction of new business-critical software,
- a paradigm shift in your application landscape or your company organisation (e.g. establishment and expansion of an SOA),
- the strategic repositioning/revision of your application portfolio

or you are confronted with

- excessive maintenance costs,
- redundant, incompatible or obsolete services,
- dissatisfied users,
- inadequate performance

The process

The Software Architecture Evaluation is based on an established process for assessing software architectures, the Architecture Tradeoff Analysis Method (ATAM®) from the Software Engineering Institute (SEI). This links technical and functional aspects of a software system and analyses them systematically and constructively.
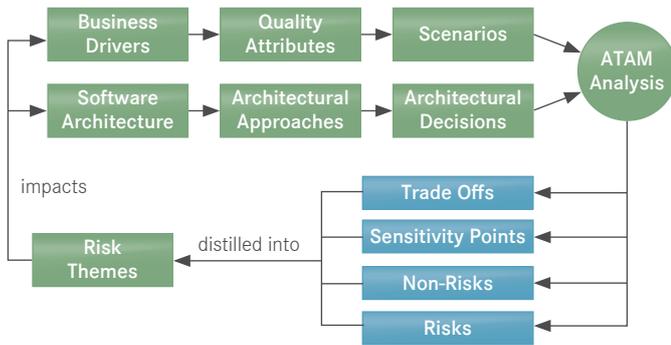
The SAE provides you with both technically sound and deep insights into the software or the service structure itself and also with an overall functional and commercial framework for your objectives. In this, the SAE takes account of both current and expected future requirements.

The SAE is used to identify and prioritise risks and then to define appropriate concrete actions.

The benefits to you

Applying the SAE brings you the following strategically important results:

- **Assessment of the software architecture against business goals**
  All software systems within an organisation ultimately serve the business goals which arise out of strategic considerations and market analyses. With the aid of the SAE the software or enterprise architecture can be permanently and systematically assessed for compliance with these business goals.

- **Holistic view involving all stakeholders**
  Gather a wide range of technical and organisational requirements for the software or services. You can then take full advantage of the experience and knowledge of your technical architecture and your organisation gathered from marketing, development and quality assurance, right through to the end-user.

- **Systematic capture of application scenarios**
  Systematically gather and analyse the scenarios that are relevant to your system and assess the robustness of the software architecture. Capture current and future requirements for the software and measure the limits of your software with comprehensive analyses.

- **Risk analysis with weighting and assessment**
  Risks can be systematically identified and weighted using the documented architecture approaches and application scenarios.

- **Deriving strategies and actions**
  Based on the identified risks, actions can be derived for the future maintenance and further development of the software landscape.

- **Due diligence**
  In connection with due diligence analyses, the SAE together with a preceding Code Quality Assessment gives you a precise insight into the possibilities and limits of a software system or enterprise architecture. The information gained from the Code Quality Assessment of the software concerning the internal technical quality and the internal software/system architecture is incorporated into the SAE as a technical aspect of the overall analysis of the architecture.

Proven foundations

- ATAM® (Architecture Trade Off Analysis Method) from the CMM/CMMI developer SEI

- Quality models based on ISO 25010

- The technical expertise and proven methods used by our analysts enable projects to be completed even under demanding conditions.

- Helpful compilation of analysis results for decision-makers

- Preparation and support for the operational implementation of agreed actions

Contact

For further information, or if you have any other questions, please do not hesitate to send us an e-mail: info@sqs.com

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