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Software Quality Management Bundle

A comprehensive package to give you a head start in advanced software product quality engineering.

The traditional view on software development is that there is always a tension between time, money and quality. "You can't have all three", is a widespread software engineering truism, also known as the famous 'devil's triangle'. From a business point of view this subsidiary role of software product quality is unjustified, since it can be argued that it is not the quality that is expensive, but rather the lack of it.

*To give you a jump start in advanced software quality management, a special bundle is now offered comprising the **Improvement T Software Quality Workshop™**, a demonstration of selected software metrics and programming rules, a hands-on inspection of your own source code with IBM's quality assurance tool **Rational Logiscope™** and a one-year licence of **Rational Logiscope Audit + Rule Checker™** for a reduced price.*

The common conviction is that a need to cut costs will inevitably result in a lower quality, or that strict ensurance of quality will jeopardize the release planning. It rarely happens that quality is deployed explicitly as a means to bring a project back on track. Project scheduling focus mostly on time/cost tradeoffs, but don't model quality explicitly.

Software quality can be an excellent vehicle for the alignment of software development with the business goals. However, selection of relevant quality attributes, the utilization of the appropriate suite of quality metrics and the roll-out of a quality improvement program is a challenge for most organizations.

The impact of software quality on business competitiveness

It is a challenge to produce software products with the appropriate level of quality, under the time and resources constraints established in projects. Lacking software product quality is responsible for a considerable increase in the total cost of many software-intensive systems.

The overall lack of attention to software quality has led to many problematic systems as well as to many software projects that are late, over budget or cancelled. Latent defects and difficulty in maintaining or extending complex source code have a dramatic impact on business competitiveness.

The dominant focus on functionality, only too often at the cost of quality, cannot be justified from a pure business point of view. Therefore, other factors must be taken into account.

The unfortunate sacrifice on quality in software development projects

First of all, functionality is often more tangible than quality, while it is more difficult to substantiate the surplus value of software product quality. The pressure on development teams to make it to the next release will also put the focus on functionality.

When the deadline for a software release looms ahead, quality is among the first 'victims' in the endeavour to meet the milestone on time. Especially in a multi-disciplinary environment, the need to synchronize the involved disciplines can overrule the software quality requirements in order to maintain the pace.

The return on investment in software product quality

Software quality must always have a crystal-clear relationship with business goals and end-user expectations. Not only the overall level of quality must be appropriate to the product, also the prioritization of quality requirements is a prerequisite for a profitable quality-driven software development project.

It is of overriding importance to make an upfront selection of the most relevant quality requirements, agreed upon by developers, customers and end-users.

Moreover, to prove its worth, software quality must be defined in an explicit and tangible way. When a quality aspect of a software product is not concrete and measurable, it is meaningless as a driver for the software architecture, useless as criterion for the completion of tasks, and powerless as part of formal acceptance tests.



The measurement of software product quality

IBM's quality assurance tool Rational Logiscope™ measures quality aspects of source code that can be correlated with quality attributes defined by the ISO 9126 quality model. Using sophisticated software metrics, Rational Logiscope™ is able to underline the relationship between certain characteristics of the source code and properties of the product. This is useful in predicting whether the final system will possess the required level of quality, as well as to solve many common problems such as late delivery, increasing number of problem reports, legacy issues, instability, persistent problems with performance or connectivity, etc. It will also help to rectify error-prone practices in the development team.

Quality-driven software development

A challenge for source code analysis tools such as Rational Logiscope™ is that they must be effectively geared to the problems at hand. The selection of the most relevant quality attributes is often a stumbling block.

Since resources are scarce in most projects, the availability of an expert in both the tool and the domain is in most cases a decisive factor for a successful introduction of structural measurement of code quality. ImprovementT combines many years of professional expertises in quality-driven software development with in-depth experience with IBM's tool Rational Logiscope™. This combined expertise is now accessible to give your organization or development team a head start in advanced quality management.



ImprovementT and IBM have put together a bundle with the following components:

- Software Quality Workshop™;
- Synopsis® of the ISO9126 Software Quality Model;
- Set-up and demonstration of Logiscope™ in your own environment;
- Quick scan of your source code (C++ or Java) with Rational Logiscope™;
- One-year licence of Rational Logiscope™ Audit + Rule Checker.

The above package is currently offered for the introduction price of € 3495,- ex. VAT.

Are you interested?

Please contact ImprovementT for more information, or make an appointment for an introductory and exploratory conversation.

At your service,
Erik Philipus

IMPROVEMENT BV
Agile Architecting