Better requirements pave the path to better results

The way an organization defines and delivers software requirements is imperative to the success of an IT project and in turn the success of the business. Even though organizations have invested heavily in project management, development, and quality assurance; many projects still fail and these failures can often be traced back to poorly defined requirements.

Defining and managing good requirements is a difficult task. Requirements emerge from an idea or as a business initiative, evolve through the definition phase, and often change through the delivery phase. To add to this challenge, there are many different people and groups involved through the requirements lifecycle. These groups are dispersed across different teams, business units, and geographies, and they need to collaborate and communicate clearly.

The rapid adoption of Agile across organizations, means having good requirements is even more important.

To ensure excellent business outcomes, organizations need to address these challenges and recognize the need for better requirements. The right requirements management solution is needed to facilitate the management of the requirements lifecycle. The solution must:

• Be easy to use
• Facilitate a single "point of truth" for both visual and textual requirements
• Support collaboration between stakeholders to ensure the right thing is being captured
• Provide traceability between requirements and other development assets (test, defects, code, and the like)
• Enforce standardization to ensure consistency and quality between requirements

From collaboration comes confident decisions

HP Requirements Management introduces a new lightweight Web client that is robust and easy to use. This modern UI complements the standard UI and has been constructed to allow access to HP Requirements Management without the need to download any add-ins or plug-ins, or need administration rights on users computers. This new solution works across all major browser platforms. With a clean, easy-to-navigate, UI and single-sign-on capabilities, this addition to the Requirements Management solution allows customers greater flexibility in deploying requirements management across their enterprise.

The new HP Application Lifecycle Management (ALM) Web Client introduces features not available in the HP Application Lifecycle Management (ALM) Desktop Client, such as: Author Mode. A document-centric viewing mode that enables you to see a list of requirements in a single document view and allows for quick editing of descriptions. This helps you to better understand the big picture. It also introduces category views. A dynamic hierarchical structure based on virtual folders allows for flexibility in manipulating the requirements view. Views can be updated on the fly by selecting new category fields. This flexibility lets you determine the way in which requirements are organized.
HP Requirements Management helps organizations define, manage, and control software requirements to meet the business needs. This solution is designed for use by business analysts (BAs), quality assurance (QA) and development teams across the entire application lifecycle. Through accurate requirements and risk-based test management, development and testing teams are given clear visibility and can focus their efforts on high-priority business needs and also that the decisions to proceed are based on quantifiable business risk.

HP Requirements Management is a core module of the HP Application Lifecycle Management and HP Quality Center solutions. It allows distributed teams to author, collaborate, and share requirements while they manage multi-dimensional traceability among requirements, tests, and defects across releases and cycles—all within a single, centralized repository. Real-time visibility of requirements coverage and associated defects build confidence in go/no-go decisions.

**Key features and benefits**

**Capture different types of requirements**

One of the most critical roles in the requirements management process is that of the BA. BAs act as a liaison among project stakeholders to gather, analyze, communicate, and validate requirements related to new IT projects or changes to existing applications, processes, or policies.

HP Requirements Management provides BAs and other key stakeholders with multiple preconfigured requirement types—from technical specifications to use cases. It also supports customizable requirements types to capture all levels of requirements and store them in the centralized repository, along with supporting attachments. Requirements can be shared across projects and also integrated into HP Agile Manager solution as user stories.

**Standardize and control requirements capturing in a familiar environment**

Maintaining consistency and quality of requirements is critical to avoiding inconsistencies, missed requirements, and high amounts of rework. HP Requirements Management gives you the capability to standardize and control your requirements by enforcing customized templates and workflows to facilitate the capturing of a requirement in a consistent structure across your entire organization.

If you prefer the familiar interface of Microsoft® Word, HP Requirements Management offers a rich text content editor with a similar look and feel for data input as Microsoft Word, allowing for rapid and easy adoption across your teams. Alternatively, you can import requirements from existing Microsoft Word or Microsoft Excel files.

**Figure 1. Requirements management**

Link requirements directly to business process models improving requirements communication
Graphically represent and map requirements to critical business process flows

HP Requirements Management allows for business process models to be imported and displayed, visually representing, and communicating defined business process flows. A requirements hierarchy is automatically generated and directly linked to objects within the business process models, allowing for detailed drill down and avoiding the risk of requirements duplication or oversight. Development and QA teams can use the visual representation of end-to-end scenarios within the models as key guidance to developing and testing the right thing. Business process models are becoming a key element in the elicitation and communication of requirements. HP Requirements Management delivers this capability as part of your application lifecycle management and quality management solution.

Manage requirements with native version control and base lining

By storing the requirements in a centralized location and leveraging the native versioning capabilities in HP Requirements Management, BAs, developers, and QA can collaborate and share data without overriding each other’s work, thus maintaining data integrity. Baselines can also be captured, including full traceability linkages, which help in making more informed decisions about when projects are ready to be moved to the next stage of the lifecycle.

Establish requirements traceability

HP Requirements Management gives users the ability to specify and link requirements, making it easy to establish and identify relationships between requirements. You can also tie requirements to test cases and code, thus establishing a traceable link to the corresponding requirement definition. Test cases can be auto-generated from a requirement, which reduces the time needed to build a test and enables superior coverage. The traceability capabilities also allow for a test’s pass/fail status and defects to be automatically linked back to the corresponding requirement, giving you an accurate, real-time analysis of the application readiness.

The requirements traceability matrix (n x n) and reporting is available to help identify broken links between requirements and help identify dependencies between requirements and cut down on the definition of wasted requirements.

Manage the impact of change

Requirements often change during the definition phase and sometimes even during the delivery phase. A change in a requirement can have a significant impact on other requirements and in turn, code and tests. The change management process within HP Requirements Management identifies and notifies the relevant personnel when a requirement is changed, so they can review and/or approve the change. An impact analysis report can also be viewed to help identify other requirements and tests affected by the change, providing broader visibility.

Align testing priorities based on a requirement’s priority and risk

No QA organization can test every requirement as there just is never enough time. HP Requirements Management includes risk-based quality management so that you can improve your testing effort based on an objective risk assessment of each requirement. This allows you to make informed decisions to align your test strategies with the most important requirements and those that pose the greatest risk to business success.

Figure 2. Requirements coverage
Gain accurate, real-time analysis of requirements coverage and readiness
Reuse and share application requirements
With HP Requirements Management, you can store requirements in a shared library, allowing multiple business units to contribute and reuse requirements assets. Requirements can be reused "as is" or modified by creating a new version for each project. This flexibility reduces duplication, and supports compliance requirements by mandating that specific requirements be used to enable regulatory or process compliance.

Manage requirements for Agile development
HP Requirements Management solves the challenges faced when managing requirements in an Agile world. With less time for BAs to prepare requirements, HP Requirements Management supports BAs in delivering requirements in the form of user stories, epics, or themes with "just enough" detail to enable development and QA to consume them for each sprint. Tasks for each user story are managed as part of the sprint backlog, allowing the user stories to evolve from elicitation through elaboration and management as more details emerge, or business needs and priorities change. User stories can be prioritized using the risk-based quality management capabilities, and linked to tasks, tests, and defects for full traceability. HP Requirements Management enables change impact analysis using version control, base lining, and asset traceability to support requirements changes that are inherent in the Agile methodology.

Supports your requirements management ecosystem
Through the use of the open application programming interface (API) or the HP Application Lifecycle Management Synchronizer tool, you can import your existing requirements data that may reside within third-party tools, reducing the need for rework and in turn accelerating the implementation and adoption of HP Requirements Management. Many of these integrations and extensions have already been created and are available for you through HP and the extensive HP partner network. The open API also allows you to build your own customer functionality extensions.

Get the support you need
HP provides high-quality software services that address all aspects of your software ALM needs. With HP, you have access to standards-based, modular, multi-platform software coupled with global consulting, education, software as a service (SaaS), and support services. The wide range of HP professional service offerings helps you achieve business outcomes with the right combination of people, process, and technology. These include ALM consulting and center of excellence services, HP software implementation and education services.

Our HP (SaaS) can help speed your time to value and significantly lower your up-front costs based on our ten years of experience assisting hundreds of customers with SaaS. Our support services range from online self-solve support to proactive mission-critical services—enables you to choose the services that best match your business needs.

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