



Promoting IT Efficiency

QAIassist Integrated Methodology

General Overview

Context

The QAIassist Integrated Methodology® is an industry recognized scalable process-based methodology used to increase an organizations operational performance and efficiency – it consists of the three primary (project management, software development, software testing) information technology (IT) methodologies. All three of the methodologies are separate unique “processes” – they can be applied across an organization independently or together as an integrated solution.

The Project Management Methodology provides organizational stakeholders and project teams a lifecycle to effectively initiate, plan, oversee and complete products and projects. The Software Development Methodology offers IT development and maintenance teams a lifecycle to define requirements, design applications and develop the necessary functionality. The Software Testing Methodology provides IT development and maintenance teams a lifecycle that ensures the necessary functionality has been developed and adheres to the authorized business requirements.

All three (Project Management, Software Development, Software Testing) of the QAIassist Integrated Methodology are applicable in a multitude of development and maintenance environments and can be leveraged using all industry recognized (waterfall, agile, spiral, extreme, rapid application development) delivery approaches.

Benefits

The QAIassist Integrated Methodology is a repeatable process – when institutionalized, it can increase the operational efficiency and productivity of organizations and project teams by up to 20 percent by

- improving communications between stakeholders and project teams (users and IT staff)
- providing a common repeatable approach (process) that can be used and reused by all project teams
- delivering projects on time and within budget
- creating and administrating authorized business (user) requirements - designing and building solutions and functionality according to those authorized business requirements
- multi level testing to ensure the functionality being delivered meets the business need
- establishing a corporate process that is used as a benchmark for performing formal process reviews and audits
- establishing a corporate process from which operational metrics can be obtained and used for ongoing operational improvement

Improving Communications (Stakeholder, Business Users, IT Project Teams)

The QIassist Integrated Methodology acts as the glue that keeps the project stakeholders and the project team working from the same page. This includes project stakeholders, business users and IT project teams. Project Stakeholders are able to define and monitor the status of authorized projects with regard to progress, risks and issues. Project Managers are able to dedicate project resources to specific responsibilities and the creation of specific deliverables and artifacts as part of the project plan. Project team members have a clear understanding of their roles and responsibilities and a clear understanding of the procedures used to administer the project.

Repeatable Organizational Process

The QIassist Integrated Methodology can be applied as an organizational process. As a process, organizations are able to define, utilize and repeat a common approach used to develop and support their products and business applications. By utilizing the QIassist Integrated Methodology as a process, organizations are able to introduce corporate quality assurance (quality products and applications are produced when the process is followed) and ongoing organizational improvement (analyzing the metrics and measurements of how the process is being used).

Delivering Applications on Time & Budget

Being repeatable, the QIassist Integrated Methodology affords organizations reliability in how products and business applications are developed and supported. Project team members (stakeholders, business users and IT) are able to understand their roles and responsibilities, project plans are defined and approved, and the necessary deliverables and artifacts needed to complete the project are identified, the project is executed and monitored through completion. Applying the QIassist Integrated Methodology establishes a degree of structure that project teams leverage (and re-use) to consistently deliver their projects on time and on budget – the more often it is used the more proficient the project team becomes at applying it – the more proficient they become the greater the savings in time and budget.

Solutions Reflect Authorized Business Requirements

The phased structure of the QIassist Integrated Methodology ensures user requirements are the cornerstone for developing products, solutions and applications. Specific deliverables are used to ensure the user requirements are defined, administered and effectively communicated to the IT project team developing or maintaining the application. The user requirements are also used as the criteria for testing the functionality of the application.

Organizational Governance and Operational Improvement

The QIassist Integrated Methodology provides Senior Management a process they can rely on to establish predictability (schedule, costs, quality). As a repeatable process, it can be used as the basis for performing formal process reviews and audits (to determine how project teams are applying the process) and can also act as the basis for introducing operational metrics that can be used for ongoing organizational process improvement. This affords Senior Management some flexibility to budget and prioritize what applications are to be completed, when they can be completed and what resources will be available to deliver these products and applications. This also provides Senior Management an ability to re-adjust the priorities of corporate resources to reflect the business priorities.

Cross Functional Training

The QIassist Integrated Methodology provides organizations a basis for developing cross-functional expertise in both the business and IT sides of the house. As a resource becomes more learned on how the methodology is applied, they can leverage that expertise to become effective in other areas of the business (i.e. an apprentice carpenter that has learned to use a hammer to build a dog house can rely and re-use that same knowledge and skill when building a deck or a house). This offers flexibility in how resources are to be applied and offers staff an avenue to gain additional expertise and knowledge in other areas of the business.

Viability Considerations

Though implementing a corporate methodology (process) may appear to be a simple exercise, there is a significant amount of effort that must be applied before the organization will realize a twenty percent increase in the efficiency and delivery capacity of its project teams. Factors to determine the viability of the QAssist Integrated Methodology include

Existing Corporate Culture and Hierarchy

Every organization has its own unique corporate hierarchy and culture. Based on the nature (i.e. speed to market, quality, legislatives, etc) of the business, every organization has had to evolve to optimize its structure and operational capability. In some cases this translates into flat organizations whose operations are to get the product out as soon as possible, in other cases this translates into formally structured organizations with rigid protocols that ensure products meet legislative requirements. Prior to implementing the QAssist Integrated Methodology the organization must have a good understanding of its existing culture, operations and strategic direction. This will provide the organization the information they require to effectively leverage the QAssist Integrated Methodology – the more familiar the organization is with its existing culture and operations the greater the benefits the organization will derive upon implementing the methodology. Corporate cultures vary in the acceptance/tolerance/rejection of organizational change – in some organizations “change” is easy and promoted, in some organizations “change” is more difficult but worthwhile once implemented, in some organizations “change” is a non-starter.

Identifying Existing Efficiency Opportunities & Priorities

Every organization develops and delivers its products and services differently from every other organization. One organization may be more effective applying project management across its organization, another organization may be more effective at software development and another organization may be more effective at software testing. As organizations obtain more familiarity with the QAssist Integrated Methodology they recognize the benefits that can be derived and the specific areas where greater efficiency can be obtained. The QAssist Integrated Methodology provides organizations a diversified process they can rely upon to increase their efficiency and operational performance – the organization should understand its existing strengths and weaknesses to be able to strategize where and how the QAssist Integrated Methodology can best contribute to its operational performance and bottom line.

Assessing and Prioritizing Methodology ROI Alternatives

Implementation of an organizational methodology is a strategic corporate undertaking. Organizations must assess the tradeoffs (benefits versus cost) they are to derive from the implementation of the QAssist Integrated Methodology from three perspectives. First, the immediate costs associated with obtaining, customizing and implementing the QAssist Integrated Methodology. Second, determining the ongoing resources it will take to apply a corporate governance function of the QAssist Integrated Methodology. Third, assessing the short and long term benefits (tangible and intangible) once the QAssist Integrated Methodology has been implemented successfully.

Implementation Considerations

The QAIassist Integrated Methodology is comprised of the three (project management, software development, software testing) primary information technology (IT) methodologies – it can be implemented in whole or in part. The following protocol is used to help organizations maximize the benefits they can derive from using the methodology

Generic Evaluation

An exercise is conducted to identify existing operational practices to determine the strengths, weaknesses and opportunities for improvement. This exercise identifies the demands on the resources and how they align with organizational priorities and opportunities. This exercise results in an organization knowing whether it can benefit from implementing the QAIassist Integrated Methodology, where it will benefit, and how it will benefit. Once this exercise is completed the organization will have a basis for planning their QAIassist Integrated Methodology implementation.

Customization & Scaling

The methodology must be customized to meet the specific and unique needs of the organization. An organization must ensure the methodology aligns with organizational priorities – the purpose of the methodology is to provide corporate resources a tool they can leverage to deliver greater efficiency. As part of this exercise, the methodology must be pared/scaled to ensure resources are not encumbered when applying it. This exercise provides the basis for defining a corporate plan that will be used to implement the methodology.

Customize Training Curriculum & Training Material

The organization will need to create a training curriculum and deliver the appropriate courseware to ensure resources understand the new methodology, their role in implementing and applying it and how the organization intends to leverage it. Upon the completion of the organizational training, resources will have the necessary information to begin applying the methodology.

Establish Corporate Governance

In conjunction with customizing/scaling the QAIassist Integrated Methodology to meet the efficiency goals and developing the training curriculum and courseware the organization must introduce an operational function to monitor how the QAIassist Integrated Methodology is being applied. This function will be used to assess and report the status associated with implementing the methodology as well as the ongoing monitoring of how the methodology is being applied once the initial implementation is complete. This independent function will report to corporate stakeholders on how the organizational resources are applying the methodology. This function will contribute to corporate quality assurance (premise – when the methodology is used it will deliver better products and applications).

Ongoing Methodology Evaluation (fine tuning)

The organization should remain nimble and vigilant in its ability to deliver quality products and applications on time and within budget. This can be accomplished by analyzing how the methodology is being applied, how it can be improved upon, and how it can be optimized to meet the specific needs and requirements. This is accomplished through acquiring, disseminating and distributing metric and measurement information on who is using the methodology, how the methodology is being applied and the benefits being derived.

QAIassist is the industry recognized benchmark in information technology (IT) methodologies for small and mid-sized business (SMB's) – including the certification and support of practitioners delivering QAIassist IT Methodology solutions. Visit [QAIassist's website—www.qaiassist.com](http://www.qaiassist.com)