Beyond QA: Business Process Assurance for the Digital Age

By focusing on business results, quality assurance teams can transcend the traditional “widget” mindset and set their sights on delivering applications and services that meet the demands of digital business.
Executive Summary

As digital platforms and applications take center stage, IT organizations and infrastructures have become critical aspects of business success. Assuring the availability, performance and usability of a company’s digital assets – infrastructure, operations and customer-facing applications alike – is now a strategic concern for C-level executives across industries. Consequently, quality assurance (QA) has become more about ensuring positive business outcomes and improving stakeholder satisfaction, and less about testing the individual components of IT underpinnings.

This shift is largely due to the failure of traditional QA approaches to take into account the business processes and goals associated with digital transformation. Thus, many digital initiatives have been “too little, too late” – failing to reach the market on time and on budget, with IT teams scrambling to meet the business's operational needs. To avoid this scenario and ensure that new solutions and services meet the quality standards driven by digital, enterprises must turn their attention to cultivating and implementing business process assurance (BPA).

This white paper describes how BPA can help ensure that organizations achieve their crucial business objectives, comply with regulatory requirements and remain competitive by aligning the technical and operational components of digital transformation. It also discusses how business process assurance guides everything from delivery sequencing to validation of new applications and services that support the new and still evolving digital business processes.
Quality Assurance vs. Business Process Assurance

Enterprises continue to undertake digital initiatives in order to provide more customer-centric products and services and improve the overall customer experience. Alongside these efforts, they must deal with increasingly stringent regulatory and compliance demands, align and modernize their systems to accommodate mergers and acquisitions, and get to market faster without compromising quality.

Yet traditional approaches for overcoming these challenges are not delivering the expected outcomes, primarily because they are based on requirements typically handled by the IT organization – leaving those teams to develop new digital applications, and/or integrate, configure and customize off the shelf applications and services in isolation. This can result in costly, frustrating adjustments and fixes late in the development and deployment cycles as organizations attempt to fill the gaps between IT, operational and business needs, and fulfill increasingly high customer expectations.

To understand the need for and impact of business process assurance (BPA), consider how it compares to traditional QA approaches:

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<thead>
<tr>
<th>Traditional Quality Assurance</th>
<th>Business Process Assurance</th>
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<tr>
<td>• Test to ensure systems execute only defined features and meet functional requirements.</td>
<td>• Assure that applications and services meet the demands of the business, customers and key stakeholders by validating individual IT features and functions, end-to-end solutions and business interoperability.</td>
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<td>• Reduce the cost of testing individual IT components through automation, efficient use of staff and new QA approaches.</td>
<td>• Align technology and operational delivery activities to deliver business capabilities comprehensively and quickly, based on business need and value.</td>
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<td>• Accelerate time to market for new products and services through faster development and testing – focusing on delivering IT components.</td>
<td>• Develop “built-in” compliance by mapping regulatory rules to required processes from the start. This helps assure compliance while reducing cost and risk.</td>
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<td>• Give stakeholders visibility into program activities to identify and mitigate quality issues that could put the business and the brand at risk.</td>
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Why IT Projects Fail

A wealth of third-party research confirms the importance of business process assurance, and why the coordination of testing, validation and delivery of business and IT components is so essential. McKinsey and Oxford University report that among IT projects valued at more than $15 million, 45% are over budget, 7% are delivered late and a whopping 56% fall short of the defined benefits. Among the key reasons cited are inadequate business process enablement, technical complexity, a shortage of skills and poor planning.

The most common causes of budget overruns are unclear objectives and a lack of focus on business outcomes (see Figure 1). While technologies may meet delivery requirements, the capabilities delivered do not consistently align closely enough with operational and business process needs. Companies can avoid these issues and safeguard their brand by concentrating on the business side of quality from the very beginning.

Why Most IT Projects Fail

Rough distribution by cause of the 45% of IT projects that experience cost overruns (for those with budgets >$15 million in 2010 dollars).

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Focus</td>
<td>13%</td>
</tr>
<tr>
<td>Execution</td>
<td>11%</td>
</tr>
<tr>
<td>Content</td>
<td>9%</td>
</tr>
<tr>
<td>Skills</td>
<td>6%</td>
</tr>
<tr>
<td>Unexplained</td>
<td>6%</td>
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Figure 1
Building a BPA Plan

Achieving and sustaining true business process assurance requires a five-step approach for validating and implementing digital processes (see Figure 2).

- **Develop a program strategy that reflects the far-reaching technological and operational impacts of digital transformation.** Begin by clearly communicating and aligning business goals, and identifying obstacles that could impede these objectives. Next, work with the appropriate stakeholders to identify the processes that will be affected by the transformation, understand their priorities, and uncover risks/exposures that could hamper success. (This can be done through a risk analysis).

It is also essential to determine the appropriate sequencing of processes during implementation. For example, if the highest business priority is to increase customer satisfaction through self-serve account management, then all of the activities associated with that process should be prioritized and sequenced accordingly.

Finally, develop a strategy for the tools to be used across the program to help assure a friction-free implementation, with automated, reusable components that make the best use of budgets, time and resources.

Defining Business Process Assurance

To achieve true digital transformation, organizations must consider each step in the context of implementing end-to-end business processes rather than IT “widgets.” Systems need to be ready to deploy and run without last-minute scrambles or ongoing, painful and expensive workarounds.
**Perform business process modeling (BPM)** to confirm the processes that will serve as a key reference throughout the delivery lifecycle. Industry-standard models, such as those produced by the Banking Industry Architecture Network (BIAN) and the National Retail Federation (NRF), should be used when available to jumpstart BPM efforts. We believe it is essential to utilize a toolset that supports ongoing maintenance and enhancement of these BPM models, as well as integrates with downstream technologies such as requirements and automated test design/management tools. This helps assure that new processes accommodate all key business scenarios.

Next, companies should use their BPM models as input for their software-development methodologies to create user stories and use cases, specify requirements, confirm functional needs and track business process components during critical stages. They should also establish a traceability method for requirements, design, development and assurance components that incorporates business risk analysis and delivery sequencing. Finally, develop high-level business scenarios to validate outcomes and mitigate risk.

**Align technology and operational requirements** to assure that the right components, such as operations, procedures and training, are in place, and focused on supporting business processes. Companies can start by making sure their operations and applications are in sync, identifying related roles and responsibilities while paying close attention to regulatory mandates. Activities that have no technology component but are critical to overall performance can be added. Again, a model-based approach should be used to develop business and technology processes and allow for rapid adjustments, reuse and analysis.

**Establish a process-aligned approach** that prioritizes business risks, sequences delivery, and aligns IT and operational components to assure an end-to-end business process. Repeat for additional processes until the entire solution is realized.

**Employ outcome-based validation.** This is where companies achieve true business process assurance – moving beyond traditional system compliance to a process-driven framework that validates systems and daily operational activities. At this stage, companies include all essential processes in IT and business testing. This is a good time to perform “what-if” analyses and see how processes will perform and comply in real-world settings. Results can then be measured against critical business directives.

After completing these steps, QA organizations will need to apply analytics to guide ongoing business process improvements, assure that IT and operational components are aligned and validated, and quickly identify and resolve issues stemming from internal and external functions.

Achieving and sustaining true business process assurance requires a five-step approach for validating and implementing digital processes.
The Digital Imperative

In the digital age, bringing new applications and services to market quickly is not enough. Underlying technologies play a fundamental role in supporting innovative, highly personalized products and services in an increasingly digital marketplace.

Yet digital transformation is not about the IT “plumbing” that supports a business, but the customer-facing applications, processes and services that differentiate the enterprise, enhance the customer experience, and distinguish the brand. Companies that view quality assurance in this context will be the ones to prosper in the digital world.

Looking Ahead

To get started on the BPA journey, we suggest that QA organizations develop a comprehensive program strategy and provide the leadership to achieve stated business and digital-transformation objectives. This requires a thorough understanding of project parameters and the factors that drive digital business. A detailed blueprint and framework for designing, testing and cataloging processes can be followed by pilots to assess and estimate the scope and costs of broader initiatives.

Enterprises can benefit from market-specific accelerators that allow customers to customize processes for specific countries, cultures and businesses.

QA organizations typically need an experienced partner to make the transition to BPA. We suggest working with a provider that offers a range of comprehensive skills and documented success in helping enterprises plan, test and implement BPA in the context of digital transformation.
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Footnotes

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