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Outsourced Testing Market Overview

Already common knowledge, bug-free solutions and projects that perfectly follow the development model are more a myth than reality, when associated with daily occurrences. Still, companies aim towards higher and higher standards, towards the perfect, faultless code in this data-centric world of IT services.

Some companies may still be prone to approach solutions testing as an IT issue, however the industry increasingly understands it is actually a critical business issue. The way that testing is perceived by a company, directly enables or disables revenue streams.

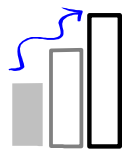
The overall testing cost is small compared with the potential expense of missing a deadline or having a key fail error on a solution rollout. Encompassing even **25 to 50 % of total development** costs, testing is vital in the development process. Lack of commitment towards testing raises high problems, increases the costs of fixing problems after the applications go live up to 30 times higher than early detection and fixing. Lack of quality drives IT managers to re-examine quality assurance and prioritize testing in the overall development process.

Yet more than half of all software projects fail to meet objectives or suffer significant schedule and/or budget slippage because defects are discovered too late-even though up to **40 % of project budgets** is spent on software testing.

The main and most visible advantage of early detections of applications gaps is the cost reduction, but there are many more indirect aspects related to catching bugs early in the process, aspects that impact even the costs related to architectural matters like: designs, coding practices and staff allocation.

Many organizations are still committed to keep the testing capacities in-house. However, faced with fierce competition, relentlessly squeezing margins, these organizations are required to perform IT budget cutbacks, often implemented from the high costs of testing. By limiting the testing capacity, many organizations perform implicit and visible cut-down in the value they deliver to the end-user.

Following best practices, companies must therefore adopt alternative strategies to keep quality within specified terms and implement testing plans, measures and activities at all phases of the development lifecycle, understanding that application quality is only achieved through the combination of skilled professionals, processes and procedures, methodology, tools and services.



Trends in Outsourced Testing Services

The global trend of ascending lack of technical skills and qualified resources has a high impact also on almost each business initiative regarding enterprise resource allocation to kick off the quality efforts.

The main challenge is to determine which business functions should be kept in-house and are best served by in-house resources and which ones are appropriate for external service providers. The challenge increases in high-end areas of specific field and industry knowledge, which for example are required in business analysts role and preferably should be available in-house, but market lack of specialized resources and a high fluctuation rate of the IT personnel imposes long-term contracts to ensure business needs. Other technical functions, like testing are however easily outsourced.

Currently IT organizations have to deliver enhanced quality applications with less time with fewer resources. Often, the first downsize in the IT budget is felt on testing systems, thus making it difficult for many IT organization to execute a complete application testing function internally.

An outsourcing provider delivers centralized and qualified testing methodologies, skilled staff as well as certified standards.

In a recent Compuware - Forrester survey, conducted between senior IT executives in Europe and US, **85%** of IT executives indicated application quality is either critical or very critical to demonstrate solution business value. The sale survey reflects a growing trend in quality assurance, application quality assurance growing a healthy **63%** from 3 years before, indicating as main challenge lack of standardized quality procedures resulting in low formal quality assurance discipline.

The same survey reveals that in order to be effective, testing efforts must coordinate with development, quality assurance and operations functions. Because of its collaborative nature, in outsourcing testing services both company culture and regional cultural compatibility should be well considered.



Testing can prevent up to 80 % of unplanned downtime

In a recent study, Gartner shows that the average cost of unplanned downtime for mission-critical applications is \$100,000 per hour. Mission-critical, highly visible applications must be managed at the highest possible level in mature organizations. The same study estimates that **40% of unplanned application downtime** is caused by application failures ("bugs", performance issues or changes that cause problems); **40% by application errors** (performing an operations task incorrectly or not at all); and only 20% by hardware (server and network), environmental factors (heating, cooling and power failures) and disasters. Thus, **80% of unplanned** downtime can be mitigated by development and operations groups working together to improve IT processes, execute pre-deployment testing and complete operations training.

According to Gartner, software defects found in production cost four times as much to fix as defects found during system testing, and two hundred times as much to fix as defects identified during requirements definition.

Many organizations unfortunately fail to understand or respect the importance of a testing team. Because of this lack of understanding, many testing tools are brought into an organization under the pretext of ease of use. Consequently, many testing tools are severely miss-utilized, giving the enterprise little return on investment (ROI) out of the testing functions.

In a sector study by AMR Research, survey demonstrated a cost of finding and fixing defects accounts for nearly 50% of the cost all software development projects. The same research reveals that offshore software testing saves companies up to 75% over in-house costs, improves quality, and is a lower risk way to develop mature offshore outsourcing skills.