

Testing Services

Meeting the challenge of software quality and maximizing return on investment

Performance driven. Quality assured.



Introduction

Today, insightful IT departments understand that software development and its application is just as important from a business perspective as it is from a technical one - applications provide the foundations for an organization's key offerings and, by extension, for its brand and reputation.

Rigorous software testing has therefore become increasingly important in providing reassurance of reliable quality, performance, and security, particularly for business-critical systems. However, poor execution and a lack of structure mean inadequate software testing can actively increase business risk, potentially causing a loss of revenue and worse, a loss of customer trust.

Capgemini Testing Services provide a comprehensive portfolio of solutions that help you reduce the risk of application or system failure and ensure your organization's systems operate seamlessly and consistently to meet the expectations of both business users and customers.

Our service produces clearly identifiable results, notably the reduction in cost of software development and maintenance by up to 30%; enhanced quality levels (the prevention of high-severity defects by more than 98%), improved time-to-market, and importantly mitigation of technical and business risks.



Testing Challenges

Technology remains a fundamental mechanism for not only delivering operational responsiveness, but also driving revenue growth. Ultimately, robust and standardized Quality Assurance (QA) and Testing procedures throughout the software development lifecycle are invaluable in providing a level of confidence in an enterprise's systems as well as protecting both bottom line and corporate reputation. Achieving flawless performance of applications and systems is therefore essential to organizations, regardless of sector, and should not be underestimated. However, ensuring that the IT infrastructure meets the needs of the organization, while satisfying cost and regulatory measures, results in a number of strategic and operational challenges for senior IT managers.

Mitigating Business and Technical Risk

With 100% test coverage, risk is theoretically reduced to zero, but the cost increases exponentially. However, without testing, application risk increases tremendously. A single application failure at a crucial point is costly to rectify and can impact the wider business. Minimizing these technical risks and meeting external regulatory demands, such as Sarbanes-Oxley, is essential.

Controlling Costs

Financial pressures are a constant, but testing budgets within many organizations are often the first to be squeezed. Alongside the challenges of quantifying the value delivered by testing relative to the resources consumed, testing is often unjustly perceived as costly, fragmented, and poorly measured.

Improving Time-to-Market and Output Quality

The speed of application launch is often the differentiating factor for many organizations' competitive positioning. Release frequency, time-to-market pressures, and technology complexity lead to many projects finishing late or over budget. These issues, together with a shortage of specialized QA skills reported across many different industries, have a negative impact on the quality of the final product.

The recent economic downturn reinforced the critical role that business agility plays in helping an organization achieve competitive advantage.

Maximizing ROI From IT Investment

Many organizations are dissatisfied with the commercial impact of IT program delivery, with some outsourcing contracts failing to deliver on the benefits expected by the business. Evaluating the true return on investment remains a key CIO challenge.

Building a World-Class Testing Organization

This requires a balance of the right skill sets, employee career paths, latest technology innovations, methodologies, and best practices. Getting the right resources in the right locations can be costly, and failure to do so can result in an ineffective QA organization.

Capgemini Testing Services

Business-driven, the service focuses on quality assurance that delivers against the requirements of the organization, and achieves reduced cost of testing, faster time-to-market, increased quality, and mitigated risk.

As one of the world's largest dedicated testing practices, our specialist knowledge and experience make us the testing partner of choice for over 500 of the world's largest enterprises. Independent and objective, we offer a comprehensive portfolio of consultative and execution testing solutions, including:

Strategic Consultancy: Working closely with you to design, develop, and deploy customized testing solutions that address the unique needs of your business and industry, such as QA, audits, and test organization strategy. In addition, we help you leverage cutting-edge thinking to further streamline your application test lifecycle, including Cloud, Virtualization, Simulation, and Model-based Testing.

Managed Testing Service using Rightshore®: A proven, incremental roadmap to test sourcing, whether onshore, nearshore or offshore, that provides the right skills, in the right locations, at the right time, to deliver the best value.

Test Process Consulting: Test process maturity assessment plus performance improvement recommendations to fast-track implementation, this service uses our own industry standard TPI® model and Quality Blueprint accelerators.

Test Management, Engineering and Execution: Using Capgemini Group's world-leading TMap® methodology, we provide 'best of breed' practices for comprehensive testing coverage, minimizing the business risk of production flaws, delivery delays, and operational defects. Our approach enables industrialization and automation across the delivery lifecycle. It includes functional, infrastructure, security, packaged applications, migration, and end-to-end testing, as well as our on-demand Software Testing as a Service.

Our Testing Services enable organizations to meet these challenges and maximize the return on their investment in IT systems through a proven, best-practice approach to highly industrialized and structured software testing.

Our main Testing Services are:

- Managed Testing Services
- Test Process Improvement TPI®
- Specialized Testing Services (Mobile Testing, Cloud Testing, Test Management Command Center)
- Performance Testing
- Test Environment Management
- Test Data Management
- Agile Testing
- Test Automation (GUI and non UI with CAFE)

Our Two Key Services

Managed Testing Services

We leverage our global delivery model Rightshore® via multiple onshore test centers around the world, our Testing Center of Excellence in India, plus nearshore facilities in Eastern Europe, South America and North Africa. This low-risk, proven, and incremental roadmap to test sourcing allows you to choose how much test management control you keep or delegate to a trusted and experienced provider.

At the heart of MTS is TMap®, our business-driven, risk-based approach for structured software testing, designed to address your key issues of quality, time, and cost across the whole development lifecycle.

The essentials of our Managed Testing Service:

- Customized service built around specific client requirements and measured by Service Level Agreements that reflect the business goals for testing;
- State-of-the-art solution that delivers the best balance of test service management;
 - Onshore test management and engineering;
 - Nearshore test co-ordination and engineering;
 - Offshore test organization and test facility.

Managed Testing Services (MTS) is our collaborative approach to sourcing testing and QA services for clients who want to transform their testing function and achieve quality services, without the expense of large overheads or loss of control.

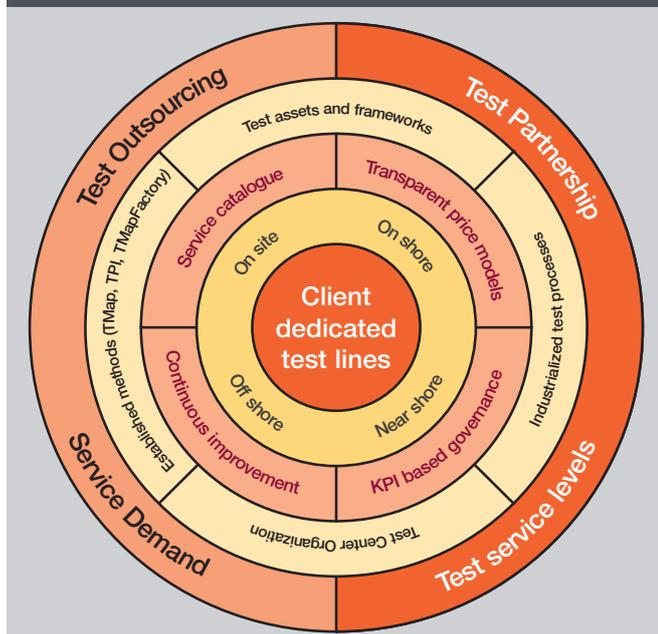
- Business-driven governance model and test execution underpinned by TMap®'s industrialized processes;
- Global delivery capabilities and access to scalable resources, via our network of test centers, accommodating the peaks and troughs in demand experienced by all IT departments.

Proving the benefits of outsourced testing

We have built up an enviable track record delivering long-term MTS contracts to many multinational organizations, including those within the financial services and telecoms sectors. Typical benefits from an MTS contract include:

- Significantly reduced total cost of testing: An optimal balance between local and offshore execution can result in cost savings of up to 25% in year one;
- Standardization of reliable best-practice test processes: Under the right conditions there can be up to 30% reduction in the overall test effort;
- Measurable improvement in quality: Proven detection rates of more than 98% for high-severity defects can be achieved;
- Improved time-to-market of at least 15% under the right conditions;
- Mitigation of technical and business risk;
- Scalable resource and delivery flexibility: There is always highly-skilled capacity to accommodate increased demand from your business;
- Skills transfer-capabilities are embedded into your organization and consistent quality assurance is delivered across multiple supplier environments.

Figure 1. The Essentials of our Managed Testing Service



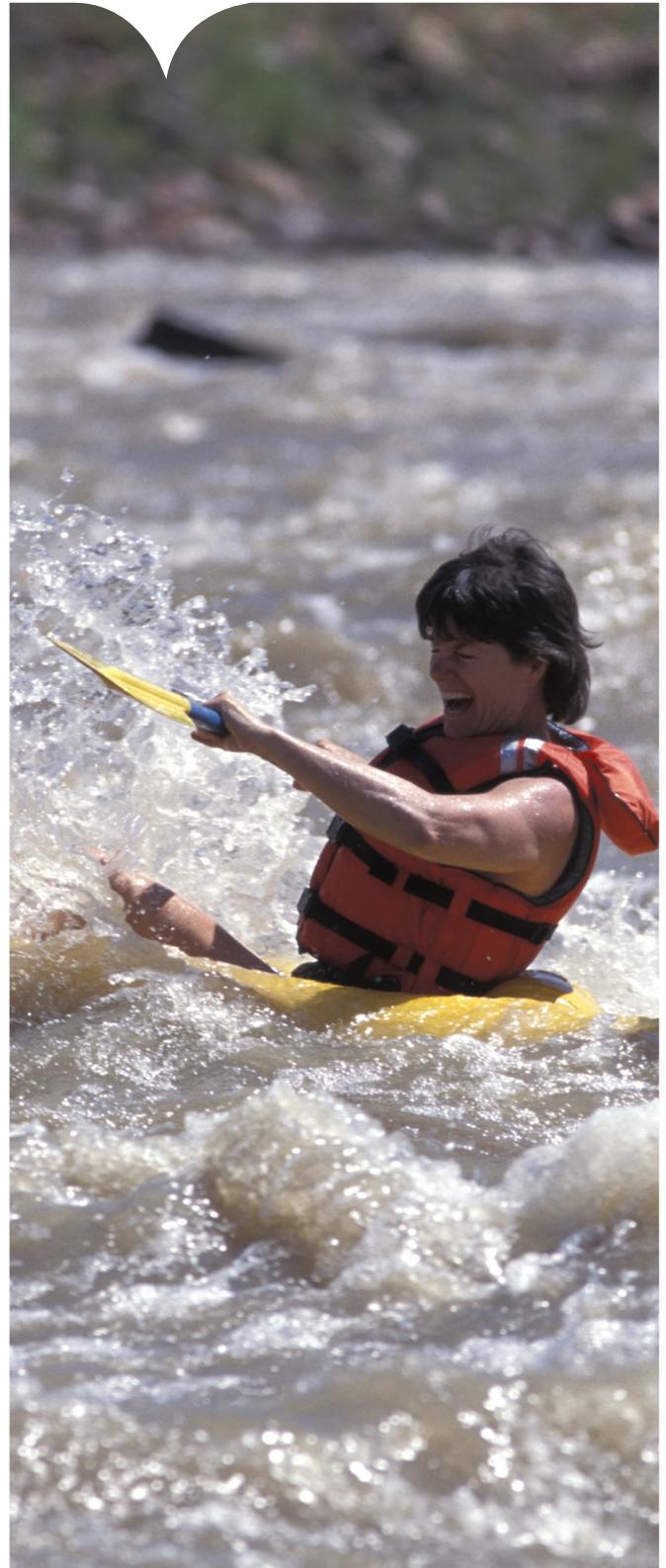
Test Maturity Assessment and Improvement, Using TPI® and Quality Blueprint

As the number of applications being tested increases, inefficiencies in the testing process become more evident and problematic. On top of this, many organizations lack sufficient insight into their testing processes to ensure that the quality of the system will enable them to achieve their desired targets. Our approach to test process assessment and improvement is an end-to-end service that enables you to achieve a higher level of test maturity, lower total cost of ownership, and accelerated time-to-market. Based on a combination of our industry standard TPI® methodology and Quality Blueprint framework, we provide a clear and objective assessment of the relative maturity of your test processes and structure, identifying a practical roadmap, plus accelerators for faster step change improvement.

Our service provides you with:

- Insight into the existing maturity of your test processes based on TPI®;
- Quality Blueprint benchmarking against your industry peers;
- Clear roadmap of staged improvements to meet your business-specific goals;
- Accelerated implementation using off-the-shelf accelerators and our Innovation Lab's tools to achieve a step-change in maturity.

Together we can help create a testing organization that addresses your key test execution challenges—enabling you to deliver greater performance efficiency and effectiveness as well as reducing production defects, lowering costs, and improving quality of output.



Why Choose Capgemini Group?

Passing the Test

Managed Testing Services deliver cost optimization as well as demonstrable improvement in the quality of testing, processes, deliverables, results and flexibility of test operations.

Typical benefits from MTS contract include:

- Significantly reduced total cost of testing: An optimal balance between local and offshore execution can result in **cost savings of at least 25% in year one**;
- Standardization of reliable best practice test processes: The right conditions can produce **up to 30% reduction** in the overall test effort;
- Measurable improvement in quality and greater precision: **Proven detection rates of 98% or higher** for high-severity defects can be achieved;
- Improved time-to-market of 15% or more and greater transparency of your testing processes and procedures;
- **Scalable resource and delivery flexibility**: Highly skilled capacity to accommodate increased demand from your business;
- **Skilled transfer**: Capabilities and a quality focus are embedded into your organization and consistent quality assurance is delivered across multiple supplier environments;
- **Continuous optimization and access to innovation techniques**, such as Cloud Testing and Virtualization, to establish and maintain a competitive edge.

Extensive Track Record and Deep Domain Expertise

Our testing heritage stretches back over 20 years, making our accumulated technical and sector knowledge unparalleled particularly in financial services, telecoms, and government. Over 500 clients from across the industry spectrum trust us to deliver consistently, time after time.

Dedicated Resources

We are one of the largest dedicated professional testing practices in the industry providing expert global delivery. We have over 12,300 career test specialists worldwide and up to 14,500 further application testers available when you need them most.

Global Delivery Network - Rightshore®

We have a global delivery capability and scalable testing resources. Our dedicated onshore/onsite client teams are balanced by an extensive offshore capability and 24x7 operations.

World-Leading 'Best in Breed' Intellectual Property

- TMap®: The **de facto** industry standard for structured testing;
- TPI®: The world's number one model for assessing and improving test processes;
- Quality Blueprint: Market intelligence benchmarking and accelerated implementation using the Group's Innovation Lab techniques;
- Our annual **World Quality Report** co-sponsored with HP, now in its fifth year of publication, providing the largest single research study on testing and QA business issues such as testing budgets, outsourcing, cloud and mobile testing, based on 1,500 interviews across 25 countries.

Continuous Investment in Testing Innovation

We make significant investment in the development of leading testing thinking and fund business-focused research and development through our Solutions Innovation Centers across the globe.

Partnering with the Market Leaders

We work in partnership with the world's largest technology suppliers including HP, IBM, Oracle and Microsoft; their market-leading testing software suites help us streamline service delivery to clients, while our partners use our TMap® methodology as plug-ins to their tools.

About Capgemini and Sogeti

With almost 140,000 people in over 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2013 global revenues of EUR 10.1 billion. Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

Sogeti is a leading provider of technology and software testing, specializing in Application, Infrastructure and Engineering Services. Sogeti offers cutting-edge solutions around Testing, Business Intelligence & Analytics, Mobile, Cloud and Cyber Security, combining world class methodologies and its global delivery model, Rightshore®. Sogeti brings together more than 20,000 professionals in 15 countries and has a strong local presence in over 100 locations in Europe, USA and India. Sogeti is a wholly-owned subsidiary of Cap Gemini S.A., listed on the Paris Stock Exchange.

Together Capgemini and Sogeti have developed innovative, business-driven quality assurance (QA) and Testing services, combining best-in-class testing methodologies (TMap® and TPI®) to help organizations achieve their testing and QA goals. The Capgemini Group has created one of the largest dedicated testing practices in the world, with over 12,300 test professionals and a further 14,500 application specialists with Testing experience, notably through common centers of excellence with testing specialists developed in India and elsewhere.

For more information, please visit:

**www.capgemini.com/testing or
www.sogeti.com/testing**

**To find out how
Capgemini and Sogeti's
Testing Services can
help your organization
achieve its Testing and
QA business goals,
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