



Testing & Quality Management Services

For financial institutions, survival in a dynamic and complex environment depends upon the success of day-to-day operations which are driven by high volume events conducted in real-time. To keep pace within this competitive industry, firms must continually provide innovative solutions which are enabled by modifications to existing applications or new software development. In addition, data security, new regulations, and increasing customer expectations combine to add new pressures to overloaded quality assurance teams.

Over the past two decades, Capgemini has helped global financial institutions overcome these challenges by

maintaining or improving the quality of their applications. Our successful quality assurance services are powered by:

- Capgemini developed *industry standards* TPI, TMAP® and Quality Blueprint
- Over *10 books* published on Quality Management
- *Deep industry domain expertise* in financial services spanning insurance, banking and capital markets with a special focus on cross industry disciplines such as wealth management, payments and risk and compliance



- More than *500 professionals certified* in technology, business and leadership domains including Certified Software Test Engineer (CSTE), ISTQB and NSE's Certification in Financial Markets
- *Highly skilled testing leadership* with an average of 10-15 years experience, often at world class technology firms
- *Rightshore® network* of centers in 32 cities across 15 countries provides the right skills in the right location at the right cost
- *Strong alliance partnerships* with leading quality assurance and testing vendors

- Trusting the quality of services that are not developed by your firm
- Ensuring interoperability among services developed using different technologies by globally diverse teams
- Managing the business change impact of services

To best address these issues your firm must leverage a combination of traditional test methodologies, new SOA-specific test approaches and technology innovations. Capgemini can help you find the right balance by providing SOA quality consulting and testing expertise, bringing best-of-breed industry technologies to your firm.

Capgemini offers the full spectrum of test planning and execution services to financial services firms around the world.

Functional Testing

Capgemini has over 20 years of functional testing experience with financial services firms. We have helped hundreds of customers deliver quality on time and within budget through a range of services including unit, integration, system, and user acceptance testing. Our functional testing solutions are supported by extensive training programs, CMM Level 5 standards and procedures, award-winning quality metrics and deep industry knowledge. By continuously increasing test coverage and efficiencies, we have helped global financial firms reduce defect leakage by over 60% and increase user and customer satisfaction.

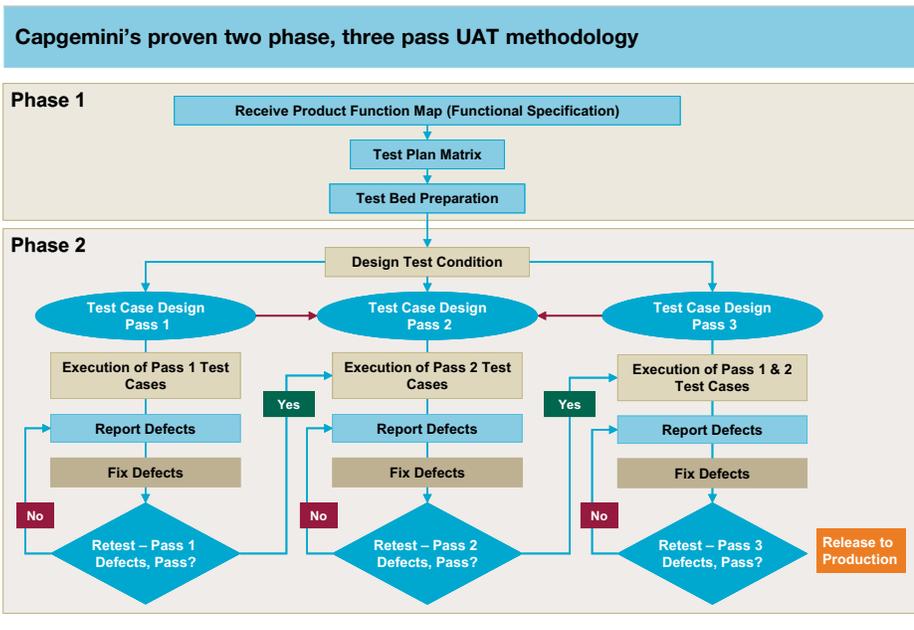
Services Testing

As the industry adopts and transforms to a Service Oriented Architecture (SOA) paradigm, new quality challenges are being uncovered. Key issues include:

- Leveraging automation in an environment with no graphical user interface

Test Automation & Tool Consolidation

Simplify your end-to-end quality lifecycle by automating the most manual, complicated and time-consuming tasks. Capgemini's certified automation experts can help you identify candidates for automation, select the right tool, implement and customize the tool, and automate the tasks. Through our network of alliances and partnerships, Capgemini can help procure leading tools at competitive prices.



We've also developed a library of in-house tools which address common needs for financial services firms to automate complex workflows, increase test productivity and reduce overall test lifecycle time.

Performance Engineering

Today's IT systems must constantly expand to support organizational growth. Every day, more customers are moving online to perform daily financial transactions. Together these factors increase the load on IT systems for financial services firms and drive a critical need for performance engineering across the testing lifecycle. Capgemini can set up a Performance Center of Excellence for your firm to help predict, test and manage loads to ensure performance, scalability and reliability for your mission-critical systems.

Security Testing

Each day financial institutions trade in millions of dollars worth of cash or commodities. A single security breach can result in severe long-term damage to a firm's financial stability

and customer trust. Capgemini can make your applications more secure by identifying and addressing security vulnerabilities. We can show you how to include security testing as a standard part of your quality processes. To keep up with changes in technology and hacking trends, Capgemini security professionals undergo extensive training on the latest security standards and procedures and the related tools and technologies—supported through our alliance partnerships.

Package Reusable Solutions

As a CMM Level 5 organization, Capgemini has a dedicated focus on continuous improvement. For each project we deliver, our teams capture best practices and reusable artifacts which are consolidated, reviewed and published to a global knowledge repository. Over time our repository has grown so it now hosts pre-packaged reusable content for all domains across financial services including banking, insurance, capital markets, wealth management, payments and cards, and risk and compliance.

Capgemini has testing experience with the mainframe, distributed and web-based applications that drive the financial services industry

Insurance	Capital Markets		Banking	
Agency Port	Bloomberg & Calypso Integration	Market Risk Summary	Autoscore	PROBE
AIS	Brass	MW Analytics	CACS	Raptor
Amarta	Calypso	NOVA	CardLink	RISKNET
Cogen	Cross Asset Class Analytics	OASYS	CardPac	StrategyWare
Eclipse	FIX	On-Line FX, FXAll	CLARUS	TRIAD
Guidewire	GL Trade OMS	Operational Risk Framework	DebtManager	TS2
ILOG	Global Share	SWIFT	Essentis	Vision Plus
Ingenium	InvestOne	UBIX	FlexCube	
OneShield	IOM		Hogan	
Pega	Lens		LoanQuest	
PMS	Limiting Exposure		MortgageServ	

Our library includes test cases, test scripts, test plans, test frameworks, models, in-house testing tools and training materials. By leveraging Capgemini's pre-packaged content, your firm can jump start your efforts with an accelerated solution that reduces the test lifecycle time by as much as 50%.

Data Warehouse & ETL Testing

More than any other industry, financial services relies on accurate, timely and complete data. We can help you realize the success of your business intelligence initiatives with Capgemini's end-to-end extract-transform-load (ETL) testing services ensuring reliable, accurate and complete data streams.

Test Data De-personalization

Testing financial systems and applications involves dealing with large amounts of security sensitive and personal test data. With the increase in test outsourcing, testing can be

conducted from diverse locations such as India or China, which means test data privatization and security for distributed test executions is now a critical issue.

Before outsourcing your testing activities, your firm needs a systematic approach to test data management. Capgemini manages testing for some of the world's largest financial firms. We've used our experience to build a test data management framework that addresses data management issues unique to financial firms that must comply with regulations such as data privacy. Our approach lets us create, store and de-personalize your test data using layers of masking techniques to ensure data security.

For more information, contact us at financialservices@capgemini.com



About Capgemini and the Collaborative Business Experience

Capgemini, one of the world's foremost providers of Consulting, Technology and Outsourcing services, has a unique way of working with its clients, called the Collaborative Business Experience.

Backed by over three decades of industry and service experience, the Collaborative Business Experience™ is designed to help our clients achieve better, faster, more sustainable results through seamless access to our network of world-leading technology partners and collaboration-

focused methods and tools. Capgemini utilizes a global delivery model called Rightshore® which aims to offer the right resources in the right location at competitive cost, helping businesses thrive through the power of collaboration.

Capgemini reported 2009 global revenues of EUR 8.4 billion and employs over 90,000 people worldwide.

More information about our services, offices and research is available at www.capgemini.com.