

# Oracle FLEXCUBE® Model Based Testing Workbench

**Capgemini's Model Based Testing approach speeds testing efforts for your core banking system**

Oracle's FLEXCUBE suite includes one of the leading solutions for core banking across the globe with a strong customer presence in over 125 countries. Due to this global reach, FLEXCUBE is often selected by banks that require multi-country deployments and global standardization.

A bank faces challenges when implementing any core banking solution regardless of the scenario: new implementation or replacement. When doing a new implementation where no prior system exists, developers and testers can avoid problems associated with legacy systems. But new systems bring specific challenges related to

change management and training as employees learn new processes.

When converting or migrating from existing systems, challenges include extracting and converting data from legacy systems and integrating the new systems with older, existing ones. Rigorous, comprehensive testing can help mitigate the risks associated with new core banking systems. Capgemini can show you how.

# Five phases to implement a core banking system

To mitigate data-related risks when moving to a new core banking system, it is crucial to perform exhaustive data testing and validation

## Parameterization

Parameterization ensures the business rules required for the operation of the bank are part of the core banking solution. By clearly understanding all the rules—including regulatory requirements for all geographies, industry guidelines and best practices, and operational policies unique to the bank—you can define bank, branch and product parameterization for the solution.

*Pre-implementation* testing helps ensure your core banking solution will meet business requirements. Testing at this phase lets you verify that all key business rules are addressed in the solution.

## Product Walk Through and Functional Analysis

At this stage the bank sets offerings for the core banking solution and verifies the solution can perform all functional tasks. User friendliness, functional flows, and outside dependencies are evaluated to gain clarity on the impact for transaction control, operational risks and subsequent mitigation, and reporting.

*Functional testing* uncovers imbalances between offerings and ease of use to help the bank implement a solution that best addresses the needs of users and the business.

## Legacy Data Analysis and Mapping

Data is a key element during any migration. Most banks use a mapping study to analyze available legacy data versus required data in the core banking system. This helps uncover issues with data quality and cleansing.

Testing the deliverables of data capture or migration tools helps verify the availability and quality of required data during migration.

## Mock Migrations

To model a data migration effort, most banks extract data from legacy systems using a data capture tool, process it through a migration tool, and deliver output in a flat file format that can be uploaded to the migration staging area. Validation is run on the staging data to check that it is correct.

*Migration tool testing* and *data validation* checks are used in this phase to minimize defects. To mitigate data-related risks, it is crucial to perform exhaustive data testing and validation.

## Go Live

In this last stage, the core banking system is available live. In addition to testing that is performed during all other phases, *migration testing* certifies the application is ready to go live.



# About Model Based Testing for FLEXCUBE

**Capgemini has over 17,000+ test scenarios to test FLEXCUBE core banking across different banking segments including: retail, credit, corporate, trade finance and treasury.**

Model based testing is a methodology and toolset designed to accelerate the creation of test scripts. The tools let users describe the system under test using process models which then automate the generation of test cases. With model based testing, the amount of effort needed in the preparation phase of a project can be reduced by as much as 30%.

Capgemini's FLEXCUBE Workbench uses a model based testing approach to generate test scenarios and cases by modeling business requirements. With over 17,000 FLEXCUBE test scenarios in our library, we provide coverage for most business processes used in core banking. Key features of our workbench include:

## **Ready-to-use artifacts**

From the first day of testing, Capgemini can provide your bank with test models, use cases, test cases and automated test scripts from our extensive library of artifacts specifically developed for FLEXCUBE core banking.

## **Improved test coverage and quality**

Capgemini follows a rigorous, systematic approach to testing which helps improve test coverage and quality. Our TMap® and TPI® methodologies provide guidelines for test management and process improvement that help ensure every Capgemini testing engagement supports improved outcomes. By using a model based testing approach, we provide more test coverage than traditional testing methods.

## **Traceability and industry best practices**

As part of our testing workbench approach, Capgemini links product requirements and customizations to specific test scenarios, providing an audit trail to trace requirements across the testing lifecycle. Our FLEXCUBE test artifacts are created using industry best practices and test case design procedures to meet the exacting standards of our clients. Most of our artifacts have been tested in real-world engagements for some of the world's largest banks.

## **Proven value**

Capgemini's Financial Services testing practice has a proven track record of delivering mid- to large-scale testing engagements across banking, payments, insurance and capital markets domains.

Capgemini's global testing team is one of the largest dedicated testing practices in the world and includes:

- **9,500+** test professionals globally
- Over **3,000+** test professionals focused on Financial Services
- More than **1,200** test professionals certified in ISTQB

Capgemini has proven experience helping banks test FLEXCUBE implementations including:

- Industrialized our FLEXCUBE model based testing workbench for a major French retail bank
- Supported a leading Australian bank in implementing the FLEXCUBE model based testing workbench with the next generation FLEXCUBE platform.

“Capgemini’s Model Based Testing Workbench is a proven, proprietary solution that includes testing assets, tools and accelerators with a financial services focus. Unlike most testing solutions, our Workbench was created in partnership with Capgemini clients including some of the world’s largest financial institutions to help solve their real-world testing challenges. Our solution is targeted to financial services applications such as Guidewire, Calypso, SWIFT and VisionPLUS.”

**Govind Muthukrishnan**

Vice President and Global Financial Services Testing Leader

For more information contact us at [fstesting@capgemini.com](mailto:fstesting@capgemini.com) or visit [www.capgemini.com/fstesting](http://www.capgemini.com/fstesting).

## About Oracle

Oracle is the world leader in solutions for financial services. Oracle provides banks and financial institutions the most comprehensive footprint of hardware, software and applications. Oracle helps banks become more customer centric, drive efficiency in transaction processing, better manage their risks, be compliant to regulations and manage their performance. Oracle world leading offerings include solutions for core banking, risk and compliance management, anti-money laundering, fraud detection and business analytics. Oracle partners with financial services industry leaders – including 20 of the top 20 banks – to transform their businesses.



## About Capgemini and the Collaborative Business Experience

Capgemini, one of the world’s foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies.

Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working, the Collaborative Business Experience™.

The Group relies on its global delivery model called Rightshore®, which aims to get the right balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients.

Present in 40 countries, Capgemini reported 2011 global revenues of EUR 9.7 billion and employs around 120,000 people worldwide.

Capgemini’s Global Financial Services Business Unit brings deep industry experience, innovative service offerings and next generation global delivery to serve the financial services industry.

With a network of 21,000 professionals serving over 900 clients worldwide, Capgemini collaborates with leading banks, insurers and capital market companies to deliver business and IT solutions and thought leadership which create tangible value.

For more information please visit [www.capgemini.com/financialservices](http://www.capgemini.com/financialservices)

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