Tenjin
TESTING WORKBENCH

Yethi Offers End-to-End Managed Testing Solution for a Bank's NBFC-to-Bank Transformation

The Challenge

A Non-Banking financial institution that was primarily in the vehicle finance business was granted a licence to operate as a 'Small Finance Bank' in 2017.

The professionally managed NBFC has a long-standing track record of being a retail-focussed and customer-centric institution serving low- and middle-income individuals and micro / small businesses that have limited or no access to formal banking and finance channels.

Yethi has been associated with the Bank as the sole 'Quality Assurance Partner' since the transformation of the NBFC to a Bank providing 'Managed Testing Services' for the Bank. Yethi's engagement has been significant during the Transition and Transformation phase and continues through the Business as Usual mode of operations.

Transition & Transformation Phase

Starting in a competitive market, the bank decided to adopt a best-of-breed approach towards customer service and had a wide tech stack to configure, test and commission.

The Bank had a System Integration partner that was also providing business and technology consulting services like defining the requirements and implementing the same through a host of technology initiatives. Yethi was involved early in the cycle so as to ensure that there are no notches from a QA perspective.

The Bank had an ambitious target of going live in a limited span of time due to regulatory requirements. While the applications needed significant amount of customization, testing the requirements and ensuring compliance to the requirements in a dynamic requirement cycle was always a challenge.

Industry

Banking & Financial Services

Company Size

- 400 Branches
- 1.2M Customers
- $7.49B Asset Under Management

Headquarters: India

Yethi Delivery

- QA Partner from Transition to BAU
- Tenjin Workbench – The Codeless, AI-Powered Test Automation Suite
- Integration and User Acceptance Testing
- Regression Testing

Business Impact

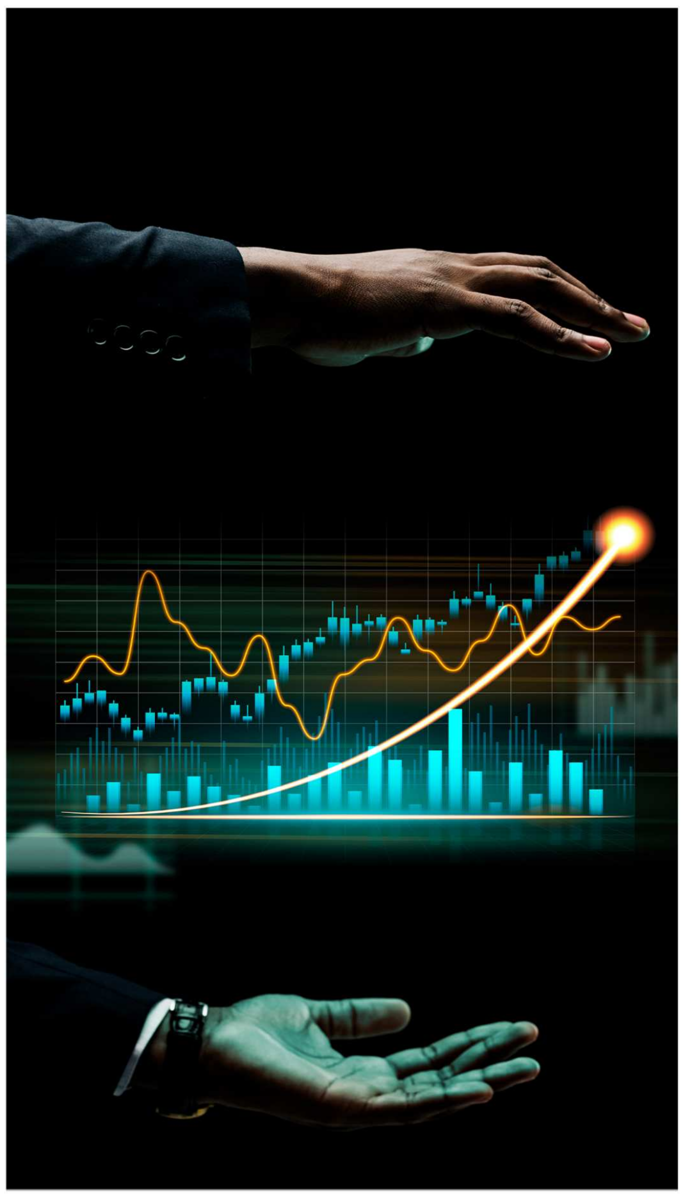
- More than 45 applications covering entire gamut of Banking operations tested
- Multiple rounds of SIT/UAT during transition
- Automated regression for Core apps, CRM and Channels
- Replacement of apps covered as a part of BAU
- Multi-device testing for Mobile apps

Yethi was tasked to test the following applications within an acceptable timeframe.

- Retail and Corporate Core Banking Solution
- Trade finance
- Pricing and GST
- Digital lending platform for consumer loans
- Internet Banking-Mobile Application Retail
- Legal Management Solution
- ASBA (Applications Supported by Blocked Amount)
- Fraud Risk Management & Transaction Monitoring
- Saving and Current Account Opening
- Aadhar Enabled Payment Application
- Corporate Internet Banking
- Collection Application
- Mobile Loan Origination & Document Verification
- Two-Wheeler Loan Origination System
- Instant Account Creation Using Aadhar
- Pradhan Mantri Jan Jeevan Bima Yojana
- Atal Pension Yojana
- Pradhan Mantri Suraksha Bima Yojana
- Micro Finance Application
- CASA Account opening, Customer services,
- Payments (Bulk uploads)
- Payments
- Loan Origination System for Retail & Corporate Assets
- Payments (Bulk uploads)
- Mutual Funds
- Human capital management solution
- Learning, Compensation & Performance of Staff
- Employee Onboarding process
- Customer POI & POA Document Collection
- NSSCL-Trading transactions on TD accounts
- Travel Desk for reimbursements
- Payment Gateway
- MB-UPI payments
- Bill payments
- Cheque truncation system
- Challan payments for Beverages
- Financial transactions
- Banking services
- Customer Documents Repository
- Cheque truncation system
- Integrated IB and MB Solution that replaced the original ones
- New Loan Origination System for Retail & Corporate Assets

The transformation testing process proved fairly complex because

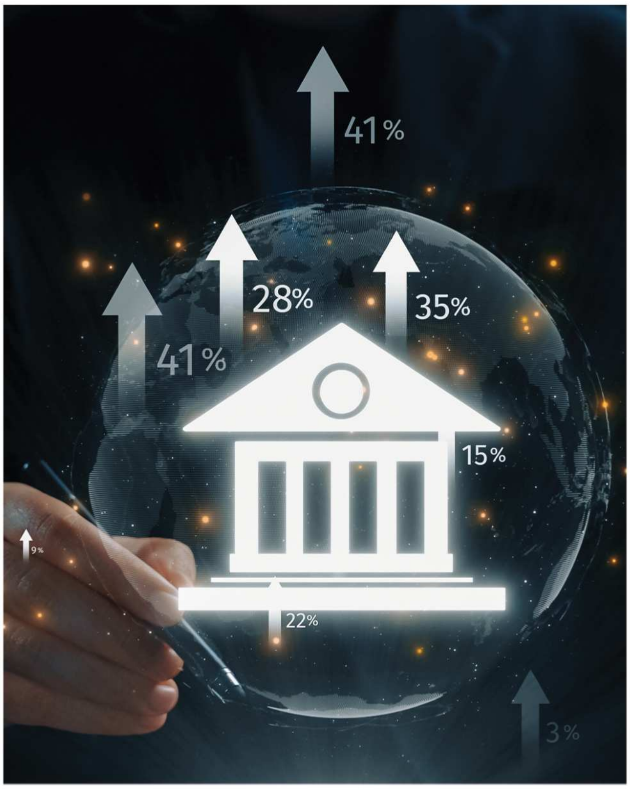
- Number of applications that were to go live and the magnitude of operations to start with
- Vision to be a 'Digital Bank' from day-1 rather than transform to one later
- Multiple touchpoints with both upstream and downstream applications
- Fast-paced and dynamic user requirements
- Timelines to go live were very stringent and were more or less non-negotiable
- Not only Yethi, but also the System Integrator was getting hands-on experience on some of these applications for the first time leading to a steeper learning curve
- Change of mindset for the organization, transforming from an NBFC to a Bank



The Solution

Yethi took complete ownership across functional, performance and security testing, working with all the stakeholders including the System Integrator and the Bank to put in place an efficient process for testing that helped meet the stringent requirements.

- Yethi deployed a large team of resources who were well-versed in the Banking domain as well as technology.
- It was ensured that the team was actually a 'Cross-Functional Team' that could move across application streams.
- A 'Test Management Office', reporting to the Program Management Office was created that owned all the QA activities.
- Meticulous planning to ensure all interdependencies were addressed. All requirements were tracked to completion post-testing.
- Red flags, if any were raised as a part of the daily stand-up meetings rather than waiting for weekly reports. This ensured that issues were prioritised for fixing and were made production ready.
- Yethi created a centralized Project Management Office that was coordinating within the organization. The PMO played a significant role in knowledge sharing between different projects. One of the primary roles was to act as a centralized repository of knowledge available within the organization as Yethi was also working with four other organizations that were undertaking a similar journey. This helped Yethi share some of the requirements like regulatory compliances, interfaces etc., that were common across all the clients.
- Hybrid model of deploying people in an onsite-offshore model was started which also helped reduce the costs for the client.
- Test automation using Tenjin was initiated for core and some of the allied applications and this ensured reduction in timelines for subsequent rounds of testing. This provided for daily regression for workflow solutions to ensure low rate of error injection.
- The automation pack so created, was transitioned into a regression pack for use during the BAU phase.
- Testing of digital applications were extended to multi-device and multi-form factor testing
- Performance testing for core applications and some of the digital applications were carried out to assess the infrastructure requirements and application scalability.
- Security testing was done covering vulnerability assessment and penetration testing for customer-facing applications.



Key Business Benefits

The transition – transformation phase gave Yethi a significant number of first to its credit.

01	End-to-End Testing from Mobile – Core – Mobile Achieved using Tenjin Automation Tool
02	Over 85,000 cases designed and executed with 13,000+ automated
03	Met go-live deadlines with adequate software quality
04	Over 20,000 defects raised across multiple rounds of testing ensuring quality & standards of the applications
05	Test Execution throughput of 120+ cases per person day achieved, thanks to automation using Tenjin
06	Test data creation automated through Tenjin saving valuable time and effort resulting in faster go-to-market

Business as Usual (BAU) Phase

While the transformation phase included significant application launches, the Business as usual phase started post go-live with a series of different challenges. There was a period of time where the BAU testing and Transformation Testing were being done in parallel as the core business applications were already live and the others were in the process of implementation.

The business was being evaluated and new banking products being launched at regular intervals meant that end-to-end business processes were to be tested before each product launch. Regression testing for any impacted modules had to be carried out to ensure that there is no impact on the products that are already live and being offered to the customers.

Added to these, the OEMs used to release multiple patches / upgrades and they needed to be tested before being deployed. Automated testing gained more prominence during this phase and regression testing in 'Hands-off, Lights-off' mode ensured reduced timelines for quality assurance of such patches.
Production defects that were raised were analysed thoroughly and simulated to ensure end-to-end coverage of the functionality including all possible interfaces impacted. The fixes would undergo end-to-end regression testing before deployment.

Change requests for new products or modification to existing products are received at regular intervals that are catered to.

Application Replacements

One of the hallmarks of working with this client has been their constant endeavour for attaining excellence. The Bank constantly evaluates the utility of the applications and the goals with which a particular application was chosen. Whenever there have been instances where the utility was not up to the mark, the Bank hasn't hesitated to accept the reality and move on with a different product with better fitment to the requirements.

A host of applications that were changed during the course includes:

- Internet Banking and Mobile Banking for Retail customers
- Loan Origination Solution covering Retail and Corporate assets. The new solution caters to Web and Mobile platforms.

In addition to the functional and performance testing for these applications, data migration between the systems needs to be tested exhaustively. Yethi has been working with the Bank in ensuring the quality of data migration is in line with the documented requirements.

Yethi
Innovation for Quality

Conclusion

Yethi adopted a collaborative approach working with all the stakeholders including the Bank, their consultants, the system integrators and OEMs wherever necessary. A methodical process with SMART (Specific, Measurable, Achievable, Realistic, Timebound) goals was devised and monitored by the Test Management Office.

- Inter-team communication was the key attribute that rendered quick success.
- Yethi's executive participation in key steering committee meetings helped build the confidence with the stakeholders
- Meticulous planning to ensure all interdependencies were addressed.
- Consultants cross trained on dependent systems.
- Test data creation automated through Tenjin saving valuable time and effort.
- Achieved significantly high throughput through automation.
- Automated regression for core applications and significant customer facing applications has ensured quicker turn around times for patch releases / minor upgrades
- A team of functional and automation professionals was deployed onsite at the client premises as well as offshore ensures knowledge sharing as well as reduced costs.

A symbiotic relationship based on trust and quality of delivery that has been established over four years provides testimony to the capabilities of Yethi Consulting in delivering large quality assurance assignments covering the entire gamut of Banking operations. Having seen the propensity for quality of delivery, the client believes in Yethi's capabilities and is one of the large and profitable clients for Yethi.

About Yethi

Yethi Consulting Pvt Ltd is a leading provider of Quality Assurance, Test Automation, and Payments Modernization solutions for the global banking and financial services sector. Our mission is to ensure the reliability of financial applications, accelerating business success worldwide.

With over a decade of experience, Yethi combines deep domain expertise with a robust library of 1.2 million test cases covering 350+ financial applications. We've successfully delivered 700+ projects for 130+ customers across 30+ countries, offering a comprehensive suite of products, services, and solutions.

Learn more on www.yethi.in

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