



HEXAWARE

Driving Agility and Automation with Acceptance Test-driven Development

Streamlining operations and accelerating growth for a
North American secondary mortgage provider.

Case study

Client

| Client

Challenge

Solution

Benefits

Summary

The client is a secondary mortgage provider in North America. They help provide affordable mortgage credit to buy, refinance, or rent homes.

The client partnered with Hexaware for an automation solution leveraging acceptance test-driven development to build a target state that is flexible, scalable, and low maintenance to ensure high-quality software delivery.



Challenge

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The client faced several business challenges that impacted their overall efficiency, customer satisfaction, and growth, including lack of scalability, difficulties in introducing and marketing new products, inefficient processes, legacy systems, and manual workflows. Overcoming these challenges required a strategic approach, including implementing automated testing and innovative automation solutions to drive the business forward.

The client needed a scalable platform with flexibility, increased operational efficiency, and the ability to market risk-sharing products quickly.

What the client needed:

- Scalability for increased market share
- A platform to introduce and market new products with flexibility, reliability, and speed
- Increased operational efficiency and faster delivery
- A scalable, state-of-the-art platform to expand risk-sharing/transfer opportunities
- Flexibility to interface with the legacy systems and automate manual processes
- Ability to quickly market risk-sharing products
- Replacements for inflexible and manually-intensive systems that are not scalable
- Overcoming constraints in creating new revenue streams

Current System	Target State
• Inflexible • Non-scalable • Manually intensive • Technically constrained • Difficult to maintain	• Extremely flexible • Highly scalable • Fully automated • Constraint-free, advanced technology stack • Easy to maintain



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To address the client’s challenges—scalability limitations, inefficient processes, and reliance on manual workflows—a robust automation framework was implemented using acceptance test-driven development (ATDD) and continuous integration (CI). This approach enabled:

- Faster and more reliable software delivery by automating acceptance tests early in the development cycle.
- Scalability and efficiency through a structured in-sprint automation framework.
- Seamless integration of new products by reducing time-consuming manual testing efforts.
- Improved market competitiveness by accelerating product releases with minimal defects.

An overview of the 4-step automation approach:

To capitalize on the combined benefits of the ATDD and CI principles, every sprint followed four steps:

Acceptance criteria

- Acceptance criteria, with examples, are defined after discussions between the product owner (PO), scrum master (SM), development (Dev), quality assurance (QA), and business analyst (BA) teams.

Test definition

- Based on the acceptance criteria, written acceptance tests in the form of user stories and scenarios are defined as per the ATDD methodology.
- The QA and Dev teams perform a combined review of the acceptance tests.

Automated test implementation

- ATDD style tests are implemented using Google Web Toolkit (GWT) to represent user stories.
- Page objects are created for all the pages of all the applications using Selenium, Cucumber, and Java.
- Unit tests are written in PageObject methods using Junit.
- User interface (UI) unit tests are performed using Karma/Jasmine.

CI executing and reporting

- CI execution is auto-triggered using Jenkins.
- Unit and acceptance test execution results are displayed on the Jenkins dashboard.

By following a 4-step automation process, the client was able to streamline the testing process, improve collaboration, and achieve reliable and transparent test execution and reporting.

Benefits

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- The solution led to:
- Over 80% increase in velocity in three sprints
 - Faster implementation of the entire critical backlog
 - Quicker introduction of three new products
 - Increase in revenue growth through faster delivery of user stories
 - Significant increase in business satisfaction



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The client, a secondary mortgage provider, faced several challenges, including scalability limitations, inefficient processes, and hurdles in introducing new products. To overcome these obstacles, the client sought a scalable platform with flexibility, operational efficiency, and rapid marketing capabilities.

Hexaware provided a comprehensive solution leveraging an acceptance test-driven development (ATDD) in-sprint automation framework. By following a 4-step automation approach encompassing acceptance criteria, test definition, automated test implementation, and CI execution and reporting, the client achieved significant business benefits. These benefits included increased velocity, faster clearance of backlogs, quicker product introductions, revenue growth through faster delivery, and enhanced business satisfaction.

By implementing a scalable automation solution and following a 4-step process, the client experienced notable improvements in velocity, backlog implementation, product introductions, revenue growth, and business satisfaction.



Drive Agility and Growth in Secondary Mortgage Operations.

Contact Hexaware's experts at marketing@hexaware.com to discover how acceptance test-driven automation can streamline processes and accelerate product launches.

About Hexaware

Hexaware is a global technology and business process services company. Every day, Hexawarians wake up with a singular purpose: to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With offices across the world, we empower enterprises to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at <https://www.hexaware.com>.

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