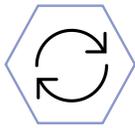


## CASE STUDY

# MCKESSON TRANSFORMS BUSINESS WITH SCRIPTLESS TEST AUTOMATION

QUALITY ASSURANCE AND TESTING



### AUTOMATION

Test automation reduces 2 hours to manual testing effort to as little as 30 minutes



### COST SAVINGS

Cost-effective delivery model utilises onshore and offshore delivery resources



### OPTIMISATION

Maintains efficient time to market and reduce total cost of ownership by 30%

## Client Background

McKesson is the leading provider of supply, information and care management products and services to the healthcare industry. As the largest pharmaceutical distributor in North America, McKesson is responsible for one-third of the medicines used on the continent and supplies over 40,000 healthcare locations. The company employs over 32,000 people across the globe and brings in an annual revenue of \$112 billion.

## Business Problem

Over the years, McKesson has developed a complex IT infrastructure to support its entire pharmaceutical business, from customer onboarding to supply chain management. The environment consists of several critical SAP applications, including ECC, SCM, BW, CRM and SRM, as well as a middleware foundation that utilises IBM WebSphere and WebSphere MQ. The company is dependent on these integrated systems for the performance and profitability of its business.

To meet its customer needs as well as internal system requirements, McKesson makes regular changes to this environment.

These changes, known as service objectives, are applied to core business processes and allow McKesson to deliver personalised service to each of its customers. Varying in magnitude and complexity, typical service objectives fall within four process areas: order to cash, procure to pay, financial and non-SAP process areas. For example, as a new customer is onboarded, changes are made to the order to cash process to support that particular customer's needs.

As the service objectives move through development and quality assurance phases, McKesson will group them together into a single release, usually amounting to about 40 changes every 3 months. McKesson found that with so many changes being applied on a regular basis, these service objectives introduced risks to the availability and performance of critical business processes and therefore needed to go through thorough regression testing.

While testing these changes prior to release ensured system reliability, the McKesson team was spending much of their time testing.

To maintain efficient time to market, while reducing total cost of ownership, McKesson was in need of a sound and optimised test strategy that would enable the company to adapt quickly in dealing with service objectives, ensuring that the changes are thoroughly tested and rolled out within a reasonable timeframe.

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## About the Company

- ▶ *Leading provider of supply, information and care management products and services to the healthcare industry*
- ▶ *Responsible for 1/3 of the medicines used in North America*
- ▶ *Supplies over 40,000 healthcare locations with \$112 billion in annual revenue*

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## Business Challenges

- ▶ *Numerous changes being applied to its SAP applications and middleware foundation increased availability risk and critical business process performance, necessitating regression testing*
- ▶ *Complex data mappings and attributes needed to be validated across applications and modules, with invalid test data often leading to script failures*
- ▶ *Testing was time-consuming and inefficient; needed optimised test strategy to quickly and effectively perform service objective testing*

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## Solution

- ▶ *Built regression test library with over 1,7000 test cases*
- ▶ *Automated nearly 40 business processes to cut costs and manual effort*
- ▶ *Leveraged Effecta accelerator to validate sales order data against original, accurate data, enabling the identification of data failures*
- ▶ *Increases test volume and creates over \$800,000 in cost savings*

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## Solution

McKesson engaged Prolifics' testing division, test and test automation experts, to assist with their overall QA strategy. The companies established a flexible, adaptable and cost-effective delivery model that utilises delivery resources both onshore and offshore and has resulted in over \$800,000 in cost savings. Prolifics was able to establish a structured process and governance model for the distributed team and build out a regression test library consisting of over 1,700 test cases. As part of the overall strategy, Prolifics also identified patterns and processes ideal for automation that would maximise efficiency during each release. Automating close to 40 business processes, McKesson saw reduced test time and costs, as well as gaining increased test coverage and volume for their business systems. As an example, automation was able to take a test case that previously took 2 hours of manual test efforts down to 30 minutes.

However, as part of their test automation strategy, McKesson faced three types of challenges that were critical to address. The company had hundreds of data attributes and complex data mappings that needed to be validated across applications and modules. In addition, invalid test data often led to the failures of a significant number of automated scripts. Lastly, McKesson was in need of a single tool that addressed all aspects of their test automation strategy. To address these challenges, Prolifics and McKesson decided to leverage a powerful tooling strategy that includes HP Quality Center and HP QuickTest Professional together with Effecta, Prolifics' testing division's test automation framework.

Data validation proved to be a critical piece in McKesson's test automation strategy. With Effecta, the company is able to increase the quality of their systems by validating their sales order data against the original, accurate data. By mapping the sales order against the original data, Prolifics is able to verify the accuracy of the end result and identify any failures. The automated data validation feature has helped McKesson to test a higher volume of about 100,000 sales orders per day. Effecta also provides the built-in capability to perform SAP IDoc, XML, Flat File and Table comparisons. As changes are made to the system, Effecta indicates the areas that have been impacted so that they can be addressed.

Prolifics was also able to increase reusability and repeatability of test scripts using Effecta. The team found that, on average, McKesson spent 4 hours building an automated script. Maintaining these scripts was a challenge because as changes were made, each script had to be modified individually. With Effecta, scripts are automatically captured and automated after they have been recorded by QuickTest Professional. Now, McKesson is able to make a single change and propagate it across all scripts. This has helped to drastically simplify the process and reduce the total cost of ownership by approximately 30%. Effecta also provides powerful test data management to ensure that all scripts and test cases are mapped to the appropriate data, cutting out the manual effort involved in carrying out these steps. Prolifics' overall test automation services have brought in \$2.2 million in cost savings for McKesson.

Test automation has been critical to McKesson's ability to ensure that service objectives undergo proper testing and are released within a reasonable timeframe. In addition, Prolifics' services have helped McKesson meet FDA and SOX compliance by providing documentation to capture IT testing results. As a result of the strong partnership with McKesson, Prolifics was able to meet and exceed quality assurance SLAs, achieving a 97% defect removal efficiency (DRE) with \$2 million savings of defect detection.

## ABOUT PROLIFICS

Prolifics creates a competitive advantage for organisations around the world by implementing customised, end-to-end IT solutions that achieve business success, leveraging leading technologies in a global delivery model. For more than 40 years, the company's technology expertise, industry-specific insights and certified technology accelerators have transformed organisations around the world by solving complex IT challenges. For more information, visit [www.prolifics-testing.co.uk](http://www.prolifics-testing.co.uk).