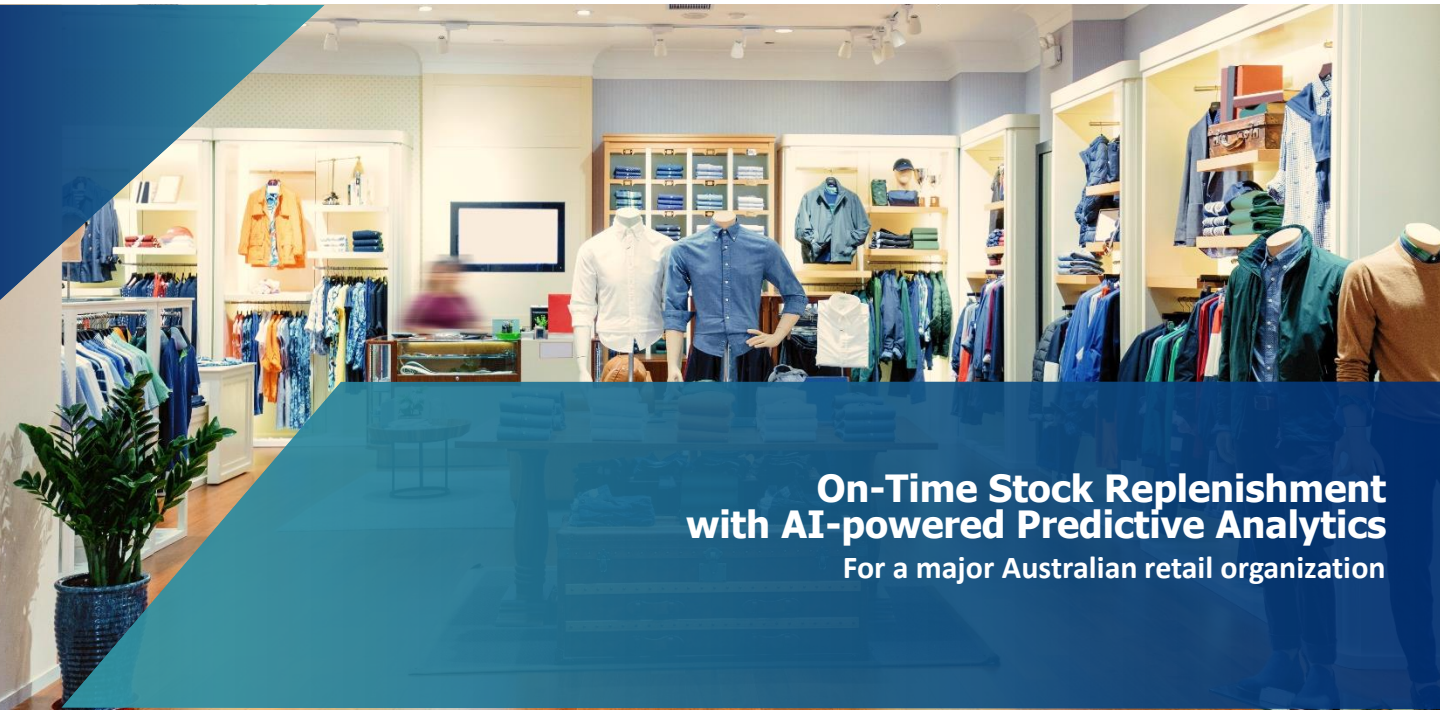

On-Time Stock Replenishment with AI-powered Predictive Analytics

For a major Australian retail organization

ABOUT THE CUSTOMER

The customer is one of the largest retailers in the Australian continent with 1000+ stores and 20+ distribution center networks. They control a major share of the retail market in Australia, with business operation available to both online and offline consumers. The customer was on a mission to improve convenience and shopping experience for their customers with the right mix of digital solutions and intelligent automation.

BUSINESS CONTEXT

Large retail operations are highly dependent on effective distribution networks to ensure on-time stock replenishments.

The distribution process relies on smooth workload operations, and if there are any batch job failures or delays, the stock items may not reach the stores on time, resulting in lost sales.

To avoid this, retailers need to adopt the latest AI/ML based technologies and predictive analytics, to ensure their batch jobs are executed and SLAs are met on time.

THE PROBLEM

From Batch Fails to Empty Store Shelves

In retail operations stock replenishments are managed overnight. The replenishment planning process starts after the stores close; dispatch orders are sent to distribution centers before 2 AM, and the stock is transported to each store before the stores open the next day. A failure to meet the time-limit results in empty shelves, poor customer experience, and lost sales opportunities.

These processes rely on the timely completion of numerous batch jobs, enabling order consolidation, master data syncing, inventory balance calculations, orders processing, logistics planning, and so on.

The customer's existing processes for batch operations were reactive, manual, and fraught with risks. Every time a batch delay was detected, support need to manually assess the impact and invoke Business Continuity Plans (BCP), if it was not resolved on time. This meant utilizing additional resources, and was inherently costly, risk-prone, requiring ad-hoc decisions. Hence the customer needed a better solution to meet this business challenge.

THE SOLUTION

- ignio AI.Workload Management provides **end-to-end visibility on 1000+ batch jobs** by blueprinting the entire replenishment batch stream.
- ignio accurately predicts future batch with a high degree of accuracy, based on both the historic run statistics and the current run statistics, giving the team enough time to resolve any potential delays. This enables proactive BCP planning and more efficient operations
- ignio utilizes the alerts that were previously sent to ITSM tools for ticket generation to do a **thorough analysis of the failure/delay, understand the potential impact, suppress false alerts,** and highlight the ones which need attention
- Business owners can now **take faster decisions** as the entire **calculation time is reduced to less than 30 minutes**. ignio also provides detailed impact analysis and root-cause analysis to help them take appropriate decision be it to invoke BCP, or re-run some of the jobs, or do a partial BCP process, etc.
- ignio monitors the real-time status of all the batch jobs to ensure they are executed on time and **provides much needed assurance** that the business processes in the background are working without the need for intensive manual monitoring.
- By ensuring timely completion of batch jobs to meet businesses SLAs, ignio helped reduce operating costs of invoking BCP. Moreover, with SLAs being met more consistently, the stock replenishment process is streamlined, resulting in **improved customer experience.**

ignio ™ BENEFITS

90% reduction in time taken for SLA calculation and BCP decision making

90% accuracy in predicting delays from batch jobs

An average of 3-4 hours saved per failed/delayed job

Better visibility for future-day planning – where additional workloads are expected to impact SLAs.

KEY VALUES DELIVERED

- On-time stock replenishment, leading to improved customer experience
- Resilient batch operations providing higher assurance of meeting business goals
- Reduced operational cost by avoiding manual BCP processes