ENHANCING A MAJOR AUSTRALIAN LOGISTICS PROVIDER'S WAREHOUSE MANAGEMENT SYSTEM

Capgemini helps launch a comprehensive warehouse management system upgrade program for improved application uptime, reliability, stability, and utilization

This major Australian transportation and logistics company operates in over 40 countries with services that span road, rail, sea, air, and warehousing. The organization delivers more than 66 million parcels for over nine billion in revenue annually. End clients belong to various business sectors such as retail, fast-moving consumer goods, automotive, chemical, agribusiness, telecom, healthcare, government, defense, mining, and energy. On average, the company's warehouse applications process thousands of orders per day across hundreds of warehouse management centers, which serve a wide range of clients in multiple regions across the globe.

However, the company was experiencing warehouse management system (WMS) maintenance and sizing issues, along with unsupported software and security vulnerabilities leading to increases in system outages and incidents. An average of 150 incidents were being raised per month and a total of 34 priority one and two incidents were resulting in significant service disruptions.

In order to rectify this situation and provide better support during peak periods, the organization was looking to update its WMS system completely and minimize downtime and inventory discrepancies, which would improve its services while meeting warehouse KPIs and heightening customer satisfaction. In addition, the company wanted to better streamline labor scheduling by ensuring that its WMS maintained a consistently high quality of performance. To accomplish all of these objectives, the organization was seeking a partner that could deliver a comprehensive application modernization program.

Client: A major Australian logistics provider

Industry: Transportation and Logistics

Client challenge:

The company was looking to improve customer satisfaction and system uptime, and eliminate inventory discrepancies and incidents by updating its warehouse management system (WMS)

Solution:

Working collaboratively, Capgemini helped the client develop a comprehensive WMS upgrade program that improved application uptime, reliability, stability, warehouse utilization, and the achievement of critical KPIs

Benefits:

- Over 50% reduction in incidents overall
- 99.9% unit level scanning accuracy and 99.9% value level accuracy
- Zero IT incidents reported during the intensive stock taking process
- 99.9% application availability
- Temporarily achieved zero dollar inventory discrepancy errors
- Higher work force utilization and superior business KPI achievement
- Substantially improved operational efficiency

> " Overall, we are progressing nicely with our plans to increase the resilience, stability, and security of our systems landscape. Thank you so much for your continued support – I am deeply appreciative of all your efforts!

THE COMPANY'S GLOBAL HEAD OF IT BUSINESS PARTNERS

Capgemini

Comprehensive WMS service stabilization and acceleration for substantial operational efficiency and incident reductions

The organization chose to partner with Capgemini due to its application and industry expertise. The Capgemini team brought everyting ADMnext has to offer and began developing a WMS upgrade strategy that would be divided into four major components: server hardware upgrades, integration service upgrades, database and application services upgrades, and a proactive monitoring setup.

The partners established a joint council consisting of internal experts, Capgemini experts, and other partners. This joint council then reviewed and implemented warehouse Standard Operating Procedures (SOPs) and began addressing process and operational challenges. Next, the council performed warehouse planning with business users that resulted in optimal warehouse configuration, while daily end-of-day monitoring and reporting helped identify opportunities for improvements from both an operational and systems perspective.

The partners also began proactively working with warehouse operators in reviewing SOPs and conducting user training for new process implementations. This led to increased stability and uptime, along with the elimination of inventory discrepancies and improved warehouse service levels and throughputs.

Afterwards, the Capgemini team automated the integration layer health check and reconciliation activities, which improved platform stability and helped to proactively identify issues. Additionally, the integration team worked to build solutions to reprocess bulk transactions in a short time span. ADMnext components Smart Analytics and Intellimap were used for analysis and root-cause identification. Meanwhile, health-check bots and auto-ticket-assignment BOTs were deployed to ease support operations.

As per the stabilization and remediation project plan, the partners deployed a multi-skilled team that included an application architect, application subject matter experts (SMEs), and quality consultants. With the help of other infrastructure teams, the partners managed to achieve the first major deployment in under two months. As a part of the remediation, all of the required database, operating system, and other supporting software was upgraded to the latest compatible versions. The team also achieved high availability and disaster recovery capabilities by splitting databases into multiple servers with clustering and load balancing.

Additionally, security patching using the RHEL (red hat enterprise Linux) Satellite Platform was implemented to mitigate any security risks. Extensive technical analysis was carried out daily while the partners ensured that the WMS began utilizing monitoring tools like app-scheduled job watchers, App Dynamics and Cloud watcher, and Oracle OEM to identify performance-related issues.

Currently, zero IT incidents are being reported during the intensive stock take process – a big improvement overall – with unit level scanning accuracy at 99.92% and value level accuracy sitting at 99.97%. These levels of accuracy are official KPIs used by the Australian Bureau of Statistics (ABS) and ensure industry-standard barcode scanning accuracy levels. Our support teams continue to achieve these high levels of satisfaction.

While lower inventory mismatch between customer and back-end merchandise systems have meant less rework for both the client and its customers. We also helped successfully upgrade the WMS technical stack to the latest supported infrastructure. This improved application security and performance, and fully tested disaster resilience and stability. Additionally, priority one and two incidents have now been reduced to only one incident with minimal service disruption over the past few months – this means an over 50% reduction in incidents overall. As a whole, we improved operational efficiency for business and support teams (which service over 500 locations) thanks to higher availability and a more resilient WMS platform.

> Thank you to everyone involved in this complex project that has encompassed multiple releases, long weekends, and curve balls from all directions. I feel particularly proud of how the whole team handled challenges, kept calm, and delivered with the utmost rigor to shield the rest of the organization from the risks and issues faced.

THE COMPANY'S HEAD OF DIVISIONAL APPLICATION SERVICE DELIVERY

Overall, the project team's strategic efforts brought the following benefits:

- Over 50% reduction in incidents overall
- 99.9% unit level scanning accuracy and 99.9% value level accuracy
- Zero IT incidents reported during the intensive stock taking process
- 99.9% application availability compared to 85% during the previous year
- Temporarily achieved zero dollar inventory discrepancy errors – compared to an average of four million AUD over the previous year
- Higher work force utilization and superior business KPI achievement through improved application stability
- Substantially improved operational efficiency for business and support teams servicing over 500 locations.

Moving fast towards the future with Capgemini

The partners are keen to expand upon the successes achieved here. Together, the goal is to ensure that the company's WMS application remains stable, and that the organization can onboard new customers to the platform as its business continues to grow. The company also has a vision to consolidate its WMS landscape, which comprises multiple vendor systems on Blue Yonder. The partnership will continue to support the application as a managed service and contribute to future customer experience improvement projects.

About Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of over 325,000 team members more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2021 global revenues of €18 billion.

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