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Problem Description

Being competitive in this frequently updating generation requires constant evaluation and adaptation to the market and new innovative technologies. According to the 2018 WERC report, the adoption of technologies speed is around 70%. Auto parts industry in major cities of Australia is deploying new technologies which are critical for more reliable operations of warehouses and supply chains. The prominent auto-part suppliers are integrating technologies like IoT, cloud computing, automation, advanced sensor, and artificial intelligence to accelerate their growth and stay ahead in the market. However, few auto parts warehouse managers are still using papers, spreadsheets, management systems with few integrated technologies to handle core warehouse process and other functionalities. The consequences were poor Productivity, inaccurate inventory information, decrease in sales, delay in order processing, poor daily management functions, and outdated inventory system.

One of the Auto-part's suppliers of Jack Greig and Daniel Cox in the principal city of Australia with several years of expertise in this industry had the equivalent outcomes and declining its position. Integrating new innovative technologies will optimize warehouse process with increased productivity and profitability. Hence developing a robust, next-generation new warehouse management system is imperative for Jack and Daniel business.

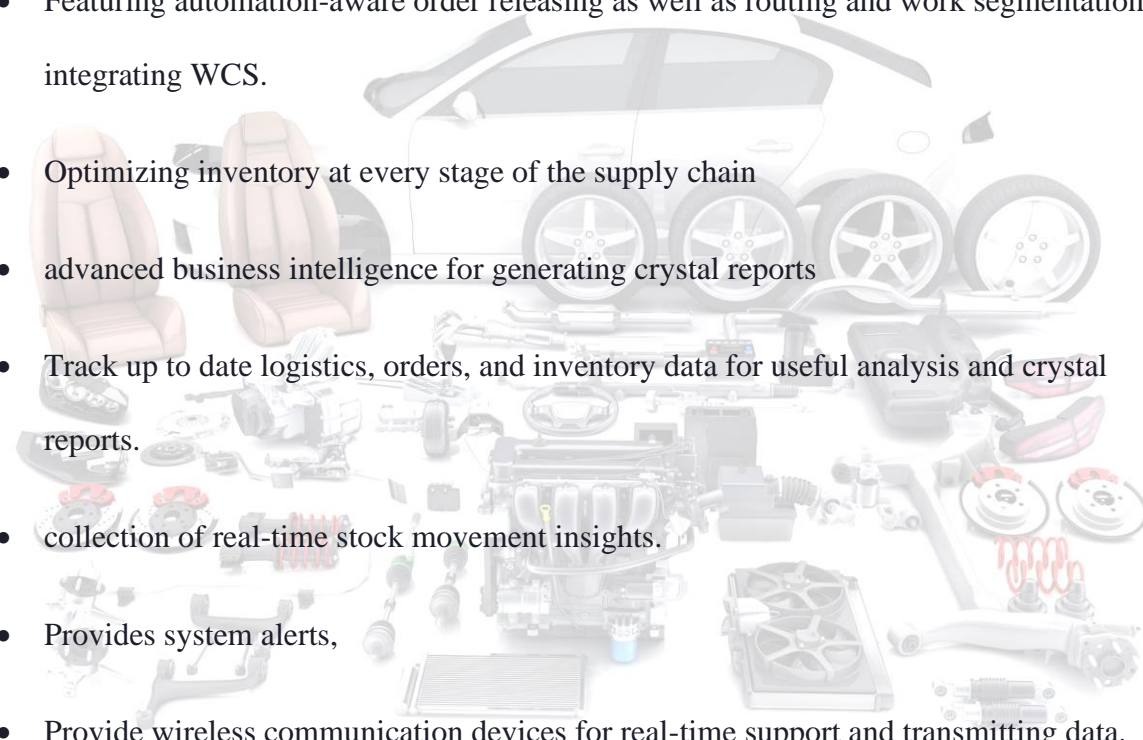
System Capabilities

Distributer information subsystem:

- Receiving all types of orders from distributors.

- Provide distributor accounts, orders and billing capability
- Visibility of distributor purchases and inventory status
- Incorporates comprehensive order fulfilment.
- More accessible pick-up and process orders and faster order processing.

Information subsystem

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- Featuring automation-aware order releasing as well as routing and work segmentation by integrating WCS.
 - Optimizing inventory at every stage of the supply chain
 - advanced business intelligence for generating crystal reports
 - Track up to date logistics, orders, and inventory data for useful analysis and crystal reports.
 - collection of real-time stock movement insights.
 - Provides system alerts,
 - Provide wireless communication devices for real-time support and transmitting data.
 - Monitoring security of wireless communication technology

Benefits

The specific benefits include:

- Maximize the efficiency of warehouse and reducing logistics cost by using RFID technology.

- Increased Productivity by reducing the workload
- Increased efficiency of order picking by using RFID-SAS.
- Improved analytics using Ai which can be useful for better decision making
- superior security and disaster recovery system of wireless communication technologies.
- Lower operating costs.
- Maximizing profit by predicting and responding to the demand before it occurs by advanced BI.
- Increase in workflow by integrating Automation and WCS.
- Maintain better logistics and storage life period by effective scheduling method.
- Increase in Distribution of operations in real-time.
- Enhanced customer service
- optimized user-friendly interface.
- Improved operational efficiency.
- Faster fulfilment times, which provides better customer experience and better trade.

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