Problem Description

Being competitive in this frequently updating generation requires constant evaluation and adaptation to the market and new innovative technologies. Auto parts industry in major cities of Australia is renewing their warehouse management systems and deploying new technologies. 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. But 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consequences were poor Productivity, decrease in sales, delay in order processing, poor daily management functions, and outdated inventory system.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. Besides, research has shown that infusing new innovative technologies will optimize warehouse process with increased productivity and profitability (add citation here). Hence developing a robust, next-generation new warehouse management system is imperative for Jack and Daniel business.

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One of the Auto-part's suppliers of Jack Greig and Daniel Cox in the primary city of Australia with several years of experience in this industry had the same outcomes and declining its position. Besides, research has shown that infusing new innovative technologies will optimize warehouse process with increased productivity and profitability (add citation here). Hence the development of a new warehouse management system is crucial for Jack Greig and Daniel Cox business.

Implementation of the right technologies will be critical to the smooth operations of warehouses and supply chains.

**Capabilities**

Distributer information subsystem

* Receiving all types of orders
* Collection of information from receiving orders to delivery.
* Provide distributer accounts, orders and billing capability
* Faster Order processing
* Includes comprehensive order fulfillment
* More accessible pick-up and process orders
* order load management,
* receiving packing orders

Information subsystem

* Featuring automation-aware order releasing as well as routing and work segmentation by integrating WCS.( MICHEL, 2018)
* Optimizing inventory at every stage of the supply chain
* advanced business intelligence for generating crystal reports
* Tracking up to date logistics, orders, and inventory data for useful analysis and crystal reports.
* COLLECTION of real-time stock movement insights.
* Provides system alerts,
* Keeping track of products as you sell, restock, manage returns across multiple locations
* Provide wireless communication devices for real-time support.
* Monitoring security of wireless communication technology

**Benefits**

The specific benefits include:

* Maximize the efficiency of warehouse and reducing logistic cost by using RFID technology.
* Increased Productivity by reducing the workload
* Increased efficiency of order picking by using RFID-SAS(Choy, Ho, & Lee, Intell Manuf 2017).
* Improved analytics using Ai which can be useful for better decision making
* superior security and disaster recovery system of wireless communication technologies (McCooey, 2017)
* 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.
* intelligent warehouse management system for better logistics management services and monitoring of the entire storage life cycle of materials. ( Mao, Xing, Zhang,2018)
* Increase in Distribution of operations in real-time
* Enhanced customer service
* user-friendly interface which is easier to use for any field service technician or retail clerk can use the system with literally zero assistance.
* Improved operational efficiency
* Increase in revenue
* faster fulfillment times, which provides better customer experience and better business.