

# **Supply Chain Mobility: Digital Transformation**



# **Supply Chain Mobility**

Mobile solutions allow the digitalisation of end-to-end supply chain processes to streamline operations, drive efficiency and improve productivity.



#### **Market Landscape**

Changing customer purchasing habits, along with an increasing demand for products to be delivered with a shorter turnaround time, has put pressure on supply chain operations. Warehouses are now required to manage a larger volume of stock, which moves through the warehouse more rapidly, bringing with it a greater need for accurate, traceable inventory data.

In a bid to deliver a seamless customer experience, businesses are being put under continued pressure to reduce order-processing times and shorten delivery timeframes, with 'next day' rapidly becoming the expected normal for receiving products. An efficient supply chain operation, with connected end-to-end processes, is crucial to making informed business and operational decisions to deliver on customer demands.

There is a lot of talk around the future of warehousing, with digital transformation seen as the path forward to achieving more efficient supply chain operations. This is backed up by the 2021 MHI Annual Industry Report<sup>1</sup>, in which 22% of supply chain leaders revealed they believe the digital supply chain is already the predominant model and 83% expect it to become predominant within five years.

However, with new innovations being developed all the time and a variety of technologies offering the ability to digitise operations, it is important to remember to assess the tangible business benefits of any potential new solution. There is not a one size fits all approach and, for example, while automated vehicles may be the right solution for one warehouse, it may not bring the same benefits to all businesses.

## **Managing Warehouse Operations**

It is widely acknowledged that the size of the market for Warehouse Management Systems (WMS) will increase, with market analysis predicting an annual growth rate of 15.3% from 2021 to 2028<sup>2</sup>. This is expected to be driven by companies in the healthcare, manufacturing and retail industries as they strive to streamline their operations to increase output and meet rising consumer demand. The set-up of new warehouses to cater for increased customer demand, a change in supply chain models, the capability to ship products faster and an ability to automate processes, can all be attributed to the expected growth.

It is crucial that companies ensure they are getting the most out of a new WMS system. While the introduction of a WMS may improve visibility of stock, orders and movements throughout the supply chain, if data is inputted into the WMS manually, the potential efficiency and productivity gains will not be realised. It is also important to note that existing WMS solutions can also be enhanced with the integration of new technology, to deliver improved efficiencies.

## The Role of Mobility

The key to processing and delivering orders on time, every time, is end-to-end real-time visibility of data across the supply chain. It is crucial that every stock item stored, order received and shipped delivery is accounted for and tracked through the warehouse process.

Completing warehouse tasks using manual processes, or limited technology, can cause stock discrepancies, order errors, delivery delays and slow down operational performance. Implementing an effective mobile solution can transform supply chains, with immediate benefits of improved stock accuracy, reduced processing times and increased productivity being realised.

In addition to the clear stock traceability benefits, the transition from fixed desktop workstations to utilising applications on mobile devices also significantly reduces walking time by eliminating the need to continually return to a desktop to input information. Automatically retrieving tasks on the go further adds to the boost in productivity.

While the MHI Report<sup>1</sup> details 26% of companies are using some form of mobile technologies in the supply chain today, it is clear to see why it is predicted that 67% will adopt mobility solutions within five years.

# **Real-time Insights**

Barcode and labelling innovations allow physical product information to be quickly and easily scanned by a mobile device, whether a tablet, ruggidised handheld, truck-mounted device or wearable headset. The specific process undertaken by the operator can be recorded on the mobile device, which is updated directly to the ERP system in real-time, allowing accurate and efficient tracking and processing of items through the warehouse.

It is not just about mobilising individual processes, an intelligent mobile solution can connect all supply chain processes to ensure complete visibility of the end-to-end supply chain, anytime, anywhere. This real-time insight is becoming a pre-requisite within supply chain operations in order to meet demand and deliver a seamless customer experience.

#### **User Engagement**

The use of mobile devices is part of everyday life, with warehouse operators already familiar with using mobile apps away from a work environment, making the transition to mobile technology an uncomplicated one from an end user perspective. Many end users embrace the introduction of intelligent mobility solutions as they make tasks quicker and easier to complete.

The intuitive user interface of many mobile solutions also significantly reduces employee onboarding and training times and makes the process of hiring temporary and seasonal staff, to cope with peaks in demand, much simpler.

## **Analytics on Demand**

The role of analytics within warehouse operations is changing, with a shift from analysing data on a daily or weekly basis, to transitioning to real-time analytics that can inform accurate decision making to enhance current operations.

Access to real-time metrics anywhere, anytime, allows supply chain managers to interpret data on the move to influence stock movements, re-deploy resources and maximise asset utilisation to ensure customer deliveries are always fulfilled on time and in full.

## **Rapid Deployment**

While the benefits are clear to see, the perception of large-scale business changes, operational disruption and complex process migrations, alongside user hesitance, can often be a barrier to the implementation of mobility solutions.

There are a number of options you need to consider which can affect the deployment time. Will you be using your internal resource? Will you be working with a mobility specialist? Will you be developing a solution from scratch? Will you be using a low code platform? Will you use an out-of-the-box solution? Sometimes the best way forward is a combination of these options.



#### **Continued Innovation**

The different options for deployment of mobile apps are continually being developed, with the use of wearables steadily increasing year on year. Wearables not only enable operators to carry out tasks hands-free, using voice commands to update the transactions in the system in real-time, but also allow them to collaborate with colleagues, sharing live video for immediate input and instructions.

Other innovations that are beginning to emerge in supply chain operations include the use of counting inventory using a mobile camera, the adoption of Autonomous Guided Vehicles (AGVs) and the introduction of drones as a safe and quick way to manage inventory. According to Gartner<sup>3</sup>, it is expected drones will grow from 989,000 in 2019 to over 13 million units worldwide by 2029.

As warehouses are put under increasing pressure to deliver, mobilising the supply chain is an important step on the journey to creating a more efficient and productive operation. The use of mobile technology is expected to become commonplace over the next five years, but it is the innovative ways this technology can be used and deployed that will drive further gains to those that are tuned in to the benefits it can bring.

# **Mobility with The Config Team**

At the Config Team, we have been providing mobile solutions to optimise supply chain processes for over a decade, continually developing our products to ensure all our mobile applications meet the changing needs of our customers.

PreBilt™, our suite of out-of-the-box mobile applications, allows any supply chain processes to be executed through a mobile device with a real-time connection to SAP. With the ability to be deployed in days, PreBilt has been developed with the user in mind and offers easy to use applications that simplify complex processes seamlessly with SAP.

For further information on supply chain digital transformation or to discuss your specific business requirements please contact The Config Team on 01625 557846 or visit theconfigteam.co.uk.

- 1 https://www.mhi.org/publications/report?mkt\_tok=MjM1LVZRVS0yMzEAAAF8cFUuUMqyPe30S2mknqlXy8F-yiU7KDVztUwxgz7I-emZxkD8VcfNWqvrqfkxg\_qjLH9xEB51Ir107Si9W1CxNh4ng\_jdQE93W25ZCe1b
- 2 https://www.grandviewresearch.com/industry-analysis/warehouse-management-system-wms-market
- 3 https://www.gartner.com/en/newsroom/press-releases/2019-12-04-gartner-forecasts-global-iot-enterprise-drone-shipmen



