

Körber Supply Chain

Tackling SKU proliferation in FMCG

How to find the right warehouse automation solution



Introduction

Since the rise of ecommerce and omnichannel deliveries, supply chain operations have been playing catch up with customer demands. This past year, COVID-19 has put even more pressure on fast-moving consumer goods (FMCG) warehouses. Orders keep increasing, while stock quantities for each product keep getting smaller. With retailers offering a variety of products with different packaging, colors and flavors, stock-keeping unit (SKU) proliferation is inevitable. But for a warehouse, that means finding a way to handle and distribute products more quickly and efficiently.

Automation solutions offer different ways to tackle SKU proliferation, depending on each warehouse's needs. From organizing stock to managing operations, the key is to introduce new technology without a substantial cost increase. Automation can support the FMCG supply chain in a variety of ways, including finding the right storage solution, and improving warehouse operations.

Finding the right storage method

Flexibility and responsiveness are key factors for an FMCG warehouse to stay competitive. 2020 proved customer demand can change unexpectedly. Logistics operations must be ready to adapt to these changes, without compromising efficiency, and while keeping costs low.

To do this, they must have the right automation solution for their warehouse needs. This can include:

- **An automated storage and retrieval system (ASRS)**
Automated stacker cranes and pallet shuttles are designed to efficiently handle the storage and retrieval of palletized

goods, in a more accurate way than manually operated machines – improving day-to-day storage operations. This technology will ultimately reduce costs, load-handling times, and potential errors, all while increasing productivity and space efficiency.

- **Conveyor systems and rail guided vehicles**
Both are cost-effective options for load transportation within the facilities. By taking over pallet handling between different areas, for example, they let staff focus on higher value-added operations, saving travel time and reducing labor costs. Their compact design will also mean more space – for more solutions, more SKUs, or both.



Increasing person-to-goods productivity

Automation solutions can also support staff, making their tasks safer and smoother. Both autonomous mobile robots (AMR) and voice technology, for example, release floor workers from strenuous, repetitive tasks, and work alongside them through person-to-goods operations.

- **Voice technology**

SKU proliferation is always a concern, but it is particularly challenging during peak times. This is also when seasonal staff are hired, requiring extra training time. Voice technology makes this process faster, by guiding new workers via a headset, and giving them simple verbal instructions. Receiving information this way also means their hands are free to pick and move stock without having to check a display or tablet with instructions, saving time and improving safety.

- **Autonomous mobile robots**

AMRs take repetitive, time-consuming tasks out of workers' hands, freeing them up to focus on aspects of the job that require more skill. For example, the robots can move to a picking location, and the nearest worker can perform the manual handling of products. The robot can then move to other areas of the warehouse, and the picker can simply move to the next closest robot. This way, staff travel time is significantly cut, increasing productivity.



Improving goods-to-person order fulfillment system

With SKU proliferation, a common challenge for FMCG warehouses is keeping a fast and simultaneous access to different product cases. To add to the complexity, the number of available staff is quickly decreasing, with younger people favoring more skilled, technical jobs. But even with a robust workforce, there can be tasks too difficult for employees, such as working in low temperatures. Automation solutions can help you create a smooth order fulfillment system, from picking to pallet building, with fewer employees.

Combining different solutions, such as ASRS and Layer Picker, for example, means that much of the moving, storing and picking is done by automated machines rather than humans. This reduces not only the need for workers to be on the floor, but also the possibility of errors. They can adapt to the volume and size of each order, no matter the complexity.

However, human labor is still very necessary for a warehouse to operate, and should be accommodated accordingly.

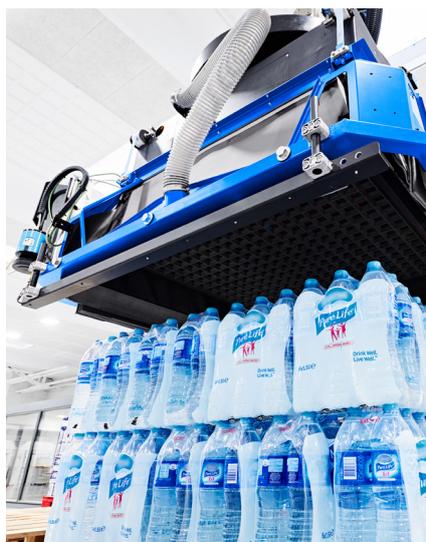
To improve goods-to-person order fulfillment systems, pick workstations must be designed more ergonomically, following the latest safety guidelines. Optimizing distances of pick positions in a workstation – and guiding employees by display terminals (or ideally, voice systems) – will also significantly increase productivity.

Introducing layer picking solutions

A Layer Picker Solution is often the best choice when tackling SKU proliferation, as it also happens to be the right starting point for those interested in automating their warehouse. It's another small step towards an automated future, giving the investor time to better understand the technology. By automatically building customer pallets with different layers of products, it also offers a quick and efficient way to handle additional numbers of SKUs. The floor space is reorganized with automation in mind, meaning it can accommodate higher stacks of pallets, creating even more space for further SKU proliferation.

A Layer Picker will make your warehouse processes faster, cutting the need for labor to do manual layer picking, and reducing picking errors and damages, while optimizing

production and flow. It allows for steady progress towards bigger automation solutions, with a quick return on the initial investment.



“Selecting the right level of automation and automated system is a highly individualized task. The key to success is understanding your own needs and expectations (or your customers’) [...] Once you understand your own needs and capabilities modular automation systems that progressively upgrade the section of your warehouse with the greatest capability can generate positive momentum, as well as enable integration as you continue operating your warehouse.”

Julia Arlinghaus
Prof. Dr.
Fraunhofer IFF Institute

Conclusion

For retailers, a wider product choice increases sales. But for supply chain logistics, it means a higher level of complexity. Automation makes all operations run more smoothly, improving warehouse efficiency, even in unexpected circumstances. However, there is no “one solution fits all” available.

Whichever way you choose to go for your warehouse, be sure to first assess your specific needs and introduce the solution that makes sense for your operations.

Find out more

To make your choice easier, Körber offers a series of master classes for each solution:

Read more →

Could Körber’s automation solutions help you future-proof your warehouse for increasing SKU proliferation? Contact us to find out:

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