

WHITEPAPER

# The voice of proliferation

Mitigating SKU proliferation complexity  
through voice directed work

# Introduction

Consumers have become accustomed to product options for every possible requirement and taste. Many of these products may be very similar at a glance but with discernible differences—a food product that looks similar in its packaging but comes in different flavors or lower salt or sugar options, for example. This brings a growing set of challenges in how manufacturers and distribution centers distinguish and process these items.

In the 1980s, Campbell Soup approached leading psychophysicist Howard Moskowitz, hoping that he would help them find the one “perfect” spaghetti sauce recipe for their struggling Prego brand.

What he found, through extensive market research, was that there wasn’t one “perfect” recipe which would satisfy all discerning tastes, because different customers wanted different things from their spaghetti sauce. Some liked it plain, some liked it spicy, and some liked it chunky. In response to this, Prego developed a chunky sauce, to be sold alongside their existing line. It was a big success, and a new level of consumerism was born: horizontal differentiation.

Today, horizontal differentiation touches upon nearly every industry in some way, but is most common with food, cosmetics and fashion. While more choice for the consumer arguably encourages sales to a point, it has also come at a price: rampant SKU proliferation, and complexity across the supply chain.



“Proliferation in retail is a healthy and natural thing, but it has to be managed well. Marketing and sales want to meet the specific needs of each individual customer, but manufacturers and operations typically want standardization to decrease costs and complexity.”

**Anton Du Preez**

Group Sales Director for Infios Voice

## What is SKU proliferation?

SKU (stock-keeping unit) proliferation is where retailers increase the number of products (SKUs) that they offer to customers, catering for a range of tastes and requirements.

There was only one type of spaghetti sauce available in the 1980s, but today there are hundreds. This is the case for nearly every commercially available product, and as tastes become more varied, so does the demand for more variables. This poses a number of challenges across the supply chain.



# Macro challenges

## Manufacturing

Mass production is efficient, but SKU proliferation limits its scale. While it is simpler and more cost-effective to produce only one generic recipe of product in bulk, it will only suit the tastes of some. When there is variety available from competitors, it will increase the likelihood of another brand making the sale, resulting in unsold units and waste. Producing smaller batches of different types of sauce, on the other hand, carries much higher manufacturing overheads.



“A perfect warehouse holds stock briefly before shifting it back out again. Getting the balance between that and having the right products always available for all customers is a constant challenge.”

**Anton Du Preez**

Group Sales Director for Infios Voice

## Warehousing

Having hundreds of different variations of products to distribute is a big risk in terms of space and storage. If one style of sauce goes out of “fashion,” when there are still units to be sold, those units will take up a huge amount of storage space which could be put to better use.

This also affects how the warehouse is organized, a process known as “slotting.” Popular products are placed near the packing area to reduce travel time for the team, while the less popular ones are moved further away. This reduces movement during peak times, making operations more efficient.

Slotting is easily managed when it comes to managing inventory for peaks, but variation trends are much harder to predict. This means the laborious task of arranging and rearranging the warehouse to improve efficiency happens more and more frequently.

# Micro challenges

## Accuracy in picking

Smaller amounts of products in greater numbers and in denser locations means there is a higher chance of a team member mis-picking. This directly translates into an impact on the end customer’s experience. SKU proliferation ultimately drives the need for more accuracy, as there is more variation, leading to more scope for mistakes.

## Efficiency in picking

Proliferation means individual products are more spread out, even when slotting is carefully managed. This means it ultimately takes longer to pick full pallets, no matter how many people you have available. This extends to how a team member’s capacity is used, with them often having to spend their time moving between locations, rather than picking.



“If you have a limited number of products to provide to a customer, the picking process is fairly easy. With SKU proliferation, pickers have to go to different locations to pick different products, and often have to arrange the products to meet provided specifications. With each additional SKU, things get more and more complex.”

**Anton Du Preez**

Group Sales Director for Infios Voice

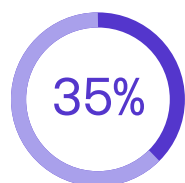


# Managing complexities through voice

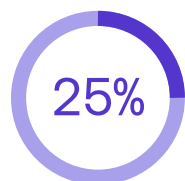


SKU proliferation is a vast and complex challenge, but there are ways to circumvent some of the micro-challenges on the warehouse floor. One of these is VDW (voice directed work).

VDW enables hands-free and eyes-free operations for faster, more accurate work. It works by sending workers directions through a headset. Once the task, or the stage in the task, is complete, their responses are recorded in real time and sent back into the system so a new direction can be given.



Increase in productivity



Increased accuracy

VDW helps manage some of the impacts of SKU proliferation in the following ways:

## Accuracy

- Ensuring the correct product is always picked at the correct time, reducing mis-picks
- Decreasing time spent looking for the correct items

## Efficiency

- Enabling the processing of multiple orders simultaneously (utilizing team members' capacities differently)
- Easy combination with WMS (warehouse management systems) and other efficiency-focused innovative solutions, such as robotics

## Compliance and quality

- VDW gives warehouse operatives easy to follow step-by-step guidance. By setting defined operational rules, for example how to correctly build a mixed pallet, VDW increases both accuracy and productivity
- With a growing number of individual SKUs, the opportunity for quantity errors increases. Through a "countdown" capability, once an operative has stated the quantity of a product they have picked, voice will confirm the remaining stock level, with no further physical checking input needed.

# The future of SKUs

Having more choice is ultimately a good thing, at least for the retailer and consumer. The sheer volume of SKUs could plateau in the future, as certain products and variants fall out of favor and are replaced by others, but it is unlikely to decrease. Because of this, it's important for warehouses to be proactive in their approach to managing proliferation complexities.

Of course, voice isn't the answer to everything. The macro problems of space and storage, for example, cannot be fully addressed with greater accuracy and efficiency on the warehouse floor. But a multi-dimensional challenge requires a multi-dimensional solution, something that voice could form an integral part of in the future-proofing of your business.



“As a consumer I don't want a return to “one size fits all” mass production. I like the choice that I have. SKU proliferation is here to stay, either as a constantly increasing number or as a changing list. It will always be a challenge.”

**Anton Du Preez**

Group Sales Director for Infios Voice

## CONCLUSION

A rapid increase in SKU proliferation is indicative of the diversifying tastes of consumers. Only the most flexible and adaptable processes will be able to handle the increasing pressures of choice on the warehouse floor, and therefore reap the benefits.

### Find out more

See how Infios's versatile VDW solutions could help you future-proof your warehouse in the face of SKU proliferation.

Learn more about our voice technology:

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