

How SKU-ed up is your chocolate and bar production process?

Quantitative and qualitative evidence from the industry on SKU proliferation



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INTRODUCTION

SKU proliferation is a challenge we constantly hear anecdotes about from our customers, so we decided to gather evidence from the market and from our own customer base.

Across the Consumer Packaged Goods (CPG) sector, including chocolate and bar manufacturing, businesses are adding to their inventory and product range in order to meet an increased and diversified demand. This has a significant impact on how you plan and operate your production process.





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128% GROWTH IN SKUS FOR CONSUMER-PACKAGED GOODS

As customer demands rise, a greater range of products are being produced and processed. To meet those demands and remain competitive, chocolate and bar manufacturers are processing these products more rapidly.

When it comes to SKU proliferation within the broader CPG sector, an increase in new products is a key factor. This, in turn, leads to shorter run lengths, more frequent changeovers, and a greater need for innovation.

Between 1998 and 2016, <u>the number of new products hitting the market</u> <u>more than doubled</u> – from approximately 18,000 to 41,000 – which has led to what's known as consumer microsegmentation. By microsegmenting consumers to address their needs more acutely, CPGs have developed a constantly increasing range of SKUs.





Breaking it down - SKU proliferation in the food sector

In 2019, the three food categories with the largest shares of overall new product introductions were snacks, bakery foods and beverages, according to the <u>USDA Economic Research Service</u>. They accounted for 42.7% of new products, and have been in the top five for the entire 2012–2019 period with a slight reduction since 2012 (from 46.1% to 42.7%).



Three main challenges of SKU proliferation

To keep up with demand, manufacturers must harness technology and innovate, or they risk being left behind.

1. Trapped capital

SKU proliferation can be a real problem, because to attract more customers and increase sales, manufacturers are adding items to their offering and holding onto obsolete or slow-moving inventory.

2. Increased costs

SKU proliferation drives up the costs of customer service, overhead and decreased output, as well as increasing inventory and distribution costs.

3. The need to innovate

Innovation can be challenging as product lifecycles have become increasingly compressed - even new products become obsolete faster. So, as the range of a company's product portfolio increases, so too do the costs of R&D needed to get those products to market in a short a time frame as possible. Product and process innovations that reduce unit costs and increase operating efficiency are critical.

Manufacturers need to be aware of the challenges SKU proliferation presents, so that not only can it be managed, but its positive aspects maximized for business growth.

SKU proliferation trends in the bar industry

When it comes to the snack bar market, revenue is expected to reach \$8.8 billion by 2023, even while US manufacturers navigate the Covid-19 era. While this is partly due to the growing popularity of health bars, sales for other snack bars continue to climb as well. The breakfast/cereal/snack bar was up 5.7% in 2019, while all other snack and granola bar segments were up by 3.1%.

Chocolate is what's commonly termed an 'old-school food', which means it's been around for centuries. And yet, where other old-school foods have become obsolete, the demand for chocolate continues to rise. SKU proliferation is having as much of an impact on chocolate manufacturers as in any other area of CPG.

According to researcher <u>Euromonitor International</u>, in the six years through 2019, global retail sales of chocolate jumped 19% to a record \$108 billion.

"Innovation in the industry has kept consumers coming back," said Jared Koerten, Head of Packaged Food at Euromonitor in Chicago. "Companies are introducing products that give consumers reasons to try something new," and keep them buying chocolate."

Innovation in the industry has kept **17** consumers coming back.



Underlying this growth are some key trends:

Trend #1: Ingredient innovation

Innovation is evident in an 'any-ingredient' approach to chocolate products. Including ingredients such as green tea, balsamic vinegar, tree resin, curry powder - to name but a few - to create constantly evolving flavors is a winning strategy that's helped to keep demand for chocolate high.

For example, the legalization of marijuana in some North American states is set to have an impact on the demand for chocolate. Binske, a cannabis company in Colorado, is importing rare cocoa beans from the Amazon jungle to offer <u>chocolate edibles containing marijuana</u>. The cannabis-edibles category could be worth more than \$4.1 billion in the US by 2022, up from \$1 billion in 2017, according to <u>Arcview Group</u>.

"Conservatively, 40% or 50% of that is edible chocolates," said Jake Pasternack, Founder and CEO of Binske.

Trend #2: Flavor mash-ups & multiple textures

Many market leaders are combining flavors and ingredients to create 'mash-ups' and different textures. For instance, Mars recently decided to combine their classic Snickers bar with a chewy peanut brownie filling – creating the <u>Snickers Peanut Brownie</u>.

Hershey are also offering a new mash-up in the form of the <u>Kit Kat Duos Mocha & Dark</u> <u>Chocolate</u> bar, alongside their previous Duo of Mint & Dark Chocolate. The mash-up theme often features in limited edition products such as birthday cakes, pumpkin pie, raspberry crème, apple pie, lemon crisp and, for Halloween, a marshmallow-flavored Witch's Brew variety.

Creating constantly evolving flavors is a mining strategy that's helped to keep demand for chocolate high



Trend #3: Sugar reduction in focus

In response to a growing demand for healthier options, many candy manufacturers are offering reduced sugar options in their product range.

Major chocolate retailer <u>Hershey's</u> has recently introduced a range of chocolate products that are sugar free, while <u>ChocZero</u> specialises in offering dark and milk chocolate products that are not only sugar free, but some are also gluten free and keto-friendly.

These examples are indicative of a global shift to limit the amount of sugar that goes into sweets and candy. In Europe alone, <u>research</u> has indicated that 50% of consumers are actively seeking healthier candy options, and 60% have indicated there aren't enough healthy options available.

Trend #4: Better-For-You bars

The popularity of protein bars is consistently on the rise. The market is expected to reach <u>\$1.8 billion by 2024</u>. And now, there's a demand for even healthier options, such as the vegan bar. Major brands like LÄRABAR, Clif Bar, and KIND already offer predominantly vegan selections.

Mars has also launched a <u>vegan chocolate bar</u>, becoming the first major confectionery company to offer a plant-based alternative to milk chocolate.

- The NPD Group's recent report <u>The Future of Snacking</u> showed manufacturers are responding to consumer needs with both healthy and 'naughty' products.
- <u>How America Eats: The State of the Snack Industry</u> by market researcher IRi, found that snack and granola bars with grain and 100% natural claims were among the growth-rate 'winners' when looking at categories across the store.
- Technavio's <u>report into the US snack bars market</u> found that there's potential for it to grow by \$806.08 million during 2020-2024, and the market's growth momentum will accelerate during the forecast period because of the steady increase in the year-over-year growth.

These trends present opportunities for manufacturers to tap into new markets, and effectively plan for SKU proliferation.



Insights from chocolate and bar manufacturers

The impact of SKU proliferation is definitely being felt throughout the industry.

We gathered market insights from various PTL clients, across both manufacturers and multinationals.

There were 3 common themes across the sector that emerged:

1: Keeping up with customer demands

"The biggest challenge in our industry is staying on top of what the consumer wants, right?" says the Director of Engineering at a comanufacturing company. "It's more competitive than it ever used to be. So, staying on top of that and finding innovative ways to keep our business going are probably one of our biggest challenges."

SKU proliferation means shorter runs and reduced product lifecycles, as customer demands continually evolve. "Everyone's always looking for the next Oreo, or the next Oats and Honey granola bar or the next Pop Tart," says the Principal Engineer at a multinational brand customer. "So, products don't get a long time on the shelf. Companies launch them and if they don't make it, they have no fears of pulling the plug after six or 12 months."



Everyone's always looking for the next Oreo, or the next Oats and Honey granola bar or the next Pop-Tart With this shortened lifecycle comes the challenge of striking a balance between the investment needed to be made in product R&D against the ROI. "The biggest problem we have is our products don't last any more than two years. And that's a very large investment that you're putting in to be able to change everything," says a PTL General Manager customer. "Because no one wants them the same size, no one wants the same size of carton, same size of wrap, same size of bar. Everything's got to be unique. That makes it difficult for us as a core manufacturer."

2: Weaving in the ESG factor

Then there's the customer shift towards healthier, environmentally sustainable, and climate-friendly products. This is known as Environmental, Social and Corporate Governance (ESG) - customers not only want healthier options, but they want assurance that what they're buying is environmentally and socially responsible. If animal welfare is compromised, or ingredient production is causing environmental harm, customers will look for options that appease their conscience.

"The new trends are more towards what the consumer wants, and those trends are moving very fast," says another of our customers, a Director of Chocolate Technology

Nestlé <u>launched a new recyclable paper wrapper</u> for its YES! snack bars, marking the first time a confectionery bar has been packaged in paper using a high-speed flow wrap technology. Patrice Bula, Nestlé's head of strategic business units, noted that "Consumers are looking for more natural and sustainable options when they choose a snack, both in terms of ingredients and packaging."

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3: Lifestyles on the go

Among those fast-moving trends is a fast-moving lifestyle. "Things have changed over the last 50 years. No one sits down for breakfast anymore. You just get up, you grab a granola bar, and go. And that's the food that we're making, it's grab-and-go."

It's not just the consumers who are moving at a more rapid pace either. The demand for ever-increasing product ranges and the resulting SKU proliferation means manufacturers must innovate swiftly if they're going to remain competitive. "In the factories it's all about produce, go, go, go. High efficiency, high volume," says the Director of Chocolate Technology. "Range and volume are our biggest driver. We need to get new lines running quicker, we have to hit the ground running at a hundred miles an hour."

So not only is SKU proliferation on the rise when it comes to chocolate and snack bars, it looks set to continue on an increasing scale. Even through the Covid-19 era, manufacturers still have to respond to rising customer demands, including that of swift and innovative product delivery.

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Manufacturing innovation to address the challenge of SKU proliferation

Meeting the challenges of SKU proliferation can be achieved with a focus on constant innovation. Manufacturers need to have systems in place that can manage a complex SKU landscape. There are many logistical challenges to managing hundreds of SKUs, and you need the kind of technology and systems that give you control over each SKU and its lifecycle.

Production planning

Effective SKU management is also about getting the most from your production process. It's important to reduce bottlenecks and leverage strategic factory floor placement. Investing in compact, powerful and flexible equipment is the key to efficient SKU proliferation, because it will enable ingredients to be switched over faster, allowing the production of multiple SKUs.

Changeover agility

When you need to produce multiple SKUs, machinery needs a changeover and cleaning capability that provides the flexibility to go from one product to another quickly and easily in order to maximize production.



It's also important to ensure a small footprint combined with high production rate is when adding new product variations to existing production lines. Rapid production, ease of sanitation (especially allergen cleanability) and minimal downtime are the three pillars of manufacturing multiple SKUs. If chocolate and bar manufacturers are going to move towards product variations, they will need to replace their old machines with agile chocolate processing machines that are hygienically built for easy cleaning and accessibility

PTL machinery is designed to specifically address the challenges associated with SKU proliferation. It's aimed at:

- Enabling manufacturers to increase their production output and capacity
- Allowing the production of more SKUs with shorter lifecycles
- Eliminating the bottlenecks in production lines

How does it achieve this? By creating together with our customers, to ensure we're:

- Boosting production rates
- Transforming changeovers
- Reducing footprints

Working together, we ensure that our expertise and experience matches yours.

Rapid production, ease of sanitation (especially allergen cleanability) and minimal downtime are the three pillars of manufacturing multiple SKUs.



About PTL

Since 1988, we've been creating innovative machinery. We specialize in designing and manufacturing innovative chocolate and bar machinery for the world's multinationals and largest comanufacturers. We service customers throughout North America, and have an established footprint, with people on the ground to handle installations, service and support.