Harnessing the power of simplicity in a complex consumer-product environment

Companies can generate significant value by deliberately managing sources of complexity, including those presented by the COVID-19 landscape.

by Christina Adams, Raphael Buck, Gary Herzberg, Janine Mandel, and Curt Mueller
Even before the onset of the coronavirus pandemic, complexity in consumer goods was increasing at an accelerated rate. The evidence can be seen all around: in grocery stores alone, new product launches have risen dramatically, from around 20,000 in 1996 to 39,000 two decades later. The evolving retail landscape has created new and different ways for consumers to shop, with each channel bringing its own product and packaging requirements. Meanwhile, direct-to-consumer models and the growing demand for personalization have led to faster cycle times and ever-smaller shipments, and the explosion of small, nimble players across industries is forcing legacy manufacturers to expand their supply chains to be more responsive. The current crisis and market landscape are making choices in assortment more important than ever.

Adding some complexity to address consumer and retailer needs is inevitable—and can spur tremendous growth. But as the current market landscape highlights, it also needs active management to avoid an erosion of productivity and profitability for consumer-packaged-goods (CPG) companies.

The implications of COVID-19 have created more urgency for CPG companies to act. Certain businesses have performed well during this time: for example, over-the-counter cold and flu drugs saw a 150 percent increase in sales in the weeks following the outbreak, while grocery e-commerce increased by 25 percent. But many more have struggled, as more than 40 percent of US consumers have slowed their purchases.¹

To adapt to this new market landscape, manufacturers are being forced to make difficult assortment decisions, as retailers, given rapidly shifting consumer tastes, are demanding different products on their shelves. Further complicating the situation, prioritizing the well-being of vital employees affects the day-to-day operations of manufacturing and the supply chain. The cumulative effect of these forces can feel overwhelming. Still, it is important to keep a balanced view of both the short-term needs of securing the business and success in the longer-term environment.

CPGs that tackle complexity will see an impact far beyond streamlined product portfolios: successfully managing complexity can increase net sales by 1 to 4 percent and boost margins by up to 8 percent. Further, implementing processes to combat value-diminishing complexity can have additional benefits, including unlocking employee capacity and refocusing leadership and employee resources on critical business areas. Since CPGs have been struggling to maintain healthy growth, they can ill afford to overlook any promising option.

Yet many CPGs lack the discipline and capabilities to manage sources of complexity across the full value chain. Executives should first familiarize themselves with the different types of complexity created by external factors such as market forces and internal processes within the organization itself. To determine a starting point for initiatives to streamline operations, executives should then pinpoint their company’s sources of complexity. With this visibility, companies can then make targeted investments to reduce complexity and reallocate resources to higher-value activities.

Identifying where complexity is smothering value
Companies must be able to recognize the difference between strategic, incremental portfolio growth and costly, unprofitable SKU proliferation.² For organizations that play in categories requiring a certain level of complexity, recognizing these dynamics can create new opportunities. The confectionery category, for instance, demands a broader SKU portfolio that accommodates seasonal products and flavor variations, both of which are necessary to support growth as consumers continue searching for novelty.

A look at a CPG manufacturer’s typical value chain highlights the potential impact of value-diluting complexity and the common areas where it can creep in (Exhibit 1).

Complexity—good and bad—occurs throughout the value chain.

**Good complexity**
- Strong innovation pipeline
- Customer-specific SKUs where needed
- SKU variation that supports category competitiveness
- Strategic use of specialty materials to drive value
- Broad, robust in-house manufacturing capabilities
- Innovative packaging that drives consumer value
- Streamlined, cost-effective merchandising
- Accretive promotional activity for key customers

**Bad complexity**
- SKU proliferation driven by lack of process
- Unclear strategic roles of low-margin SKUs without active discontinuation, yearly cleanup, or offsets
- Lack of common raw materials sourcing across product groups
- Co-manufacturing used as flex production due to suboptimal forecasting
- Secondary and tertiary packaging that does not drive consumer value
- Margin-dilutive merchandising without common chassis across product groups
- Last-minute promotional activity that dilutes value

**Portfolio development and innovation**
Consumer demand for innovation and specialization, combined with category dynamics, can result in an upward-spiraling stock-keeping unit (SKU) count. Without strict process management, organizations can find themselves with an unwieldy portfolio and a growing portion of low-margin SKUs with no clear strategic roles.

**Manufacturing**
Smaller runs make production more difficult to plan, leading to reduced fill rates. Changeovers become more frequent, along with accompanying idle line time and higher expenses. Warehousing costs for finished goods may increase, and customer-service levels may fall.

**Procurement**
A broad and growing portfolio can create a long list of raw inputs needed to create products. More and more SKUs are niche or limited-time offerings, which means materials orders are smaller, more specialized, and harder to manage, with fewer common inputs across SKUs. The resulting complexity makes demand planning difficult, raises out-of-stock and carrying costs, and increases the risk of spoilage and waste.

**Packaging**
Smaller, niche products may need bespoke packaging that existing packing equipment is unable to handle. Specialty packaging needs result in costly manual packing or use of copackers. Incorporating custom secondary or tertiary packaging without a clear view of the value it may bring further reduces margins.

**Sales and marketing**
Shelves that are increasingly crowded by niche players and small SKUs give channel partners...
negotiating leverage, squeezing bottom lines through increased promotional spending, slotting fees, and discounts. Portfolio fragmentation also challenges manufacturers’ marketing focus, diluting messaging and making it more challenging for consumers to find products on shelves. Manufacturers may increase merchandising activity to improve relationships with customers, but without streamlined planning and production, such activity can quickly destroy value.

**Proven levers for reducing complexity**

Broadly speaking, CPGs have four primary ways to address complexity: assortment optimization, simplification of design, design to value (DTV), and process management (Exhibit 2).

**Assortment optimization**

This approach eliminates SKUs that erode margins and redirects resources toward portfolio gaps, thus increasing distribution of higher-margin SKUs that

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Exhibit 2

**CPG companies have four ways to address complexity.**
have room to grow. Companies should assess a number of factors, in particular the impact of the SKU assortment on velocity and supply chain (Exhibit 3). This action is also the fastest one to take when faced with a crisis such as COVID-19.

**Simplification of design**
Organizations can reevaluate product development, procurement, manufacturing, and merchandising to ensure common sourcing and develop more standardized product and packaging chassis (common baseline models and sets of ingredients upon which to build several products, for example). This approach can reduce costs and changeover times associated with product variation.

**Design to value**
Many products are burdened with more specs than the consumer actually values, which results in unnecessary cost and complexity. For overly complex product lines, gaining a better understanding of which product and packaging features consumers truly care about can eliminate waste, raw ingredients, and excessive labor, all of which squeeze margins.

**Process management**
Revised internal processes—including those for new product development—are necessary to manage complexity. This is far from a one-time effort; it requires commitment to an ongoing

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**Exhibit 3**

**Winners assess broader portfolio impact, including supply-chain complexity, when deciding to add or eliminate SKUs.**

**Criteria used for SKU changes, % of respondents**

<table>
<thead>
<tr>
<th></th>
<th>Winners</th>
<th>Others</th>
<th>Factors in adding SKUs</th>
<th>Factors in eliminating SKUs</th>
</tr>
</thead>
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<tr>
<td>Baseline impact</td>
<td>93</td>
<td>87</td>
<td>93</td>
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<tr>
<td>(revenue, volume,</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>margin)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incrementality</td>
<td>100</td>
<td>85</td>
<td>100</td>
<td>40</td>
</tr>
<tr>
<td>Velocity</td>
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<td>38</td>
<td>80</td>
<td>69</td>
</tr>
<tr>
<td>Supply chain</td>
<td>100</td>
<td>38</td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>complexity</td>
<td></td>
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<tr>
<td>Customer request</td>
<td>100</td>
<td>92</td>
<td>92</td>
<td>0</td>
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</tbody>
</table>

Source: 2018 NA Commercial Excellence Benchmarking (CEB) Survey – Survey: Which of the following criteria are used when adding or eliminating SKUs?
series of reviews to ensure collaboration across the business, support strategy, and provide structure in decision making. Recent McKinsey research found that 40 percent of "winners" conducted a SKU evaluation at least once every quarter, compared with 23 percent of other companies (Exhibit 4). In addition, research indicates that 100 percent of winners take supply-chain complexity into account when adding SKUs, and 80 percent use it as a criterion when eliminating SKUs.

The challenge for any organization is that each lever can take substantial time, skill, and resources to execute effectively. Unless leaders know the core drivers of complexity, they cannot be sure which one will generate the most value.

Five archetypes
Since a company’s specific sources of complexity will dictate which remedies it deploys, a diagnostic can bring welcome clarity to an otherwise opaque challenge. Research conducted in the development of our "complexity quotient" has allowed us to identify five common archetypes, which are distinguished by complexity-driven behaviors or attributes.

History-led organizations
These companies tend to rely on what has traditionally worked and take a one-size-fits-all approach to the market, applying a single core product model to different market situations. While this tends to simplify decision making, it can also cause an organization to miss opportunities to tailor strategy to changing channel or market dynamics. History-led organizations could benefit from applying assortment optimization and DTV to tailor their approach to more-segmented customer groups.

Common behaviors observed: Limited price tiers and line pricing, low level of customization

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Footnote:
³ "Winners" are defined by their advantages across a number of metrics, including growth, pricing strength, sales expenses, and online sales.

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Exhibit 4

**Winners perform SKU evaluations quarterly.**

**Frequency of SKU evaluation, % of respondents**

<table>
<thead>
<tr>
<th></th>
<th>Winners</th>
<th>Others</th>
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<tbody>
<tr>
<td>Every quarter</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>Every six months</td>
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</tr>
<tr>
<td>Every year</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Less than once a year</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>As needed</td>
<td>0</td>
<td>23</td>
</tr>
</tbody>
</table>

Source: 2018 NA CEB Survey
for customers and consumers, and minimal breakthrough innovation.

**Gut feelers**
These companies, having made limited investments in data and insights, instead use a broad set of people who rely on experience and instinct to make decisions. If led by visionary senior executives, such organizations may thrive through quick thinking and breakthrough innovation, despite their lack of data-based visibility into the complex business landscape. Gut feelers’ performance, however, tends to suffer as their competitors harness an increasingly rich data environment and advanced analytics to optimize processes across the value chain. Gut feelers can use assortment optimization, advanced analytics, and process management to develop a better structure around their portfolio.

**Common behaviors observed:** Limited consumer testing involved in setting price points, incrementality rarely used in portfolio decisions, and no clear rules or thresholds for SKU additions or subtractions.

**Overthinkers**
These organizations tend to make “the great” the enemy of “the good.” They are thorough and methodical in their decision making, and their analytics provide them with a good understanding of their consumers and customers, which can lead to well-thought-out decisions. This approach, however, can also lead to overengineered solutions, inflexible processes, and unnecessary complexity in marketing and operations. This tends to introduce friction into a system and impede decision making. Overthinkers can benefit from process management to streamline decision making throughout the organization.

**Common behaviors observed:** Internal misalignments on promotional activity, limited consensus on price and pack architecture, and many products with secondary and tertiary packaging.

**Category navigators**
These organizations operate in complex and challenging categories that often demand a high level of product complexity. While successfully operating in these categories often leads to strong customer and consumer relationships, these companies sometimes have difficulty managing at-shelf, promotion, or margin landscapes due to the level of complexity their categories demand. They can benefit from assortment optimization and simplification to corral their SKU complexity.

**Common behaviors observed:** Lack of common chassis and ingredient bases for product development, extensive margin variation across product lines and business units, and a high percentage of volume occurring on promotions.

**Independent operators**
Independent operators often have a clear understanding of how to win in the market and can communicate effectively with their sales teams. But other departments in these organizations often don’t communicate regularly, resulting in misalignment among consumer demand, manufacturing operations, and internal processes. This can lead to suboptimal supply chains and vendor contracts, and difficulty coordinating operations with portfolio strategy. Independent operators can benefit from internal process optimization to drive communication throughout the organization.

**Common behaviors observed:** Lack of consumer insights into product development, minimal formal contracts with vendors, and potentially inflexible supply networks and systems that can make communication between commercial and operational functions even more critical.

**Taming complexity: Two cases**
Regardless of a company’s archetype, its leaders have opportunities to improve gross margin by managing complexity. A look at two real-world examples demonstrates the application of specific levers and their impact.

One food company had a complex product line that was putting pressure on margins, constraining employee capacity, and creating service-level issues. As a category navigator, this company’s
portfolio was largely shaped by a highly competitive category that valued innovation, seasonality, and promotions.

The company embarked on a combination of initiatives to control complexity in the near term: it optimized product assortment by limiting SKUs and implementing higher thresholds for introducing new products to minimize portfolio creep. In addition, the company increased distribution of higher-margin SKUs, simplified packaging of similar SKUs, and simplified product design by using product chassis and a design-to-value approach. These simplification initiatives, which affected more than half of the product portfolio, identified opportunities to improve top-line revenues through increased distribution and to reduce costs by 3 to 5 percent.

Another company, a gut feeler, had focused on increasing revenue—but at the expense of profitability. Over a three-year period, it had increased the SKUs it offered by 66 percent, which corresponded with a 40 percent decrease in sales per SKU and a 10 percent reduction in margin. To address this, the firm undertook a simplification program that involved portfolio optimization, product design, and commercial network alignment. By harnessing analytics that factored in revenue-growth targets and operational constraints, the company reduced its product portfolio by 25 percent while improving gross profit by 3 percent.

Tackling complexity isn’t a one-time fix; the pace of change in consumer goods requires companies to make it an ongoing effort through continued process optimization. Doing so can also enable companies to get ahead of changes that may otherwise be forced on them by economic, environmental, consumer, or retailer changes. With this foundation in place, consumer goods companies will be better equipped to keep complexity in check.

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