

# Simpler is (sometimes) better: Managing complexity in consumer goods

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# Simpler is (sometimes) better: Managing complexity in consumer goods

Here's how consumer-goods manufacturers can master complexity—and even turn it to their advantage.

With consumers' product preferences diverging and retail formats proliferating, consumer-packaged-goods (CPG) companies have compelling reasons to constantly launch new SKUs. Fast-growing niche markets—such as health and wellness products, socially and environmentally responsible wares, and ethnic foods—represent enticing opportunities for CPG companies, as do new online and offline retail channels. Indeed, product innovation can help CPG companies win shelf space and capture growth, which is crucial at a time when many CPG categories are experiencing flat sales. But manufacturing more SKUs means having more complexity in the entire business system—and that's not a trivial matter to CPG companies already under pressure to cut costs and to become ever more efficient. We estimate that complexity among food-and-beverage manufacturers, for example, is costing them as much as \$50 billion in gross profit in the US market alone.

Many companies are painfully aware of the problem, and acknowledge the difficulty of keeping complexity under control. CPG executives from a range of companies—including Campbell Soup, Colgate-Palmolive, ConAgra Brands, and Hershey—have made public statements about their efforts to reduce complexity in their businesses. It's a tricky undertaking, precisely because some level of complexity is necessary and advantageous. Traditional approaches to simplification—such as “cutting the tail,” or discontinuing the lowest-volume SKUs—are suboptimal, both because they tend to address only one aspect of the business system (a cut-the-tail program is all about assortment) and because they can produce unintended consequences. For example, by discontinuing a low-volume SKU, a manufacturer might inadvertently eliminate a product that plays a unique strategic role in the assortment. Or it might unknowingly drive up the per-unit cost of manufacturing other SKUs made on the same production line.

Companies should take a more nuanced approach to managing complexity. Specifically, they need an approach that takes into account both commercial and operational perspectives, uses big data and analytical insights, and sets aspirations and action plans that the entire organization can agree on. In our experience, such an approach can help a CPG manufacturer achieve significant impact: a net revenue increase of one to four percentage points, margin improvements of three to six percentage points, and asset-productivity gains of 10 to 25 percent—even as it trims its SKU count by 25 percent. To top it off, the company will also likely increase its speed to market, improve shelf availability, and boost customer satisfaction.

## Two kinds of complexity

The key to mastering complexity is to recognize that there is both good and bad complexity, and then to systematically distinguish one kind from the other. Good complexity drives incremental sales and volume that exceed the incremental expenses incurred, or results in a favorable shift of the product mix. Good complexity can take the form of new SKUs that fill unmet consumer needs or that capture growth in emerging segments (such as gluten-free foods or organic products), new price tiers that allow for better margin management or that fulfill additional need states, or the addition of unique ingredients that influence consumers' purchasing decisions (such as Angus beef or antibiotic-free chicken). In other words, good complexity more than pays for itself. Bad complexity, on the other hand, erodes profit, increases inventory, and makes the supply chain less agile.

To ensure that it's adding only good complexity to its business, a company must become adept at figuring out what products and features consumers are willing to pay for. The company must then put in place the supply-chain systems and capabilities that will enable it to bring those products to market profitably.

Consider the case of a global food manufacturer. In one of its leading business units in North America, SKU count had risen by 66 percent in just three years, mainly because of three types of items: line extensions (such as low-calorie versions of existing products), new pack sizes, and products developed for specific retailers or channels (SKUs customized for the dollar-store channel, for instance). In response to retailer pressure and fierce competition, the company had added new items without discontinuing any older ones. During the three-year period, sales per SKU dropped by 40 percent. Furthermore, some of the new SKUs contained allergens that required separate storage space and long changeover times; other new SKUs had packaging configurations that required co-manufacturing and new online capabilities. The company thus found its productivity and efficiency declining. Margins fell by as much as 10 percent in select categories.

Alarmed at the company's deteriorating performance, the top team launched an ambitious simplification program. Instead of resorting to a traditional cut-the-tail exercise, it used advanced analytics to understand sales by region and to assess the true incremental value and cost of each of its SKUs. It found that the new pack sizes drove incremental sales and could be manufactured less expensively; on the other hand, sales of the new SKUs containing the allergen, although stronger than expected, fell short of covering the additional costs of manufacturing them—so those SKUs were discontinued. The results of the program: SKU count dropped by 25 percent, changeovers became speedier, and gross margins improved by 2 to 4 percent (Exhibit 1). In short, the company dramatically reduced the bad complexity that had clogged up its supply chain.

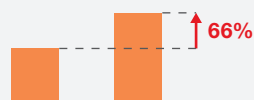
Exhibit 1

## A large food manufacturer significantly reduced complexity in its business, delivering bottom-line impact.

### Situation

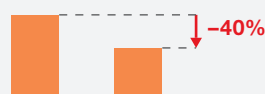
#### Increasing complexity in past 3 years

- Number of SKUs



#### Loss of efficiency and productivity

- Sales per SKU



- 10% margin decline
- More changeovers, write-offs, and inventory
- More than 3x the levels of co-manufacturing

### Result of complexity effort

#### Significantly reduced number of SKUs



- Reduced inefficient customer promotional configurations by 15%
- Reduced changeover time by 25%

#### Gains in gross margin



- Added new process to systematically design to value
- Updated processes to sustain end-to-end complexity management

Source: McKinsey analysis

Another company, a US-based packaged-food producer, didn't just get rid of bad complexity but also added a considerable amount of good complexity. For one of its main brands, the company eliminated ten low-volume SKUs but didn't reduce its SKU count. It instead replaced those SKUs with new items that filled identified gaps in its assortment—for example, it introduced more vegetarian items, which consumer research showed would attract new customers to the brand. It created a new price tier targeted at consumers looking for trade-up options. The company also reformulated certain low-margin SKUs and reduced the number of ingredient variants for selected categories. The expected impact of these and other program initiatives: more than \$50 million in run-rate gross margin across five brands.

### An end-to-end view of complexity

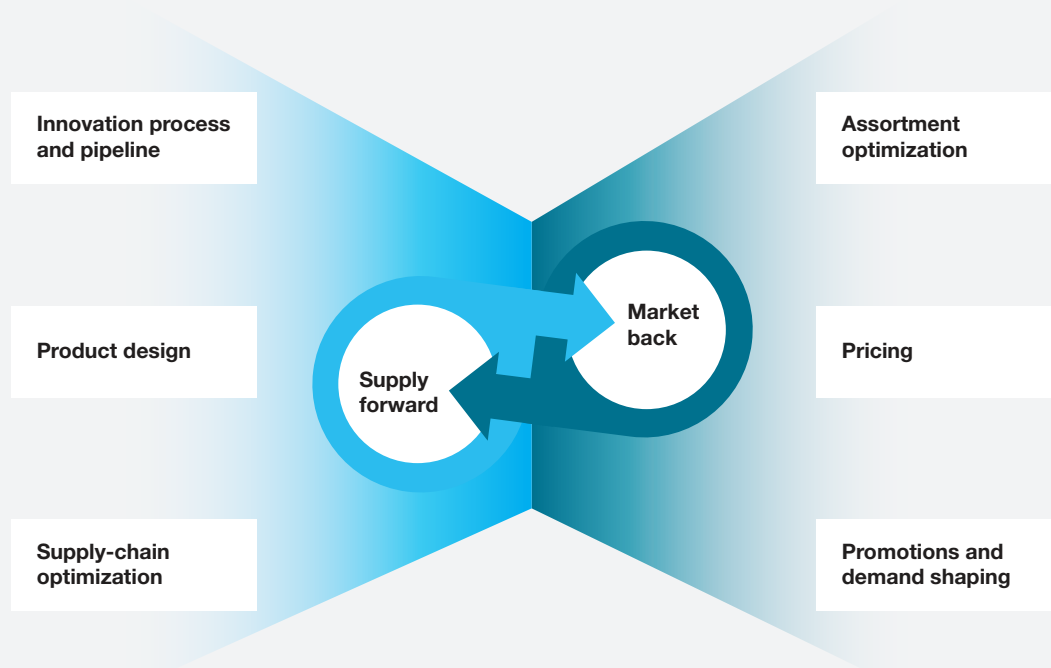
Many CPG companies tackle complexity by undertaking either a SKU rationalization or a manufacturing optimization, usually led by the supply-chain side of the business. While such initiatives can certainly tame complexity, they are limited in scope and won't be nearly as effective as a multifunctional program.

We recommend that companies take a full-system view instead—that is, they should examine all the possible entry points for complexity using what we call “market back” and “supply forward” lenses (Exhibit 2). Market-back considerations have to do with what consumers and retailers care about—for example, assortment, pricing, and promotions.

Exhibit 2

## Complexity should be viewed through both ‘market back’ and ‘supply forward’ lenses.

### Sample levers



Source: McKinsey analysis

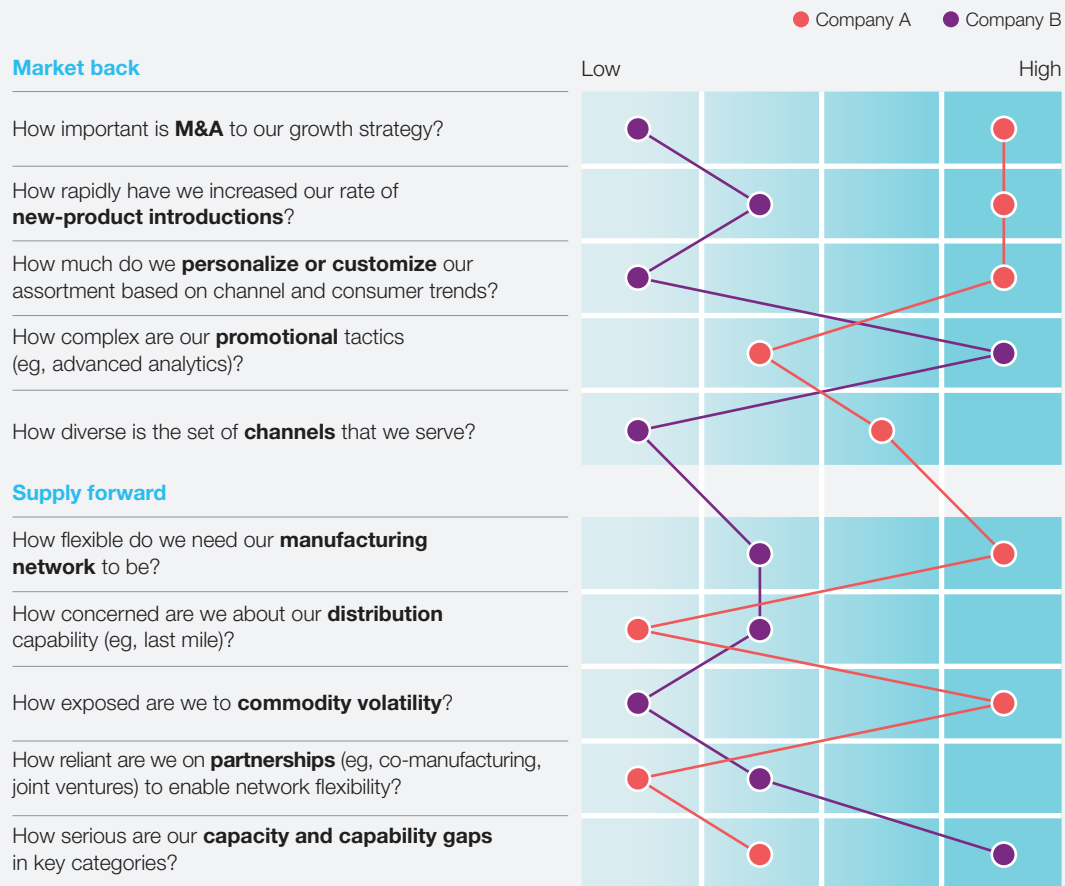
The supply-forward lens gets at how the company should manage operations, including its innovation pipeline, product-design processes and platforms, and supply-chain structure.

The most relevant market-back and supply-forward levers will differ for each company. A CPG manufacturer may find it useful to think about a series of questions from both a market-back and supply-forward perspective (Exhibit 3). Answering these questions can serve as a quick diagnostic to uncover the root causes of complexity, or the “complexity hot spots,” in a company’s business.

For example, as shown on the exhibit, Company A—a manufacturer of both branded and private-label products—relies heavily on inorganic growth, frequently introduces new products, has an efficient but relatively inflexible manufacturing network (which makes launching each new product a rather expensive venture), and is highly exposed to commodity risk. Given these hot spots, assortment optimization would be an important lever for Company A. Less so for Company B, which isn’t acquisitive and has a limited product portfolio that it sells through only

Exhibit 3

### A series of questions can help companies identify their ‘complexity hot spots.’



Source: McKinsey analysis



a few channels. A complexity-management program at Company B should instead prioritize other levers, such as revamping the promotion architecture.

Regardless of which specific market-back or supply-forward levers a company decides to focus on, it should seek to tap into the powerful insights that big data and advanced analytics can deliver. Take assortment as an example: successful assortment optimization relies in part on how well a company understands consumers' buying decisions—which product attributes matter most to them when buying a certain product, which products they consider interchangeable, and so on. Through big data analytics, CPG companies can now generate quantified and actionable insights into consumers' decision-making processes, thus helping them more precisely refine their assortments.

### **Preventing 'complexity creep'**

To prevent bad complexity from creeping back in after a complexity-management effort, a company must redesign its business processes so that they systematically eliminate waste and inefficiency while also supporting good complexity. In particular, companies can take the following steps.

#### *Establish a cross-functional governance structure.*

It's easy for each function to revert to the habit of focusing exclusively on its own goals and coming up with siloed functional solutions, instead of taking an end-to-end view of complexity. To ensure that various functions continue to collaborate with each other, CPG companies would do well to create a cross-functional governance structure, with a defined cadence of meetings. For example, a leading food manufacturer established a recurring series of cross-functional working sessions involving brand teams, product-development

teams, and line-level factory workers.

During these sessions, participants discuss which SKUs and ingredients drive complexity, align on the biggest areas of opportunity, and develop potential solutions. When line workers observed that the penne in a pasta dish tended to bounce out of trays during the manufacturing process—requiring human intervention, slowing production time, and sometimes resulting in food waste—the cross-functional team decided to replace the penne with a different pasta shape. Changes like these amounted to \$1 million in annual savings across three manufacturing plants.

#### *Regularly pay attention to a range of metrics.*

When leaders become overly focused on only one or two financial measures—say, sales or gross margins—they ignore metrics that might be just as important, and often end up making suboptimal business decisions. The most successful companies consider metrics such as incrementality, velocity, and all-commodity volume distribution (a measure of a product's availability at retail stores), giving them a fuller understanding of each SKU's costs and contributions.

#### *Change mind-sets.*

Complexity management shouldn't be an episodic, ad hoc activity. Sustained improvement requires wholesale changes in mind-sets and behaviors. As part of broader efforts to embed a complexity-management mind-set into its business processes, a CPG company established a “one in, one out” rule for line extensions: each time it introduced a new SKU, an older SKU had to be discontinued. It created and maintained a “SKU watch list” that was on the agenda at every portfolio review and at annual planning meetings, and executives engaged in active SKU-discontinuation conversations throughout the year, both internally and with retailers.



Mastering complexity need not be a long and arduous undertaking. We've seen companies assess their situation, identify the most relevant complexity-management levers, prioritize and plan initiatives, implement those initiatives, and reap the benefits—all within a three- or four-month period. These companies then took steps to ensure they sustain the right level (and the right kind) of complexity in their supply chain. The results are anything but complicated: better financial performance, faster innovation, and greater customer satisfaction. ■

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