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The Challenge of Customization: Bringing Operations and Marketing Together

Customers want more customized, personalized products and services, but companies struggle to cost-effectively deliver them. Improving communication and coordination between operations and sales and marketing is one critical path to profitable customization.

Today's companies are under greater pressure than ever to be "all things to all customers" — to produce increasing variety and customization of products and services, and keep their costs under control so they can deliver at competitive prices.

Unfortunately, most companies struggle with the rising costs to serve customers who are demanding more and more variety, customization, and personalization. Indeed, companies frequently find themselves introducing the wrong variations at the wrong prices — giving customers value that they don't really want at a price that the company can't really afford to pay.

Such errors don't occur because of incompetence, say experts at the Wharton School of the University of Pennsylvania and Booz Allen Hamilton. On the contrary, marketers often know their customers and their distribution partners in astonishing detail, and operations engineers can follow their products in real time from the factory to the warehouse to the store. The real problem, they say, is systemic.

Most companies' organizational structures and management incentives frequently discourage — and sometimes even obstruct — the collaboration and communication between the operations and sales and marketing functions that is essential for cost-effective customization.

In this paper, consultants from Booz Allen and faculty from Wharton conclude that failure to communicate and coordinate among functions, particularly between marketing and operations, significantly raises the costs and difficulty of executing customization strategies. They explain the structural and cultural reasons that make it tough for marketing and operations to work together. And they offer suggestions on how senior executives can encourage better communication and information sharing between these functions to ensure that new varieties of products actually add value for customers and earn profits for companies.

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Complexity Drivers

To understand what goes wrong, it's important to see how decisions to introduce new features are made in the first place. "Generally, marketing believes that more variety will enable the company to reach more customers," says Matthew Egol, a principal at Booz Allen based in New York City.

At the same time, salespeople often push for even more variation, as they try to match their product to the desires of a specific customer, not just a perceived market need. "Sales guys have an incentive to make products more complex because they want to close the deal; they want to get that order or defend the price premium," Egol explains.

In some cases, the distribution channel itself drives product variation, whether this adds value or not. Keith Oliver, a Booz Allen senior vice president based in London and head of the firm's global operations practice, says that in a service business the "expert interface," such as an insurance broker, often wants to add complexity to the offering. "You know, their main job is to complicate life because that's where their added value is," he says. "If the product was self-evident and didn't actually require interpretation, then value of the expert interface in the channel is reduced."

But marketers and salespeople often don't appreciate the underlying costs of introducing greater variety and complexity, Booz Allen and Wharton experts say. "Marketing is focused on providing the variety that's demanded, but they often don't think of the cost. Or they think, here's a budget I have to hit, and then they rely on the Ops guys to figure out how to cut costs… It's not a systemic approach," Egol says.

For example, Egol recalls a heavy equipment manufacturer he worked with that offered 500 different versions of the product in its catalog, which were then customized by the sales team into thousands of ad hoc configurations. "They ended up with thousands of versions, because the sales guys would go in and say, 'You know, your needs are really unique. Let's change the specification to be exactly what you need and we'll have a warranty that stands behind it,'" he recalls.

Overindulgent Customization

It's difficult to prevent such over-promising. Leslie H. Moeller, a Booz Allen vice president based in Cleveland and leader of the firm's Customers, Channels, and Markets services, says that customization can be a bit like eating too much; you do it because "it feels good when you're doing it. Then you wake up one day and you're 80 pounds overweight."

Moeller argues that customization missteps often occur because sales and marketing frequently lack information about "the calories" (i.e., the cost of creating more variety and introducing more complexity). Quantifying the costs of such variety-binges might sound simple, but often these complexity costs are "hidden," in higher overhead, higher supply chain costs, or greater discounting.

Such over-customization can eventually lead to a weaker position in the market, with the firm pushing an excessively complex product to a bewildered customer. "At the end of the day, consumers often get more complexity than they want," says Moeller. He cites one recent study where 50 percent of respondents said that they postponed a purchase of an electronics product because the product was too complicated. Wharton marketing professor Jerry Wind concurs that too many options can paralyze the consumer. "If customers have too much choice, they cannot make a decision; they freeze," he says.

The problem is not just lost sales. The firm that has indulged in too much variety and is facing a competitor offering just the right variety can end up with a serious competitive disadvantage. Keith Oliver cites an example from a recent Booz Allen study: Chrysler's Dodge Ram is available with 1.2 million different variations. The Toyota Tundra sports a much smaller 22,000 possible configurations. Yet, Oliver says, "Toyota doesn't appear to be penalized by having less variation and customization." In fact, Ram is losing share while the Tundra is gaining share. According to Oliver, Toyota's frugal approach to managing variety gives it a tremendous cost advantage over Chrysler. Between greater line efficiency and fewer variations, he says, Japanese automobile manufacturing labor costs are 80 percent lower than those in Detroit.

At its most extreme, choice complexity can actually lead to a value-destroying business model that's a bit like the old vaudeville joke about the salesman who "loses on every sale but makes it up in volume." Moeller recalls a packaged goods client whose top sales manager on its Costco account hadn't real-

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ized the true costs of the packaging that the warehouse grocery giant demanded. Booz Allen analysts discovered that an account that appeared to be expanding revenue at 7 percent a year was accomplishing this feat only by boosting its per unit costs by 6 percent a year.

Historic Conflicts

Most U.S. firms have historically had a culture in which operations and sales and marketing are adversaries rather than partners. This makes getting the right information to the right people at the right time a challenge.

"Not only is there a tension between the functional objectives, in many instances they are in fact 180 degrees opposite," Oliver says. Marketing wants short lead times and huge variety; manufacturing wants long lead times and limited variety. "Operations actually needs to design the changes, they need people to make sure that the bill of materials gets to the right place in the production line, that they actually made what was promised," says Egol.

Conflict also arises because each function is compensated differently. Operations executives make their money on cost reduction, not volume. Marketing and sales incentives are typically built around unit sales. Often, even sales incentives aren't calibrated to maximize profitability. Leonard Lodish, a professor of marketing at Wharton, says he knows of one snack-food company where delivery drivers and salespeople are still compensated on per pound sales, rather than on the profitability of a particular product line.

Communication between sales and marketing and operations is made still more complex by the fact that each function is generally run by people who lack a common background and vocabulary. Operations leaders are often engineers and technically oriented. They usually don't have MBAs. Sales and marketing executives, whether or not they have business degrees, are not attuned to technical costs and tend not to sweat the details the way the engineers do.

"Choice complexity can actually lead to value destruction: One packaged goods company was expanding revenue at 7 percent a year, but was accomplishing this only by boosting its per unit costs by 6 percent a year."

As a result, says Egol, "the Ops guys think that the sales guys just don't understand the cost implications of what they're doing, and the sales guys think that the operations guys don't understand that the customer is king."

Given the challenges of achieving what Booz Allen has dubbed "smart customization" — making an intelligent balance between more choices for the customer and the costs of complexity for the company — it might be tempting to take a page out of Henry Ford's book and offer customers "any color they want as long as it's black."

But in today's society, not offering the appropriate range of choices isn't an option. When operations-focused cost-cutters reduce the number of choices without consulting marketing, it can be just as bad as having too much variety. In fact, Wharton's Lodish says that such operations-driven decisions can lead to trouble if, for instance, a company decides to cut its lowest-selling 10 percent of SKUs without considering the impact to the company's sales and fixed costs. "If you don't have all the pieces, and you concentrate on one side and not the other, you end up making very bad decisions," explains Lodish.

A Nontrivial Challenge

Some of these misunderstandings can be resolved through more dialogue, but it won't happen without encouragement from the top, says Stephen Hoch, a marketing professor at Wharton. What's needed is "leadership at the top that recognizes that there's a conflict and is focused on resolving it," Hoch says. That "doesn't necessarily mean caving one way or caving another," but it does require encouraging discussion.

Regrettably, Oliver says, most companies lack an easy way to encourage such dialogues. Although marketing and operations teams typically talk to each other all the time in the ordinary course of business, there tends to be no forum for strategic discussions.

Yet even these occasional dialogues may not be enough. "The companies that do well with customization often have well-developed cross-functional teams," Egol says. At the level of execution, "functions need to speak about how to reduce the complexity of the system and how to cost-effectively add variety and increase focus regarding what variety to add. The team is the focal point for making such trade-offs."

Finding a common set of data for those groups to discuss is another key to cross-functional success. Wharton's Lodish argues that activity-based costing systems are essential to ensure managers make decisions that are analytical rather than political. Otherwise, he says, "they're flying in the dark."

Booz Allen's Moeller says most companies find it difficult to do sophisticated cost-analysis. "To get them to think that there are different fixed costs that are fixed over different time horizons against different segments in different ways…is a very hard thing to do. The traditional business organization is just not set up today to do that," he says.

Still, company-wide understanding of issues throughout the value chain need not be synonymous with consensual decisions. "The trick is to be very clear about which decisions need to be made where," asserts Moeller.

Companies also need to focus on the customer experience. Instead of offering thousands of choices, Wharton's Jerry Wind advises companies to group customizable elements into distinct, modular packages. Booz Allen experts agree that modular packages provide more manageable ways for salespeople to deal with customization, and tend to be somewhat easier for customers to handle. Special solutions that involve choices that are not on the customization "menu" need to be only for a small subset of the account base.

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Know Your Mission

Ultimately, Booz Allen experts say that many of the difficulties companies have with customization relate to how clearly the company understands its business. Oliver says that at Toyota, for example, every employee is drilled in the company's three values — quality, durability, and reliability. The QRD mantra "actually permeates across functions," says Oliver. This common understanding of the company's goals has not only sped up the production line, it has also shaped and made Toyota's marketing more productive as well, according to Oliver.

Wharton's Hoch says that companies with a high level of operational efficiency often have a clear sense of their most desirable customer. "For instance, Dell does provide a lot of value, but if you don't know a lot about computers and you don't want to wait two or three weeks, they don't want to do business with you," he says. Southwest is another company whose operational efficiency is driven by a clear idea of who its customers are and the kind of value they are looking for in an airline. "If you feel that you want to be called by your first name and you want an assigned seat and you want to be part of a frequent flier club and all that kinds of stuff, Southwest says, 'Sorry, you're not our customer,'" he says.

While a company need not be as operationally focused as Dell or Southwest to succeed, understanding both the true cost and the value of its products is essential. Reaching that level of corporate self-awareness, and tailoring products to reflect that understanding, really can't be done without strong communication between sales, marketing, and operations. As Booz Allen's Oliver says, the cross-functional dialogue that smart customization entails is "a nontrivial challenge."

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