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The Five Principles of Smart Customization

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Two years ago, the CEO of a major specialty chemical company realized that his salesmen were selling so many expensive, value-added deals that they were eroding his company's position of cost leadership. His prescription: Standardize options to maximize scale economies and limit overhead costs.

However, moving from a "snowflake" model of customization to the other extreme of full standardization was a Pyrrhic victory. Customization was a requirement to compete for larger deals, and the company was forced to gyrate back in the other direction.

This seesaw between differentiation and cost-leadership strategies is not unusual. A 2003 Booz Allen Hamilton cross-industry study of 50 product and services companies in North America and Europe found that most companies are grappling with these very same issues. Moreover, "Smart Customizers"—those that successfully trade off the value of variety against the costs associated with introducing more complexity into their business models—outperform peers two to one in revenue growth and have profit margins 5 percent to 10 percent above competitors¹.

What's the secret of those companies we call Smart Customizers? Management gurus talk a lot about focus and vision, but that's not the essential quality here. Smart Customizers not only have vision, they also have *peripheral* vision. They are able to root out "complexity

costs" incurred by tailoring products or service offerings. Just as importantly, they understand which customization decisions are most critical to achieving volume growth or premium pricing. Finally, Smart Customizers tackle the hard work of aligning their business models to ensure that customization creates value for customers without undermining scale economies.

For example, using the Smart Customization methodology:

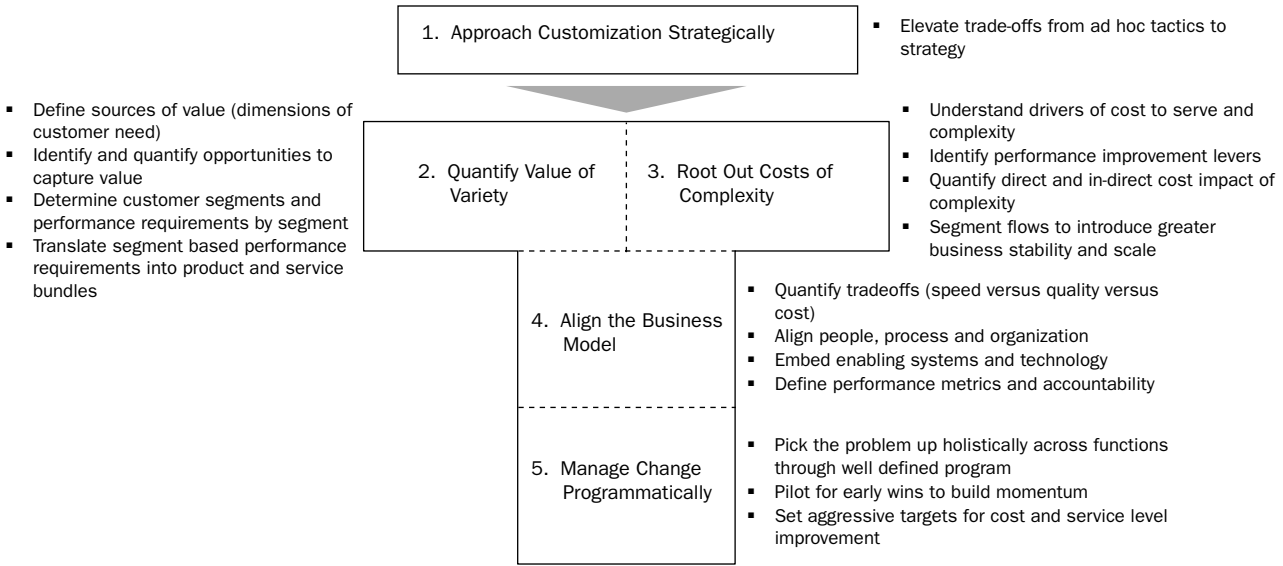
- Bank of America developed differentiated approaches to customer service that met unique segment needs at world class levels while reducing total costs by 20 percent.
- Clorox customized services across retailer accounts, while controlling the costs associated with offering unique capabilities across its account base.
- Boeing reduced costs by 30 percent—with no sacrifice in quality or customer satisfaction.
- Reliant differentiated services provided to customers while reducing costs by 20 percent.
- Pella launched an entirely new sales channel with unique products and downstream customer service, which drove sustained double digit growth at higher margins.

The good news is that while achieving the full benefit of Smart Customization requires a programmatic approach, companies can capture immediate and dramatic improvements in performance.

¹ "Smart Customization: Profitable Growth Through Tailored Business Streams," strategy+business, Spring 2004.

Exhibit 1

Five Principles of Smart Customization



Source: Booz Allen Hamilton

This viewpoint provides insights into the five principles of Smart Customization (see Exhibit 1).

1. Approach Customization Strategically

Smart Customization starts with a series of strategic decisions. The issue is not whether the company should “focus” more, but how much it should customize, for whom, and how to ensure that the additional complexity introduced doesn’t pollute the overall business system. Designing the right business model for a given segment, formulating differentiated go-to-market approaches, or introducing policies regarding tailored service levels all involve strategic decisions.

The reinvention of Bank of America’s treasury service is one example of what strategic thinking about customization can achieve. In Bank of America’s treasury business (e.g., cash management, foreign exchange, letters of credit) service was far from simple to deliver. Over time, Bank of America’s treasury service had grown into a mammoth enterprise, reaching 30,000 clients in over 20 countries, and generating 10 million client contacts every year. The infrastructure to serve all those clients involved seven separate product organizations, 56 IT systems, and 45 different service centers all over the globe. Yet the result of all that work was a one-size-fits-all

business model where most clients were either over- or underserved.

Like its competitors, Bank of America viewed service as a key basis for competition. All across the industry, treasury service prices had been dropping for years, squeezed by cost-cutting improvements in technology and the pressure of global bank consolidation. However, Bank of America’s gold-plated service model resulted in bottlenecks and service costs that were higher than that provided by the competition.

Working together, it became clear that no one had ever really thought about treasury operations as a systemic whole. The service mantra appeared to be to “give everything to everybody, as best as we can.” As a result, a sprawling system had grown up over the years with services being delivered in ways that were up to 16 times more expensive than necessary for some customers.

To help address these challenges, Bank of America developed new segmentation insights to differentiate the service channel used across segments, distinguishing between unique and common service requirements. The segmentation analysis revealed a divergence in customer behavior and needs, with customers differentiated primarily along two key dimensions: their needs for

specialized customer service, and their preference for consultative assistance versus faster self-service. Based on these new segmentation insights, we redesigned service delivery around three business streams: self-service, standardized, and consultative.

Under the new approach, the bank flows the majority of customers through the lower cost, self-service business stream, while focusing the more complex consultative business streams on customers who truly value the additional service provided. The new, tailored business streams also enabled significant simplification of the IT architecture and call center operations worldwide. Customer service levels rose even as overall costs fell by 20 percent.

2. Quantify the value of variety

One difficulty companies face when they customize products or services is figuring out the “value of variety.” Companies are under significant pressure to introduce further customization, whether to differentiate from competitors during competitive sourcing, to justify price increases, or to gain access to additional shelf space. However, most companies do not truly understand the value created by introducing more complexity into their business model. Without any gauge for this value, companies must rely on intuition and partial answers to manage complex trade-offs.

This results in two types of errors. First, a built-in bias to add complexity to meet customer requirements and avoid lost sales. Alternatively, a lack of willingness to bet on more variety because too narrow a financial lens is applied which misses the potential for higher volume or pricing that offsets higher cost-to-serve.

“Working from the market back” is critical to fully understanding the value of customization. Different methods can be used to quantify this value. These range from simpler survey-driven methodologies to more sophisticated statistical analyses to isolate how value is created and captured for different segments.

For example, Clorox used an independent segmentation analysis of its customers to identify which capabilities were “right to win” versus just “right to play.” The in-depth survey provided unique insights into both the

value different retailers placed on a number of service dimensions (e.g., trade funding approaches, innovative co-marketing programs, retail execution, supply chain management) and how suppliers stacked up against these services dimensions. Working together, we quantitatively ranked the importance of services in driving the purchase decision, to isolate which were just table stakes versus which provided true differentiation. This proved a key starting point, in combination with growth and cost-to-serve by account, to develop the overall strategy for where to deploy more customized capabilities and where to instead leverage shared capabilities across accounts to control costs.

3. Root out the costs of complexity

The other side of the equation is exposing and then managing the costs of complexity introduced to provide more customization of products or services. These costs are typically hidden in overhead or in the supply chain. “Hostile variety” can contribute to overhead in many ways, including additional headcount required to create and deliver new, tailored services or to reconfigure a production line for customized orders. It can also drive up supply chain costs as suppliers build in extra flexibility to deal with more variety.

Most companies also lack the metrics to understand the cost implications of customization. Typically, they are limited to simpler accounting tools, which don’t provide insight at such a granular level. In addition, most companies lack the ability to understand the indirect effects, either because they don’t fully allocate costs or focus on the appropriate cost drivers.

Tackling the costs of complexity therefore requires a holistic view of the entire enterprise, including its supply chain partners. Only in this way can companies hope to get their cost to serve under control, increase business stability, and realize economies of scale.

To understand what can go wrong for companies that lack a holistic view of complexity costs, consider the case of Boeing. For this large aircraft manufacturer, variability and complexity added nearly a third to the cost structure. The source of that complexity was frequent upstream changes in the supply chain, such as the development

of new features, line modifications, and bid competitions that added huge costs to Boeing's suppliers and lengthened time to market. Over time, suppliers learned to protect themselves in various ways to accommodate the aeronautics giant's frequent change orders and cancellations. Suppliers built in worst-case assumptions and added cost estimators, manufacturing engineers, development engineers, and tool-and-die makers on staff simply to cope with changes and re-bids.

Although ordering and configuration systems were designed for variability, the vast majority of orders didn't actually require customized specifications. In fact, two-thirds of the parts, build processes, and resource requirements almost never changed. As with Bank of America, processes were organized around the exception, not the rule, and as a result contributed hugely and unnecessarily to costs.

By increasing predictability, Boeing was able to help suppliers take half of their costs out of the system, which translated into a 30 percent savings for Boeing—a 20 percent unit cost savings for purchased inputs plus around 10 percent of the direct cost expense. Increased predictability was achieved in two ways. First, by creating a "basic and stable" category of parts, about two-thirds of the total. Next, by taking a more modular approach to changes, limiting those options that could be configured by a client to a few easier-to-manage choices.

By tackling these challenges programmatically and in long-term partnership with suppliers, Boeing reduced 150,000 product functions and features to 500 unique offerings. A revolution still in progress, Boeing's Smart Customization program is on track to simplify processes in other ways as well, by reducing the operations sites from 90 to 15, development sites from 50 to 6, and data centers from 30 to 3. This has translated into a 30 percent reduction in operating expenses to date, with further room for performance improvement still ahead.

4. Align the business model

Smart Customizers recognize 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. Only so much

customization is a good thing. A key starting point for Smart Customization is taking a modular approach to introducing nonstandard offerings. Truly "off menu" customization should be provided for very few customers, subject to a very rigorous business case that addresses the total systems costs and benefits. Standardized offerings that provide segment-specific differentiation should be pursued wherever possible. And plain vanilla offerings that enable basic and stable operations should be the rule for the majority of customers.

The experience of Reliant, a leading supplier of retail power solutions to the commercial and industrial market in several states that have deregulated, illustrates how to effectively align the demand and supply sides of the Smart Customization equation.

Prior to embarking on its Smart Customization program, Reliant found itself catering to frequent requests for specialized offers in order to maintain existing customers and to capture new customers. These "off menu" items for customized billing, information, and other services were mostly seemingly minor requests, and individually looked like inexpensive ways to sweeten a deal. Yet taken all together, those special requests added significant complexity and cost as mid-office and back-office support had to absorb constant changes in pricing techniques and terms, value-added services, and new IT solutions.

While Reliant tightly managed the economics of individual deals through an analytically thorough contribution model and was making money on these deals individually, management recognized that margins, comparable to other deregulated industries such as telecom, would likely be competed downward. Additionally, management appreciated that its internal capacity and throughput was being consumed by the complexities mentioned above. Lower throughput factors were inconsistent with the need for scalability as new markets opened, and with increasing needs for faster deal turnaround, speedier and more accurate bills, and other services.

To position itself, Reliant developed an innovative approach to customization. First, executives realized the power of identifying a small number of customer needs around which they could deliver better defined and competitively differentiated value propositions. By mining

their internal customer insights and other marketplace perspectives, they developed a segmentation driven by customer needs, allowing Reliant to target value propositions mattering most to these customers.

Moving away from the traditional size-based segmentation had significant benefits in Reliant's mid and back offices. It allowed Reliant to optimize its delivery system around distinct value propositions, permitting the company to customize where it was needed, but limit (or incentivize better) choices where customers didn't really care and preserve scale economies.

Today, this balanced approach to customization has positioned Reliant well to achieve cost leadership, scalability, higher service levels, and enhanced differentiation. By delivering segment-focused value propositions, the company is on track to reduce its costs by 20 percent with a more scalable model now poised for greater retention effectiveness and new customer growth.

5. Manage change programmatically

Organizations resist change. The more successful the organization has been in the past, the more it is likely to resist change. Overcoming that natural tendency toward inertia is perhaps the biggest challenge of all for executives who want to improve their company's approach toward customization.

To make sure the organization is making the right choices about customization, leaders need to select their change objectives very carefully. Transformations are often most successful if they start with pilots within specific business units or country markets. An early win can build momentum and create buy-in for more change down the line.

At the same time, cross-functional involvement is also essential. Sales, marketing, and operations tend to see questions from decidedly different points of view, and without a broad-based dialogue among these stakeholders in the overall business system, a Smart Customization program is likely to go nowhere.

Even when the program is implemented, that dialogue needs to continue. The goal is to make sure that the kind of misalignments between customer need and the business model that created the necessity of an initial Smart

Customization program don't arise again. Just as coiled metal tends to bend back over time after it is flattened, poorly managed customization tends to creep back into businesses that aren't vigilant.

Creating such a responsive organization is a challenge, but it can be done. Just ask the executives of Pella, the door and window manufacturer. Pella began its Smart Customization effort because a market shift toward big box home improvement centers (e.g., The Home Depot, Lowes) was flattening Pella's historically strong top-line growth.

Pella had a strong premium position and brand, known for innovative and top quality offerings—meticulously crafted wood products targeted at high end of the market. It relied on independent distributors to serve contractors, who controlled ultimate marketing, selling, customization, and assembly at the customer location. This channel was ineffective in serving the rapidly growing DIY segments which were taking their business to the rapidly growing home center channel. It became clear that customers were basing their renovation and repair decisions on the outlet first, with home centers the preferred format.

Serving the noncontractor market required building an entirely new business, mostly separate from the existing business. Pella needed to develop a new product line with much less complexity and lower cost. They also needed to implement new manufacturing plans and processes with longer runs of standard products versus small runs of various products. A new distribution system was put into place to replenish home centers with truckloads in very tight, regular delivery cycles at higher fill rates than the current system (i.e., stock replenishment versus build to order). Lastly, changes were made to measurement and IT systems to ensure that the key objectives of the new system were met.

Pella underwent a fundamental, wholesale transformation to realize the new strategy—virtually every part of the business was affected. Pella set aggressive targets for cost and service level improvements—for both Pella and its distributors. To implement the new system, Pella needed to revise its culture to promote decision-making authority at lower levels of the organization and create a more rigorous focus on execution.

Based on the program, Pella reignited double digit growth, while increasing inventory turns tenfold. Moreover, customer segmentation and different business models became a critical part of Pella's ongoing strategy and continued success. Pella recently embarked on creating another business model for another underserved segment, a consumer direct channel for replacement windows to tap into the fastest growing segment of the market. Pella is now able to leverage these three distinct channels with tailored business streams to add new brands over time and increase profitability due to scale economies. Moreover, after years of significant change and improvement in business performance, the CEO stated, "We're only 20 percent of the way there."

Conclusion

Peter Drucker once said that the central mission of business is to invent a customer. We believe Mr. Drucker was right about that, but that he left out a crucial corollary: To invent a customer, a company first needs to invent itself. And then reinvent itself, for that process of self-definition is one that never really ends for a healthy company. It's a process best approached with clear insights into the organization's capabilities, the customer's needs, and the nature of its offerings. Ultimately, the framework we call Smart Customization is just another way of asking those same essential questions about the nature of the enterprise itself.

Please go to www.smart-customization.com to complete Booz Allen's Smart Customization diagnostic tool and see how your company compares to other companies and to find additional readings about Smart Customization.

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