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Special Report

'Smart Growth': Innovating to Meet the Needs of the Market without Feeding the Beast of Complexity

CONTENTS

'Smart Growth': Innovating to Meet the Needs of the Market without Feeding the Beast of Complexity

As companies struggle to innovate in today's competitive environment, they need to continually guard against adding to their "clutter" — the creeping impact of complexity on efficiency and cost-competitiveness. In this three-part special report, experts from Wharton and George Group Consulting discuss how management can approach this problem by thinking "ambidextrously" — that is, focusing on innovation and broad exploration while minimizing the impact of clutter on operational processes and costs. Also, Mike McCallister, CEO of Humana, discusses balancing innovation and complexity in the health care industry with Wharton management professor Michael Useem and Stephen Wilson, engagement director in George Group's Conquering Complexity practice.

I. Innovation vs. Proliferation: Getting to the Heart of the Customer

What is the next big idea or market

opportunity? The question plagues CEOs of all growth-hungry companies as they race to scoop their competition with a product or service that no one has thought of before. But how do companies know what products and services their customers want — and will be willing to pay for — next?

Henry Ford famously said, "If I had asked my customers what they wanted, they'd have asked for a faster horse." In other words, the road to true innovation is rarely illuminated by customers telling you what to do next; they may often not know what they want next. But, experts from Wharton and Dallas-based George Group Consulting warn, unbridled proliferation in the hopes of "hitting it right" can lead companies into the trap of having too much complexity, which consumes existing resources and ultimately harms returns. It is a difficult tension to manage and one which requires a level of "ambi-dextrous" thinking. The key, they say, is for companies to identify the unmet and unarticulated needs of the customer and align their innovation processes to those insights. Companies must discover what innovations customers are willing to pay a premium for, identify their own competitive strengths and free up innovation capacity by removing or managing complexity within the organization's products, services and operations. The potential reward is a better bottom line and increased visibility with customers, as companies invest in understanding customers' needs while shedding the excess clutter that can bring down their rivals.

Ford's words resonate even today with Dan Chow, senior vice president at George Group and leader of its Fast Innovation practice. As an example, he says there was no sure-fire way to know that customers "needed" an iPod, Apple's MP3 player that has taken the market by storm. "While you might not be able to come up with the specific thing called 'iPod,'

you can reliably generate iPod-like ideas by using different and varied sources of innovation fuel," says Chow. "Challenging conventional wisdom and understanding core capabilities tend to be the fuel that helps companies generate out-of-the-box thinking to push them to new ways of uncovering customer needs."

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For example, says Chow, the real innovation with the iPod is its business model — tying music to great user design to great brand cachet. And behind that success is the fact that deeply understanding the customer is the first and most important capability a company can have to drive innovation, he says.

To illustrate that idea, Chow points to the example of a school supplies company that was challenged with commoditization of their product in the office and discount channel. Their product was purchased most heavily in the back-to-school season by students. Looking beyond the features and functions of the product in the hands of the student, to the frustrations, delights, wishes and concerns of students and their parents, led to an insight: There was an opportunity for the company to differentiate itself by addressing the broader needs of parents during what was an anxiety-ridden time of year. Armed with this idea, the company started selling complete solutions — integrated packages of school supplies

— so that parents could do away with their lists and a bit of their anxiety. It also gave the parents more time — a precious resource for which they would happily pay a premium.

It is only through identifying these unmet needs that companies can continue to secure premiums in the market, Chow says, adding that this approach contrasts strongly with what is often a knee-jerk response to higher levels of commoditization: increased proliferation of features, attributes and product variants.

Distinguishing Innovation from Product Proliferation

But discovering what customers need isn't always easy, and this is exacerbated by the fact that many companies often go down the wrong innovation path due to internal biases. Kevin Werbach, Wharton professor of legal studies and business ethics, says that Apple's innovation strategy is distinguishing itself from conventional MP3 players by being "scored in simplicity" and resisting the influence of internal biases. Too often, consumer technology product makers tend to "over-feature" their innovations. "These are geeks who want to add the latest new thing and historically have a tendency to make their products too complex," he says. "They are technology experts, and their tendency is to build the product they can use, which is not the mainstream product."

Werbach says iPod is a "big counterexample" of that trend. "They didn't try to put in every feature; they stripped it down and focused on a really great design and user interface, even though it by no means was the first portable digital music player."

A simple and functional design similarly helped Google, says Werbach. "There were plenty of search engines before Google, but sites like Yahoo! and others got so clogged up with features that tried to get people to buy ads and buy other services," he says. Google, he notes, stuck to a simple search offering. Users loved the plain screen with just a couple of links. Eventually, it paid off handsomely, notes Werbach: "As it turned out, Google figured out a way to do it and still become more profitable than all those other [rival] companies."

In some senses, Google had a "me-too" offering, but it clearly did not replicate its predecessors. David Reibstein, professor of marketing at Wharton, says unforeseen perils await those who blindly follow their competitors. He recalls how PepsiCo followed Coca-Cola into the seemingly promising market for "half-the-calories" beverages. "The problem was that there was no market," says Reibstein. "Pepsi went chasing Coke into a dead end and ended up wasting millions of dollars."

Reibstein says companies often launch new offerings because they are afraid they'll miss the boat. He recalls how a few years ago there was heightened speculation about the emergence of a paperless society, where credit cards would replace cash and so forth. He also talks of similar expectations in recent years of video-on-demand technology replacing video stores. "Markets are much slower to change than people would ever imagine," he says.

Experts at George Group note that without a strong understanding of what value new products are providing, it is very easy for companies to drift off track; they may be simply 'going through the motions' in their innovation practices. A key question, they say, is: Are you innovating, or are you simply creating more SKUs (stock-keeping units)?

Much complexity — seen or unseen — is the result of going too far with what companies misread as innovation, says Matt Reilly, a senior vice president at George Group. "Some [corporate] leaders mistakenly confuse innovation with product proliferation," he says. The problem, he explains, is when companies don't really understand what their customers perceive as value and what they are willing to pay for. "Companies wind up over-featuring and over-developing to the extent that they become focused only on building something new, not necessarily building something profitable or building something valuable." That gets further complicated, he says, when companies don't get a grip on "how well they can actually execute that [innovation]."

Reilly notes that, unlike three to four years ago, the stock markets don't value revenue growth alone; they now reward profitable growth. "Yet, a lot of these product companies are focused on driving top-line growth; the cost and the complexity of actually executing all these new offerings is typically not factored in," he says. That situation persists in many companies, he adds, because "marketing people are often dangerously disconnected from operations and are rewarded for remaining that way."

Finding the 'Heart' of the Customer

How can companies begin identifying customers' unmet needs, and particularly those they are willing to pay for?

According to the book *Fast Innovation: Achieving Superior Differentiation, Speed to Market, and*

Increased Profitability, by George Group's Michael L. George, James Works and Kimberly Watson-Hemphill (McGraw-Hill, 2005), sources for analyzing customers' needs might include ethnographic studies; face-to-face interviews with end-users and customers; diaries and intercepts; and expert advice and trend analysis on technology and markets. These help companies measure, explore and make trade-offs among customer requirements, the authors write. Where differentiation in offerings is calibrated carefully to customer needs and fast-tracked to market, there is larger-than-usual opportunity to realize premium prices before commoditization.

What the authors found was that many companies spend too long in development time, and too little time and money in the upfront stage, leading to an inadequate understanding of customer needs. Companies are then compelled to commit more investments post-launch as they begin to understand customer responses and tweak their offerings.

Jason Santamaria, engagement director in George Group's Fast Innovation practice, recalls an initiative to uncover customers' underlying needs in a recent consulting assignment. The firm in question was a $400 million telecommunications equipment company that faced inadequacies in its own understanding of a particular customer's needs. The customer — a telecommunications service provider — was equally lost about what it wanted.

But Santamaria's client had one advantage: It possessed the expertise to deal with the highly technical and complex nature of its products, a capability that the customer lacked. "One of the 'A-ha!' moments was helping the [client] company realize that one, the customer was uncertain of its [own] needs, and two, it needed to work with the customer in a collaborative fashion to uncover those needs," says Santamaria. The first step was to bring his client's engineering managers into direct contact with the customer so there was no filtering of information between them. The telecom equipment maker and its customer adopted a "rapid prototyping" process in which the customer was presented with iterative prototypes of the product during development. In this case, it was a telecommunications traffic analysis tool.

According to Santamaria, "Instead of the traditional 'waterfall approach' where you receive a set of requirements from the customer and you go out and develop it and present the final product to the customer, we adopted a spiral design method where the engineering manager was in regular contact with the customer, and we repeatedly placed

prototypes in front of the customer and got that customer's feedback." The end result, he says, was a final product delivered in a dramatically more accurate manner than the waterfall approach would have yielded. The takeaway, he notes, is that the key to customer insight development is to look across the entire value chain for insights, and not rely on your channel partners to do the consumer work for you.

Giving Customers the Faster Horse

Without a broader view, innovation efforts may be reduced to simply reacting to every little request from customers. In fact, argues George Group's Stephen Wilson, co-author of *Conquering Complexity in your Business,* many companies are still responding to customers' requests for a faster horse — to borrow the Ford analogy — without a view to the impact on the company's costs and processes, nor to the long-term strategy of the company. Complexity creeps in, and these companies wake up to a sprawling portfolio with burgeoning costs and unintentionally find themselves unable to serve customers well.

One company, operating in a fairly mature market, "had built a strategy of having the broadest possible offerings and being very responsive to the customer," he says. "But they were not necessarily being innovative." The company was engineering-focused and tended to respond to every customer request for a product variation, Wilson notes. "They were so busy doing the incremental changes that they had no time to really innovate. Over time, it absorbed their capacity to innovate." That also left the company vulnerable to competition, which scored better on speed to market and customer service. "By trying to respond to every customer's specific requirements, they lost out on addressing customers' more basic, fundamental needs."

Moreover, he adds, the company was not able to generate premium margins sufficient to cover the incremental costs of complexity. "Decisions based on incremental revenue were driving massive amounts of waste in the organization," he says. Inventories ran into "millions and millions of parts."

In such a situation, Wilson recommends getting a clear perspective on what is really important to the customer and what they will pay premium prices for. Internally, management needs to adjust its focus from chasing market share to "value share," which means getting an increasing share of the margins available in that market segment.

When it comes to matching customer needs with what could justify premium pricing power, Reilly points to a big disconnect that many companies fail to see: They often have detailed data on size of the market, pricing and trends, but don't often have good end-user data. One reason for that, he says, is that sales teams working the distribution channels don't always have an incentive to present the truest picture on the ground.

"If a competitor is gaining market share in a certain distribution channel, and if the sales team is meeting its quota, there isn't a big incentive to report that," he says. The situation gets worse particularly with consumer goods, where third-party logistics companies handle product deliveries at the retail level, which has the closest interface with the customer. "So companies end up making decisions at the macro level, not at the distribution channel or store level," says Reilly.

Managing Complexity

Wilson points out that complexity can be an organizational drag, consuming resources, diluting focus and impacting profitability. In that way, it can be a drag on innovation efforts. But conversely, he notes, it is important to understand how the current innovation system helps or hinders the issue of complexity. "In many situations, the innovation system itself can be one of the drivers — a poor innovation system can lead to clutter and complexity," he says.

Next, companies must get a grip on what causes that complexity. "Is it a lack of customer knowledge, or poor understanding of the economics of the situation?" asks Wilson. Additionally, he says, they need to get an accurate picture of the real effects of complexity.

There are corrective strategies for complexity, he notes. "One of them is to reduce complexity in your portfolio or in your processes. But reducing your portfolio is only one strategy, and it may not be the right strategy for your organization."

Another strategy, says Wilson, is to "make your complexity more approachable for the customer and make the choices digestible." Indeed, there exist ways to empower the customer to comfortably deal with the full range of a company's offerings.

Wharton marketing professor Barbara Kahn says discovering that golden mean of how much is not too much is the trick. "If it's too much, they won't deal with it; if it's too little, then they may be able to deal with it," she says of customers' buying patterns.

That's where customer expertise comes into play, according to Kahn. "One of the factors that makes [a higher number of offerings possible] is expertise," she says. "The more people become experts, the more they articulate their preferences — and the more they have a consumption vocabulary and know what the relevant attributes are, the more variety they will be able to take." She also suggests "arranging [product] assortment in such a way that consumers just see what it is they want and they don't have to see all that they don't want. Websites are really good at that."

Kahn likens the process of empowering customers with how salad bars help patrons navigate a mind-boggling range of options. "If you thought of all the different kinds of salads that you could make, and you presented [customers] all the different options, people wouldn't be able to deal with that — there would be too much variety," she says. "But if you do it the way [restaurants] do with salad bars, and divide salads up into attributes ... they can deal with that variety because they can deal with those different attributes."

A reference point in the form of an expert opinion could help in such situations, Kahn adds. "Even if you don't take what they recommend, it gives you a starting point, and you don't have to deal with the entire set of offerings," she says. "You can tweak that starting point."

Kimberly Watson-Hemphill, vice president at George Group and co-author of *Fast Innovation*, recalls one client that was able to successfully "tweak" a market niche for itself, thinking outside the box in its commoditized world and differentiating its product along a different dimension. The client, a pharmaceutical company that had a "me-too" product coming to market, was able to implement a process to allow customers to get the product covered by their health insurance policies. "They had a process by which they could frequently get fast insurance approval, when it would have typically been a time-consuming, uncertain process," she recalls. "So customers would buy this product instead of their competitors' products, which weren't so differentiated on the basis of standard product performance."

But for those that don't find such unique fixes, the easy answer is not necessarily to throw out SKUs, warns Wilson. He says a flawed innovation system driven by internal processes — rather than by what the customer wants — could be generating those SKUs.

Companies that take the quick route to de-proliferate their offerings in an attempt to reduce complexity might end up returning to the same situation two years later, according to Wilson. That could lead to another danger, he says, of "cutting too shallow or too often." He warns companies not to underestimate customers' memory of portfolio changes. "The last thing you want to do is reduce some of the complexity, and then two years later tell the customer, "We didn't do it properly the last time; we're doing it again." ✳

Kimberly Watson-Hemphill, vice president at Dallas-based George Group Consulting, isn't going to be surprised if the top management at the next company she encounters needs insight about its own product development pipeline. "If you ask companies how many projects they have in process, many don't even know," she says.

Watson-Hemphill, who co-authored the book *Fast Innovation: Achieving Superior Differentiation, Speed to Market, and Increased Profitability* (McGraw-Hill, 2005) with Michael George and James Works, says that it seems all too obvious that companies shouldn't spread their innovation resources too thin, but in practice it happens frequently. "[Companies] have their top [product or service] priorities, but then they have a bunch of underlying things that are just sitting there sucking time away from the resources," she says. "You have people working on 10 different projects when they have capacity to work on just one or two."

> Companies that invest in innovation but are late to market fail to capture the initial gains of market share "where a lot of the profit is made," says George Group's Stephen Wilson.

Her colleague Stephen Wilson of George Group sees in such situations not only a disconnect with internal processes, but also symptoms of being out of touch with customers and the seeds of mistimed, or late, arrival in the marketplace with new offerings. "If you invest upfront in processes to understand the customer, you get a better sense of product or service differentiation, and that's what is going to secure your gains against commoditization," he says.

Companies that invest in innovation but are late to market fail to capture the initial gains of market share "where a lot of the profit is made," says Wilson, and they may be better off not making that investment in innovation in the first place. "Better never than late," is Wilson's advice to such companies.

Process Innovation and 'Rightsourcing'

Ravi Aron, Wharton professor of operations and information management, says innovation is not always about products and services, but actually needs to be first introduced in processes. "Process innovation makes an organization ready for product innovation," he says. For new offerings to be successful, Aron notes that companies need to appreciate the significance of two components of their processes — the "innovation pivot" and the "complexity pivot." Process innovation addresses those two pivots and readies the turf for product innovation, he says.

As an example, Aron cites a large, U.S.-based financial services company that outsourced some of its operations to India a couple of years ago; the move helped it ramp up service lines through process innovation. The company discarded its earlier work flow patterns that were designed to handle product-based transactions, replacing them with process-based innovation that allowed transactions to be handled by customer profile.

In other words, customers with multiple requests across product lines no longer had to make a separate call for every product they were interested in; the customer support executive dealing with them

would take requests across the range of offerings. For example, a customer seeking a bank loan from a financial services company might also want a credit card or a home mortgage, or to open a savings account or invest in a retirement fund. "They were essentially capable of 360-degree processing of any transaction that came to them," says Aron of the revamped customer support staffers. The company was able to expand its range of offerings without necessarily increasing staff complements by a corresponding measure — the process innovation brought scalability in operations.

Aron says that while offshoring has helped many companies free up process complexity to make way for product innovation, it is not always the best option. He points to a recent research paper co-authored by himself and Wharton doctoral students Lyle Ungar and Annapurna Valluri, which examines the nature of work complexity and its suitability for offshoring and outsourcing.

The paper, titled "Rightsourcing: The Optimal Sourcing Mix of Complex, Information-Intensive Services: Theory and Evidence," is motivated by a survey conducted by Wharton's Fishman-Davidson Center for Service and Operations Management and Unisys Corp. The authors demonstrate that a process called 'rightsourcing' permits firms to optimize operational efficiency and deliver high quality service to consumers even when the underlying processes are highly complex.

The paper is clear that not all processes can be outsourced to reduce complexity. It says that processes that require agents (employees) to understand the market context and to execute the process efficiently could be sourced in-house. But what can be offshored, according to the authors, are those processes "that require judgment-intensive work that is not context-sensitive." They say that complex processes that can be described in terms of rules of execution can be automated through a service utility and designed to necessitate human intervention only for exception-handling.

The researchers show in their paper that partitioning tasks to reduce complexity has worked well at firms such as Pipal Research, a customized research services firm based in Chicago with offices in Mumbai, India. "These firms have adopted a model of partitioning task types and allocating them to multiple sourcing options and integrating these with technology to deliver high-quality research solutions," they write.

Speed to Market

Companies that have worked out their scalability and product positioning issues have to next "start working on speed to market," says Dan Chow, who leads the Fast Innovation practice at George Group. "There are plenty of ideas that die on the vine because [companies] could never get them out the door," he says, adding that companies that take two to three years to bring new products out are at an obvious disadvantage to those who can do it in six months. Speed to market can be a sustainable and highly differentiated characteristic of the business model. Speed can put your competition in a constant state of reaction, creating competitive advantage.

Chow points to the case of Compaq versus Dell, in which he says the former "was actually the leading innovator" and developed PCs that "were far superior to others" in the market. But Dell, he says, was able to compete on customization and speed with its focus on "having better knowledge than anybody else in the marketplace on what customer needs are" and delivering on them faster than others. That combination, Chow says, is critical in an industry where product life cycles are getting increasingly shorter.

Getting aligned quickly to changing ways of doing business is equally important for moving products to the market faster. Wharton professor of legal studies and business ethics Kevin Werbach cites Google as one firm that has an inherent advantage over rivals as more and more products are sold on the Internet. "Google has no legacy, and they basically have one software-based program running on a global network on tens of hundreds of thousands of servers," he says. "They can iterate much more quickly than others, as they are directly connected to their installed base [of customers]." Microsoft, by contrast, has to get its next version of Windows "to millions and millions of users who have to adopt it and install it," Werbach says.

Getting Innovation to the Marketplace Faster

"Keep it simple" is not one of the simplest lessons companies learn, as Watson-Hemphill discovered on a consulting assignment with a U.S. maker of mobile hydraulic cranes. The company was concerned that although many of its models were big winners, others were money losers. Watson-Hemphill found that the company carried a staggering inventory of raw materials, chiefly steel parts of varying thicknesses. "The engineering experts ordered what they wanted," she said. "If you do

that, you optimize the very small at the expense of the greater good."

Watson-Hemphill's prescription was tough to swallow, but she called for a "reuse strategy," which translated into making do with a smaller range of steel thicknesses for all the crane models — and ensuring that everybody accepted the fewer raw material choices. Inventory carrying costs fell dramatically, and the company was able to still meet customer needs with fewer variations in its models.

Processes don't necessarily stifle the spirit of innovation, Watson-Hemphill says, adding that in recent years cost pressures have driven industry away from "research for research's sake." It's important to measure the rate at which products in the development pipeline make it to market, because that also highlights any congestion in the process. She cites Little's Law, which is explained in Fast Innovation: The Law of Lead Time, also known as Little's Law after MIT professor and mathematician John D.C. Little who first propounded it in 1961, expresses the average lead time of a process as the number of things in process divided by the average completion rate of processes. What Little's Law demonstrates is that the higher the number of active projects on hand, the longer it will take for all of them to be completed. The key lesson, Watson-Hemphill says, is to slash the number of projects in process by cherry-picking those with the greatest chances to succeed. This allows innovation to get out into the market, versus everything working on multi-year timeframes and never getting launched.

The warning signs for a doomed product launch are all too clear in the development stage if you look for them, says Watson-Hemphill. Case in point: One client recently told her, "We don't have time to do it right, but we have plenty of time to do it over." ✳

Addressing the negative impacts of

complexity not only releases a large amount of "hidden costs" but also helps free up resources, both human and financial, to accelerate innovation. But where and — perhaps more importantly — how can companies begin unraveling the knot of cost and complexity?

Don't start by looking at your GAAP accounting metrics, says Stephen Wilson, engagement director in Dallas-based George Group Consulting's Conquering Complexity practice. "Standard accounting … doesn't give you a sense of where you are creating value in the organization," says Wilson, co-author of *Conquering Complexity in Your Business* (McGraw-Hill, 2004).

According to Wilson and other experts, determining the financial impacts of increased complexity related to innovation begins with taking a close look at existing operations to understand the actual cost incurred and value generated at each step in the process — all the way from idea generation through product development, manufacturing, marketing and customer support, among other back-office functions. Such exercises will help in getting an informed grip on the real value generated by a company's offerings, and where there are hidden complexity costs.

Wilson says such a "value stream" analysis captures the true costs of various process steps that tend to stay hidden or are inaccurately estimated in conventional financial analysis. Most companies do costing studies by classifying the various pieces in their portfolio of offerings by the specific markets in which they operate. A garment manufacturer, for instance, may use a "market-based segmentation" method and allocate costs by product groups such as children's wear, menswear or women's clothing.

Wilson argues that the "process-based segmentation" his firm espouses "allows for an understanding of how and where products consume costs and time." That, he says, brings another bonus for companies working on innovations: "It helps you understand where you have an inherent advantage." Wilson says it is not uncommon for companies to earn four-fifths of their "economic profit" from just a fifth of their total portfolio. (Economic profit is defined as the return on invested capital minus the weighted average cost of capital.)

> According to George Group's Stephen Wilson, "Standard accounting … doesn't give you a sense of where you are creating value in the organization."

By employing such advanced analysis tools, companies are also able to accurately identify specific processes that work faster than others, that are inherently superior to competitors' and which represent a vein of innovation opportunity. "That could be a tremendous lever for competitive advantage," he says. "If you have low internal cost [in any process or processes], you can build upon it. The more you grow in that area [with new offerings] and the more your competitors try and match you, they will fail because they don't have that benefit."

Such analysis will also help management teams train their sights on processes that are driving up costs to either bring improvements there, or to make bigger decisions like whether or not to retain a high-cost product or service in their portfolios. "I might

discover that if I migrate customers from Product A to Product B, my overall customer service time will reduce by 30%," says Wilson. Companies achieve such migration by discontinuing older products and redirecting customers to "new, improved" offerings whose specific processes help with greater profitability compared with those that were pulled out.

The Silo Pattern

Matt Reilly, a senior vice president at George Group, says the reason the impacts of complexity are not often captured is that companies have become siloed, and therefore fail to see the value-stream view. Such disconnects between product development and other arms of a company are probably worse in large companies, mainly because they are also usually more siloed. "If you take a look at a product's journey through a company's value streams, what emerges is that costs and profitability look very, very different if you measure the true cost to develop, manufacture and deliver," he says. He notes that companies typically measure cost to manufacturing based on standard accounting cost.

Reilly visualizes a typical pattern at many companies: "The marketing department drives the business plan, and throws it over the wall to R&D to develop. They then develop a pilot and throw that over the wall to manufacturing, to manufacture full scale. Manufacturing then throws that over the wall to sales, to sell it." Each silo has its own turf, and tends not to recognize its own impact on the value stream upstream or downstream. So it's not uncommon to hear a marketing executive describe a certain problem as "an operations issue" or pass the buck to product development.

This silo pattern showed up in one of Reilly's consulting assignments involving an industrial goods company. Reilly got to the scene as the company grappled with a new product it felt the market needed but was unable to get its execution right. "They designed the product based on what the customers' end needs were," he says, "but after R&D developed the product, it was thrown over the wall to manufacturing, which struggled to manufacture full scale, and what emerged was not exactly what the sales people had sold."

Reilly discovered "a tremendous disconnect" between what was developed as an innovation and what was delivered to the customer. Contrary to expectations of cornering a large market share, he says, the company actually captured "a very low percentage, and the reason was they couldn't execute on what they had innovated."

But fixing those problems presented a $50 million profit opportunity, says Reilly, who used the value stream analysis. "We segmented the value streams and helped them to manufacture the new product in a certain way, and the older products in a certain way," he says. "They were then able to deliver on the innovation, and the company captured not all, but most of that opportunity." ✳

Humana CEO Mike McCallister: Letting the Consumer Drive Innovation

In the wake of rising medical costs and lowered reimbursement rates for Medicare, health care companies are finding it increasingly difficult to balance quality service with strong earnings. At the same time, the proliferation of products in the industry has added a layer of complexity that threatens service levels and, in many instances, makes execution of services more difficult and costly for companies and consumers alike.

Mike McCallister, CEO of Louisville, Kentucky-based Humana, one of the United States' largest publicly traded health benefits providers, has grappled with these issues while leading the company through the rapid changes the industry has seen during the past several years. Today, the company is focused on moving away from the traditional "one-size-fits-all" health care delivery model adopted by most employers, to a consumer-centered model — one in which product innovation is driven by consumer needs. Placing the consumer at the center is not easy, McCallister admits, because with innovation comes the potential for additional product and service complexity; the trick, he says, is delivering complexity only where consumers are willing to pay for it.

McCallister spoke with Wharton management professor Michael Useem and Stephen Wilson, engagement director in George Group Consulting's Conquering Complexity practice, about his company's take on health care delivery and the challenges of leading in a changing industry.

Useem: Looking back at how you have grown with the company since 1974, how you lead people and how you've led the company, can you offer a couple of thoughts on what it takes now, in year 2006, to

lead a much more complex, diverse and much larger enterprise than at an earlier point in your career?

McCallister: I might disappoint you if I told you that I'm not sure it's any different.

> "One of the most important decisions we ever made was to organize and drive this company around the simple premise that the consumer had to be at the heart of health care," says Humana CEO Mike McCallister.

Useem: Well that's a perfectly good answer. Could you elaborate a bit on that?

McCallister: Although there are a number of different tactical things you have to do given the scale, scope and complexity of what we are today versus what we once were, to me the principles have always been the same: You find the best people you can. You get a clear direction for the company. You delegate the right work to the right people, and then you get out of their way and let them do it while holding them all accountable for their performance. I know that's right out of Management 101, but that's what you do. Given the complexity of the business we're in today, there are a number of tactical ways you have to go about doing those simple things I described, but I think at the core they're all the same.

We've had to deal in more of a team environment than we once did. When Humana was a hospital

company, the business operated as individual, local units with as many centralized activities as we could manage. As we tried to integrate health insurance and hospitals, it became more regional, or at least metropolitan-wide. When we went into being a pure employee benefits company in the mid-nineties, our structure became much more centralized because insurance is a financial institution more so than health care. The way we operate and run Humana has transitioned. We're more data-driven today than we once were and we have more challenges relative to applying technology in an effective way. Many of the agenda items are different, but the core principles of how you manage the enterprise are the same.

Useem: You have made hundreds, thousands of major decisions. Could you pick out one of your more difficult decisions and talk about it: What went into it? How did you reach the decision? What does it take on your part to make a good and timely decision?

McCallister: Well, I'll pick one that we made not too long ago. When we decided to set the strategy for this company after I became CEO in 2000, one of the most important decisions we ever made was to organize and drive this company around the simple premise that the consumer had to be at the heart of health care. Now there's a lot of talk around that idea today. Six years ago there wasn't anybody talking about it and there weren't many people going down that path. If you think about health care and the way it operates and has for a hundred years — very paternalistic, no information — it's a mother and father "may I" kind of environment. To have the consumer at the core of how it's organized seems so simple and seems so right — except when you talk to health care people, who think it's crazy. That decision was a big one and has really guided everything we've done for the last six years with varying levels of success.... What's particularly gratifying is that the rest of the industry has now decided they're going to go down this path, too. We get the benefit of having been at it for a while, and we also take pride in the fact that we may have helped nudge the industry toward consumers.

Useem: Could you offer a word or two on what prompted that decision at that time? And, to whom did you turn for guidance or counsel on that one in particular?

McCallister: I didn't turn to anyone on the outside. After thinking about it myself, I engaged a handful of Humana's key people, and together we tried to figure out where we were going to take the company, how we were going to fix it and change it. Those

key people had an incredible mix of knowledge from both in and outside the industry, and quite frankly there wasn't much going on outside that would have led us down the consumer path.

We were trying to answer a very, very big question: "What would it take to rationalize health care and the cost of health care in the US?" We started putting down everything that's been tried, everything that's failed, everything that's worked — there haven't been too many things that have worked. When we started listing the history of it, all the various components, all the various approaches that people have tried to apply over many, many years, it quickly became clear that the one thing no one had ever tried was to get the consumer at the heart of this. But it didn't start with, "We think the consumer's great. Let's a make a case for it." It was the other way around. We looked at a blank sheet of paper and asked ourselves, if we're going to try to do something about the cost of health care and health insurance, how do we do it?

Useem: Was this a deliberation on the inside that took place over six months? A year? How much of your own time did you focus on this before you finally said this is a "go"?

McCallister: At the hundred-thousand-foot level it didn't take too long to agree the consumer was the way to go. Then we started bringing it down to fifty thousand feet and said, "All right, if the consumer's going to be the core of what we think, then what are the next steps we take to make that happen?" That took longer, probably more like a year in the making. Some great things came out of all those conversations. It's not on our strategy page, but as soon as we decided that the consumer was where we wanted to be, it was clear we were going to have to be an innovator as well, because it was going to take some innovations in the industry to bring the consumer to the center. Innovation is a core component of making that happen.

Useem: In focusing on the consumer, you in a sense opened up a Pandora's box. Every consumer has a slightly different set of needs, and so inherently the universe becomes more complex, more diverse. How have you coped, managed, led when you've invited greater complexity into the way you do just about everything you do?

McCallister: First of all, one of the faults in all of health care as far as I'm concerned is an attitude that everyone's the same. A lot of the solutions around health insurance and health care tend to be "one size fits all." I would stipulate that the con-

sumer world is very complex, that people need and want different things. For an employer or any buyer of insurance to pretend that they know what all their people need is outrageous. I start with the underlying principle that consumers are different. They all need different things and they want different things, and it's interesting that the rest of the economy responds to that every single day. Consumers drive everything — except in health care, where people try to do top-down to these folks. I'll stipulate that it's complex, stipulate that maybe it's more difficult to meet a consumer where they are, but that's exactly what has to be done if you're going to engage consumers. If you don't get down to their individual level and meet their needs, find what they're going to respond to, the chance that collectively they're going to change anything is zero.

Useem: Has this affected how you run your office or the way you work with your top team?

McCallister: It's made the company's head spin, because you have people in two different camps. You have people in the old camp of the business, those who believe we have to do better at what we've been doing. Then you have those who are ready to go down a different path and try to find a different way. The friction between the two can be significant, and generates another level of complexity in what was already a complex business. The real trick there is to separate the good complexity from the bad complexity: If you're going to respond to consumers and try to meet them where they are, it will generate some complexity, but try to stay away from what's not important and what consumers won't pay for.

Useem: Are there other companies, or even other industries, that provided some thinking through, some guidance or some models for what you're doing now?

McCallister: There are probably some components from a number of places. I'll give you one: Dell computer has done a nice job of managing complexity and delivering complexity people will pay for. Although they provide a lot of selections, there's less complexity there than most people would think. There are any number of consumer products and other consumer brands where they have done things you never would have dreamed of on the backs of consumers. Starbucks is a great example. Who would have thought you could have sold consumers that kind of coffee? They responded to some need that was yet unidentified.

I can probably go on and on, but I looked at technology from the standpoint of its importance. Even in 2000 it was clear that people were going to do significant transactional work over the Internet, that people were going to seek out information on the Internet and they were going to use the Internet for comparisons and for better pricing on products. That was a big piece of this. Just imagine the information flow that would be necessary in health care to get people engaged and empowered. It's crucial that the Internet be the core process for that. All of the Internet companies that were responding to consumers were decent models to look at, certainly from an information-flow perspective.

> "The real trick … is to separate the good complexity from the bad complexity," says McCallister.

Useem: If someone from another industry or maybe another company in the same terrain came to you and said, "Mike you've been through it. Are there a couple pitfalls to be avoided?" — are there a couple of lessons that you would pass on to them?

McCallister: One that comes to mind, quickly, would be that in an era of technology expansion and explosion like we have today, I think any business in any industry really has to carefully achieve a level of standardization — things necessary to fully maximize the technology uptake and productivity gains that are potentially out there. That was pretty natural in our business, because we have such high transactional work. I think you've got to quickly connect the process orientation with the application of technology.

Useem: Back on the pitfall side — anything that you would have done differently or would tell someone, "Watch out for this going forward?"

McCallister: If you try to make any significant changes to your business or in your industry, you better get a backbone, because critics will come out of the woodwork. Be ready to withstand a fair amount of criticism from those who believe differently.

Useem: And you're speaking both in the industry at large and then in your own ranks, of course.

McCallister: Absolutely.

Useem: With complexity comes a required focus on that diverse terrain that takes up more time, more

energy. How has this increasing focus on the con-sumer — and all the complexity that it has brought — affected your ability to be innovative and still come up with great solutions to the problems that consumers face?

McCallister: Two big issues to me. We organized a separate innovation group because I believed it was going to take that, given the fact that we were an old company that had been around a long time. We were going to require some separate people to be innovative because it wasn't going to come naturally elsewhere. That generates another couple of issues. One is that the innovative types aren't always caught up in what's actually doable, so a natural friction ensues. It's not just a question of what's actually do-able from the standpoint of build-ing out and delivering something, but what the mar-ket will eat, so to speak, as well as the execution of some of the innovative things that can come up. It's hard in a company that's fighting over resources to fund innovation, especially if it doesn't have short-term payback, because the people who are trying to make the trains run on time every day get a little frustrated with that burning of resources. But you have to get committed to some level of burn to keep an innovative engine going.

Useem: I wanted to give my colleague here, Stephen Wilson, an opportunity to ask some questions.

Wilson: Mike, one of the impacts of product and service complexity is that it can impair execution service levels. So as you go towards consumer-driven health care, what are the implications for the back office for execution, and how would you rate the overall industry in that regard?

McCallister: I think we in the industry allow our complexity to be the wrong kind at the wrong place. We allow our customer-employers to drive complexity as opposed to letting consumers drive it, which is the right way. Our industry has poorly controlled bad complexity relative to the historic sales model to employers. I think we're early in figuring out exactly what complexity we're going to be able to manage and put in front of consum-ers directly ... we'll have to see how that plays out. I think the complexity that we manage, tolerate and make good at the consumer level has big potential. Ongoing complexity in the back office from an old model is absolutely non-value-added.

Useem: Mike, let me quickly add a question onto that one. Could you just identify an example or two that shows the difference between a consumer-

driven need as opposed to an employer-driven need? How have you worked with that difference?

McCallister: Employers are trying to satisfy the health insurance needs of lots of people in one fell swoop. That causes them to go with a "lowest com-mon denominator" concept. In other words, what would it take to satisfy as many of these people as I can possibly satisfy? It's just that simple, and the driving force there will be, "What will it take for me as an employer to have everybody feel pretty good about working here?" — which is important, because no one wants to lose people over benefits.

On the other hand, if you go to a consumer-driven model, you're letting the individual consumer decide what their blend of risk tolerance is, what their economics are, the type of things they want from health insurance, how important different levels of benefits are for them — in the context of their overall family environment. I could have two employees standing next to each other: One just won the lottery, and the other one is barely making ends meet. As far as their relationship to me goes, they're doing the same job and making the same money. It's as simple as letting the individual decide the coverage, [based on] short-term versus long-term economics — the risk tolerance they have, ver-sus an employer trying to do it on a broad basis for a lot of people.

Wilson: What is the role of management in this industry, particularly in driving innovation while keeping complexity at bay?

McCallister: You have startup companies that are totally innovation driven. That's pretty straightfor-ward and pretty simple. We've had companies in our space that just stayed consistent with their old approaches, and that's pretty simple. The trick is when you start putting them together and manag-ing all of the organizational implications, as well as having a reasonable focus: What are you all about as a company, and how are you going to approach the market? We've been through all those issues and difficulties and we continue to get better at it.... I think that management's job is to balance all those horses, keep the organization pointed in the right direction. Senior management has to be the leader relative to driving innovation, because they have to make the organization feel comfortable with it.

One of the things we've tried to develop around here is a learning organization. When we first started that process, I got reactions like, "I don't know what you're talking about — a learning orga-

nization?" And so we've worked on that over the last few years and developed it. We've come a long way. I think that goes hand-in-hand with innovation. Innovation requires people to learn different things — it requires a culture built around the idea that learning is okay. I think we've come a long way there.

Useem: Looking ahead to the next couple of years, what do you see as one of the bigger challenges coming along for you, personally, either inside the company or as your own market changes?

McCallister: Well, I have a big piece of work in front of me as we speak, and it's specific to the Medicare program. We are a major player in the expansion of the Medicare program, so we have millions of new customers. Inside a highly politically charged business we have a big job to execute on the concept of consumer engagement, because the Medicare program essentially operates as a retail consumer business on a scale we've never seen in our industry. We have a wonderful opportunity in front of us to take much of what we've been trying to execute relative to consumer engagement, information, the use of technology, etc., and apply it to a very large, new business. That's very exciting. We hope to take these ideas much further down the path with this population over the next couple of years. ✻

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