

BEST PRACTICE

Medical-equipment supplier Hill-Rom accelerated its growth by segmenting customers in a new way and tackling their most pressing problems.

How You Slice It Smarter Segmentation for Your Sales Force

by Ernest Waaser, Marshall Dahneke,
Michael Pekkarinen, and Michael Weissel

Medical-equipment supplier Hill-Rom accelerated its growth by segmenting customers in a new way and tackling their most pressing problems.

BEST PRACTICE

How You Slice It

Smarter Segmentation for Your Sales Force

by Ernest Waaser, Marshall Dahneke, Michael Pekkarinen, and Michael Weissel

When executives focus anew on top-line growth, as so many are doing this season, their mental checklist nearly always includes questions about the sales force. How can its performance improve? How can it support the growth of new offerings? Many executives make the mistake of thinking the problem comes down to incentives: Get the carrots correctly aligned, and the sales force will redouble its efforts. Some assume, even more simplistically, that if you want more sales, you need more salespeople. The experience of health-care equipment manufacturer and service provider Hill-Rom illustrates, on the contrary, that meaningful improvements in sales come from doing three things: segmenting customers more thoughtfully, designing an organization that can serve the different segments more efficiently, and staffing that organization at the optimal level. We'll discuss those approaches in greater depth, but first, some background.

Three years ago, Hill-Rom was in a position common among mature businesses: The com-

pany was strong, but it needed to be stronger. Headquartered in Batesville, Indiana, the business had been successful for more than 70 years. It held a strong competitive position in its core product line of patients' beds and specialty mattresses for acute care, long-term care, and home care environments. The company also had strong complementary product lines of stretchers, furniture, architectural equipment, and nurse-to-patient communication products. It had an extensive customer base and a respected sales force that was recognized for its deep product knowledge and strong customer relationships. Hill-Rom had solid profit margins and had contributed significantly to the stock value of the parent company, Hillenbrand Industries.

But when Ernest Waaser, lead author of this article, took over as chief executive in early 2001, his initial assessment of the company uncovered some danger signs. Revenue growth had been slowing, and the company's traditional tactics, such as product line extensions and acquisitions, were not enough to achieve

desired levels of future growth. Competition was increasing, too. Some of Hill-Rom's customers were beginning to experience severe pressure to reduce costs and were considering lower-end, lower-priced alternatives.

Hill-Rom needed to demonstrate to its customers how its premium products and services could yield a higher return on their investments through lower labor costs, improved caregiver safety, and better patient outcomes. The senior management team concluded that future growth depended on more product innovation and differentiation, as well as more cross-selling and acquisitions. To support product innovation, Hill-Rom decided to nearly double its investments in research and development over a three-year period. At the same time, management felt compelled to continue to grow the bottom line. To do both would require reducing costs in every function except R&D, while also maintaining quality and customer satisfaction.

Hill-Rom focused first on the sales organization, in part because the cost of sales had risen gradually but persistently over the past five years. Acquisitions and other initiatives had made the sales organization more complex, with overlapping coverage in many areas. Even more important, sales and service are the parts of the organization that interact most closely with customers. As Hill-Rom increased investment in product innovation and adjusted the product and service mix, it was critical that the sales force lead the charge. The primary goal was to create a leaner sales process that would generate more internal growth each year. To that end, senior managers set a goal of reducing the overall cost of sales by 2 percentage points within two years. Another major objective was to develop a sales structure that would support new growth through both internal development and mergers and acquisitions.

With help from a team of outside consultants, Hill-Rom succeeded in reaching those goals—and more. Two years later, cost of sales is down, short-term revenue growth is up, the outlook for long-term revenue growth looks bright, customers are buying more products and reporting higher satisfaction, profit margins are up, and the company is working to integrate two new acquisitions. Hill-Rom is too cautious to oversell these improvements or to predict marvelous things for the future, but we

are happy to write about the approach we took and the successes we have had in the hope that they may be useful to other executives.

Useful Segmentation

Hill-Rom's executives were conscious that onetime fixes to the sales force, such as tinkering with compensation, typically lead to incremental improvements at best and often fail to raise productivity. Improving the company's overall economics would require a broader restructuring.

The first order of business was building the right customer segmentation model. Some customers were willing and able to invest in the latest technology and services, while others valued standard, "good enough" products. Both types of customers were important, but they had different requirements and needed to be treated differently.

The company's existing sales approach was essentially based on the size of the health care facility, determined by attributes like the number of staffed beds and medical care specialties. In a sense, this was logical, since size influences the level of spending. The more beds a hospital or nursing home has and the more services it offers, the greater the likelihood that capital funding will be set aside on a regular basis to replace or acquire equipment. But this approach was not particularly useful for understanding customer needs, which can be quite heterogeneous, or for discerning more detailed patterns of purchasing behavior. Marshall Dahneke, then the company's vice president of marketing and one of the authors of this article, worked with a team of insiders and Mercer consultants and discovered that, while the size of a facility was indeed important, less obvious characteristics also affected purchasing behavior. These included financial metrics such as the customer's capital spending and profit margins, operating metrics such as occupancy rate, and even a facility's mix of insurance payers.

Based on regression analysis of existing customer data, the project team sorted Hill-Rom's hospital customers into five segments, drew profiles of those segments, and further hypothesized the future dollar value of each to Hill-Rom. The team members then interviewed salespeople and a sampling of customers from each of the proposed segments to validate the data and the hypotheses. They followed the

Ernest Waaser is the president and chief executive of Hill-Rom, the health care unit of Hillenbrand Industries, based in Batesville, Indiana. **Marshall Dahneke** is the vice president of corporate strategy at Hill-Rom. **Michael Pekkarinen** is a Boston-based director of Mercer Human Resource Consulting. **Michael Weissel** is a Boston-based director of Mercer Management Consulting. Waaser and Dahneke can be reached at feedback@hill-rom.com. Pekkarinen and Weissel can be reached at info@mercercmc.com.

same process for nursing home customers, which produced three additional segments. A total of eight segments would be unwieldy to manage, they realized, so they divided the eight segments into two groups, *key* and *prime* customers, based on overall similarities of needs and priorities. Two separate sales forces, reporting to the same senior sales managers, would serve each customer group.

Key customers have far higher total capital expenditures on medical products. They buy more high-end equipment. They replace equipment, on average, 40% sooner than prime customers. They not only buy equipment more frequently but also are more likely to seek out in-depth, customized consultation. They're looking for comprehensive solutions to their problems, and they tend to view purchases as investments.

Prime customers, because of greater cost pressures, are generally more concerned about getting the features and functions they need

for the best possible price. They still value Hill-Rom's reputation, support, and industry expertise, but they're less able to afford high-end products and services. They tend to buy individual products rather than whole systems. Fulfillment time and responsiveness are often more critical for prime customers, as they often wait to make purchases until the need is urgent. (For a complete profile of these two customer types, see the exhibit "Hill-Rom's New Customer Segments.")

When Hill-Rom's customers are sorted in this way, facility size is no longer the driving factor. There are 50-bed hospitals and 250-bed nursing homes in the same segment. Dividing customers according to their own preferences allows Hill-Rom to better understand why different customers do business differently with the company. It also allows the organization to monitor how much time the sales force spends with each segment, thereby ensuring that the sales force best meets the different needs of each segment.

From its research on customer priorities, the project team determined that Hill-Rom's allocation of sales resources was skewed. A time and cost analysis revealed that the company was making a significant effort to sell to and serve both segments in the same manner, resulting in high overall sales costs. Salespeople typically were expected to cover all facilities in a given geography and felt compelled to make regular calls on each account. So some sales teams were taking a highly consultative approach when the account's profile and purchase behavior (as revealed in the new segmentation analysis) warranted another approach. The cost of sales for prime customers was, the team learned, four to five times higher than it was for key customers—which, with 20/20 hindsight, wasn't surprising. The sales force had basically been treating all customers the same way and trying to sell prime customers a level of service and innovation that they did not value or could not afford.

A Tailored Approach

Hill-Rom's goal was to match the sales approach to the specific needs and preferences of each of the two main customer segments. This would require discipline and consistency among independent-minded salespeople. If done right, however, it could generate significant financial rewards while increasing cus-

Hill-Rom's New Customer Segments

	Key Customers	Prime Customers
DECISION MAKING		
Primary Decision Maker	Nurses	Administrators
Purchase Drivers	Patient satisfaction Physician requirements Return on investment	Necessity Low maintenance costs Low risk, low liability
Deciding Factors on Brand	Performance Patient outcomes and safety Caregiver safety	Reliability Ease of use Price
PRODUCT PREFERENCES		
Product Configuration	High-end to moderate	Moderate to low-end
System or Stand-alone	System	Stand-alone
Replacement Cycle	Shorter	Longer
Required Response Times:		
Product Service	Shorter	Longer
Shipment Lead Time	Longer	Shorter
DEMOGRAPHICS		
Facility Occupancy	Higher	Lower
Patients' Medical Needs	Higher	Lower
Facility Size	Larger	Smaller

Copyright © 2004 Harvard Business School Publishing Corporation. All rights reserved.

tomers satisfaction.

One important early decision concerned whether Hill-Rom should use indirect sales and service channels such as manufacturers' representatives and third-party call centers. Indirect channels, the thinking went, might enhance service and responsiveness for prime customers. However, the cost advantage of indirect channels turned out to be smaller than anticipated. After factoring in the commissions for manufacturers' reps and distributors, plus the cost of managing a third-party channel, the overall cost of sales was similar to that of Hill-Rom's direct sales force. More important, this change could have jeopardized the strong relationship the sales force had developed with customers. Considering all these factors, Hill-Rom decided to use its own resources but to deploy them more efficiently.

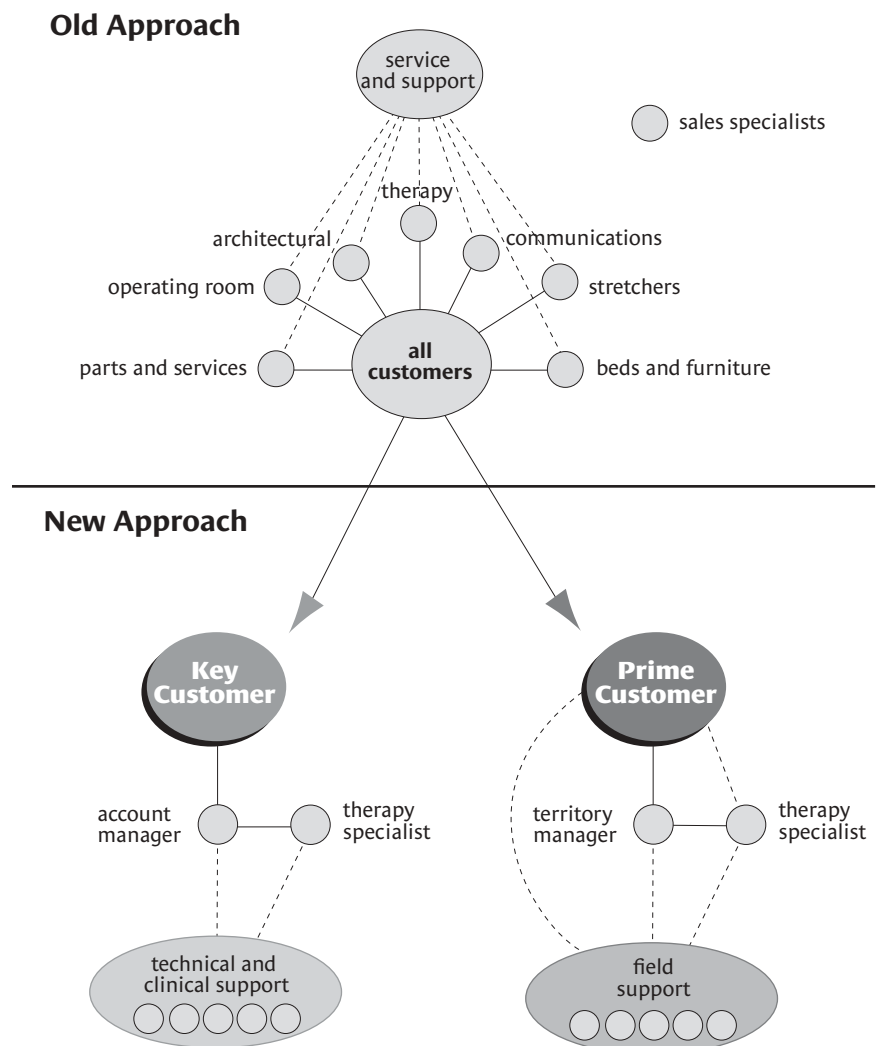
At this point, the project team engaged several sales managers within Hill-Rom to recommend new sales roles, processes, and an organizational structure. In simple terms, here's what they decided. (Also see the exhibit "A New Way to Sell.")

Key customers would be attended to by a single Hill-Rom account manager. That manager would lead a team comprising a therapy specialist—typically someone with a nursing or clinical background who knows a lot about the products and the customer's clinical and care protocols—and other technical and clinical support specialists. The team would develop a sales strategy specific to the needs of that customer. This arrangement would replace the previous approach, whereby multiple-specialty sales forces called on different people within the same hospital, selling individual products with-

A New Way to Sell

To reduce overlapping coverage and create a leaner sales process, Hill-Rom tailored its sales function to its newly defined customer segments: key customers and prime customers. Instead of sending multiple sales force specialists to call on different people within the same medical facility, Hill-Rom assigns a single account manager to serve as the company's primary representative to key customers. That account manager collaborates with a therapy specialist and other technical and clinical support specialists to develop an overarching sales strategy specific to customers' needs.

Territory managers and territory therapy specialists represent Hill-Rom to prime customers. Previously, a customer would have contacted the sales representative, who would try to locate the appropriate service or support resource. The new approach has resulted in more efficient, faster responses to requests and orders.



The sales force had been trying to sell prime customers a level of service and innovation that they did not value or could not afford.

out communicating a big-picture approach.

The new sales structure made a critical difference for many of Hill-Rom's customers. In the case of one medical facility in the Southwest, for instance, Hill-Rom created a new type of hospital room that adapts to the acuity level of the patient, allowing that patient to remain in the room and be cared for by one set of nurses. Hospitals traditionally are designed to move patients from unit to unit as their condition improves or worsens. A Hill-Rom account manager and therapy specialist worked with the customer's team for more than a year on many aspects of design, product configuration, and health care protocols in order to make the new type of room effective. This intensive collaboration would have been difficult under the old sales structure.

Another advantage of the new structure was that account managers would continue to work with individual decision makers in different parts of the facility, but when doing so, they'd keep the needs of the whole organization in mind. The new, matrixlike structure—where one person choreographs the sales effort but pulls in specialized in-house experts as needed—balanced expertise on the clinical side with clarity on the administrative side.

That balance meant that Hill-Rom was also able to extend its value proposition to key customers. For instance, through the new structure, Hill-Rom identified one facility's need to tackle one of the more common problems in hospitals today: back injuries among nursing staff, caused primarily by patient handling and repositioning. As a result, the company has introduced products that change the way patient-handling tasks are performed. Hill-Rom's TotalCare Bed moves patients into a sitting position without their having to leave the bed—and without caregivers having to transfer heavy patients from the bed to a chair and back. Customers often need help using the product to maximum advantage, so Hill-Rom can now conduct a detailed assessment that combines a facility's injury history and costs, work processes, and task frequencies. These assessments—which are developed by certified ergonomists—can help customers improve their processes and use products better.

Once products are in place, Hill-Rom can also help customers track improvements through the use of data collection and analysis tools. One hospital in West Virginia asked the

company to help address the rising costs associated with caregiver back injuries. Hill-Rom's package of products, program assessment, training, and results tracking produced dramatic results: During the first year of the agreement, the hospital reduced the costs of patient-handling injuries by almost \$1 million, with a greater reduction in costs in the second year. This kind of problem solving—where Hill-Rom employees consult with a customer over a long period of time, helping to eliminate systemic problems—would have been difficult under the old approach.

In 2002, Hill-Rom saw demand for such programs triple, largely because the redesigned sales effort focused on communicating the company's value to the right set of customers. Offerings similar to the ergonomics programs help customers solve problems such as patient falls, pressure ulcers, pulmonary complications, and even patient room design and layout challenges.

The project team also recommended new roles for the salespeople serving prime customers. A territory manager and a territory therapy specialist would represent Hill-Rom to these customers, backed by a field support team. (Previously, a customer would have contacted the sales representative, who would try to locate the appropriate service or support resource.) Here, the goal was more efficient, faster response to requests and orders.

A small group of sales managers would be responsible for overseeing revenue for all products and both sales forces. This would address a past problem of overlapping sales coverage within a given customer site and would help eliminate some of the conflicts resulting from such overlap.

Rightsizing the Force

But what was the right size for the new organization? Sizing was not a simple task, since the goal was not simply to reduce head count but also to build a more productive organization.

To calculate the appropriate number of staff, the project team looked at three sets of data: historical sales data on specific products and services, and historical and anticipated data on the time it took to complete those sales.

The group defined the sales cycle from the point of generating potential opportunities all the way through product delivery and cus-

The client—a hospital—was able to reduce the costs of patient-handling injuries by almost \$1 million.

tomer training. An internal team looked at both historical time-allocation data as well as possible modifications to the sales process. In that way, the project team could home in on cycle time under each sales scenario, whether successful or unsuccessful. Factoring out non-selling time for such activities as travel, training, and administration, the team could better project how many full-time equivalents (say, the number of full-time account managers) were required to address the estimated demands. The group completed this exercise for each role in the new organization and ran several models, ultimately choosing the one deemed most representative. Clearly, the number of full-time employees by role would have some variance once applied in the real world, but the sizing study served as a strong, data-driven starting point.

To test the earlier decisions about the redesign of the sales function, the team drew a mock map of the entire U.S. sales force and forecast by territory, including key elements such as current revenue, potential revenue, and commissions paid. This exercise revealed the need for major changes, which of course had to be carefully communicated to the sales staff.

- For account managers currently making almost all their income from commissions, a proposed reduction in the number of accounts might appear to represent a loss of income. Hill-Rom had to educate account managers on the segmentation study—notably, on the underlying assumption that in-depth, customized support of key customers would likely drive increased demand for products and services. Commissions would probably not suffer.

- For territory managers covering a large number of prime accounts, the key issue to convey was how a support staff could help strengthen customer relationships and ensure faster responses.

- Technical specialists would no longer sell products; they would devote all their time to supporting the account managers.

- Nearly 45 sales reps and specialists, or 10% of the sales force, would lose their jobs because of the shift to a single point of contact.

- For all employees, the new approach would require training and new methods of collaboration. Account managers would need broader product knowledge to sell products that specialists had been selling, for example,

and closer teamwork would be required to ensure coordination at the account level.

All of these changes would require immediate attention. For the strategic shift and sales redesign to be successful, everyone in the sales organization needed to be involved early and be encouraged to participate and take ownership. In the beginning of the project, Hill-Rom had committed several senior salespeople to work full time on developing the new design. By the middle of 2001, several teams of successful and influential middle managers in sales and general management were briefed on what the company was trying to do and were asked to respond to specific aspects of the design. With such a broad base of people involved, the project team could be assured of two things: first, that it had captured the perspective of the field organization in the redesign and, second, that the informal communication network would actually work and could shift into high gear immediately.

When the time came to make the changes, the organization moved very rapidly. The most-senior sales management positions were filled first; those managers were brought up to speed quickly on the overall vision and on implementation requirements. Formal announcements, however, came from the executive suite. Concurrently, informal communications were working through those team members who had been involved earlier. They were critical advocates of the redesign and helped sell changes to the broader organization.

As the team prepared to roll out the plan in early September 2001, several issues threatened to disrupt or delay implementation. Senior managers were aware that the long-standing vice president of sales intended to announce his departure. In addition, the terrorist attacks on September 11 raised the question of whether the rollout should be postponed.

On September 18, the company decided to proceed, and, within six weeks, the project team, human resources staff, and senior sales managers had the operation up and running. New sales roles were identified, staff and territory assignments were distributed, and employees who were to be let go were given ample time to explore job opportunities inside and outside the company. The new vice president of sales recognized the importance of the

redesign and immersed himself in the project, ensuring its continuity as it faced the inevitable bumps that would occur during the first few months.

Early Returns

Enough time has elapsed that it is possible to point to several measures of the sales group's progress:

Sales have increased. Revenue per employee increased 11% from 2001 to 2003.


Customers report more satisfaction with products and services. According to Hill-Rom's annual customer survey, overall customer satisfaction increased 6 percentage points from 2001 to 2002 (as determined by the number of customers who said they were extremely or very satisfied with their "overall experience with Hill-Rom's products and services").

The outlook for revenue growth is bright. In the short term, the 2002 revenue growth rate for Hill-Rom's North American business more than doubled from 2001. The company increased R&D funding 69% between 2001 and 2003 through cost reductions in other functions, including sales, where costs dropped 1 percentage point in 2002 and again in 2003. Meanwhile, the services business has grown dramatically now that the sales force has started to tailor offerings. Some of that additional cash flow has also been invested in acquisitions, such as the recent purchase of Advanced Respiratory, a high-growth provider of therapy products for chronic respiratory diseases.

Product margins have increased. Hill-Rom expanded its customized, consultative support

activities 24% from 2001 to 2002, helping key customers to understand and quantify specific problems they face, identify solutions, and then track results. The company has developed programs on pulmonary complications, patient falls, room design, and other factors that affect patient outcomes and patient satisfaction. As a result of these initiatives, as well as a significant initiative to reduce supply chain costs, gross margins increased 6.7 percentage points from 2001 to 2003, yielding more than \$70 million. Some of that went to the bottom line and the rest was reinvested in R&D.

•••

By the end of 2003, Hill-Rom had made significant improvements to its already successful business. In addition to the growth in revenue, operating income per employee increased 51%, and operating income as a percentage of sales increased 4 percentage points. Did all that come from restructuring the sales force? Of course not. Other initiatives were under way simultaneously. But ensuring that the sales force understands its distinct customer segments, that it serves those different segments appropriately, and that it has the optimal level and type of staff are important starting points for any company aspiring to increase its bottom line. 

Reprint [R0403H](#)

To order, see the next page

or call 800-988-0886 or 617-783-7500

or go to www.hbr.org



Harvard Business Review OnPoint articles enhance the full-text article with a summary of its key points and a selection of its company examples to help you quickly absorb and apply the concepts. *Harvard Business Review* OnPoint collections include three OnPoint articles and an overview comparing the various perspectives on a specific topic.

Further Reading

The *Harvard Business Review* Paperback Series

Here are the landmark ideas—both contemporary and classic—that have established *Harvard Business Review* as required reading for businesspeople around the globe. Each paperback includes eight of the leading articles on a particular business topic. The series includes over thirty titles, including the following best-sellers:

[Harvard Business Review on Brand Management](#)

Product no. 1445

[Harvard Business Review on Change](#)

Product no. 8842

[Harvard Business Review on Leadership](#)

Product no. 8834

[Harvard Business Review on Managing People](#)

Product no. 9075

[Harvard Business Review on Measuring Corporate Performance](#)

Product no. 8826

For a complete list of the *Harvard Business Review* paperback series, go to www.hbr.org.

Harvard Business Review

To Order

For reprints, *Harvard Business Review* OnPoint orders, and subscriptions to *Harvard Business Review*:
Call 800-988-0886 or 617-783-7500.
Go to www.hbr.org

For customized and quantity orders of reprints and *Harvard Business Review* OnPoint products:
Call Frank Tamoshunas at 617-783-7626,
or e-mail him at ftamoshunas@hbsp.harvard.edu