2010 Porter Prize Winners

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(Recipients are addressed in no particular order.)

Selection Criteria

The essence of strategy is to do things differently from others. Based on this premise, the Porter Prize recognizes those companies and business units that have chosen to compete in a distinctive way in a particular industry by delivering a unique value proposition, based on innovations in products, processes, and ways of management.

First-stage Selection Criteria
(1) Superior sustainable profitability within the industry
(2) Unique/different value proposition
(3) Strategic continuity over time
(4) Innovations that enable the strategy

Second-stage Selection Criteria
(5) Utilization of capital analysis
(6) Distinctive value chain
(7) Trade-offs
(8) Fit across activities

(Note: In the analysis of capital utilization, the key focus will be placed on ROIC (Return on Invested Capital) and ROS (Return on Sales). The following report of the winners includes these numbers in comparison with the industry averages. A positive difference from the average indicates the capital utilization of the company/business is better than the industry average. The five-year average is calculated by aggregating the numerators divided by the aggregated denominators. Thus, the derived five-year average is not equal to the simple average of the ratio for each year. The data that is used in calculating the industry average was obtained by carefully selecting truly comparable companies among those classified as being in the same industry.)
Selection Rationale (Recipients are addressed in no particular order)

Kirin Brewery

Changed from a zero-sum game to a positive-sum game

Industry background

The Japanese beer market has been shrinking since 2002, after peaking in 1994. Although the deregulation in 1994 allowed many small local breweries to launch their businesses, Kirin, Asahi, Suntory, and Sapporo continued to dominate the market due to economies of scale in manufacturing, sales, and marketing. Recently, private brand products by retailers are increasing their market share.

Kirin enjoyed a market share of more than 60% until the 1980s, when it was the dominant leader of the Japanese beer industry, achieving a strong hold on liquor shops with a hugely popular product, Kirin Lager Beer.

By 1988, Kirin’s market share decreased by 10%, to 50%, following Asahi’s introduction of Asahi Super Dry in 1987. The company’s market share stabilized at this new equilibrium point for several years, until 1994.

In 1994, the distribution of alcoholic beverages became deregulated, and mass retailers started selling beer at a discount. Beer manufacturers used rebates to push their products. Although manufacturers were frequently introducing new products, there was not much differentiation between products. Discounting by retailers made product differentiation even more difficult. Many new products disappeared from the market within a short period of time. Consequently, all the industry players, i.e., manufacturers, wholesalers, and retailers, suffered from low profitability. The Japanese beer industry had entered a vicious circle.

In the same year, 1994, Suntory introduced a low-malt beer, thereby creating a new segment at the low end. (Due to the preferential treatment in the liquor tax for second-category beers, the low-malt beer was 25% less expensive than conventional malt beers.) Kirin immediately followed suit, introducing its own low-malt beer, but could not stop losing market share. Kirin again lost market share of 10%, to 40%. Asahi overtook Kirin in terms of market share in 2001, when Asahi finally introduced its own low-malt beer.

In 2001, Kirin decided to make a turn-around by changing these industry norms with its new value proposition, called “Kachi eigyo” (value-based selling), and a new activity system.

In 2004, a third segment was created through the introduction of a beer product with much less malt or no malt at all, but which still tasted like beer. Kirin entered this segment with the product kirin Nodogoshi in 2005, and regained the top market share by 2009 by small margin after hitting bottom in 2003.

Kirin changed the competition from a zero-sum game to a positive-sum game by changing its competitive strategy from “Kakaku eigyo” (price-based selling) to “Kachi eigyo” (value-based selling). Kirin defines “Kachi eigyo” as “sales and marketing activities that do not depend on discounts, i.e. a sales approach which encourages customers to choose Kirin products because of their value, not their
price.” Although “eigyo” (selling) is part of the expression “Kachi eigyo,” this concept is not limited to the sales function. Other functions, such as product development, manufacturing, logistics, and marketing, are tightly guided by this concept. In a sense, “Kachi eigyo” is a strategic concept.

Those activities which Kirin conducts under the name “Kachi eigyo,” such as the decreased use of rebates and the increased use of proposals to retailers, which include recommendations for in-store promotional campaigns and shop floor displays, sound like common sense. However, this approach was rated highly on two points. First, Kirin significantly decreased the use of rebates by introducing an open price system and by making the pricing system transparent. This was achieved by committing itself to “Kachi eigyo,” and declaring guidelines. Second, the switch over to “Kachi eigyo” was a most effective move for Kirin, and would not have been as effective for anyone else in the industry, as “Kachi eigyo” requires a wide product line and extensive relationships with mass merchandisers.

Unique Value Proposition:

Kirin has changed its value proposition from “price” to “value provided to customers.” Kirin proposes to consumers ways to enjoy alcoholic beverages and food. Kirin also aims to offer solutions to issues retailers faced, by providing them with suggestions for improvements in merchandising that include featuring the products of other manufacturers, such as packaged foods and vegetables. Kirin creates value by creating sales floor displays that are beneficial to both consumers and retailers.

Kirin’s target customers are people who select a beer based on its benefit rather than its price. By conducting activities to enhance its brand, Kirin aims to create a situation where consumers will choose Kirin despite its more expensive retail price. Roughly speaking, the retail prices of Kirin products are 3% to 4% higher than those of competitors.

Kirin has a broad product line. It has the top-ranked or second-ranked product in each of three product segments. It seems to have developed a good portfolio of products, consisting of both long-selling products with strong brand equity and new products, some of which are achieving strong growth to meet diversified customer needs.

Unique Value chain:

Operations: Kirin increases efficiency in manufacturing and logistics in order to reduce costs that do not contribute to customer value. The manufacturing process has been improved to handle a larger variety of products without increasing costs.

Outward bound logistics: Logistics costs are being reduced through Total Cost Reform (TCR) activities. Coordination between the manufacturing and logistics functions aims to enhance the effectiveness of inventory management. Through coordination between the logistics and sales departments, the palette was selected as the unit for orders, larger trucks were introduced, and delivery schedules were coordinated to improve the utilization of trucks.

Marketing & sales: Kirin aims contribute to retailers’ sales by helping retailers to develop in-store displays that encourage consumers to enjoy food and drinks, and by customizing proposals to reflect local food and culture. These proposals are supported by data and analysis developed by the Market
Research Group. The Sales Group delivers customized proposals and Kirin Merchandising (KMD) helps retailers to implement these proposals.

The Market Research and Sales Promotion Groups work together to develop marketing plans, through which product introduction, sales promotion, advertising, and merchandising are coordinated. Such coordination is also supported by the Market Research Group, which develops annual sales projections for each product.

Kirin sets guidelines regarding sales promotion activities to ensure that retailers do not rely on discounts. It considers these guidelines as a tool for enhancing fair trade in the industry, and requires that its own sales people comply with these guidelines.

**R&D:** At the Product Development Laboratory, experts in research, manufacturing, and product concept development work together to develop products that have a clear value proposition for customers. Market Research supports this with market analysis.

**Human resource management:** Kirin trains its sales people, who have data analysis and solution development skills.

**Company infrastructure:** Kirin keeps track of successful examples of “Kachi eigyo” and in-store displays in its database, called Kirinology, which makes possible the sharing of information. Kirin’s information system also provides support to sales people, in their development of proposals for mass retailers.

In 2004, Kirin undertook a project called “V10 Suishin Project” (V10 Promotion Project) to change its organizational culture. By encouraging discussions among employees across functions and ranks about what the expressions “customer-centric” and “quality-centric” mean for Kirin, it developed a corporate philosophy called “Shurui Jigyo no Chikai” (the Oath of the Alcoholic Beverage Business) and guidelines called “Kodo no Genten” (Basic Principles of Action). To communicate the corporate philosophy and guidelines company-wide, Kirin made it clear that “Kachi eigyo” is not only a change in sales approach, but also a change in the commonly shared values, which helped the functions other than sales to understand the objective and significance of “Kachi eigyo.”

**Fit Among Activities**

At Kirin, activities are selected and coordinated around “Kachi eigyo,” providing value to partners in the retail business and reducing costs that do not create value for customers. (Please refer to Kirin’s activity system map, which appears at the end of this report.)

**Innovation that Enabled Strategy**

- Recognized “Kachi eigyo” (value-based selling) not as a different sales approach, but as a change in Kirin’s competitive strategy, which requires innovations in the corporate culture across functions.
- Established concrete guidelines in 2002 to halt the reliance on rebates. It introduced an open price system in 2005, under which Kirin decides only the manufacturer’s price.
- Transferred the merchandising group to a 100% subsidiary, Kirin Merchandising (KMD), in 2002. KMD has local offices, understands retailers, and works in cooperation with Kirin’s sales force.
 Established an information platform, *Kirinology*, whereby KMD, the sales force, and market analysis specialists can share know-how and best practices.
- Market analysis specialists participate in presentations to retailers.
- *Kirin Free*, introduced in 2009 (first 0.00% non-alcoholic, beer-flavored drink, patented) and expanded the non-alcohol beer segment five times in terms of the share in the entire beer market, 2.5 times in terms of sales volume.

**Consistency of Strategy Over Time**

“Kachi eigyo” started in 2001, when then president Koichiro Aramaki announced “*Shin Kirin Sengen*” (the New Kirin Declaration), in which Kirin declared its intention to return to a customer-centric and quality-centric approach. Although it took time to make the transition from a strategic focus on “price” to a focus on “value,” change employee behavior, and obtain the understanding and cooperation of retailers, Kirin did not return to price-based selling. It continued making efforts to realize value-based selling through trial and error.

**Trade-offs**

- Does not target those customers who choose beer based only on price.
- Keeps to a minimum sales promotion based on price reductions. After the introduction of guidance in 2002, the funding for retail discounts as a sales promotion expense was reduced significantly.
- Does not provide OEM products to retailers for their private brands. (Ignoring private brands is not so easy, as their market share was 5%, which was about 40 percent that of Sapporo, the No. 4 competitor.)
- Decreased significantly the use of complementary gifts, such as snacks, tumblers, and miscellaneous goods, for customers purchasing six-packs of beer.

**Profitability**

Both return on invested capital and return on sales exceed the industry average.

**Kirin Brewery**

<table>
<thead>
<tr>
<th>Difference from industry average over 5 year period</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on invested capital (ROIC) (Unit = percentage point)</td>
<td>17.2%P</td>
<td>-1.4%P</td>
<td>-1.4%P</td>
<td>-1.2%P</td>
<td>11.7%P</td>
</tr>
</tbody>
</table>

Inter quartile range (IQR) = 4.4%P

Return on invested capital = operating profit divided by (shareholder capital + long term debt + short term debt – cash)

<table>
<thead>
<tr>
<th>Difference from industry average over 5 year period</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on sales (ROS) (Unit = percentage point)</td>
<td>4.6%P</td>
<td>2.8%P</td>
<td>3.5%P</td>
<td>5.9%P</td>
<td>5.1%P</td>
</tr>
</tbody>
</table>

IQR = 1.6%P

Return on sales = profit on sales divided by sales
Activity System Map of Kirin
Selection Rationale (Recipients are addressed in no particular order)

Gourmet Navigator

Activate restaurant industry with a two-layered platform consisting of an ICT platform and a people-based network

Industry background
Before Gourmet Navigator’s website “Gurunavi” was launched, restaurants had very limited means for sales promotion. The means for raising consumer awareness were limited primarily to advertising in the Yellow Pages and distributing flyers. As a result, the restaurant business relied heavily on location, especially in big cities.

There are 500,000 restaurants in Japan, and its market size is 23 trillion yen. Most of these restaurants are small businesses, and every year 9% of these establishments are replaced.

Gourmet Navigator was launched in 1996 with the goal of activating the restaurant business and facilitating a “rich” food experience for all people. It focuses both on chain restaurants and SME restaurants, and provides support through not only an ICT-based platform, but also a people-based network (comprised of 1,000 salespeople).

It operates the ICT platform “Gurunavi,” which functions as a portal site for anyone looking for official information on restaurants. For restaurants, it serves as a tool for sales promotion and for individual consumers, it is a communication tool that provides various kinds of information. Gourmet Navigator was the first-mover, and its Gurunavi service helped individual consumers to acquire the new habit of searching for restaurant information on the Internet before going out for a meal. It is the biggest platform of its kind. It had 6.85 million registered individual members (as of December 2009), 840 million page views (in the month of December 2009), 20 million unique users (in the month of December 2009) and contracts with 50,227 restaurants (as of March 2010). Its sales and operating profit have been growing steadily even after 2008, during the economic downturn, and ROIC and ROS have improved from five years ago.

Gurunavi is a tool for restaurants for uploading various information. Gourmet Navigator charges restaurants for its service. This is in contrast to the popular strategy in the long-tail market, which is to have individual consumers provide information and website operators earn profits from advertisement fees.

Unique Value Proposition
In comparison to its competitors, Gourmet Navigator’s target audience is much more broadly defined. As for restaurants, Gourmet Navigator targets restaurants ranging from the low end to the high end, (e.g., cafés with customer transactions of 300 yen, to Japanese-style luxury restaurants charging 50,000 yen for a meal). Gourmet Navigator targets individual consumers in all segments. At the same time, it responds well to diverse customer needs by providing different entrances to the website, for example “Kochira Hishoshitsu” (This is the Secretarial Section), and making it easier for users to find the information they are looking for.
Gourmet Navigator defines its service to restaurants as “providing support for restaurants.” It offers the following benefits to restaurants: 1) A higher profile (for the restaurant) among consumers; 2) the provision of sales promotion tools, such as coupons and sales for a limited time only; 3) the provision of means for acquiring new customers, and means for increasing repeat customers; 4) the provision of services to improve restaurants’ business in such areas as menu development and recruitment, and 5) online and off-line “market” for local farmers, which also creates business matching opportunities for all participants. The basic service costs 50,000 yen per month, and restaurants can sign up for additional services for a fee.

To individual consumers, Gourmet Navigator defines its service as “a comprehensive website for food,” and positions itself as “the official restaurant information site.” Its portal site, Gurunavi, offers the following benefits to consumers for free: 1) Thorough and real-time searchability; 2) reliable, detailed, real-time information about restaurants, such as location, regular holidays, business hours, menu information, budget, availability of parking and private rooms, recommendations from the restaurant, delivery services, takeout options, etc.; 3) availability of discounts through coupons and special offers; and 4) reservation placement.

Unique Value Chain

Gourmet Navigator’s value proposition is supported by its ICT-based platform and its people-based network.

Business planning and system development: Gourmet Navigator has been adding new information and new services, such as Gurunavi Delivery, through which individual consumers can order delivery services online, and Gurunavi Shoku-ichiba (food market), through which users can do online shopping with restaurants. Also, it expanded its service to farmers and processed food manufacturers to better serve restaurants. Information can be uploaded and updated by restaurants.

Gourmet Navigator’s sales people and GPC (Gurunavi Promotion Community) members understand the needs of restaurant owners. Also, farmers and food manufacturers bring in ideas and information to Gourmet Navigator, attracted by its people-based network and close ties with restaurants.

Information uploading and searching: Many restaurants upload and update their information. Matching between the information on the platform and the data requested by individual consumers is done automatically by the system.

Sales and after sales services: Gourmet Navigator has a sales force of 1,000 people, who undertake sales, the subsidiary GPC (Gurunavi Promotion Community), Gurunavi University, and the call center. Sales personnel visit restaurants regularly and propose sales promotion tools, like account executives in advertisement agencies do for their clients.

Part-timers of a subsidiary, GPC, provide information, conduct surveys to get feedback from restaurants, introduce new services, and maintain relationships with restaurants through regular face-to-face communication.

A call center follows up the efforts of the sales force and GPC by making outbound calls. The call center also handles inquiries and complaints from individual consumers. Errors that affect the reliability of information are corrected immediately.
A paper-based monthly magazine, *Gurunavi Tsushin* (news letter), is delivered to the member restaurants, offering tips from successful restaurants and explaining how to make good use of *Gurunavi*. Between 100,000 and 150,000 copies of *Gurunavi Tsushin* are published each month.

*Gurunavi University* offers educational programs on sales promotion, shop management, etc. These sales and after-sales service activities contribute to the multi-layered network with restaurants, at the restaurant-owners’ level, the restaurant-managers’ level, and the chefs’ level. A people-based network is indispensable for changing restaurants’ mindsets and introducing innovative solutions leveraging ICT.

**Human resources management:** Gourmet Navigator helps to maximize an employee’s potential by assigning individuals to positions with significant opportunities for taking initiative. This practice, in turn, attracts individuals who are competent and motivated. As part of staff training, Gourmet Navigator encourages employees to meet challenges and create new things every day. It aims to instill the DNA of evolution throughout the organization.

In order to help sales personnel develop the skills of account executives, Gourmet Navigator monitors and evaluates the entire process, by noting the number of restaurant visits and/or sales calls per employee and the details of sales talks, rather than focusing merely on the results, such as the number of new contracts won.

**Fit among Activities**

At Gourmet Navigator, activities are selected and coordinated around the key strategic choices, namely, broad services, an official portal site for restaurants, and a multi-layered sales network. (Please refer to Gourmet Navigator’s activity system map, which appears at the end of this report.)

**Innovation that Enabled Strategy**

- Developed a communication platform, where restaurants upload information.
- Provides both online and offline (people-based) infrastructure.
- A system where restaurants send proposals to party organizers in response to requests that have been placed by these party organizers. In this way, party organizers can easily find a restaurant that can meet their requirements.
- An online and calling center-based reservation system that enables restaurants to sell canceled reservations and vacant seats.
- A community site for executive assistants / executive secretaries, where 20,000 executive assistants / executive secretaries of 10,000 companies exchange information regarding restaurants for business dinners and souvenirs for guests.
- *Gurunavi University* is offered to restaurants, where best practices are collected and shared through lectures on sales promotion.

**Consistency of Strategy Over Time**

Gourmet Navigator has kept the same mission and the core ideas for its business strategy since its establishment in 1996. Its mission is to protect and nurture the food culture of Japan, and its business strategy is to provide plenty of high-quality information to individual consumers free-of-charge, to
provide restaurants with tools to improve their management and operations, and to establish a people-based network to supplement the ICT-based infrastructure between Gourmet Navigator and restaurants. However, the ways in which Gourmet Navigator has been implementing its mission and core ideas have been changing according to the growth phase of the platform. In the early stages, the first priority was to increase the membership to 10,000. Therefore, in the beginning it sold simple and less expensive services. After achieving 10,000 members, it changed its service, by offering more expensive but more effective services, and it also changed its sales approach, adopting an account executive-style approach. It expanded the service to include recruiting and restaurant renovation. Now, it provides the platform to farmers and food manufacturers, making it possible for farmers to connect with restaurants and consumers, based on the thinking that the prosperity of the agricultural industry leads to the prosperity of the restaurant industry, which at the end of the day, contributes to its mission, which is to protect and nurture the food culture of Japan.

**Trade-offs**

- Gourmet Navigator foregoes the efficiency that a focus on ICT enables, and instead complements it with high touch (a people-based network).
- Does not focus on one function. Gourmet Navigator offers services beyond sales promotion services, in line with its positioning as a “Food information wholesaler.”
- Does not limit itself to a simple web-based sales approach. Gourmet Navigator has a sales force, GPC (part timers who visit restaurants), and a call center to support restaurants.
- Does not rely on consumer-generated contents/information.

**Profitability**

Both return on invested capital and return on sales exceed the industry average. Their gaps with the industry average are expanding.

### Gourmet Navigator

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<thead>
<tr>
<th>Return on invested capital (ROIC)</th>
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<tr>
<td>Difference from industry average over 5 year period</td>
<td>2005</td>
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<td>32.0%P</td>
<td>19.9%P</td>
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Inter quartile range (IQR) = 12.8%P

Return on invested capital = operating profit divided by (shareholder capital + long term debt + short term debt – cash)

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<tr>
<td>13.2%P</td>
<td>9.6%P</td>
<td>3.9%P</td>
<td>14.9%P</td>
<td>14.5%P</td>
<td>15.2%P</td>
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IQR = 8.0%P

Return on sales = profit on sales divided by sales
Activity System Map of Gourmet Navigator

- Consulting-style sales
- Corporate philosophy and venture spirit
- No.1 in the industry (volume and page views)
- Multi-layered strong sales and support function
- Positioned as "the official information site"
- Organizational culture of "speed and evolution"
- Flexible HR system to develop high-potential employees quickly
- Broad services
- Leadership with vision and entrepreneurship

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Graduate School of International Corporate Strategy
Hitotsubashi University
Selection Rationale (Recipients are addressed in no particular order)

Terumo Corporation
Interventional Systems Business of Cardiac & Vascular Products Group

Going against the Global Giants

Industry background

Interventional treatment of the heart vessel uses an introducer sheath to make an entrance for the catheter, from where a guidewire enters the blood vessel and leads the catheter to the edge of the coronary artery. Physicians take an X-ray of the blood vessel by injecting contrast media to see if there is a problem. If the vessel is narrowing, physicians insert a balloon catheter and force open the constricted portion of the blood vessel. Then, a metal tube called a stent is inserted so that the vessel will not become constricted again.

The market for interventional systems consists of three treatment areas: heart (coronary) vessels, brain (cerebral) vessels, and lower-limb (peripheral) vessels. Also, the interventional market has three segments: entrance, access, and treatment. Product innovation is active in the treatment segment, and products in the treatment segment are more expensive than those in the entrance or access segments.

U.S. giants, namely, Boston Scientific, Johnson & Johnson, Medtronic, and Abbot Laboratories, dominate the market and occupy a global market share of more than 80%. They obtain new technology through the acquisition of research-based venture companies, and quickly sell these new technologies around the world by leveraging their clinical trial capabilities and their global sales force. They have a broad product line in all three treatment areas.

Interventional systems, as medical instruments, must be approved for use by the pharmaceutical jurisprudence. In Japan and several other countries, the price of such systems is determined by law, and there is no difference in price among competitors. In the U.S. and most other countries, the market decides the price.

Terumo entered this market as a latecomer, but has established itself in the No. 5 position in the cardiology area, with its unique competitive strategy. Although interventional treatment is used in three areas (the coronary, cerebral, and peripheral), Terumo focuses on the coronary area. Its strength is in the entrance and access segments, and it has the No. 1 global market share for guidewires (75%) for access, and a 40% share for introducer sheaths for entrance into the blood vessel (in 2009 by Terumo).

These products, which are Terumo’s specialty, are necessities for physicians, but are not a product area for radical product innovations. While U.S. giants focus on the product areas where radical innovations are taking place, Terumo put emphasis on the necessities, competing to refine existing technology for better treatment and application in new areas. Terumo capitalizes on incremental innovation, clearly demonstrating the ease of use for physicians, and fully deploys the
advanced techniques of Japanese physicians and the company’s technology, such as unique coating technology and precision manufacturing technology.

Terumo leverages its strength in products that constitute necessities to create a new market by popularizing new treatment approaches, and to strengthen its competitiveness in the areas where treatment is very difficult. This not only results in higher sales of these products, which are considered necessities, but also leads to the development of new treatment methods and solutions to existing challenges, as well as contributes to broadened applications of other products used in the treatment. New treatment is possible only when Terumo’s products and the physicians’ technique function together as a well-coordinated system. This collaboration with physicians makes imitation difficult for competitors.

Terumo entered the intervention market in 1985 with access guidewires. In 1986, it commenced sales of introducer sheaths. Then, in the mid-1990s it introduced products in the treatment segment, such as balloon catheters and treatment guidewires. Currently, it offers a broad product line in the cardiovascular area.

**Unique Value Proposition**

Terumo’s target customers are those physicians who are pursuing improvements in treatment and saving patients’ lives, and who are often opinion leaders. In countries where prices are set by the market mechanism, Terumo’s guidewires and introducer sheaths are sold at higher prices.

Terumo’s value proposition is to offer better treatment and lessen the patient’s mental and physical burden. Terumo’s products have a superior sliding function and reliable operability. Also, its products enable treatments which previously had to be conducted surgically. Terumo puts a priority on facilitating new techniques, such as Chronic Total Occlusion (CTO) and Transradial Intervention (a technique in which a catheter is inserted from the wrist rather than the thigh—it is a procedure which is less likely to produce internal bleeding and requires less hospitalization, but requires more advanced skills for physicians). TRI was introduced in the 1990s, and now 60% to 70% of coronary intervention is done by TRI. These new techniques require that Terumo’s products and the physician’s techniques are well coordinated, forming a kind of system. For this reason, Terumo provides training to physicians.

Terumo also enables better medical economics. With these new techniques, physicians can reduce the failure rate, shorten hospital stays for patients, and reduce overall medical expenses. More and more physicians are giving greater consideration to medical economics these days.

**Unique Value Chain**

**Manufacturing:** In order for guidewires to assure a consistent tactile feeling and feedback, the wire should be at the center, and the coating should be applied evenly. The sophisticated manufacturing technology required for the production of guidewires makes it difficult for competitors to match the quality of Terumo products.

**Sales and marketing:** Terumo’s sales activities target opinion leaders among physicians, and Terumo aims to develop new techniques in collaboration with them. To help new techniques become widely used, Terumo provides physicians with information and training, overseas as well as in Japan. For example at its Terumo Medical Pranex in Japan, Terumo gives physicians the opportunity to undergo
training in new techniques, such as TRI and CTO, and develops relationships with them. In the U.S., Terumo also reaches out to physicians through its website, Transradial University, where physicians can find information on training programs, access videos featuring experienced physicians, and share tips and academic papers. These activities help to spread new techniques from opinion leaders to other physicians, promoting the adaptation of Terumo products beyond TRI treatment, and creating long-term Terumo fans.

R&D: Coating is one of the core technologies of R&D at Terumo. Hydrophilic coatings and hydrophobic coatings are used for Terumo products across divisions as a source of technology differentiation. In order to support its technological development, Terumo has developed specialized measurement and evaluation equipment and facilities.

Although Terumo places strategic emphasis on in-house technologies, such as coating technology and manufacturing technology, it also uses M&As to acquire unique technology which can create synergies with Terumo’s technology. For example, in 2006, Terumo acquired the American company MicroVention for its swelling coat technology. This technology has been incorporated into Terumo’s products, and it is being used in treatment areas other than the original treatment area, namely, for the treatment of cerebral aneurysms.

Terumo provides an environment in which the individuals in charge of product development participate in training programs to acquire feedback from professionals who are using Terumo’s products. This feedback is then used to make further improvements to those products.

Human resources management: Terumo published “Terumo No Kokoro” (The Heart of Terumo) in 2007 to articulate its corporate philosophy: “Contributing to society through healthcare.” Excerpts from this in-house publication include: “The quality of each individual’s work creates ‘Terumo Quality,’” and “Terumo’s customers are patients and everybody who wishes for health.” Terumo’s associates read this publication and conduct discussions about the contents from time to time.

In Japan, all newly hired associates and others undergo product training at Terumo Medical Pranex, to better understand how Terumo products are used in real healthcare settings.

Fit among Activities

At Terumo, activities are guided by its corporate philosophy, “Contributing to society through healthcare,” and are selected and coordinated around the core concept of its strategy, “to provide solutions, not only products.”

( Please refer to Terumo’s activity system map, which appears at the end of this report.)

Innovation That Enabled Strategy

- Product innovations: Developed wire made of nitinol alloy coated with a hydrophilic material when Teflon-coated stainless wires were prevailing.
- Business model innovations: Terumo positions its own business not as selling medical equipment but as promoting better treatment. This has helped improve the success rate of physicians, enhanced their trust in Terumo’s products, and at the end of the day, increased product sales.
- Innovations in treatment: TRI, CTO
- Innovations in services: Terumo Medical Pranex
Consistency of Strategy Over Time

Since Terumo entered the intervention market, it segmented the market in its own way and focused on the coronary treatment area, especially the entrance and access segments. Product differentiation has been achieved through the reduction of sliding resistance and enhanced ease of use. The hydrophilic coating technology that facilitated its entrance into the market with guidewires is still used to differentiate treatment guidewires and balloon catheters in the treatment segment.

Terumo’s strategy evolved from the entry strategy of a late comer to one for the contender with the fifth largest market share in the global market. However, the uniqueness of its strategy has remained unchanged. While maintaining this consistency, Terumo has enhanced its competitive strategy by expanding the scope of differentiation from product innovation to system-level innovation.

Trade-offs

- Does not conduct M&As to increase sales. Increases in sales should come from organic growth. It conducts M&As to strengthen its differentiation, for example, to obtain unique technology and/or to realize synergies with Terumo’s own technology.
- Does not integrate acquired companies by dissolving their organization. Rather, Terumo has them keep their existing organizational culture and encourages a gradual integration and aims to maximize synergies in technologies.
- Does not outsource the core technology and manufacturing function. In this way, Terumo can achieve precision and reliability and respond to customers’ requests to continuously improve existing products.
- Does not use strong incentives to motivate its sales force. Rather, Terumo keeps incentives to a minimum. This way, Terumo can encourage its sales force to sell solutions (systems incorporating both products and know-how), rather than just products.
- Does not sell its products at low prices for the sake of market share.
- Does not sacrifice quality for lower price and/or sales volume.

Profitability

Both return on invested capital and return on sales exceed industry average.
Terumo Corporation

**Interventional Systems Business of Cardiac & Vascular Products Group**

(Return on invested capital (ROIC))

<table>
<thead>
<tr>
<th>Difference from industry average over 5 year period</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.3%P</td>
<td>20.5%P</td>
<td>26.4%P</td>
<td>30.4%P</td>
<td>27.1%P</td>
<td>29.8%P</td>
</tr>
</tbody>
</table>

Inter quartile range (IQR) = 8.6%P

Return on invested capital = operating profit divided by (shareholder capital + long term debt + short term debt – cash)

(Return on sales (ROS))

<table>
<thead>
<tr>
<th>Difference from industry average over 5 year period</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.5%P</td>
<td>20.3%P</td>
<td>22.7%P</td>
<td>20.9%P</td>
<td>17.9%P</td>
<td>19.5%P</td>
</tr>
</tbody>
</table>

IQR = 10.2%P

Return on sales = profit on sales divided by sales

**Activity System Map of Terumo Corporation, Interventional Systems Business of Cardiac & Vascular Products Group**