



SUNIL CHOPRA

Seven-Eleven Japan Co.

Established in 1973, Seven-Eleven Japan set up its first store in Koto-ku, Tokyo, in May 1974. The company was first listed on the Tokyo Stock Exchange in October 1979. In 2004 it was owned by the Ito-Yokado group, which also managed a chain of supermarkets in Japan and owned a majority share in Southland, the company managing Seven-Eleven in the United States. Seven-Eleven Japan realized a phenomenal growth between the years of 1985 and 2003. During that period, the number of stores increased from 2,299 to 10,303, annual sales increased from 386 billion to 2,343 billion yen, and net income increased from 9 billion to 91.5 billion yen. Additionally, the company's return on equity (ROE) averaged around 14 percent between 2000 and 2004. In 2004 Seven-Eleven Japan represented Japan's largest retailer in terms of operating income and number of stores. Customer visits to Seven-Eleven outlets totaled 3.6 billion that year, averaging almost 30 visits to a Seven-Eleven annually for every person in Japan.

Company History and Profile

Both Ito-Yokado and Seven-Eleven Japan were founded by Mr. Masatoshi Ito. He started his retail empire after the Second World War when he joined his mother and elder brother and began work in a small clothing store in Tokyo. By 1960 he was in sole control and the single store had grown into a \$3 million company. After a trip to the United States in 1961, Ito became convinced that superstores were the wave of the future. At that time, Japan was still dominated by Mom-and-Pop stores. Ito's chain of superstores in the Tokyo area was instantly popular and soon constituted the core of Ito-Yokado's retail operations.

In 1972 Ito first approached the Southland Corporation about the possibility of opening Seven-Eleven convenience stores in Japan. After rejecting his initial request, Southland agreed in 1973 to a licensing agreement. In exchange for 0.6 percent of total sales, Southland gave Ito exclusive rights throughout Japan. In May 1974 the first Seven-Eleven convenience store opened in Tokyo.

This new concept was an immediate hit in Japan, and Seven-Eleven Japan experienced tremendous growth. By 1979 there were already 591 Seven-Eleven stores in Japan; by 1984 there were 2,001. Rapid growth continued (see **Exhibit 1**), resulting in 10,356 stores by 2004.

On October 24, 1990, the Southland Corporation entered into bankruptcy protection. Southland asked for Ito-Yokado's help, and on March 5, 1991, IYG Holding was formed by

Seven-Eleven Japan (48 percent) and Ito-Yokado (52 percent). IYG acquired 70 percent of Southland's common stock for a total price of \$430 million.

In 2004, convenience store operations from Seven-Eleven Japan and 7-Eleven Inc. in the United States contributed 48.2 percent of total revenues and 90.2 percent of total consolidated operating income for the Ito Yokado group. Seven-Eleven Japan contributed 87.6 percent of the total income received from convenience stores by Ito Yokado. Effectively, Seven-Eleven Japan has become the dominant part of the Ito Yokado group.

The Convenience Store Industry and Seven-Eleven in Japan

As in the United States, convenience stores in Japan provided customers with a variety of products carried by general retailers as well as food retailers. In Japan, the convenience store sector was one of the few business areas that continued to grow during the prolonged 1990s downturn. From 1991 to 2002 the number of convenience stores in Japan increased from 19,603 to almost 42,000. As a percentage of all retail stores in Japan, this represented an increase from 1.2 percent to 3.2 percent. During that period, annual sales at convenience stores more than doubled from just over 3 trillion to 6.7 trillion yen. As a percentage of all retail sales in Japan, this represented an increase from 2.2 percent to 5.0 percent.

Japan's convenience store sector gradually consolidated, with larger players growing and smaller operators shutting down. In 2004, the top 10 convenience store chains accounted for approximately 90 percent of Japan's convenience stores. As the chains improved their operating structures and better leveraged economies of scale, smaller operators found it hard to compete.

Seven-Eleven Japan had grown its share of the convenience store market since it opened. In 2002 Seven-Eleven was Japan's leading convenience store operator, accounting for 21.7 percent of all convenience stores and 31.5 percent of total store sales. Seven-Eleven was very effective in terms of same store sales. In 2004 average daily sales at the four major convenience store chains excluding Seven-Eleven Japan were 484,000 yen. Seven-Eleven stores, in contrast, had daily sales of 647,000 yen—more than 30 percent higher than the competition. In 2004 Seven-Eleven's operating income of 165.7 billion yen positioned it as a leader not only of the convenience store sector but also of Japan's retail industry as a whole. In terms of growth, their performance was even more impressive. In 2004 Seven-Eleven accounted for 60 percent of the total net increase in the number of stores among the top 10 convenience store chains in Japan. This growth had been very carefully planned, exploiting the core strengths that Seven-Eleven Japan had developed in the areas of information systems and distribution systems.

The Seven-Eleven Japan Franchise System

Seven-Eleven Japan developed an extensive franchise network and performs a key role in the daily operations of this network. The Seven-Eleven Japan network includes both company-owned stores and third-party-owned franchises. In 2004 franchise commissions accounted for over 68 percent of revenue from operations. To ensure efficiency, Seven-Eleven Japan based its fundamental network expansion policy on a market-dominance strategy. Entry into any new

market was built around a cluster of 50 to 60 stores supported by a distribution center. Such clustering gave Seven-Eleven Japan a high density market presence and allowed it to operate an efficient distribution system. Seven-Eleven Japan, in its 1994 annual report, listed the following six advantages of the market-dominance strategy:

1. Boosted distribution efficiency
2. Improved brand awareness
3. Increased system efficiency
4. Enhanced the efficiency of franchise support services
5. Improved advertising effectiveness
6. Prevented competitors' entrance into the dominant area

Adhering to its dominant strategy, Seven-Eleven Japan opened the majority of its new stores in areas with existing clusters of stores. For example, the Aichi prefecture, where Seven-Eleven began opening stores in 2002, saw a large increase in 2004 with 108 new store openings. This represented over 15 percent of the new Seven Eleven stores opened in Japan that year.

Geographically, Seven-Eleven has a limited presence in Japan. In 2004 the company had stores in about 70 percent (32 out of 47) of the prefectures within Japan. However within prefectures where they were present, stores tended to be dense. As the 2004 annual report stated, "Filling in the entire map of Japan is not our priority. Instead, we look for demand where Seven-Eleven stores already exist, based on our fundamental area-dominance strategy of concentrating stores in specific areas."

With Seven-Eleven franchises being highly sought after, less than one out of 100 applicants was awarded a franchise (a testament to store profitability). The franchise owner was required to put a significant amount of money up front. Half of this amount was used to prepare the store and train the owner. The rest was used for purchasing the initial stock for the store. In 1994, forty-five percent of total gross profits at a store went to Seven-Eleven Japan, and the rest went to the store owner. The responsibilities of the two parties were as follows:

Seven-Eleven Japan responsibilities:

1. Develop supply and merchandise
2. Provide the ordering system
3. Pay for the system operation
4. Supply accounting services
5. Provide advertising
6. Install and remodel facilities
7. Pay 80 percent of utility costs

Franchise owner responsibilities:

1. Operate and manage store
2. Hire and pay staff
3. Order supplies
4. Maintain store appearance
5. Provide customer service

Store Information and Contents

Seven-Eleven had 10,303 stores in Japan and Hawaii as of 2003 (see **Exhibit 2**). In 2004 Seven-Eleven Japan changed the standard size of new stores from 125 square meters to 150 square meters, still significantly smaller than the size of most U.S. Seven-Eleven stores. Daily sales at a store averaged 647,000 yen (about \$6,100), which was about twice the average at a U.S. store.

Seven-Eleven Japan offered its stores a choice from a set of 5,000 SKU's (stock keeping units). Each store carried on average about 3,000 SKU's depending upon the local customer demand. Seven-Eleven emphasized regional merchandizing to cater precisely to local preferences. Each store carried food items, beverages, magazines, and consumer items such as soaps, detergents, etc. Sales across product categories from 2002 to 2004 are given in **Exhibit 3**.

The food items were classified in four broad categories: (i) chilled temperature items including sandwiches, delicatessen products, and milk; (ii) warm temperature items including box lunches, rice balls, and fresh bread; (iii) frozen items including ice cream, frozen foods, and ice cubes; (iv) and room temperature items including canned food, instant noodles, and seasonings. Processed food and fast food items were big sellers for the stores. In 2004, processed and fast foods contributed about 60 percent of the total sales at each store. Over one billion rice balls were sold in 2004; this amounted to each Japanese citizen eating approximately eight Seven-Eleven rice balls a year. The top-selling products in the fast food category were lunch boxes, rice balls, bread-based products, and pasta. As of February 2004, Seven-Eleven Japan had 290 dedicated manufacturing plants that only produced fast food for their stores.

Other products sold at Seven-Eleven stores included soft drinks, nutritional drinks, alcoholic beverages such as beer and wine, game software, music CDs, and magazines.

In 2004 Seven-Eleven was focused on increasing the number of original items that were only available at their stores. At that time, original items accounted for roughly 52 percent of total store sales. The company aimed to grow the percentage to 60 percent in the medium to long term.

Store Services

Besides products, Seven-Eleven Japan gradually added a variety of services that customers can obtain at its stores. The first service added in October 1987 was the in-store payment of Tokyo Electric Power bills. The company later expanded the set of utilities for which customers could pay their bills in the stores to include gas, insurance premiums, and telephone. With more convenient operating hours and locations than banks or other financial institutions, the bill payment service attracted millions of additional customers every year. In April 1994 Seven-Eleven Japan began accepting installment payments on behalf of credit companies. It started selling ski lift pass vouchers in November 1994. In 1995 it began to accept payment for mail order purchases. This was expanded to include payment for Internet shopping in November 1999. In August 2000, a meal delivery service company, Seven-Meal Service Co., Ltd was established to serve the aging Japanese population. In 2001, IYBank Co. was established through a joint investment with Ito Yokado. By April 2004 ATMs had been installed in about 75 percent of the total store network in Japan, with the goal to achieve 100 percent ATM installation.

Other services offered at stores include photocopying, ticket sales using multifunctional copiers, and being a pick up location for parcel delivery companies that typically did not leave the parcel outside if the customer was not at home. The major thrust for offering these services was to make Seven-Eleven stores in Japan more convenient places to shop. Several of these services exploited the existing Total Information System (see below) in the store.

In February 2000, Seven-Eleven Japan established 7dream.com, an e-commerce company. The goal was to exploit the existing distribution system and the fact that stores were easily accessible to most Japanese. Stores served as drop-off and collection points for Japanese customers. A survey by eSBook a joint venture between Softbank, Seven-Eleven Japan, Yahoo!Japan, and Tohan, a publisher, discovered that 92 percent of its customers preferred to pick up their online purchases at the local convenience store, rather than have them delivered to their homes. This was understandable given the frequency with which Japanese customers visit their local convenience store. 7dream hoped to build on this preference along with the synergies from the existing distribution system.

Seven-Eleven Japan's Integrated Store Information System

From its start, Seven-Eleven Japan had sought to simplify its operations by using advanced information technology. Seven-Eleven Japan attributes a significant part of its success to the Total Information System installed in every outlet and linked to headquarters, suppliers, and the Seven-Eleven distribution centers. The first on-line network linking the head-office, stores, and vendors was established in 1979, though the company did not collect point-of-sales (POS) information at that time. In 1982 Seven-Eleven was the first company in Japan to introduce a POS system comprising POS cash registers and terminal control equipment. In 1985 the company developed, jointly with NEC, personal computers using color graphics that were installed at each store and linked to the POS cash registers. These computers were also on the network linking the store to the head office as well as the vendors. Until July 1991, head office, stores, distribution centers, and suppliers were linked only by a traditional analog network. At that point in time, an integrated services digital network (ISDN) was installed. Linking more than 5,000 stores, it became one of the world's largest ISDN systems. Seven-Eleven Japan spent 2.4 billion yen setting up this network.

The two-way, high-speed on-line communication capability of ISDN enabled Seven-Eleven Japan to collect, process, and feed back POS data quickly. Sales data gathered in each store by 11 o'clock p.m. was processed and ready for analysis the next morning. In 1997 Seven-Eleven Japan introduced its fifth generation of the Total Information System, which was still in use in 2004.

The hardware system at a 1994 Seven-Eleven store included the following:

1. Graphic order terminals for placing orders were linked to the store computer.
2. Scanner terminals scanned deliveries from the distribution center.
3. Store computers were linked to the ISDN network.
4. POS registers were linked to the store computer.

Each piece of hardware had a role.

Graphic order terminal: This was a handheld device with a wide-screen graphic display, used by the store owner/manager to place orders. The items were recorded and brought up in the order

in which they were arranged on the shelves. The store manager/owner walked down the aisles and placed orders by item. When placing an order, the store manager had access (from the store computer) to detailed analysis of POS data related to the particular item. (**Exhibit 4** gives an overview of the results of the analysis provided by the store computer.) The store manager used this information when placing this order, which was directly entered into the terminal. Once all the orders were placed, the terminal was returned to its slot, at which point the orders were relayed by the store computer to both the appropriate vendor and the Seven-Eleven distribution center.

Scanner terminal: These scanners read bar codes and recorded inventory. They were used to receive product coming in from a distribution center. This was then automatically checked against a previously placed order and the two were reconciled. Before the scanner terminals were introduced, truck drivers waited in the store until the delivery was checked. Once they were introduced, the driver simply dropped the delivery in the store, and a store clerk received it at a suitable time when there were few customers. The scanner terminals were also used when examining inventory at stores.

Store computer: This linked to the ISDN network, the POS register, the graphic order terminal, and the scanner terminal. It communicated between the various input sources, tracked store inventory and sales, placed orders, provided detailed analysis of POS data, and maintained and regulated store equipment.

POS register: To better understand the functioning of this information network, one needs to consider a sampling of daily operations. As soon as a customer purchased an item and paid at the POS register, the item information was retrieved from the store computer and the time of sale was automatically recorded. In addition, the cashier recorded the age and sex of the customer. To do this, the cashier used five register keys for the categories: under-13, 13-19, 20-29, 30-49, and 50+. This POS data was automatically transmitted online to a host computer. All sales data collected by 11 o'clock p.m. was organized and ready for analysis by next morning. The data was evaluated on a company wide, district, and store basis.

The analyzed and updated data was then sent back to the Seven-Eleven Japan stores via the network. Each store computer automatically updated its product master file to analyze its recent sales and stock movements. The main objective of the analysis was to improve the ordering process. All this information was available on the graphic order terminal used for order placement.

The information system allowed Seven-Eleven stores to better match supply with demand. Store staff could adjust the merchandising mix on the shelves according to consumption patterns throughout the day. For example, popular breakfast items were stocked earlier during the day, while popular dinner items were stocked later in the evening. The identification of slow and non-moving items allowed a store to convert shelf space to introduce new items. More than 50 percent of the items sold at a Seven-Eleven store changed in the course of a year. Part of this related to seasonal demand and part to new products. When a new product was introduced, the decision whether to continue stocking it was made within the first three weeks. Each item on the shelf contributed to sales and margin and did not waste valuable shelf space.

Seven-Eleven's Distribution System

The Seven-Eleven distribution system tightly linked the entire supply chain for all product categories. The Seven-Eleven distribution centers and the information network played a key role in that regard. The major objective was to carefully track sales of items and offer short replenishment cycle times. This allowed a store manager to accurately forecast sales corresponding to each order.

Since March 1987 Seven-Eleven had offered three-times-a-day store delivery of all rice dishes (which comprised most of the fast food items sold). Bread and other fresh food were delivered twice a day. The distribution system was flexible enough to alter delivery schedules depending on customer demand. For example, ice cream was delivered daily during the summer but only thrice a week at other times. The replenishment cycle time for fresh and fast food items had been shortened to less than 12 hours. A store order for rice balls by 10 o'clock a.m. was delivered before the dinner rush.

As discussed earlier, the store manager used a graphic order terminal to place an order. All stores were given cut-off times for breakfast, lunch, and dinner ordering. When a store placed an order, it was immediately transmitted to the supplier as well as the distribution center. The supplier received orders from all Seven-Eleven stores and started production to fill the orders. The supplier then sent the orders by truck to the distribution center. Each store order was separated so the distribution center could easily assign it to the appropriate store truck using the order information it already had. The key to store delivery was what Seven-Eleven called the combined delivery system. At the distribution center, delivery of like products from different suppliers (for example milk and sandwiches) was directed into a single temperature-controlled truck. There were four categories of temperature-controlled trucks: frozen foods, chilled foods, room temperature processed foods, and warm foods. Each truck made deliveries to multiple retail stores. The number of stores per truck depended on the sales volume. All deliveries were made during off-peak hours and were received using the scanner terminals. The system worked on trust and did not require the delivery person to be present when the store personnel scanned in the delivery. That reduced the delivery time spent at each store.

This distribution system enabled Seven-Eleven to reduce the number of vehicles required for daily delivery service to each store, even though the delivery frequency of each item was quite high. In 1974, 70 vehicles visited each store every day. In 1994, only 11 were necessary. This dramatically reduced delivery costs and enabled rapid deliver of a variety of fresh foods.

As of February 2004, Seven-Eleven Japan had a total of 290 dedicated manufacturing plants throughout the country that only produced fast food for Seven-Eleven stores. These items were distributed through 293 dedicated distribution centers (DCs) that ensured rapid, reliable delivery. None of these DCs carried any inventory; they merely transferred inventory from supplier trucks to Seven-Eleven distribution trucks. The transportation was provided by Transfleet Ltd., a company set up by Mitsui and Co. for the exclusive use of Seven-Eleven Japan. The outline of the combined distribution system is shown in **Exhibit 5**.

Seven-Eleven in the United States

Seven Eleven has expanded rapidly around the world (see **Exhibit 6**). The major growth has been in Asia though the United States continues to be the second largest market for Seven Eleven. Once Seven-Eleven Japan acquired Southland Corporation, it set about improving operations in the United States. In the initial years, several Seven-Eleven stores in the United States were shut down. The number of stores started to grow beginning in 1998. Historically, the distribution structure in the United States was completely different from that of Japan. Stores in the United States were replenished using Direct Store Delivery (DSD) by some manufacturers with the remaining products delivered by wholesalers. DSD accounted for about half the total volume with the rest coming from wholesalers.

With the goal of introducing “fresh” products, Seven-Eleven introduced the concept of combined distribution centers (CDC) around 2000. By 2003 Seven-Eleven had 23 CDCs located throughout North America supporting about 80 percent of the store network. CDCs delivered fresh items such as sandwiches, bakery products, bread, produce, and other perishables once a day. A variety of fresh food suppliers sent product to the CDC throughout the day where they were sorted for delivery to stores at night. Fresh food sales in North America exceeded \$450 million in 2003. During this period DSD by manufacturers and wholesaler delivery to stores also continued.

In 2003 revenue in the United States and Canada totaled \$10.9 billion with about 69 percent coming from merchandise and the rest from the sale of gasoline. The North American inventory turnover rate in 2003 was about 17 compared to over 50 in Japan. This performance, however, represented a significant improvement in North American performance.

Study Questions

1. A convenience store chain attempts to be responsive and provide customers what they need, when they need it, where they need it. What are some different ways that a convenience store supply chain can be responsive? What are some risks in each case?
2. Seven-Eleven's supply chain strategy in Japan can be described as attempting to micro-match supply and demand using rapid replenishment. What are some risks associated with this choice?
3. What has Seven-Eleven done in its choice of facility location, inventory management, transportation, and information infrastructure to develop capabilities that support its supply chain strategy in Japan?
4. Seven Eleven does not allow direct store delivery in Japan with all products flowing through its distribution center. What benefit does Seven Eleven derive from this policy? When is direct store delivery more appropriate?
5. What do you think about the 7dream concept for Seven-Eleven Japan? From a supply chain perspective is it likely to be more successful in Japan or the United States? Why?
6. Seven-Eleven is attempting to duplicate the supply chain structure that has succeeded in Japan in the United States with the introduction of CDCs. What are the pros and cons of this approach? Keep in mind that stores are also replenished by wholesalers and DSD by manufacturers.
7. The United States has food service distributors like McLane that also replenish convenience stores. What are the pros and cons to having a distributor replenish convenience stores versus a company like Seven Eleven managing its own distribution function?

Exhibit 1: Stores and Annual Sales for Seven-Eleven Japan

Year	Number of Stores	Annual Sales (Billion Yen)	Year	Number of Stores	Annual Sales (Billion Yen)
1974	15	0.7	1989	3,954	780.3
1975	69	4.8	1990	4,270	931.9
1976	199	17.4	1991	4,629	1,081.8
1977	375	39.8	1992	5,058	1,194.9
1978	591	72.5	1993	5,475	1,281.9
1979	801	109.8	1994	5,905	1,392.3
1980	1,040	153.6	1995	6,373	1,477.1
1981	1,306	202.1	1996	6,875	1,609.0
1982	1,643	256.5	1997	7,314	1,740.9
1983	2,001	319.0	1998	7,732	1,848.1
1984	2,299	386.7	1999	8,153	1,963.9
1985	2,651	453.6	2000	8,602	2,046.6
1986	2,964	521.9	2001	9,060	2,114.0
1987	3,304	599.1	2002	9,690	2,213.2
1988	3,653	686.3	2003	10,303	2,343.2

Exhibit 2: Financial Figures for Seven-Eleven Japan (2000-2004)

For fiscal years ended February 28/29	2000	2001	2002	2003	2004
Net Sales (Billion Yen)	1,964.0	2,046.6	2,114.0	2,213.3	2,343.2
Revenue (Billion Yen)	327.0	346.9	365.9	400.7	445.4
Ordinary Income (Billion Yen)	140.2	147.2	153.8	159.6	168.9
Net Income (Billion Yen)	68.2	78.4	83.2	86.5	91.5
Number of Stores	8,153	8,602	9,060	9,690	10,303

Exhibit 3: Sales by Product Category Between 2002 and 2004

	2002				2003			
	Sales (Billion Yen)	Gross Margin (percent)	Percent of total sales	Percent increase from prior year	Sales (Billion Yen)	Gross Margin (percent)	Percent of total sales	Percent increase from prior year
Processed Foods	681.5	34.4	32.0	5.3	696.0	34.9	31.2	2.1
Fast Foods	642.2	32.3	30.2	3.1	674.7	32.4	30.3	5.1
Fresh Foods	264.9	30.5	12.4	3.3	284.0	30.9	12.7	7.2
Nonfoods	540.2	22.9	25.4	1.7	573.6	22.6	25.8	6.2
Total	2,128.7	30.4	100.0	3.5	2,228.2	30.5	100.0	4.7

	2004			
	Sales (Billion Yen)	Gross Margin (percent)	Percent of total sales	Percent increase from prior year
Processed Foods	725.4	36.0	30.8	4.2
Fast Foods	704.4	32.2	29.9	4.4
Fresh Foods	305.0	31.1	12.9	7.4
Nonfoods	624.0	22.1	26.4	8.8
Total	2,358.8	30.6	100.0	

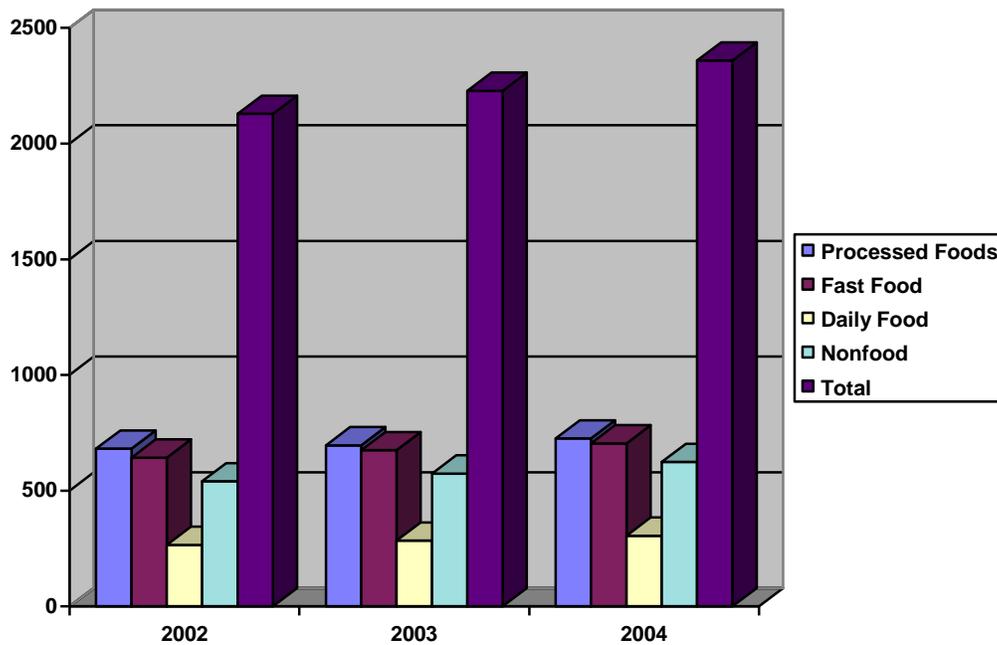


Exhibit 4: Information Analysis of POS Data

- Sales analysis of product categories over time
- SKU analysis
- Analysis of waste or disposal
- Ten-week sales trends by SKU
- Ten-day sales trends by SKU
- Sales trends for new products
- Sales analysis by day and time
- List of slow-moving items
- Sales analysis by product categories
- Analysis of sales and number of customers over time
- Contribution of product to sections in store display
- Sales growth by product categories
- Evaluation of merchandising

Exhibit 5: Combined Distribution System

Temperature-Controlled Combined Distribution

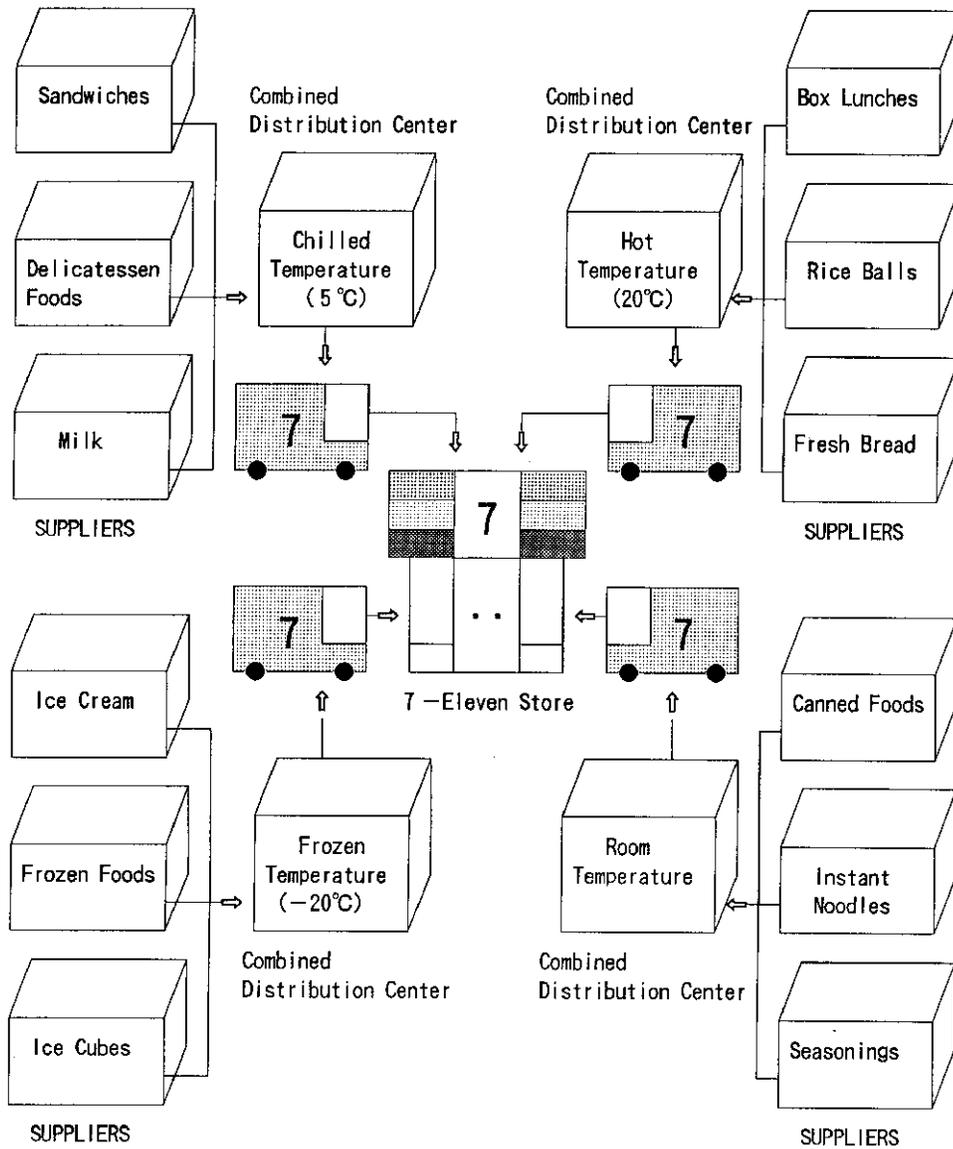


Exhibit 6: Global Store Distribution for Seven-Eleven in 2004

Country	Stores
Japan	10,615
U.S.A	5,798
Taiwan	3,680
Thailand	2,861
South Korea	1,179
China	808
Mexico	491
Canada	488
Malaysia	460
Australia	345
Singapore	261
Philippines	257
Norway	78
Sweden	74
Turkey	65
Denmark	46
Puerto Rico	12
Guam	8
Total	27,526

