ONLINE GROCERY: HOW THE INTERNET IS CHANGING THE GROCERY INDUSTRY

Online grocers ‘must create storefronts as easy to use as Amazon’s, build delivery infrastructure as sound as UPS’ and pick and pack pickles and pineapples better than anyone ever has.’

--Evie Black Dykema of Forrester Research

A survey by the University of Michigan ranked 22 favorite household tasks, and found that grocery shopping came in next-to-last, just ahead of cleaning. According to the Food Marketing Institute (FMI), the average American household (HH) made 2.3 trips to the grocery store a week and spent $87 per week on groceries. Andersen Consulting estimated that the average grocery trip took 47 minutes, not including time to drive, park and unload groceries.

Economic factors of the online grocery model

Proponents of the online grocery model point to numerous factors that they say makes the model appealing from an economic standpoint. They argue that because they don’t need to pay for checkout clerks, display cases, or parking lots, online grocers can drop prices below those of retail stores and remain profitable. Key factors determining success for the online grocery model include scalability, membership size, order frequency, and order value.

Industry Projections and Outlook

Forrester Research segments the industry into Full-service and Specialty online grocers (see Figure 1). They predict that the full-service segment will struggle to achieve the necessary economies of scale and to overcome hard-to-change consumer buying behaviors.

Full-service online grocers are located in urban centers where critical volumes can be realized. Streamline.com estimates that the top twenty markets

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1 David Henry, “Online grocers must change buyer habits, keep costs down,” USA Today, March 30, 2000, p. 3B.

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This case was prepared by Research Assistants Richard R. Johnson and Lauren Killgallon, and Kimberly Lockhart (Darden ’00), under the supervision of Paul Farris, Landmark Communications Professor of Business Administration. This case was written as a basis for discussion rather than to illustrate effective or ineffective handling of an administrative situation. Copyright 2000 by the University of Virginia Darden School Foundation, Charlottesville, VA. All rights reserved. To order copies, send an e-mail to dardencases@virginia.edu. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet or transmitted in any form or by any means-electronic, mechanical, photocopying, recording or otherwise without the permission of the Darden School Foundation.
provide access to 40 percent of the United States population. The number of families that meet the criteria of an urban HH with annual income over $35,000 limits their target audience. In 1998, only eleven million HHs met this criterion. By 2003, however, this number is expected to increase to nineteen million HHs.

According to Forrester Research, specialty online grocery sales will surpass that of full-service online groceries in 2000 because their customer base is more dependent upon the number of people with Internet access, rather than a specific customer demographic. This segment is not seen as a replacement service for weekly grocery shopping. Instead, it merely supplements gift and specialty shopping needs. In most cases, the products offered in this segment cannot easily be found elsewhere. Table 1 provides insight into how these two market segments differ.

Table 1: A Comparison of the Full-Service and Specialty Online Segments

<table>
<thead>
<tr>
<th>Service Providers</th>
<th>Example Companies</th>
<th>Peapod Streamline Webvan</th>
<th>Godiva Hickory Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Selection</td>
<td>All, including perishables</td>
<td>Gifts Hard-to-find items Bulk replenishment</td>
<td></td>
</tr>
<tr>
<td>Buyers</td>
<td>Demographics</td>
<td>80% female, 20% male Average age: 35 65% with kids</td>
<td>35% female, 65% male Average age: 40 36% with kids</td>
</tr>
<tr>
<td></td>
<td>Location</td>
<td>Urban areas: &gt; 1 million</td>
<td>Nationwide / worldwide</td>
</tr>
<tr>
<td></td>
<td>Primary Motivation</td>
<td>Convenience</td>
<td>Convenience Impulse / Seasonal buy</td>
</tr>
<tr>
<td></td>
<td>Cost per order</td>
<td>$105 average</td>
<td>$50 - $60 average</td>
</tr>
<tr>
<td></td>
<td>Items per order</td>
<td>+/- 60</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td># purchases per year</td>
<td>25-30 average</td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>Membership / Delivery fee</td>
<td>$10 - $30 per month</td>
<td>$5 - $10 per order</td>
</tr>
</tbody>
</table>

These specialty grocers also typically face less channel conflict. Historically, companies like Hickory Farms have sold directly to consumers. Well-established fulfillment practices are already in place.

Competing Full-service Players and Strategies

There are several competing strategies and business models in the full-service online grocery sector. Exhibit 1 provides a categorical comparison between the leading full-service online grocers.

Peapod—the Company
“Smart shopping for busy people.”

Founded in 1989 in Skokie, Illinois, Peapod is the oldest online grocer. Peapod went public in June 1997 at $16 per share. As of December 1999, Peapod employed 1020 people. By May of 2000, Peapod operated in eight metro markets (see Table 2).

Table 2: Peapod’s Markets, Spring 2000

<table>
<thead>
<tr>
<th>Market</th>
<th>Operations Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago</td>
<td>CDC (70,000 sq.ft)</td>
</tr>
<tr>
<td>San Francisco</td>
<td>CDC (50,000 sq.ft)</td>
</tr>
<tr>
<td>&amp; San Jose</td>
<td></td>
</tr>
<tr>
<td>Columbus</td>
<td>2 Kroger stores</td>
</tr>
<tr>
<td>Boston</td>
<td>4 Stop-n-Shop and a small CDC (20K sq.ft.)</td>
</tr>
<tr>
<td>Austin</td>
<td>2 Randall’s/Tom Thumb stores</td>
</tr>
<tr>
<td>Dallas</td>
<td>5 Randall’s/Tom Thumb stores</td>
</tr>
<tr>
<td>Long Island</td>
<td>Small CDC (20K sq.ft.)</td>
</tr>
</tbody>
</table>

Peapod—Operations

Peapod’s original model of distribution sourced products from local supermarkets with an army of personal shoppers. Peapod received a 6 percent discount from supermarket partners, yet it still cost the company about $40 to fill a $100 order. In 1998, the firm shifted to a strategy of centralized distribution centers (CDCs), the first of which was

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opened in December of 1998. Peapod planned to use the CDC model for all future markets, while existing operations would be gradually converted to centralized order fulfillment (see Table 2). See Exhibit 2 for an example of a leader in order fulfillment.

Peapod’s CDC model allowed the company to serve an entire metro market out of one facility. Each CDC carried approximately 12,000 SKUs. Under the old model, eleven Jewel supermarkets were required to serve the firm’s Chicago customer base; this

Table 3: Peapod profitability comparison, traditional retailer model vs. CDC model

<table>
<thead>
<tr>
<th></th>
<th>In-store</th>
<th>Warehouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grocery Sales</td>
<td>$115.00</td>
<td>$115.00</td>
</tr>
<tr>
<td>Consumer Fees</td>
<td>$15.75</td>
<td>$8.85</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$130.75</td>
<td>$123.85</td>
</tr>
<tr>
<td>COGS</td>
<td>$102.95</td>
<td>$85.85</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$27.80</td>
<td>$38.00</td>
</tr>
<tr>
<td>Picking, Packing, and Delivery</td>
<td>$14.25</td>
<td>$19.05</td>
</tr>
<tr>
<td>Other*</td>
<td>$4.60</td>
<td>$8.40</td>
</tr>
<tr>
<td>Variable Operating Expenses</td>
<td>$18.85</td>
<td>$27.45</td>
</tr>
<tr>
<td>Fulfillment Center OH</td>
<td>$5.85</td>
<td>$2.65</td>
</tr>
<tr>
<td>City OH</td>
<td>$1.80</td>
<td>$2.60</td>
</tr>
<tr>
<td>Net Contribution</td>
<td>$1.30</td>
<td>$5.30</td>
</tr>
</tbody>
</table>

required Peapod to have eleven groups of employees to staff each location. The switch to the CDC model improved margins by 308 percent (see Table 3). However, opening a new CDC required a capital expenditure of $1.5 million.

Under Peapod’s “old” model, customers paid a $5 monthly fee in addition to a five percent charge on their total order value. With the CDC model, however, customers had three options:

- $0 monthly fee and $9.99 per delivery
- $5 monthly fee and $5 per delivery
- $19.95 monthly fee and free delivery

With this system, the average order fee was $8.50 without the monthly charge.

Customers choose two-hour delivery windows with twelve hours lead-time. Peapod’s average order size was between $85-$115, more than five times the in-store order size of traditional retailers. New members ordered one or two times per month, and the company forecast that, over the long term, this frequency would increase to twice per month.

**Peapod—Online Customer Experience**

Peapod’s Web site featured a virtual supermarket with electronic aisles. Customers could create personal lists for frequently purchased items. The site also offered the opportunity to input specific shopping instructions: i.e., only very ripe bananas.

Peapod has established a number of agreements with leading Internet sites. One such partnership involves a three-year agreement with Excite.com to be the only food retailer to advertise on their site.

In October of 1999, Peapod announced the national rollout of a program called Peapod Packages. The service made 7,000 non-perishable grocery items, health- and beauty-care products, pet merchandise and other household goods available for shipping to customers in the lower 48 states. Customers could send themed packages like “Late Night Study Buddy” and “New Baby Welcome,” or they could send their own customized packages. Shipments were sent via UPS ground service at a flat rate of $7.95 per package.

**Peapod—Market Research**

Peapod tracked member profiles, shopping behavior, and purchase history, and offered this information to its suppliers for a fee through a marketing program called Consumer Directions. Approximately eighteen consumer packaged goods companies (CPGs) subscribed to this service, including Colgate-Palmolive, Kraft, Nestle, and Frito-Lay. Subscription fees varied, but typically ran less than $250,000 per year.

The Consumer Directions center provided market data and also ran individual tests for manufacturers. As Peapod’s senior vice president of product management and marketing Mike Brennan explained, “Do discounts get sales? Recipes? Everyday low prices? This is what manufacturers want to know. And, the interest level [in
manufacturer research] has been increasing” in the last half of 1999. 

**Peapod—Outlook**

In September 1999, Peapod announced that Bill Malloy, former head of AT&T’s wireless division, would join the company as its new CEO. Investors lined up with a promised $120 million cash infusion. In October 1999, analyst George Dahlman at US Bancorp Piper Jaffray estimated that Peapod would become profitable by 2001. At the end of 1999, the firm had achieved revenues of $73.1 million for the year with a total net loss of $28.5 million.

In March 2000, Malloy was forced to step-down, due to unspecified health problems. The promised $120 million investment was withdrawn due to Malloy’s departure, and Peapod was left with little cash on hand, and the prospect of going broke by May 2000. In mid-April, Dutch food retailer Royal Ahold, owner of several U.S. food chains including Giant Foods, announced it would bail out Peapod with a $73 million cash infusion – paying a premium of almost 50 percent above Peapod’s sagging stock price – plus a $20 million line of credit. In return, Ahold received a 51 percent stake in the Peapod and an entry into the US online grocery market. Ahold, along with Britain’s Tesco (see Exhibit 3), claimed to already be profitable providing online grocery services in Europe. As of May 1, 2000, Peapod’s market cap was $55 million based on a share price of 3 1/16.

**Streamline—the Company**

“Streamline your shopping. Streamline your life.”

Streamline was founded in 1993 in Westwood, Massachusetts. As of December 1999, Streamline had a workforce of 350 employees. By May of 2000, Streamline operated in 3 markets (Boston, Chicago, and Washington, D.C.) with a scheduled launch into the Northern New Jersey market later that month, and a planned launch in Minneapolis in the fall of 2000.

The firm’s strategy was to augment its online grocery orders and deliveries with services such as video returns, photo processing, and other typical errands. Streamline relied on three primary sources of revenue: member subscription fees, sales of goods and services, and marketing research fees collected from consumer packaged goods companies.

**Streamline—Operations**

For $30 per month, Streamline customers could lease a refrigerated storage box—installed for no extra fee, directly in their home or garage—into which their ordered goods were delivered. This option eliminated the need for the consumer to be home to accept delivery.

Orders were fulfilled through a distribution center. In the company’s Chicago distribution facility, opened in February of 2000, each product was assigned to one of eight temperature zones to ensure freshness, and conveyor belts moved product through inspection and shipping zones. Thirty percent of the products were moved by automated carousels that routed higher frequency items to pickers. Each picker utilized a handheld computer device for increased efficiency.

Deliveries were made using leased, refrigerated trucks with the Streamline logo. These vehicles enabled the company to accommodate all types of products, including refrigerated, frozen, and ambient temperature foods as well as hanging bags and flower boxes. Each Streamline driver was also a fully trained customer service representative, empowered to make on-the-job decisions on behalf of the customer. The customer’s “cold box” included a notepad that could be used as a communication tool between each customer and driver.

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Streamline also had the added complexity of “back haul” items. They returned video rentals; picked up dry cleaning, film for processing, and packages to be sent by UPS; and repaired shoes.

**Streamline—Online Experience**

The average Streamline customer placed 40 orders per year, and the average order value was $102. In 20-30 minutes a week, customers could order food, videos, or dry cleaning service. Consumers were encouraged to form “Personal Shopping Lists” and “Don’t Run Out of…” lists, which automated the purchase of frequently bought goods.

**Streamline—Market Research**

Similar to Peapod, Streamline tracked the purchases of its customers and provided detailed consumer purchasing data and analysis to suppliers for a fee through its Consumer Learning Center. Thirteen companies, including Gillette, Proctor & Gamble, and Kimberly-Clark, worked with the center, and had access to highly specific product buying information.

Each Streamline customer had a “personal shopping list” which accounted for 80 percent of the products ordered. The participating companies could track whether Streamline’s customers added their brands to the personal shopping lists. Gina Wilcox, vice president of strategic relations for Streamline, explained, “We have two key metrics not available in brick-and-mortar grocery stores. First, we can tell a brand manager what percentage of our shoppers have his or her brand on their personal shopping list.” Also, “We can tell them when shoppers have migrated brands from the personal shopping list to the ‘Don’t Run Out’ list,” which is Streamline's auto-replenishment program — and the holy grail of online shopping from a marketer's perspective.8

**Streamline—Outlook**

Streamline reported a total net loss of $19.5 million on revenues of $15.4 million for 1999. Streamline’s market cap on May 1, 2000 was $83.7 million based on a share price of 3 3/4. Customer orders increased 93% to over 73,000 orders for first quarter 2000.

In addition to the announced market expansions of Northern New Jersey and Minneapolis in 2000, Streamline planned to expand into three to five more facilities the following year.

**Webvan—the Company**

“We, the world’s market at your doorstep.”

Webvan.com was founded in 1996 in Foster City, California by Louis Borders, co-founder of Borders Group bookstores. By June 1999, Webvan employed 414 full-time and 259 part-time employees through its Oakland distribution center. This warehouse, with the capacity to service a product volume equivalent of eighteen traditional supermarkets, offered 15,000 SKUs including specialty items like live lobsters, premium wines, office products, and cigars.

Webvan claimed to offer products at five percent less than the local grocery competition. Unlike its competitors, the company offered a food-preparation capability. Visitors to the Webvan Web site could order fresh meals prepared by gourmet chefs (i.e., sea bass with Julienne vegetables or Asian style baby back ribs)

In September 1999, George Shaheen, the former CEO of Andersen Consulting, became the CEO of Webvan. The firm completed its Initial Public Offering on November 5, 1999. The company offered over 25 million shares at $15 per share, and subsequently raised over $375 million.

**Webvan—Operations**

Similar to Wal-Mart, Webvan utilized a hub-and-spoke delivery system. The entire process was automated from ordering to inventory management to route management. Orders were picked and packed in the CDC and loaded into totes that were color-coordinated according to temperature requirements.

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8 Jane Hodges, “Jumping on the Bandwagon.”
Unlike other warehouses, Webvan's distribution center featured an intricate system of carousels and conveyors that routed the products to the employees, rather than moving employees to the products. At any given time, a picker moved no more than 19.5 feet in any direction and had access to over 8,000 bins of goods. This highly scalable model allowed the addition of a significant number of SKUs with very little labor.

Once orders were picked, they were taken to local docking stations by way of temperature-controlled trucks. A single Webvan CDC could support ten to twelve of these docking stations, all of which were located within a 50-mile radius of the distribution center. Orders were then reloaded onto smaller vans for delivery to the customer. No driver drove more than ten miles in any one direction. For a comparison of the traditional grocery store operations process to the Webvan process, see Table 4.

Webvan sourced product from wholesalers, distributors, and food and drug manufacturers. As product volume increased, the firm planned to sell direct from the manufacturer. Webvan used local suppliers for produce, meats, and fish, and the company has freshness targets as well.

**Webvan—Customer Service**

All Webvan delivery drivers were equipped with a wireless computer device, so that they could communicate directly with Webvan headquarters. The drivers were empowered to credit a customer's bill, make changes to an order, or request additional items.

Customers could choose from 30-minute delivery windows, including same day windows if one was available. Webvan offered free delivery for all orders over $50, and charged a fee of $4.95 for those orders under $50. Unlike its competitors, the firm did not accept coupons.

**Webvan—Outlook**

In 1999, Webvan entered into a $1 billion agreement to construct 26 new distribution centers over the next three years. Each new distribution center

<table>
<thead>
<tr>
<th>Traditional Grocery Store Processes</th>
<th>Webvan Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case of cereal arrives at warehouse</td>
<td>Case of cereal arrives at distribution center</td>
</tr>
<tr>
<td>Cereal taken off rack</td>
<td>Cereal taken off rack</td>
</tr>
<tr>
<td>When store needs cereal, cereal loaded onto truck for delivery</td>
<td>Cereal moved to appropriate location for storage/picking</td>
</tr>
<tr>
<td>Store receives cereal</td>
<td></td>
</tr>
<tr>
<td>Clerk moves cereal to back of store for storage</td>
<td>Customer places order – cereal picked and placed in tote bag</td>
</tr>
<tr>
<td>When needed, cereal moved to aisle</td>
<td>Tote bag transferred to loading dock</td>
</tr>
<tr>
<td>Old/Outdated stock rotated or removed</td>
<td>Tote loaded onto truck and taken to docking station</td>
</tr>
<tr>
<td>Customer selects cereal off aisle</td>
<td>Tote transferred to waiting vans</td>
</tr>
<tr>
<td>Cashier rings up purchase and puts cereal in bag</td>
<td>Customer receives cereal at home</td>
</tr>
<tr>
<td>Customer drives purchase home and unloads bag</td>
<td></td>
</tr>
</tbody>
</table>
center required a capital expenditure of $25-35 million, dwarfing the $1.5 million cost of a Peapod.com warehouse. Exhibit 1 provides a categorical comparison between the leading full-service online grocers.

Webvan’s revenues for 1999 were $13.3 million, with a total net loss of $144.6 million. On May 1, 2000, Webvan had a market cap of $2.2 billion based on a share price of 6 9/16. Also on that day, Webvan began service in its second market, Atlanta, with plans to expand to fifteen markets by the end of 2001.

On June 26, 2000, Webvan acquired HomeGrocer.com for $1.2 billion. HomeGrocer, was founded in 1998, based in Kirkland, Washington, and backed by Amazon.com. The company operated in the Seattle, Portland, and Southern California markets and offered a full range of foods, as well as fresh flowers, health and beauty aids, and top-selling books, videos and movies. HomeGrocer used a CDC model, coupled with a fleet of delivery trucks, for order fulfillment.

The company went public on March 9, 2000 at a price of $12 a share, raising $264 million. As of May 1, 2000, shares had fallen to 6 1/8 for a market cap of $764.5 million. Revenues for 1999 were $21.6 million, with a total net loss of $84 million. Net revenues for the first quarter of 2000 were $21.2 million, nearly double those of the last quarter of 1999.

Other Online Grocers

NetGrocer, a privately held online grocer based in North Brunswick, New Jersey, was founded in 1995. NetGrocer delivered solely via FedEx, and thus operated nationwide rather than within particular metropolitan markets. The company offered approximately 7,000 non-perishable grocery items, nonprescription drugs, and other products. The company did not charge a membership fee; however, customers paid a delivery fee.

GroceryWorks was founded in 1999 in the Dallas area. The company used a centralized warehouse to store dry goods, while perishables such as meats and deli items were farmed-out to local vendors. With a typical order, GroceryWorks would pick up perishables from the local store, then package them at the distribution center with the dry goods for delivery. Delivery was free, though there was a minimum purchase of $25 per order.

In January of 2000, GroceryWorks announced its intention to open 21 warehouses in 11 areas within two years. That April, Safeway purchased a 50 percent stake in the company.

Traditional Grocers: Will They Respond?

At the end of 1999, some executives of traditional supermarket chains were scoffing at the notion of people buying groceries online. Barry Scher, a spokesman for Landover, Md.-based Giant Food Inc., said at the time that the biggest grocery chains wouldn’t be selling groceries online or making home deliveries anytime soon. “Customers like to squeeze the tomatoes.”

On May 1, 2000, Scher was quoted as saying, “The trends are practically changing over night. This is a very fast changing technology and there’s no doubt that e-commerce is going to have a very important position within the current retail food store operations in the U.S.”

By that time, the three leading brick-and-mortar grocery chains had begun testing the e-commerce waters. Albertson’s tested an online service in Bellevue, WA. The 30,000 square foot facility served as both a traditional grocery store and as an online fulfillment center. Customers could

10 Rebecca Mowbray, “Can online grocers bring home the bacon?” Houston Chronicle, April 2, 2000, p. 1.
place orders online, then choose whether to pick them up at the store or have them delivered. The online orders were fulfilled in a warehouse in the rear of the store. The front served as a conventional supermarket, though with Web kiosks.12

Safeway primarily concentrated on the European online grocery market, where they were experimented with ordering via Personal Data Assistants (PDAs). In April of 2000, Safeway bought a 50% share in Dallas-based Groceryworks.com. As a result, Texas-oriented chains such as Tom Thumb and Randall’s, which were owned by Safeway, moved to drop their connections with Peapod for GroceryWorks. Kroger’s online plans were unknown in May of 2000.

Amongst other leading traditional grocery chains, Giant entered the online world in April 2000 when its parent company -- Dutch grocery conglomerate Royal Ahold NV – bought 51 percent of Peapod for $73 million. That same month, Publix, a privately held Florida-based chain, said it would offer online grocery shopping in 2001 starting in selected Georgia and Florida markets.

Commenting on traditional grocers buying into the online channel, Forrester analyst Evie Black Dykema noted that “relative to starting to sell online from scratch, Royal Ahold and Safeway [got] in cheap.”13

H. E. Butt Grocery Company (H-E-B), a Texas-based grocery chain with $7 billion in annual sales, planned to roll-out three online services in 2001:
- Online grocery
- Online pharmacy
- Specialized, web-enabled, pre-ordering services (for orders to be picked up at local stores)

The company planned to provide targeted advertising through their retail locations to promote their online business.

European Online Grocery Leaders

Britain’s largest supermarket chain was also its largest online grocer. With 300,000 registered customers and more than £2.5m ($4.1m) sales a week, Tesco claimed profitability in the online grocery market.

In February of 2000, Tesco accepted online sales at 100 of its stores, with plans to expand the service to 300 locations, which would give the company the ability to serve more than one million home-shopping customers each week. Tesco exploited its 650 stores across Great Britain to avoid constructing CDCs. Customer submitted orders via the Tesco Web site, which were then sent to the server computer at the local store nearest the customer’s home. Each order was first assigned to a delivery van, then sent to a high tech, software-enabled “picking trolley” where it was packed and loaded into the van. Tesco’s average online shopping basket was worth about £100.14

Waitrose, a British supermarket chain of 120 stores located mostly in southeast England, launched Waitrose.com in September of 1999. Waitrose.com, an Internet service provider, had attracted 64,000 registered users by February of 2000 with a growth rate of 2000 new users per week.15 The company entered the online grocery world with its Waitrose@work offering, delivering groceries to customers at their workplace. Companies with at least 300 computers could sign-up at a cost of £1 per computer. Employees then shopped from their desks,

12 Deena M. Amato-McCoy, “New Albertson’s Supermarket has Online Fulfillment Section and Web Kiosks,” Retailtech, February 2000, p. 35.
and grocers were delivered to them at work with no delivery fee. As of April 2000, 37 companies had enrolled as members in the program, reaching approximately 37,000 employees, with another 40 companies set to join. Another Waitrose program, WaitroseDirect offered organic fruits and vegetables, wine, and flowers online, sent to the customer’s home anywhere in the mainland UK within 48 hours.

Prospects for Online Grocery in Japan

In Japan, convenience stores have emerged as neighborhood clearinghouses for online transactions due to the pervasiveness and typical 24-hour schedule of the stores, as well as the reluctance on the part of many Japanese to reveal their credit card numbers online. Consumers place their orders online, then pick up and pay for them the following day at their local convenience store.

As of February 2000, Japan had about 36,000 convenience stores nationwide, and the typical consumer visited one every other day. Seven-Eleven operated over 8,000 stores in Japan, nearly twice as many as in the United States. Some believe that the Japanese convenience store industry may be the most extensive retail distribution network in the world.

In January 2000, Seven-Eleven linked with several partners to form 7Dream.com, and planned to sell books, music, concert and airline tickets, and digital photos through the site by June 2000. Convenience store companies Sunkus, Circle K, and FamilyMart announced the formation of eConvenience, an online grocery store that would sell and deliver approximately 4,000 items.

18 Clay Chandler, “In Japan, the Internet without the PC; Mobile phones, high-tech kiosks provide access for less cost,” The Washington Post, February 8, 2000, p. E1.
19 “Japan: Store wars in cyberspace”
### ONLINE GROCERY: HOW THE INTERNET IS CHANGING THE GROCERY INDUSTRY

Comparing the Full-Service Online Market Leaders

<table>
<thead>
<tr>
<th>Year Founded</th>
<th>Markets served</th>
<th>Market cap, 5/2/2000</th>
<th>Revenues</th>
<th>IPO / date Stock price</th>
<th>Business model</th>
<th>Warehouse cost</th>
<th># SKUs offered</th>
<th>Average order size</th>
<th>Number of members</th>
<th>Customer acquisition cost</th>
<th>Method of delivery</th>
<th>Delivery charge</th>
<th>Home for delivery?</th>
<th>Delivery window</th>
<th>Key strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peapod</td>
<td>1989</td>
<td>8</td>
<td>$55.2 M</td>
<td>$21.5 M, 4Q ‘99</td>
<td>Some in-store, some CDC</td>
<td>$1.5 MM/warehouse</td>
<td>12,000</td>
<td>Delivery van</td>
<td>$60</td>
<td>$60</td>
<td>Delivery van</td>
<td>Varies: Average $8.50</td>
<td>Yes</td>
<td>2 hours</td>
<td>First in business, key investor Royal Ahold</td>
</tr>
<tr>
<td>Streamline</td>
<td>1993</td>
<td>3</td>
<td>$75.3 M</td>
<td>$8.46M, 1Q ‘00</td>
<td>CDC</td>
<td>$25 MM/warehouse</td>
<td>10,000</td>
<td>Refrigerated truck</td>
<td>$3-3/8</td>
<td>$209</td>
<td>Refrigerated truck</td>
<td>$30 monthly fee for storage box</td>
<td>No</td>
<td>Yes</td>
<td>Many services, delivery anytime</td>
</tr>
<tr>
<td>Webvan</td>
<td>1996</td>
<td>2</td>
<td>$2.303 B</td>
<td>$16.3M, 1Q ‘00</td>
<td>Large CDC</td>
<td>$25 MM/warehouse</td>
<td>15,000</td>
<td>Delivery van</td>
<td>$7</td>
<td>$25</td>
<td>Delivery van</td>
<td>$4.95 for orders under $50</td>
<td>No</td>
<td>Yes</td>
<td>Automated fulfillment technology</td>
</tr>
<tr>
<td>HomeGrocer</td>
<td>1998</td>
<td>3</td>
<td>$725.5 M</td>
<td>$21.2M, 1Q ‘00</td>
<td>CDC + store</td>
<td>$25 MM/warehouse</td>
<td>20,000</td>
<td>Delivery van</td>
<td>$5-13/16</td>
<td>$5-13/16</td>
<td>Delivery van</td>
<td>$9.95 for orders under $75</td>
<td>Yes</td>
<td>1-4 days</td>
<td>Leading automated fulfillment technology</td>
</tr>
<tr>
<td>NetGrocer</td>
<td>1995</td>
<td>1</td>
<td>Private</td>
<td>PVT, $5M YR ‘98</td>
<td>Non-perishables</td>
<td>Private</td>
<td>9,700</td>
<td>FedEx</td>
<td>$5.99 and up</td>
<td>$5.99 and up</td>
<td>Delivery van</td>
<td>$5.99 and up</td>
<td>No (min. order $25)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Grocery Works</td>
<td>1999</td>
<td>50% UK pop.</td>
<td>Private</td>
<td>Private</td>
<td>CDC + store</td>
<td>Private</td>
<td>15,000</td>
<td>Private</td>
<td>$10.1825</td>
<td>Private</td>
<td>Delivery to office</td>
<td>Delivery to office</td>
<td>Key investor Safeway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tesco</td>
<td></td>
<td></td>
<td>Private</td>
<td>Private</td>
<td>CDC + store</td>
<td>Delivery to workplace</td>
<td>300,000</td>
<td>Delivery van</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waitrose</td>
<td></td>
<td></td>
<td>$23.1 B</td>
<td>Avg $49.75M per QTR</td>
<td>In-store</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.1825</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Data as of May 1, 2000, or most recently available as of that date
Fingerhut: A Leader in order fulfillment

Fingerhut, owned by Federated Department Stores, is considered to be the industry leader in fulfillment technology. Retailers like Wal-Mart, Macy’s, eToys, and Intuit have outsourced their fulfillment to Fingerhut Business Services. Fingerhut Companies, Inc. was the nation’s number two catalog retailer in 1999, behind JC Penney. Sales for the year 1998 totaled $1.6 billion, with a net income of $75.5 million.

As of 2000, Fingerhut had four distribution centers – located in St. Cloud, MN, Piney Flats, TN, Spanish Forks, UT, and Cheshire, CT – totaling over 4 million square feet. The combined facilities had 225 receiving docks, 190 shipping docks, and over 23 miles of conveyors, for an output capacity of 330,000 packages per day. In December of 1999 alone, the Fingerhut facilities shipped six million packages. Fingerhut maintains a database with marketing information on over 40 million customers.


pictures: [http://www.dnymagazine.com/DNYmag/JF00/E-fulfillment/3rdparties.html](http://www.dnymagazine.com/DNYmag/JF00/E-fulfillment/3rdparties.html)

Pictured above: Fingerhut’s St. Cloud, MN facility