

Putting E-Commerce to Work:

The Japanese Convenience Store Case

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ABSTRACT

Japanese convenience stores (CVS) are exploiting e- and m-commerce solutions different from, but relevant to, US practices. Seven-Eleven Japan, Lawson, and FamilyMart – three of the largest CVS – base their fundamental business models on increasing store traffic.

Japanese reluctance to make credit card payments over the Internet or via telephones opened the way for CVS to provide third-party payment services, which required substantial IT infrastructure. Now they are leveraging this investment. In doing so, they are following a different e-commerce B2C model than is typical in the United States. Their approach incorporates heavy dependence on IT-based alliances (e-*retsu*), a range of services and products, and telematics (coupling detailed database management with the use of smart cell phones and sophisticated in-car communication and guidance systems) rather than PCs. This business-to-consumer (B2C) model is relevant to markets and market segments possessing similar characteristics.

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Retailing entered a new era in July 1995 when Jeffrey Bezos opened a web site to sell books. Naming his online store after the mighty Amazon River, it was the first serious effort to sell products directly to consumers using the Internet. Such e-commerce is often referred to as B2C – business-to-consumer.

Pioneering B2C ventures quickly displayed serious shortcomings, but not before consuming billions of dollars in investment. This paper considers an approach that might more successfully help realize the potential of e-tailing, especially in countries that do not have the extensive PC and Internet infrastructure available in the United States.

E-tailing is developing very rapidly in Japan, based on many traditional aspects of Japanese business and consumer retailing. Two things appear particularly important. One is that most consumers still pay cash for purchases – something true in a good deal of the world – and the other is that firms are used to forming cooperative alliances to take advantage of new business opportunities. We term the new, IT-based alliances "e-resentsu".

Convenience stores in Japan differ from those in the United States in ways more fundamental than generally being smaller. Services and fresh, ready-to-eat food play a much greater role. Thus, Seven-Eleven Japan sells more "fast food" than McDonalds Japan. Since the mid 1990s there has been a trend for US CVS to be paired with gas stations; this has not happened in Japan.

Both the service and fresh food offerings require sophisticated IT support, and that has meant the Japanese CVS have entered the e-tail era with at least some experience in practically every aspect of what e-tailing entails, from deploying IT to understanding customers. This is why they are such good case studies. Our business and analytical

assessment of their initiatives in e- and m-commerce illustrate and explain the powerful economic and competitive advantages that can flow from the systematic use and application of integrated telematic solutions (Box 1).

As an introduction to the approach being taken by these Japanese innovators, the paper begins by looking at B2C players in the late 1990s, with particular attention to the factors in e-tailing's lack of initial success. A common characteristic of most of the losers was the failure to add much, if any, value. That failure, in turn, is partly explained by not achieving economies of scope (Box 2).

Box 1 - Telematics

Telematics during the 1980s referred to interactive computer mediated communications. But more recently it has come to cover the intersection of informatics (the processing and application of data with specific goals and objectives) and telecommunications, especially wireless communications in a mobile environment. It thus refers to applied telecommunications in a data rich environment and can incorporate businesses and services where ubiquitous or pervasive computing intersects with e- and m-commerce as well as intelligent transportation systems that enable the linking of mobile and wired solutions to achieve a multi-media result.

Toyota estimates telematic activities and their related goods and services will grow to a ¥60 trillion market by 2015 just in Japan (Toyota 1999). This explains why Japanese CVS, Toyota, and Japanese consumer electronics companies such as Sony, Matsushita, and NEC, along with mobile phone companies NTT DoCoMo and KDDI, and leading systems houses NTT Data (an affiliate of NTT, Japan's dominant telecom carrier) and NRI (a subsidiary of Nomura Securities) are heavily involved.

NTT DoCoMo, Japan's largest mobile phone company, is a global leader in introducing Internet access by mobile phone. The service, called i-mode, had over 38 million subscribers in May 2003. For this reason, many e-commerce ventures in Japan are compatible with i-mode.

As one example of telematics as an aspect of e- and m-commerce, Seven-Eleven Japan (SEJ) and Sony have an agreement to offer high-speed downloading of games for PlayStation 2 using a centralized server containing all current game selections. This means an SEJ store can offer a total selection of games, but only has to inventory blank CDs. Players have a convenient alternative to downloading over a slow (and expensive) residential telephone line. Upgrades are easy to provide. The pressure on video game rental stores and software shops is enormous.

The concept of e-retsū is then developed. The remaining sections, which are the bulk of the paper, focus on Japanese CVS, especially the strategies of three leading firms. Topics analyzed include how they and their partners view the e-tailing value chain and how they use telematic solutions to achieve their objectives and create competitive barriers. Structurally, there are sections on aspects of CVS strategies common to all three chains. These sections

are followed by sections on each chain, providing more details on their e-retsu, other IT infrastructures, and views on e-commerce.

Box 2 - The Importance of Scope

Scope is an important element in costs. At its most general microeconomic textbook level, scope relates to what happens when a single firm produces two related but different outputs compared to two firms each producing one of the outputs. There are economies of scope if the single firm produces more than the other two firms together, given the same inputs, or the same outputs at lower cost.

In the 1970s and '80s glory days of conglomerates, the broader concept of scope – variously put as the whole being greater than the sum of the parts or, for quants, $1+1 > 2$ – was much bandied about under the name "synergy", a word that entered English in the 17th century from the Greek for "work together". Perhaps the failure of most conglomerates to work at all, let alone in ways that enhanced value, has been a factor in the relatively little attention scope has received in the economics literature since the mid 1980s. It is not even mentioned in some textbooks or defined in most economics glossaries.

This is unfortunate because economies of scope are real and crucial in exploiting information technology successfully, as even a casual study of e-commerce demonstrates. It is also surprising, as the push to repeal Glass-Steagal in the US and otherwise recast the world's financial services industry is driven at least in part by expected economies of scope. Simplistically broadening a firm's activities can lead to diseconomies of scope, as the failed conglomerates attest. However, finding economies of scope can contribute to scale economies. Thus, fiber optic cable doesn't care whether it is carrying a tv-show, a voice telephone call, or packets of Internet data; hence the logic of cable companies expanding their offerings.

Hence, also, the e-commerce model being followed by Japanese CVS: expand offerings to build traffic, and cross sell. When the services are IT based, the marginal costs of providing more of more offerings is small compared to the fixed costs of setting up the systems. Scope and scale thus can and do interact in a virtuous circle.

The quest for economies of scope can lead to problems, though, if not properly understood

1 Early E-Commerce

E-commerce in its infancy – the late 1990s – can be analyzed usefully by distinguishing between two types of players. These are the pure start-ups and the forays of established retailers.

1.1 The Start-up "Clicks"

Amazon.com began as an electronic emulation of catalogue retailing. A web site display substitutes for the traditional paper presentation. Because the US retail catalogue segment was well developed, consumers readily understood substituting the Internet for the catalogue. The perceived advantages to the consumer of B2C included the real-time availability to freely browse information related to promotional sale prices or out-of-stock

items and not having to make a phone call, as well as – relative to most stores though not most catalogs – the convenience of 24-hour shopping.

Numerous online start-ups followed Amazon. Some had viable business plans, but many were organized primarily to respond to the rapidly inflated demand for Internet-related IPOs, which encouraged Internet entrepreneurs to raise hundreds of millions of dollars. In short, it was the extreme optimism of venture capitalists (VCs) and investment bankers regarding these new business models that led to enormous amounts being invested in so many e-commerce start-ups.

Most of these new online sellers (e-tailers) had rapid “burn-rates” – that is they generated negative cash flows – and thus quickly used the billions raised from venture capitalists and IPO investors. First, there was the large initial investment for computer hardware and systems development. Then came marketing costs. To attract wary customers away from the reassurance of a "real" store if there were problems with the purchase, many offered steep price discounts. In addition, they often absorbed shipping costs. Moreover, they spent lavishly on advertising to develop brand recognition and make consumers aware of their web sites.

1.2 The "Bricks" Strike Back

The perceived threat of B2C e-tailing start-ups to traditional retailers created by Wall Street and media hype shook the industry. Under pressure to be part of the “new economy”, many traditional retailers moved aggressively to enter e-tailing. Several created web sites and many established tracking stocks for these activities so they too could raise capital quickly and cheaply or make acquisitions for stock on a comparable basis to the e-tailing start-ups. (In mid 1998 Amazon.com had a stock market capitalization exceeding traditional bookstores

Barnes & Noble (BKS) and Borders Group combined despite having sales of only some 20% of BKS.)

The established retailers' foray into e-commerce is popularly known as “bricks-and-clicks” because of the firms’ existing physical retailing infrastructures. A good example is Barnes & Noble, a bookseller with large stores across the United States and roots in the 19th century. BKS launched the barnesandnoble.com web site in 1997 and established a separate tracking stock (BNBN) for its dot.com affiliate in 1999. Retailers such as Toys “R” Us, LL Bean, and Wal-Mart followed similar entry strategies, though only a few firms deployed tracking stocks.

Over time, established firms displayed some clear advantages over the start-ups. First, most effectively managed to leverage their existing brands and name recognition, permitting them to spend less on advertising compared to start-up e-tailers. Because they typically had existing capital and cash flow from their regular stores to invest in their e-tailing ventures, they were less dependent on VCs. This gave them better control over their business operations.

Part of leveraging their name recognition was greater consumer confidence and convenience. Customers could order online and take delivery (and make returns) at a nearby store, saving shipping charges and having to make trips to the post office or schedule delivery services. Complaints could be handled in person if necessary. They also accepted payment for online purchases in their retail establishments, reassuring customers reluctant to give credit card information online. At the same time, customers benefited from the convenience of 24-hour access and the ability to conveniently browse for information in their homes. To emulate these advantages, some start-ups began building their own physical

infrastructure, such as selling booths in shopping malls. Also, during the dot.com mania, some (lucky or far-sighted) start-ups used their inflated stock to acquire established retailers.

1.3 The Survivors

EBay has created something that works precisely because it transcends physical place and space but, overall, bricks and clicks has emerged from the 1998-2001 period as the e-tailing approach most likely to be successful in the “new economy” and even the “new, new economy”. This is especially true when one recognizes another key competitive advantage of traditional firms - their management’s knowledge of their customers and their industry’s particular economics. Amazingly, many start up retailers had no previous experience in the industry, let along the specific market segment they entered. The start-ups' ignorance is a major reason why the “new economy” did not last long. It has generally proven easier for those with knowledge of retail to learn or buy IT expertise than vice-versa, and this will be even more so now that inflated stock is no longer available to start-up dot.coms.

Interestingly, many stock market analysts continue to treat surviving start-up e-tailers such as Amazon.com and eBay, as well as established firms that migrated into being Internet-focused such as 1-800-Flowers.com, as part of an Internet industry category rather than as retailers.

2 Factors in E-tailing's Lack of Initial Success

Even most established firms lost money, so clearly e-tailers encountered significant problems. Four factors seem especially important, with the last two being especially fatal for start-ups.

1) Consumers did not flock to online purchasing to the extent, or with the rapidity, that the industry expected. Though it is often easier to order online and get delivery at home

rather than go to a store, many on-line browsers went to stores for the actual sale. Factors contributing to this include concerns with the security of online payment mechanisms and limited Internet access.

2) Advertising costs associated with trying to build a customer base were huge, especially for start-ups. As creative as some of the campaigns were, they were not enough to ensure success or even survival.

3) In almost all cases, third-party shippers such as UPS or FedEx deliver the merchandise. Consumers often resent having to pay an explicit shipping charge, and the fact this is partly because the customer generally under-estimates the out-of-pocket and opportunity costs of going to a store is of no practical consolation to the e-tailer.

4) Start-ups rarely had a proprietary interest in the products they were selling and, given consideration 1, were not able to achieve volume purchases that would give them any advantage over large established players in their product category.

3 The Need to Add Value

The last two factors are aspects of a broader problem: the typical start-up e-tailer occupied a relatively small part of the value chain between the production of a good or service and the customer. That is, it added little value.

Amazon.com, for example, started in Seattle to be near established book distributor Ingram. Amazon does not produce any of the items it sells, and third parties provide delivery and credit card payment services. To amortize the high fixed cost of its hardware and software systems, it has needed to generate economies of scope by dramatically expanding the range of goods and services it offers, though if it is to avoid diseconomies of scope as in the case of the conglomerates it needs to do this in goods with similar economic properties.

That is the reason Coke benefits from economies of scope is that its soft drinks are very similar in their packaging, delivery and marketing regardless of type (Classic vs Diet or Vanilla Coke, or Fanta vs Sprite). In this regard selling CDs or DVDs is very similar to marketing books. But it is not clear furniture would be the same given greater warehousing and delivery costs. Thus, 1-800-FLOWERS.COM, which initially expanded utilizing an existing system for having flowers delivered, offers gourmet foods, popcorn, and various gift items.

Established retailers generally were able to capture a larger part of the value-added stream, but even they are not well positioned to develop economies of scope when the “bricks” part of the business is inherently specialized. EBay, by acting as a facilitator, defined itself as making available an almost unlimited range of goods, but even it quickly sought to extend itself over more of the value chain in addition to its economies of scope by buying online payment services Billpoint in 1999 and PayPal in 2002. In addition it expanded its franchise scope from auctions to fixed-price trading (24% of gross sales in 2002) and specific niches such as auto sales.

4 E-*retsu*

An innovative way to create economies of scope and increase a firm’s share of the value chain in the broad sense is IT-based alliances, which we term “e-*retsu*”. Firms in e-*retsu* often have no previous alliance relationship and no cross shareholdings – common shareholding is only in the e-*retsu* company. The name was chosen because they first appeared, and remain most common, in Japan. Japanese firms are used to cooperating to take advantage of new business opportunities. (Many Japanese companies are members of groups called *keiretsu*. Although *retsu* does not mean a group, borrowing syllables is accepted in

word coinage.) The motivation in forming an e-retsu is to pool expertise in a new venture in which all parties hold shares.

The objective is to cooperatively use their expertise and shared personnel to exploit an e- or m-commerce opportunity. In quickly raising capital and pooling the principals' business and technical expertise, this structure substitutes for the relative scarcity of venture capital and "free agent" (mid-career-hire) staff in Japan while leveraging the investors' R&D and brand recognition.

Because each partner is providing its own products, services, and expertise, their B2C activities cover a much larger part of the value-added chain than do the start ups, and even most established retailers, discussed earlier.

From an e-tailing perspective, the most interesting of the e-retsus are based on Japanese convenience stores (CVS). Such stores can capture a large part of the payment and delivery aspects of the value chain, and as part of an e-retsu more product value too.

5 CVS in Japan

Large CVS have enjoyed relatively better performance than general merchandise stores (GMS) in the 1990s. The GMS have experienced declining sales attributable to increased competition, Japan's economic downturn, and widespread deflation. In sharp contrast, CVS sales rose from ¥3.89 trillion in 1993 to ¥6.18 trillion in 1998, although they fell slightly in 1999 to ¥6.13 trillion. Despite general deflation, they have remained at roughly that level through 2001. (Almost all CVS in Japan have fiscal years ending in February of the following calendar year. Throughout the paper, financial data are for the 12 months ending in February of the following year unless noted otherwise. For consistency this is done even when annual reports are stated as for the year in which the fiscal year ends).

Competition among CVS and against other retail sectors has intensified during Japan's malaise, so the time is past when the CVS sector as a whole can enjoy good growth. Future success means deploying better merchandising strategies, offering more services, making greater use of IT, having superior strategic site selection, and providing better franchisee and staff development.

Thus, although further deregulation of the retail industry means increases in the kinds of merchandise and services CVS can offer, only the better-managed companies can exploit these opportunities successfully. For example, increased offerings of financial services requires sophisticated training of store owners and their employees, as well as good field support.

The industry is dominated by four chains comprising 67% of CVS sales, three of which are discussed in this paper. The fourth is the result of the merger of Sunkus and Circle K. As of February 2002 had slightly fewer stores and lower sales than FamilyMart. Box 3 and Table 1 present salient facts about each chain; additional data are in the Appendix tables.

Box 3 - The Leading Japanese CVS

Seven-Eleven Japan (SEJ) is the largest CVS in Japan by sales and by number of stores. It is not nationwide, but rather is heavily concentrated in the greater Tokyo (Kanto) region and also has a strong presence in Osaka. There are no plans to enter new geographic areas within Japan. SEJ is a 50.6%-owned subsidiary of Ito-Yokado (IY), the number two (by sales) but most profitable supermarket chain. US-based 7-Eleven is managed more or less independently, although IY and SEJ jointly hold 72.5% of the share.

Lawson is the number two CVS. Headquartered in the Osaka area, it is the only chain that operates in every ken in Japan. The company was established in 1975 as a subsidiary of Daiei, Inc, Japan's largest GMS. Shares were listed on the Tokyo Stock Exchange in July 2000. Preoccupied with its own troubles, Daiei has been reducing its shareholding, making the company essentially independent, though it has come increasingly under the influence of Mitsubishi Corp.

FamilyMart (FM) is the third largest CVS company by number of stores but the third largest by sales (2/2002). Stores are primarily in the greater Tokyo area. The company was established in 1981. Formerly a member of the Seibu Saison group, since 1998 it has been considered part of the Itochu group. (Itochu Shoji, called C Itoh in English, is a major trading company.) FM is focused in Tokyo and Nagoya, Japan's third largest metropolitan area.

C&S was formed in July 2001 as a holding company for Circle K and Sunkus & Associates, the fourth and fifth largest chains at the time. After the merger, C&S is fourth largest CVS in Japan both in terms of number of stores and annual sales. The new company, as were its predecessors, are controlled by Uny, a mid-size GMS. Circle K is the largest CVS in the Tokai area, which includes Nagoya.

Table 1Basic Data on Japanese CVS, 2002¹

<u>SEJ</u>	<u>Lawson</u>	<u>FM</u>	
2,213	1,291	932	Total store sales (¥ billions)
401	239	217	Revenue (¥ billions)
158	35	28	Operating income (¥billions)
9,690	7,625	6,013	Number of stores in Japan ²
656	489	479	Average daily sales per store (¥ thousands)
30.5	30.3	..	Gross Margin (%)

1 Fiscal years ending last day of February in the following calendar year (here February 2002).

2 At fiscal year end.

Sources: Company reports. Note company reports vary in terms of the year they cover; so sometimes the 2001 annual report will cover FY 2001 ending February 2002 and sometimes this will be called the 2002 report and the fiscal year 2002. SEJ in particular seems to now refer to the year ending 2002 as FY 2002.

5.1 Market Saturation

In Japan, any store open 24 hours a day has been classified in government statistics as a CVS. By this minimum definition, in 2002 there were 55,658 CVS. A population of 3,000 per CVS usually is regarded as the critical level for viability. The number in Tokyo was around 2,000; in Osaka it was even less.

To consumers, however, a real CVS at the time offered all or most of such services as postage stamps, copiers, fax machines, video games, utility bill payment, and package delivery. By that standard, there were only about 32,000 CVS in 1996, which meant a population per high-quality store of around 4,000. The major firms saw this as a chance to add as many as 10,000 quality stores. As hoped, many marginal stores did not survive the increased competition: even as the major chains added stores, total CVS declined by some 9,000, to 39,627 stores in early 2001. Some of the independent low-quality stores closed completely, others became franchises of the large firms. The share of stores of the eight major CVS chains was 43% in 1996. By 2002 the top four (SEJ, Lawson, FM and C&S) had 48 % of the stores and over 67 % of total CVS sales. The other member of the top five is

Ministop. With this shakeout, the feeling is that saturation indeed has been reached even for higher-quality stores.

Therefore the current announced strategy of the leading firms, except SEJ, is not to expand the number of stores, but rather to replace marginal stores with upgraded or relocated ones, preferably with a license to sell alcohol, which in Japan includes wine and beer. SEJ evaluates some 135 factors in deciding whether to open a new store, but liquor is seen as especially important. About 35% of SEJ stores sold alcohol in 1991. This had risen to about 63% in 2001, when 5,427 were licensed, compared to 5,115 in 2000. With little change in the total number of outlets, FamilyMart stores with liquor licenses increased from 1,901 in 2000 to 2,279 in 2001.

SEJ boasts per store and per square meter sales at least 50% higher than any major competitor. It is generally agreed that it has achieved its position through flexibly supplying its stores with a wide variety of goods and services, especially with different food items during the day. The company appears to be using its greater efficiency to further increase market share. In 2002 it had a plan to open 900 new stores and publicly stated its intention was to increase the number of stores and its location dominance.

Although by no means first or best in all areas of the business, IY and SEJ are a benchmark for the industry. It is thus useful to consider the merchandising goals that drive the firms' overall strategy. These are outlined in Box 3. (Also see Rapp 2002, ch 8.)

Box 3 - IY's Merchandising Goals

"The merchandise in Ito-Yokado's stores must be ones which customers want, be in stock regularly and be reasonably priced." Several things are done to realize these three goals. At the core of the company's strategy is an item-by-item inventory control system. What IY calls "team merchandising" supplements this. [Note that this section is quoted directly or paraphrased from Ito-Yokado's fiscal 2001 Form 20-F filing. It outlines the company's approach to using IT to gain competitive advantage. IY shares trade in the US as ADRs on Nasdaq (IYCOY), hence its SEC filings.]

The first two goals can be stated in economic terms as minimizing inventory subject to ensuring that the products customers want are in stock. The constraint is important: reducing lost sale opportunities due to items being out-of-stock is a fundamental concept in merchandising.

The first-order purpose of the inventory control system is to distinguish fast-moving items from slow-moving ones. By item is meant an SKU (stock-keeping unit), which is a unique product as regards manufacturer and such characteristics as size, color, flavor, and the like. Taste, durability, sales methods, and price are also taken into account in planning. Control is made possible by a point of sales system (POS) that captures data. Based on the data, slow-moving items are reduced immediately and more of fast-moving items can be stocked.

Having data reflecting current consumer trends facilitates forecasting. By relieving suppliers from having to take back unsold merchandise, Ito-Yokado keeps costs down and retains a right to decide appropriate production volume to meet product sales trends.

"Team merchandising" means working closely with manufacturers and suppliers to select materials and specify manufacturing processes. It also involves sharing sales data from IY stores. Ito-Yokado believes the result is a "highly efficient system for developing and manufacturing merchandise that meets consumer requirements. ... Team merchandising also makes the production process more flexible, enabling Ito-Yokado to increase or decrease production in response to changes in the market. Ito-Yokado can cut the time it takes to fill orders or fast-moving merchandise and avoid running out of extremely popular items." This system limits the number of firms IY does business with and involves overseas partners as well as domestic suppliers.

In short, IY wants to do more than turn inventory rapidly, it wants to turn the right inventory.

6 CVS Strategy and the Transition to E-Commerce

A key strategy for leading Japanese CVS has been to continually add services to attract traffic, even if these services do not contribute directly to profits. The store ideally wants a customer to buy something to eat immediately, food and magazine for later, and a toiletry, while making payments and using the shipping services. This section provides an overview of CVS offerings and how they are being implemented. Company-specific sections further analyze offerings, strategies, and practices. Table 2 lists the chronology various services were started.

Many CVS services reflect the fact Japan is still a cash-using society and giros (direct transfers between accounts) have been preferred to checks. Just how cash using Japanese are is indicated by looking at cash as a percentage of private consumption expenditure. In 1998

this was 17.8% for Japan, 12.6% for Germany, 8.1% for the United States, and just 4.6% for the United Kingdom. Interestingly, the percentages increased during the 1990s in all these countries except the UK. (Data from Bank of Japan, *Comparative Economic and Financial Statistics*.)

Table 2
Services Introduced by CVS¹

Date	Service
1980s	Copiers
1980s	Faxes sent and received
1987 Oct	Payment point for Tokyo Electric Power
1988 Mar	Payment point for Tokyo Gas
1989 Feb	Payment point for life insurance company (Dai-Ichi Seimei)
1989 Jun	Payment point for NHK fees (the public tv network)
1991 Apr	Payment point for NTT (telephone company, then a monopoly)
1995 Jun	Money orders sales
1990s	Package drop-off and pick-up service
1996	Rice sales
1996 Apr	International phone card sales
1996 Oct	Color copiers begin to replace black & white copiers
1996 Nov	Game software sales
1998	Multimedia kiosks ³
1998 Mar	CD sales
1998 Apr	Foreign exchange services
1999 Nov	Payment point for Internet sales
	Postage stamp sales
2000	Reservation services for travel packages
2001	ATM ²
2001	Credit card ⁴
2001	Points program ⁵
Future	Handle prescription pharmaceuticals ⁶

- 1 SEJ unless noted. Although not always first, dates are indicative and SEJ has most complete information. System-wide rollout generally came months later and is not complete for any chain for ATMs (except Lawson) and kiosks. During year ended 2/2002, 700 million copies were made in SEJ stores.
- 2 Started SEJ own IY-Bank May 2001, others followed using outside banks
- 3 Lawson, followed by others in 1999 and 2000.
- 4 Date introduced by Lawson. Others have followed as described in cases. Cards are issued through subsidiaries that have other partners, as discussed in the case studies.
- 5 Date introduced by Lawson, which originated the programs. FM followed in 2001, and SEJ was a reluctant third in 2002.
- 6 Perhaps acting as pick-up and payment points for on-line pharmacies.

Sources: SEJ web site and various news reports.

Being payment points for utility bills began in 1987 and has become a significant activity. For 2001, SEJ reports over 3% of the total Japanese payments market, which includes payments made through banks and the postal system. This represented some ¥990 billion in payments and involved over 126 million transactions on behalf of 291 companies. During 2000 Lawson processed 82 million transactions for a total of ¥650 billion. These transactions are more than the small fee collected on each one; they represent store traffic. In 2001 transaction value, mainly public utility bills (telephone, electricity, gas, water), rose to ¥743 billion and commissions were ¥5.7 billion, up 7.9% year on year. Payment services have grown about 20% annually since 1995.

Regarding utility bills, the CVS are competing against the banks, which accept payments at their teller windows and through their ATMs. The ubiquity and longer hours of CVS give the CVS a clear advantage for those paying cash. But banks also offer automatic direct-debit transfers, and an estimated 80% of utility bill payments are made this way according to the Japan Bankers Association (2001, p 20).

In the mid 1990s package shipping was added, with stores serving both as a drop-off site and as the ship-to address for customers. IY and SEJ, and FamilyMart use Yamato Unyu (Black Cat), Japan's largest package-delivery firm, non-exclusively in the case of FamilyMart. During the year ended February 2002 SEJ handled 13.8 million such parcels.

Having the payment and delivery systems in place, it was logical for the CVS to provide these services to customers of e-tailers. Thus, in November 1999 SEJ began accepting payment for purchases made over the Internet. Many credit card holders are reluctant to give their number over the phone or Internet, so over 75% of Internet purchases are paid for at CVS.

Even as the Internet was offering new opportunities, financial deregulation was opening the way for new offerings that fit the CVS' more & more-services strategy. This includes having ATMs in stores and issuing credit cards. These have combined with e-tailing using multimedia kiosks (MMKs), the provision of which lead to creation of each chain's key e-resents. In short, each chain is developing e-businesses based on its stores being the center of a distribution and information network.

Their e-commerce ventures are helped by the fact they already have good penetration with the younger part of the population, which is most disposed to e-related activities. But older customers also are being sought – especially because persons over 65 are expected to be over 25% of the population by 2015. Thus, meal-delivery programs started by SEJ and FM, although not dependent on e-commerce or limited to an older audience, will benefit from both.

The following sections look at ATMs, credit cards, and kiosks, as well as point (reward) programs, as aspects of CVS strategies common to all three chains. These discussions are more fully developed in the sections on the individual chains. Table 3 provides an overview.

6.1 ATMs

It is logical to have ATMs in CVS. However, an ATM is a bank branch under Japanese banking rules. So, the CVS – other than SEJ – have invited one or more banks to locate ATMs in their stores. The banks thus control the ATM. Because IY and SEJ want to control the services available through the ATMs in their stores, they decided to have their own bank (discussed later). Otherwise, so far strategic differences appear more at the margin.

Table 3
Comparative E-Commerce Offerings

SEJ	Lawson	Family Mart	
7dream	at-Lawson	FamilyMart	Web site name (.com) ¹
Feb 2000	Dec 1999	May 2001	Web site start date
		850 ⁱ	Registered members (000)
	Loppi	Famiport ^h	Kiosk name ¹
Nov 2000	1998 ^d		Kiosks launch date
37% ^a	100%	100% ^f	Kiosk penetration ²
	35% ^g	100% ^f	ATM penetration ²
	Feb 2002	2002	Credit card launch date
	800 ^e		Credit card holders (000)
5,000			Points members (000) ³

- 1 In addition, there is mobile phone access; see text.
2 Percentage of stores having.
3 Includes credit card holders, who are automatically part of the programs.
a January 2003
d Lawson had installed kiosks in all its stores by October 1998.
e September 2002. Expected 1 million by February 2003.
f December 2002.
g April 2003. Higher in Tokyo and Osaka.
h Since May 2001, interfaces with Sharp's Zaurus PDA.
i April 2002.

Lawson took the four major banking groups as partners in the joint venture that operates its ATMs, while FM's ATM strategy seems a bit more reliant on regional banks. As of the summer 2001, 2,000 CVS had ATMs using regional banks that were members of e-net and 70% of these were in FM stores. FM had kiosks and ATMs in almost all its stores by the end of 2002. This was a faster ATM rollout than its competitors and should allow FM to more quickly challenge Lawson, which already had 100% penetration of its kiosks.

Presumably SEJ's more measured approach is because it (rather than partner banks) is funding its own ATM expansion and has about twice as many stores.

When cash dispensers, the predecessor of ATMs, were first installed in Japan in 1969 they could operate only during regular banking hours and be on the premises of a bank branch. The restrictions on locations and hours were eased rather slowly, which explains why ATMs did not appear in CVS sooner. ATM use in CVS has been primarily on weekends and after 8 PM.

The types of banking and financial services available through ATMs is expected to expand, with the stores in effect containing automated bank branches. Eventually remittances, money transfers, a debit card, credit cards, purchase-point cards, loans, Internet banking, and settlement services with other member firms will be included. In addition, there will be access to services such as brokerage, insurance, and credit cards offered by affiliated firms.

The ATMs of the major CVS, including those of Sunkus and Circle K, all handle actual settlement through e-net. IBM is a shareholder and the systems integrator of e-net, which also supports Internet shopping settlements.

6.2 Credit Cards

Credit cards are issued by all three CVS through affiliated companies that include other partners. JCB, Japan's indigenous competitor to MasterCard and Visa, markets a card jointly with SEJ and IY, and is a partner in the consortium issuing FamilyMart's card. IY's wholly owned card company is called IY Card Service, was established in October 2001, and had initial capital of 400 million yen that was increased to ¥4 billion in 2002.

FM uses a smartcard (called IC cards in Japan), giving it both point awarding and credit card functions. Besides JCB, partners are C Itoh, Toyota Finance, PIA, and NTT Data.

The Lawson credit card, LAWSON PASS, is a joint venture with Mitsubishi Corp (20% ownership) and Credit Saison Co Ltd (30% ownership).

The cards are integrated with the stores' point programs, with points given for all purchases, not just those at the issuing CVS. The cards thus serve two immediate purposes: building customer loyalty and providing revenue from financial services. Longer term, they will facilitate building a mineable telematic database.

6.3 Kiosks, Web Sites, and Catalogues

All three chains have web sites and monthly catalogs for shopping. Lawson and FamilyMart have multimedia kiosks in every store, SEJ expects to by 2006. Kiosks have been used mainly for tickets and downloading CDs and games, and these services are available at all SEJ outlets.

Other services available on the web sites or kiosks are printing digital photos, applying for cellular phones, and requesting same-day hotel reservations. Travel bureau JTB offers packages through all three chains, but Lawson has arranged for a unique product. Called "Quick", they are packages sold at the last minute as special deals.

Planned services include reserving rental cars (with pick up and drop off at a CVS where parking is available) and arranging for auto inspections, repairs, and driving lessons.

FM's Famiport kiosks have, since May 2001, interfaced with Sharp's Zaurus PDA, which has almost a quarter of the Japanese market. Games and e-books can be downloaded and, among planned extensions, the two companies are working to include Bluetooth

wireless protocols so discount coupons and special offers can be beamed to Zaurus owners. FamilyMart also is cooperating with Toyota in a number of ways, discussed later.

Membership in FM's point program is necessary to shop online and submit an order via Internet phone, PC, or kiosk. However, online and kiosk offerings can be explored without being a member. Other CVS seem less wedded to this system, though you do have to be a member to accumulate points.

It is not clear what fundamental difference there is between catalogues, although FM claims to offer many more items. FM produces its catalogue with ticket seller PIA as a free magazine, distributing 700,000 copies each month. SEJ and Lawson also distribute copies of their catalogues monthly in all their stores. In the case of Lawson they segment their offerings into multiple catalogs that cover different types of products and services rather than having one large catalog covering all items. The catalogs generally have a wider range of items than the web sites, which offer more than the kiosks. Lawson has (as of February 2003) done the most to develop an online catalog.

6.4 Point Programs

All three firms offer "point cards". These give customers points based on the amount of purchases. They were introduced first by Lawson and then by Family Mart. While SEJ initially resisted, it ultimately was compelled to do the same. Like similar programs in the United States, they are intended to reward customer loyalty. Getting a credit card issued by one of the CVS automatically makes one a member and its use earns one points.

FamilyMart claims a more extensive list of items points can be redeemed for. It awards 1.4 points for each ¥100 in purchases; after accumulating 1000 points, a customer can use them to buy items at FM stores. In the case of IY's card, one gets 1.5 points for each 100

yen in purchases at an IY Group establishment and 1 point per 200 yen at other JCB outlets. Each point is the equivalent of ¥1 towards IY purchases.

6.5 Internet Connections to Mobile Phones

Lawson has supplemented its in-store kiosks with i-Lawson, "mobile e-kiosks" launched in May 2001 in cooperation with NTT DoMoCo for its over 38 million mobile phone customers with i-mode (April 2003). Because NTT DoMoCo is a partner, Lawson has some advantage as a result, but DoMoCo has cooperated with SEJ and FM so that they also have i-mode compatibility. Thus, FamilyMart supplements its main web site with famima-i (i-mode accessible) and famima-j (accessible by customers of J-Sky).

I-mode and J-Sky are not complete interfaces for e-commerce, and a major competition is underway to establish the standard for Internet connections between convenience stores and mobile phones in terms of how to arrange purchase, payment, and delivery. Once the system is fully created and is working, the winner hopes to license it to other stores and to collect a royalty. SEJ is allied with Mitsui & Co, NEC, and NRI. Lawson has joined NTT DoCoMo, Matsushita, and Mitsubishi Corp. FamilyMart has teamed with C Itoh, Toyota, and NTT Data.

7 **Seven-Eleven Japan (SEJ)**

SEJ and IY, with help from Nomura Research Institute (NRI), are moving quickly and decisively to harness the potential of e-commerce. They are using a customer-driven strategy in which the concept of convenience goes well beyond the types of items normally associated with a CVS, especially in the United States. The companies have long been in the forefront of using IT to gain an advantage (see Rapp 2002, chapter 8).

Especially when venturing into new offerings, SEJ will work with others, often to create a specialized firm. In 1999 it established two significant joint ventures e-Shopping!Books (with Softbank, Tohan, and Yahoo!Japan) and CarPoint Japan for car sales (with Softbank, Microsoft, and Yahoo!Japan).

As part of exploiting economies of both scope and scale, SEJ also will provide its services to others. Thus, the 3 million customers of Japan's largest virtual mall, Rakuten Ichiba (rakuten.co.jp), can use SEJ stores to make their payments and pick-up packages if they do not want them delivered directly. As another example, SEJ and NRI have jointly started providing clearing services for purchases through the Internet, which is separate from the third-party payment services provided through the banking system or the CVS.

E-commerce is just a tool to SEJ, not an end in itself. It thus continues to seek new offerings, and ways to improve existing offerings, that have little to do with e-commerce. This led to the creation of Seven-Meal Service, as an expansion of the chain's already extensive fast-food operation. The service provides prepared meals and packages of cooking ingredients for “customers who find daily meal preparation inconvenient”. Items can be ordered by telephone, fax, and Internet, or at Seven-Eleven stores and can be picked up at the store or delivered using special vehicles that can keep the food at required temperatures. The service was established in August 2000 with three other companies and uses SEJ production, distribution, and information networks. It was available at about 40% of SEJ stores as of February 2002.

IY and SEJ's e-commerce support system is an extension of its already very sophisticated satellite-based IT system and is largely independent of the Internet. This reflects the fact it was already in place by the time the potential of the Internet was widely

recognized. But the company feels that the advantages of a proprietary network are such that it would not have used an Internet-based system even if that had been an option. For now, SEJ prefers the direct control and competitive barriers its proprietary IT approach creates. However, the company is closely monitoring use of the Internet by others, especially the system intended to emulate SEJ's proprietary system being constructed by Lawson and Mitsubishi Corp. And, it has connected its system to the Internet.

IY reports that about 75% of shoppers on its web sites pay and pick-up at the store. Besides the direct revenue, the sites and services clearly are helping to build traffic and thus sales of other items. The next three sections provide details on three IY e-commerce ventures, including one in the United States.

Table 4

The 7dream.com E-resentsu

Company¹	Expertise and services provided
SEJ (51%)	Principal organizer; provides places for kiosks to access the web site.
NRI (13%)	Advises on structuring business; develops and operates e-commerce systems.
NEC (13%)	Built and operates 7.dream website. Designed and developed multimedia terminals, all connected via dedicated lines.
Sony (6.5%)	Supplies technological support for its MD (mini-disk) and IC card technologies.
Sony Marketing (6.5%)	See Sony, includes online packaged music and games.
Mitsui & Co (6%)	Trading company provides information, merchandising support, distribution.
JTB (2%)	A travel agency (formerly Japan Travel Bureau)
KINOTROPE (2%)	Software firm consulting Internet business design, systems development.
PIA Corp (0%)	Event tickets (Japan's largest ticket agency).

e-Shopping!Books² Books.

CarPoint² Car sales.

1 Percentage ownership in parentheses.

2 Joint venture owned in part by SEJ.

7.1 7dream.com

An archetypal e-retailer is 7dream.com. Owned by seven companies and involving several others that provide goods and services (Table 4), its web site was launched in February 2000. SEJ intends it to be “one of the largest EC [e-commerce] businesses in Japan and operate at the forefront of its field”.

The services also are accessible from multimedia kiosks that SEJ began putting in Tokyo stores in November 2000. Nationwide rollout will take several years; over 37% of stores had kiosks as of February 2003 with about 100% anticipated by the end of 2006. But kiosks do not yet provide Internet access or the full catalogue of products that can be purchased via phone or at the store using SEJ’s proprietary on-line system or the monthly catalogue, which can be picked up at any store.

In keeping with NRI’s recommendation that any e-commerce access strategy should be “ubiquitous”, 7dream can be accessed directly over the Internet and other networks, including those open to mobile phones and direct TV.

Net sales in 2001 were ¥1,170 million, compared to ¥617 million in 2000. Sales have not grown as rapidly as expected, even though the pace of kiosk installation has been on plan. This is attributed to the kiosks having limited offerings and prices still being a bit high. But SEJ expects prices will drop with experience and as the range of goods or services sold.

7.2 IY Bank

IY and SEJ want to control the services available through ATMs in their stores so they decided to have their own bank. Although a consolidated subsidiary of IY, the bank has

aggressively pursued online connection alliances with other banks and securities companies to increase customer convenience. IY was the first non-bank to apply for an on-line banking license. It was joined in this e-venture by Bank of Tokyo-Mitsubishi, Sanwa Bank (UFJ Group), NEC, and NRI as shareholders. Nomura Securities, Nikko Securities, and Sony have joined the venture, and three regional banks (Asahi Bank, Shizuoka Bank, and Bank of Yokohama) have become affiliated. Participating banks expect to be able to close branches without sacrificing customer service because the ATMs accept their bankcards as well as IY's.

IY Bank began operations on 7 May 2001 with 130 employees. It will not have conventional branches, but instead will be entirely online through its ATMs, the Internet, and telematics (already, accounts can be accessed using an NTT DoCoMo i-mode mobile phone). The immediate potential market is the over 9 million customers who visit stores each day plus the companies' 200,000 employees (including those working at affiliates and franchisees). IY's market research indicates that its customers are dissatisfied with traditional banks in terms of location (generally not in residential areas), hours (limited), and products and services.

The shareholding and affiliated banks have provided staff, as has SEJ, while the bank's president is a former Bank of Japan official. The participation of two securities firms reflects IY and SEJ's expectation that on-line brokerage services will eventually be provided. Sony, which has affiliates that offer life and auto insurance, is also planning an e-bank, which will probably link to the IY Bank increasing each firm's convenience leverage.

In the first two months of operation (June and July 2001) about 10,000 IY Bank accounts were opened. By the spring of 2002 this had risen to 68,000 and 700,000 credit

cards had been issued by the end of August. They plan to have 1.5 million cards issued by February 2003.

7.3 ATMs

ATMs are being put in SEJ stores and other IY operations such as its general-merchandise stores and Denny's restaurants. By the end of December 2001 there were about 2,200 ATMs installed. This had grown to 3,600 by March 2002 and 4,200 by August 2002, primarily in metropolitan Tokyo and adjacent areas. By the spring of 2006 there will be over 7,100 throughout Japan.

Installation costs per ATM have been about ¥2.5 million. They are very compact, which is important for the store owners. Quite sophisticated, each ATM can be programmed to handle a variety of functions as services evolve. SEJ acknowledges that it was tougher getting the ATMs up and operating than it expected. Partly for this reason, SEJ has not so far trained store personnel in advanced functions. From a store's perspective the ATMs are being used primarily to generate traffic, with the bank partners handling the actual service.

Access to bank accounts (including cash withdrawals and deposits) and paying for 7dream and Seven-Meal Service transactions make up most of the ATM transactions currently offered and used.

7.4 Applying Its Strategy in the United States

IY has controlled 7-Eleven in the United States since 1991, shortly after the original parent company, Southland Corp, filed for bankruptcy. IY had become the 7-Eleven franchisee for Japan in 1974.

7-Eleven recognized several years ago that it was in the financial services business because its US stores sell \$4.3 billion worth of money orders, and their customers conduct

105 million ATM transactions annually. So, in January 2003 plans were revealed to extend IY's telematic strategy to the United States. Specifically, 49 stores in Orlando were being equipped with kiosks offering 24/7 financial services. A total of 1,000 US stores are getting the kiosks during the first half of 2003 in this pilot project. The machines, called Vcom, offer touch-screen basic ATM capabilities and other services. These include American Express ATM transactions, purchase of Western Union money orders and money transfers, bill payment through Western Union's Quick Collect service, and check cashing through Certegy Check Services (a division of Certegy, Inc).

7-Eleven anticipates that Vcom will offer additional services, such as touch-screen access to online shopping and telecommunications later in 2003. The e-commerce offerings will be provided by Cyphermint, Inc through its patented Pay Cash System, which allows customers to pay at the kiosk with cash, as well as with a check, money order, or credit card. Thus, customers can pay by cash at Vcom by inserting as many as 30 bills at a time into a bunch-note acceptor on the machine. Telecom services will be available through Verizon, Inc. They expect to have 3500 machines installed in the US by the end of 2004.

An example of strategic telematic partnering is 7-Eleven's 5-year linking with Verizon, which was announced in late 2001. Verizon pays part of the cost of placing the Vcom kiosks, and becomes the exclusive distributor of certain services through them. Thus, users can access Verizon's e-commerce platform, Verizon.com, where they can order long distance service, add a phone line, contract for new services, view or pay bills, and request repairs. Verizon sees this as a way to serve clients with busy lifestyles where they shop.

8 Lawson

Using its own combination of clicks and bricks, Lawson believes its can effectively counter and even surpass SEJ and IY to be Japan's leading B2C e-commerce company. Lawson recognized early that its entrance into e-commerce actually began with the development of third-party bill settlement services in 1995. Subsequent e-commerce initiatives are a direct outgrowth of this activity and still incorporate it as an essential feature.

Lawson has developed a multi-channel e-commerce system based on the Internet, mobile phones, and multimedia kiosks. It calls this B2C e-commerce activity @Lawson, and its web site, at-Lawson.com, was launched in December 1999. An affiliate, e-Context, handles product delivery, agency transaction settlements, and other @Lawson agency activities. It is 48 % owned by Lawson, 10% by Mitsubishi Corp, and the balance by various other companies.

Because this is an open-platform Internet-based service, the strategy is to add other convenience stores, gas stations, and the like to the system as payment and pick-up points, thereby giving Lawson greater economies of scope. As part of this, Lawson stores are featured on the maps of most Japanese in-car navigation systems. (Paper maps sold in Japan often mark the locations of the major CVS chains' stores, as well as gas stations and fast food outlets.)

Lawson views e-retailing as both currently and prospectively important. "In e-commerce and mobile commerce, which include the Internet and NTT DoCoMo's i-mode mobile service, our store network facilitates Lawson's existing services-settlement services and product pick-up at stores. We aim to provide these services for a fee to retailers and service providers that sell on line. The key element differentiating Lawson from other chains

is our nationwide presence. Clients using Lawson services will thus have access to consumers throughout Japan, unlocking a host of new Net business opportunities. Leading companies have already honed in on our strengths. We have, for example, launched joint ventures with NTT DoCoMo, Inc, Matsushita Electric Industrial Co Ltd and Mitsubishi Corp. Indeed, Lawson's competitive advantage also lies in being able to tap into these companies' wealth of resources." (Lawson 2000 Annual Report.)

However, given the similar initiatives of its major competitors, SEJ and FamilyMart, it is less clear whether they will be able to meet the objective to "improve customer convenience and set ourselves apart from other industry chains by promoting e-commerce and financial services."

8.1 E-Commerce Activities

The company has leveraged its physical stores and distribution network by developing an online catalogue, which is connected to the Internet so customers can access it via i-mode phones or PC. Lawson advertises items in newspapers or its stores using posters and paper catalogues as well. Lawson's catalogues are in the form of guides that are broken into “Shopping” for products such as flowers, toys, and golf merchandise; “Travel”; “Schools” for learning everything from the tea ceremony and flower arranging to using computers; and services such as motorcycle insurance or airline reservations. The ads and guides explain how to access the products or services on-line along with delivery information and the lead-time for every product or service. Ultimately these will all be combined electronically, but it will take until the summer of 2003 or 2004 to accomplish this.

Lawson launched a new TV advertising campaign in January 2002, the “Weekly Lawson” series, with a new commercial every week. The premise is that more than 80% of Lawson’s customers visit stores at least once a week. Lawson thus hopes to stimulate customer interest and even introduce an element of surprise to its stores and online site by renewing its attractions on a weekly basis and directly linking these initiatives to the TV commercials.

Because games are an important revenue source, Lawson has teamed with Nintendo, with each company buying about 3% of the stock in the other. This gives Nintendo a strong e-commerce ally against the Sony PlayStation-SEJ combination. In addition, Lawson has an alliance that includes Dentsu, Japan’s largest advertising agency, to develop game software for portable machines and mobile phones.

For games the Mother software is in each store and the game selected is written onto a game cartridge, either blank or an existing one. For music (from Sony), master disks are kept in the store and selected titles are copied onto a cassette or disk that one brings or buys. Eventually Lawson hopes to have both these game and music copying functions done online from a central MIDI server the same way that much karaoke in Japan is currently done.

From 2001 Lawson has had an arrangement with HMV, a large international retailer based in England that sells a wide range of CDs through mega-stores that are now opening in Japan. This allows Lawson customers via Loppi (Lawson Online Shopping Print and Pay Information) to access to HMV's large catalogue of CD titles and then order a CD through Loppi, pay for it, and have it mailed. The program is transitioning to allowing pick up at the store the next day, although that is difficult to do efficiently as a given store may only be receiving only one or two CDs a day. Still, it is a way for HMV to extend its e-commerce reach beyond its mega-stores while Lawson can extend the titles it offers beyond Sony. There will also be the potential for downloading directly onto a CD or cassette at each store as stores get high-speed satellite connections.

Lawson has joined with JTB to offer "Quick" travel packages. Sold at the last minute, they are unique to Lawson. JTB also sells travel services through SEJ and FamilyMart.

8.2 I-Convenience and I-Lawson

I-Convenience, a consolidated subsidiary of Lawson, is an e-retailer established in October 2000. Other participants are listed in Table 5.

In May 2001, about the same time IY was launching IY Bank, Lawson and i-Convenience, initiated i-Lawson, a "mobile e-kiosk" that allows customers to shop using their mobile phones if they are among NTT DoCoMo's over 38 million customers using i-

mode. I-Lawson had a membership of 65,000, the largest among the CVS, in 2001. Members can order products for delivery at Lawson stores, make payments at Lawson cash registers using a special connection, and access Lawson's various entertainment services. They also can use their mobile phones to order products and services, as well as connect to a store register to pay bills and for products ordered over the Internet. One motivation for the venture is recognition that a substantial part of growth in e-commerce will be telematic (essentially, mobile phone) based.

Table 5

Lawson E-Commerce Partners

Company¹	Expertise and services provided
The I-convenience E-resentsu	
Lawson (52%)	Principal organizer; provides places for kiosks to access the web site.
Mitsubishi Corp (18%)	Japan's largest trading company and Lawson's largest shareholder; provides information, merchandising support, distribution.
NTT DoCoMo Inc	Japan's largest mobile phone company (59% Japan market share).
Panasonic ²	Designed and developed multimedia terminals.
<u>Other Partners</u>	
Nintendo ³	Games (own shares in each others' company)
JTB	Travel services, including "Quick" travel packages unique to Lawson.
Other Activities (discussed in text)	
e-Context	Provides connections to the Internet, third-party payments, and Lawson's in-store ATMs.
LAWSON ATM Networks ATM operating company.	

1 Percentage ownership in parentheses.

2 Matsushita Electric Industrial Co Ltd

3 Lawson purchased 3% of Nintendo, and Nintendo purchased 3% of Lawson in 2001.

Members of i-Lawson get a smartcard and accumulate points for their purchases, which they can then use for discounts on other Lawson purchases including breakfast at a Lawson store. Management believes this concept has led to an increase in store traffic, one of its key strategic aims.

8.3 Loppi (Lawson Online Shopping Print and Pay Information)Kiosks

Lawson is currently the CVS leader in installed multimedia kiosks, having begun installing them in early 1998 and completing the task of putting one in every store by that October. That means currently there are around 7,700 Loppi kiosks. Lawson sources Loppi, in terms of development and manufacture, from IBM.

Loppi has two specific features: an entertainment element for purchasing event tickets or downloading game software and an information platform that provides data on events, the weather, and the like. The system also supports payments, including payments to financial institutions on loans. Over time, the company will integrate its nationwide Loppi network with the ATMs and related financial services it is now beginning to provide.

In 2001 Loppi launched a hotel booking service in conjunction with JTB, which is also in an e-resentsu with SEJ, indicating that not all alliances are exclusive.

When a customer uses Loppi to make a travel reservation, buys the right to copy music, or purchases a concert ticket, the terminal generates a bar-coded coupon. This records the type of purchase, the amount, and delivery method (pick-up at Lawson, mail, or parcel service). The coupon is taken to the checkout counter, where it is treated like any other sale, and the customer pays (cash or credit card) for it any other purchases. This procedure enables Lawson easily and efficiently to handle payments to its 150 partners (500 if one includes credit card companies) by electronically using the banking system as an intermediary.

As part of its strategy, Lawson does not deal directly with the service and goods providers on each transaction since this would cost them printing and mailing charges. So they try to be non-paper as much as possible in using the kiosks. Lawson is working with e-tailers so that customers can just click and route the order and the payment, so Lawson will not have to issue the coupons.

Sales through Loppi terminals were ¥118 billion in 2002, up from ¥40 billion in 2000 (80% entertainment related). This reflected continued increases in sales of concert tickets through a subsidiary. Also boosting revenue were a dramatic increase in demand for billing settlement services, spurred by the use of Loppi to apply to take university entrance exams and kanji certification tests, and round-the-clock repayment of loans to consumer finance companies. However, revenue has leveled off during the first part 2002. Lawson thinks it might have to wait for broadband and 3-G phones for more explosive growth to happen. DoCoMo and J-Phone introduced this service at the end of 2002.

8.4 Lawson Tickets Co

Lawson has its own concert, movie, and event ticket company, Lawson Tickets Co Ltd (LTCL). A consolidated subsidiary started in July 1992 and having 1.7 billion yen in capital in 2001, LTCL also handles airline tickets and tickets to Disneyland and Universal Studios. Sales channels are Lawson and Daiei stores, including Loppi, or by phone.

PIA, Japan's largest ticket company with sales of ¥80 billion in 2001, uses SEJ and FamilyMart as its CVS outlets(over 13,000). LTCL was growing about 20% per year, reaching ¥32 billion in revenues for 2001. The venture is profitable.

The business model is simpler than PIA's approach since PIA sells tickets for a wider range of events. Lawson instead targets customers in their 20s and 30s who like music.

Lawson then promotes in its stores and on its delivery trucks special “Glory” concerts that will attract perhaps 300,000 fans and for which Lawson controls ticket sales. The idea seems to have worked, though overall ticket sales in the first part of 2002 were down 11% from the previous year and operating income was down 4%.

8.5 ATMs and Credit Cards

Just over 35% of Lawson stores had ATMs as of April 2003, although the percentage was much higher in the Tokyo and Osaka areas where most of its 2,712 ATMs are located. By having the local or regional banks provide the actual ATMs, Lawson saves capital. In May 2001 Lawson joined with the four major banking groups and several major regional banks to form LAWSON ATM Networks, Inc, and made it responsible for installing ATMs. Lawson owns 65%, Mitsubishi Corp 5%, and the banks that actually own the ATMs each own 5% of the venture. The banks are Japan's four largest: UFJ, Mitsui-Sumitomo, Tokyo Mitsubishi, and Mizuho. Regional banks are included in many stores that serve those banks' operating area, such as in Aomori, Nagasaki, and Nagoya. The ATMs can be linked with Loppi terminals to provide a variety of financial services.

Lawson has divided the Kanto area (greater Tokyo and immediate hinterland) into four areas for managing ATMs and supplying currency. Bank partners supply currency on a 24-hour basis and charge fees for use of cards from outside the bank support group for that area. Lawson bears the risk and cost associated with each ATM up to some amount, but above that level the banks bear these costs. Lawson management feels its approach is more convenient for customers than competitors', at least to the extent Lawson has more machines (kiosks and ATMs combined) in place. But it acknowledges it does not have the same control

over the system and is thus not sure when additional financial services such as loans, insurance, or brokerage can be added.

Established in February 2002 LAWSON CS Card Inc, a joint venture with Mitsubishi Corp (20 % owner) and Credit Saison Co Ltd (30 %), began to then immediately issue a Lawson credit card, LAWSON PASS. Holders receive points for their purchases, as well as special giveaways. The expectation is that this will build customer loyalty, encouraging more visits to its stores. Thus Lawson feels the cards are strategically important for raising customer satisfaction, the center of its actions.

8.6 LETSS

During 2002, Lawson finally completed a switch over to LETSS (Lawson's Epoch-making Total Strategic System). This is a next-generation online information system that finally begins to deliver some of the functional and strategic benefits that SEJ has been gaining for many years. (IY first initiated its POS data collection and processing system in the late 1970s and is now in its fifth generation; see Rapp 2002, p 173-77.)

In the first half of fiscal 2002, Lawson's POS registers, store computers and other hardware were replaced, followed by all the software. The introduction of new machines and software is expected to improve efficiency in store operations and the speed at which data is processed. Loppi multimedia terminals will operate faster, and store management systems should be easier to use. System components have been designed to help raise sales by forecasting demand and better managing the order process.

The idea behind LETSS is to pinpoint customer needs and to use a sophisticated program to forecast demand in order to prevent lost sales opportunities. LETSS is supposed to accomplish this by creating planograms tailored to each store, as well as by offering more

appealing products and services that have high value added. The competitive test and challenge now will be the integration of this new system with the stores and Lawson supply structure to achieve organizational evolutionary learning and improvement. In this regard, SEJ has over 20 years of experience and success.

9 FamilyMart

CEO Michio Tanabe foresees FamilyMart's "E-retail business as having boundless potential and expect operations in the field to become a pillar of our efforts to build FamilyMart into a Super CVS". Continuing, the company summarizes its "bricks and clicks" and partnering effort: "As we undertake our E-Retail business, we are using the strengths of FamilyMart's physical stores to support the e-commerce businesses of companies with which FamilyMart has formed tie-ups. Our e-commerce payment collection agency service permits those customers unwilling to provide credit card information on the Internet to make cash payments at any FamilyMart store. FamilyMart's Open Cash on Delivery (OCOD) Service also allows customers to pay cash for purchases made on the Internet as well as pick up these items at FamilyMart stores. These services coupled with the Famiport MMKs [multimedia kiosks] and ATMs installed in stores are underpinning FamilyMart's efforts to attract new customers. In addition, famima.com members are visiting stores to make payments and collect ordered merchandise, which is also fueling an increase in store sales." (2001 Annual Report.)

On a more prosaic level, FamilyMart is the only CVS that has its house brands available both in its stores and over the Internet, which FM sees as an advantage in promoting its brand and value added products, giving it more of the value added chain.

9.1 E-Commerce Activities

FM's kiosks are being made by a Toyota-Fujitsu joint venture using a software platform, e-plat, developed by a Toyota-NTT Data joint venture. The ordering and payment system connects to a communications and computer center run by Toyota. NTT Data handles the actual settlement in conjunction with e-net. In a significant departure from its competitors, FamilyMart has allied with Sharp to allow the Zaurus PDA and FM's kiosks to interface.

Construction of FamilyMart.com as a B2C web site began in October 2000; operation started in May 2001. It includes an Internet shopping site with about 30,000 items. For mobile phone users, the Internet service has both an i-mode connection, which puts it in contact with NTT DoMoCo's huge customer base, and a J-Sky connection.

They have also launched an m-commerce service to provide meals, general merchandise, and all daily necessities, similar to SEJ's dubbed "Home Car". This is more comprehensive than SEJ's Seven-Meal offering. Both are being marketed mainly to older customers. Home Car is a tie-up with a company that already provided such services to seniors but did not have online capability.

9.2 Electronic Franchise System

In another departure from its competitors, for both Internet-based and home-support service, FM is encouraging each franchise store to establish its own on-site online store aimed at the store's local customers. FM calls this its electronic franchise system. Under its business model "each franchised store handles and accepts famima club membership registrations from customers. When a customer subsequently purchases an item on the famima.com site, the franchised store that handled the registration is credited with the sale."

That is, the franchisee benefits when one of its customers shops on-line through that franchisee's virtual shop. "By combining virtual shopping with physical stores, franchised stores can significantly upgrade their store management capabilities."

The company has submitted a patent application for this "innovative business model". In the case of Lawson and SEJ, the parent companies get all e-commerce related sales. In the case of FM it flows to the local franchisee, making it the first CVS to extend the franchise system to e- and m-commerce.

9.3 Relationship with Toyota

FM is based in Tokyo but its heavy focus on Nagoya may be a reason for Toyota's interest in its activities. As part of its ITS (intelligent transportation system), Toyota, Japan's leading automaker, is an important member of FamilyMart's e-retsu, and one reason for this may be that FM is a stronger player than the other two leading CVS in the Nagoya area, where Toyota's main operations and headquarters are.

Toyota and Fujitsu manufacture FM's kiosks, using a system platform developed by a joint venture between Toyota and NTT Data call e-plat. Toyota is an investor in J-phone, hence FM's web site is accessible by J-phone as well as its competitor i-mode. FM promotes Toyota's gazoo.com web site in its catalogue.

FM announced in 2002 a broadband service for its kiosks that tied to Toyota's navigation system, allowing people to do things like order tickets while driving and to then pick them up and pay for them at the next FamilyMart store on their route. This is apparently one of the reasons Toyota became a shareholder in FamilyMart.com and has invested in the joint venture with NTT Data. It is a natural extension of Toyota's ITS concept (Rapp 2002, p 150).

The car navigation system connection to the e-commerce system is through NTT, which uses a satellite system. In the future this may be based on Bluetooth, a short-range remote-wireless data communication system. The navigation system will then communicate directly with the kiosk in the nearest FM store and the kiosk printer will generate a coupon that will provide a method for completing settlement at the CVS.

Car sales and rental through Toyota also are being offered or are planned. Presently only a new car sales catalogue is available at FM's shops, but Toyota is considering the idea of rentals through some FM locations.

Besides promoting Toyota's Gazoo web site, FM's catalog includes quizzes about the new Will car, which is aimed at younger drivers, with the car as first prize. This relates to Toyota's G-Book initiative (2002), which represents the extension of 3-G to the automobile and its advanced navigation system.

Kiosks can be used to apply for auto and home insurance from Tokyo Fire and Marine, Japan's largest casualty insurance company and a part of the Mitsubishi group. (Another member of the group, Mitsubishi Corp, Japan's largest trading company, is a key member of Lawson's e-retsū, showing how old keiretsu ties can be altered in the new economy and in the formation of e-retsū based solely on a new IT business opportunity.)

9.4 New Store System

In June 2001, "the company radically over-hauled the previous ordering system and introduced its New Store System in all stores, through which constantly changing customer needs are identified swiftly and accurately on a product-by-product basis ...". As part of this, the company introduced hand-held Store Activation Terminals (SATs) and shifted part of the responsibility for ordering to store managers and staff.

Table 6

FamilyMart E-Commerce Partners

Company¹	Expertise and services provided
E-resentsu	
FamilyMart (50.5%)	Principal organizer.
C Itoh (14.5%)	Major trading company and leading FM shareholder 30.6%; provides information, merchandising support, distribution, and financial services content for web site and kiosks.
NTT Data (10%)	Japan's largest IT systems integrator. Supplies and manages FM's web site; also part of e-plat.
Toyota (10%)	Major automaker intensively involved in IT and telematic systems (see Rapp 2002, ch 7); part of e-plat; makes (with Fujitsu) FM's kiosks.
Dai Nippon ² (5%)	Printing and electronic related services
JTB (5%)	Travel services. Also works with competing CVS.
PIA (5%)	Japan's largest ticket agency. Also works with SEJ.

Other Activities and Partners (discussed in text)

e-plat	Developed Famiport (FM's kiosks); joint venture of FM, Toyota, NTT Data, and C Itoh.
Sharp	Maker of Zaurus, a PDA with almost 25% of Japanese market, that interfaces with FM kiosks.

1 Percentage ownership in parentheses.

2 Dai Nippon Printing

As outlined at length in its 2001 Annual Report, the major motivation is to avoid lost sales. In this it is belatedly following in SEJ's tracks. Thus, "If merchandise that people want to buy is not laid out on the shelves, sales opportunities are lost, and customer confidence is damaged. By increasing the precision of its product-ordering capabilities in this way, FamilyMart aims to minimize the risk of losing business opportunities."

SATs screens "indicate how individual products are moving and the real-time situation in each store, and the operator can confirm what is on the display shelves and what is in stock before placing an order."

The program for encouraging the division of responsibility for product ordering is called the Store Staff Total System (SSTS). "By apportioning information on as many as 2,800 items of merchandise among store staff, it is possible to ascertain product movements accurately and to boost the precision of ordering substantially. Moreover, by raising staff members' awareness of their sales areas and merchandise, the level of SQ&C is raised, and store-management capability is enhanced considerably." The last means the administrative burden on store managers is alleviated. Raising awareness means cultivating a sense of responsibility in non-managerial staff, thereby boosting their motivation.

10 Conclusion

From the hype and hopes, a more rational e-commerce business model has emerged. And, it has a strong Japanese flavor. In this model, e-tailing is just one of several channels to reach customers. Further, it must be combined with various support facilities. Although niche players can and no doubt will survive in e-commerce as they do on main streets, our research suggests that economies of scope are a critical element in large-scale success.

Start-up e-tailers with narrow market segments generally have not been successful, especially when the interaction between returns and customer satisfaction is important. This is especially true if the segment can be occupied by an established competitor. However, even established players moving into e-tailing are not well positioned to develop economies of scope when the bricks part of their business is inherently narrowly specialized.

In contrast, the case studies of Seven-Eleven Japan, Lawson, and FamilyMart show that the Japanese CVS model of e-tailing is consciously based on expanding scope that includes customer traffic and more parts of the value chain. Perhaps this is inherent in being in a business defined as a "convenience", but what these firms are doing in forming e-resentsu offers lessons applicable to more than just CVS.

Through their kiosks, web sites, and catalogues, Japanese CVS can generate significant economies of scope. By using their stores as payment and pick-up centers, they can achieve the greater value added and better handling of returns of traditional retailers. Through their e-resentsu partnerships, they can create and capture product value while extending their activities into telematic-based relationships with a wide variety customers and suppliers. In addition, via their kiosks, they are increasing store traffic using telematic means that also improve the revenue stream of their basic retailing business, an externality to their e-tailing ventures.

To the extent they already use sophisticated data gathering systems to track and deliver customers' purchases by store, item, time of day, weather, and special events, e- and m-commerce are simply extensions of their established supplier relationships and telematic approach.

All the CVS are in an early stage of seeing where the opportunities are and what works. However, they are committed to the CVS e-commerce model and business opportunity, while using the expertise and strength of their e-resentsu partners to develop some proprietary value adding initiatives. Each of the CVS has a lead in some e-commerce areas, but the race is never-ending. What is clear is that the CVS-based e-commerce model is working and growing, supported by large firms with real resources. How many US firms can

say that? Still, most of the e-ventures are losing money, just as in the United States.

Therefore in Japan, just as in the US its evolutionary development and organization learning must continue to be monitored.

Appendix Table 1

Seven-Eleven Japan, Basic Financial Data, 1995-2002¹

1995	1996	1997	1998	1999	2000	2001	2002	
1477	1609	1741	1848	1964	2047	2140	2213	Total store sales (¥ billions)
239	263	287	309	337	358	366	401	Revenue (¥ billions)
95	103	109	115	137	144	151	158	Operating Income (¥ billions)
6373	6875	7314	7732	8153	8602	9060	9690	Number of stores (Japan) ²
662	669	676	678	681	675	..	656	Sales per store (¥ thousands) ³
29.9	29.9	29.8	30.0	30.3	30.3	30.4	30.5	Gross Margin (%)

- 1 Fiscal years ending last day of February in the following calendar year. Excludes stores in Hawaii.
- 2 At fiscal year end.
- 3 Average daily sales.

Sources: SEJ Corporate Outline; Brief Summary Results FY 2001; Semiannual Report for the 6 months ended 31 Aug 2002. Brief Summary Results FY 2002. Also, note that to achieve commonalty all years reported end at the end of February in the following year, though SEJ is now reporting Fiscal Years ending in the February of that year.

Appendix Table 2

Lawson, Basic Financial Data, 1995-2002¹

1995	1996	1997	1998	1999	2000	2001	2002	
885	985	1094	1157	1221	1275	1286	1291	Total store sales (¥ billions)
..	..	304	302	291	280	256	239	Revenue (¥ billions)
..	..	..	34	40	41	36	35	Operating Income (¥ billions)
5683	6252	6649	7016	7378	7683	7734	7625	Number of stores (Japan) ²
..	..	..	482	483	486	489	489	Sales per store (¥ thousands) ³
..	..	..	30.0	30.3	30.3	30.3	30.3	Gross Margin (%)

- 1 Fiscal years ending last day of February in the following calendar year. Excludes stores in Shanghai.
- 2 At fiscal year end.
- 3 Average daily sales.

NOTE: Were sales per store data really available for Jan 2003?

Sources: SEJ Company Outline; Lawson 2001 and 2002 Annual Reports. Summary Financial Result 2003. Again note for commonalty differences in FY reporting among and between companies.

Appendix Table 3

FamilyMart, Basic Financial Data, 1995-2002¹

1995	1996	1997	1998	1999	2000	2001	2002	
543	635	710	758	783	843	899	932	Total store sales (¥ billions)
129	147	151	148	147	176	196	217	Revenue (¥ billions)
19	22	26	27	28	24	24	28	Operating income (¥ billions)
3965	4496	5039	5286	5546	5813	5825	6013	Number of stores (Japan) ²
491	488	486	484	481	478	479	..	Sales per store (¥ thousands) ³
29.0	28.9	29.0	29.3	28.9	28.4	..	..	Gross Margin (%)

1 Fiscal years ending last day of February in the following calendar year.

2 At fiscal year end.

3 Average daily sales.

Sources: FamilyMart, "Summary of Selected Financial Data" (2001, 2002 and 2003). Again note for commonality differences in FY reporting among and between companies.

Appendix Table 4
Companies Mentioned

Stock code	Formal corporate name	Corporate web site
7437	C&S Co Ltd	www.csgrp.co.jp
8028	FamilyMart Co Ltd	www.family.co.jp
8001	Itochu Shoji ¹	www.itochu.co.jp
8264	Ito-Yokado Co Ltd	www.itoyokado.iyp.co.jp
2651	Lawson Inc	www.lawson.co.jp
8058	Mitsubishi Shoji ²	www.mitsubishi.co.jp
8031	Mitsui Bussan ³	www.mitsui.co.jp
8183	Seven-Eleven Japan Co Ltd	www.sej.co.jp
6753	Sharp Corp	www.sharp.co.jp
8270	Uny Co Ltd	www.uny.co.jp

English names

- 1 C Itoh Corp
- 2 Mitsubishi Corp
- 3 Mitsui & Co Ltd

Mitsui & Co, Mitsubishi Corp, and C Itoh are leading Japanese trading companies.

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