7-Eleven — Doing More With Less Through Dynamic IT

CASE STUDY

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SITUATION OVERVIEW

7-Eleven Inc. is a United States-based organization operating a chain of franchise convenience stores in over 20 countries. 7-Eleven Stores Pty Ltd. Australia (7-Eleven) is the master licensee in Australia, and has more than 360 outlets operating along the east coast of Australia. Its head office is located in Melbourne, with state offices in New South Wales and Queensland. Currently, most of its stores carry approximately 2,000 to 2,500 stock-keeping units that include fuel, confectionaries, hot and cold food, including the company’s well-known product, Slurpee. All stores are centrally supported by its head office, which assumes comprehensive functions, including finance, construction, marketing, training, property, operations, and IT.

Australia witnessed a dramatic change in the convenience stores industry over the past five years with the entry of two large supermarket players, Coles and Woolworths. Coles took over the Shell network, and Woolworths went into a joint venture with Caltex. These big players bring their logistics expertise and operational might from a supermarket setup to the convenience store industry. To keep pace, 7-Eleven must ensure its long-term business and operational viabilities, and dynamically adapt its processes and IT in the face of drastic changes to its ongoing business environment.

THE CHALLENGE

7-Eleven was faced with critical business challenges in the area of falling margins in key categories, lack of timely information at store level, minimal in-stores stock level management capability, and declining customer counts. To address these business challenges, 7-Eleven needed to decrease costs and increase efficiency in its supply chain operations through better management of store deliveries and product inventories, and provide visibility at the store level to improve stock management thus reducing out of stock situation. As for falling margins, expanding into a new higher margin product segment could prove helpful.
In addition, the Y2K phenomenon and the adoption of the Goods and Services Tax (GST) in Australia prompted 7-Eleven to seek an IT-based business solution that could incorporate and comply with these new requirements.

7-Eleven's IT function had its own challenges as well. Until March 1999, the company was running its own custom financial application on an IBM AS/400 platform — the precursor to the IBM System i of today. The application managed only the financial aspects of the business and not the retail component of 7-Eleven's operations. Lack of closed-loop processes resulted in poor store information management, which in turn led to less than ideal management of stock levels. Consequently, 7-Eleven wanted a new business system that combined a retail solution with an integrated financial solution.

7-Eleven also recognized that it had to upgrade its existing hardware infrastructure in order to implement and support its new retail solution. The company also needed to address other infrastructure issues that included having a good disaster recovery system as part of a better business continuity plan, as well as catering to upcoming projects that require additional performance in terms of disks and capacity. All of these goals were expected to be accomplished without additional headcount in the IT department, while building and maintaining a dynamic IT environment that caters to future growing business needs.

THE SOLUTION

The best way to describe the overall guiding principle for selecting a solution is perhaps a quote from Michael Peck, IT General Manager, 7-Eleven Stores Pty Ltd. Australia: "At 7-Eleven, business drives the technology, technology does not drive the business."

7-Eleven selected SAP as its retail solution to provide in-store visibility, support and manage cost in retail, rebates and master data. In addition to having a good functionality fit, the scalability of the SAP solution is in line with the growing business needs of 7-Eleven. The SAP retail solution also integrated well with the existing SAP financial applications suite eliminating the need to manage the interfaces between the retail environment and that of the financial applications. This high level of integration, plus master data management capabilities, enabled what 7-Eleven calls "one version of the truth."

7-Eleven also decided to upgrade its AS/400 machine to an IBM eServer iSeries — at that time, the most advanced version of the System i family. It selected the iSeries as its infrastructure platform based on past good experience with IBM, as well as the reliability and scalability of the product. It also allowed the company to maintain its lean IT headcount without adding a dedicated database administrator.
In July 2006, 7-Eleven further upgraded its System i infrastructure. It also signed a three-year contract with IBM to host its SAP production environment in an IBM data facility. In addition to 24 x 7 operations and support (including a secured and air-conditioned environment, daily backup, back-up power, and high availability and high reliability), hosting the SAP production environment in an IBM data facility also affords the company a more superior disaster recovery capability — in line with its desired business continuity plan. Finally, outsourcing the management of its SAP production environment allows 7-Eleven to meet a key need in terms of the IT challenge of supporting a rapidly growing business without having to add IT headcount.

Currently, 7-Eleven has two System i servers, namely, the System i 550 (development environment) and the System i 570 (production environment). They are integrated with 27 System x boxes that use the System i environment as a storage area network (SAN). In addition to the SAP workload, the System i supports workload from the System x devices that control the in-store environment, including point of sales (POS), and the back-office PC. There is no direct in-store application (except a reconciliation application). Access to the SAP application is through the SAP Portal running on a System x environment. 7-Eleven maintains a centralized business with no data held at the stores.

Working together for eight years, 7-Eleven has built a strong relationship with the IBM System i brand and business entity. According to Peck, the System i group brings value to decision-making criteria, particularly with respect to advice on the System i landscape. The SAP team provides good support for the SAP retail solution, as well as guidance on product direction and future plans.

**THE RESULTS**

Overall, the total solution met 7-Eleven's expectations, and brought about:

- **High near real-time visibility.** The 7-Eleven operation team in the back office are now equipped with timely information at the store level, allowing them to better manage in-store stock levels.

- **Greater efficiency.** The various 7-Eleven stores are now able to place and receive orders efficiently from the back office.

- **Better management.** The solution allows reports to be generated on demand from the back office, thus improving business management.

- **Consolidation.** The solution enables 7-Eleven to consolidate machines/devices and simplify management.

The SAP software provided 7-Eleven with a strong upgrade path, as well as different functionalities on a timely basis.
IBM's System i infrastructure effectively supported the SAP solution. The primary benefits of the System i infrastructure include:

- The integration of System x and System i enables 7-Eleven to utilize resources (particularly the disks) on the System i box to reduce costs, and to provide better recovery in the event of a disaster, or in the event that the company loses one of its servers.

- The System i machine provides for limited downtime. Over the past three years, the uptime of the system had remained at 99.9%.

- The increased agility of the System i results in faster response time.

- The headcount of the IT department remains constant, despite increased IT usage.

- The System i infrastructure helps maintain an environment that does not impact the daily operations of the business.

The bottom line for 7-Eleven customers is a more pleasant experience: products are available in the stores when customers wish to purchase.

**THE FUTURE**

Moving ahead, 7-Eleven aims to implement several key business strategies, including:

- **Launch a fresh food offering.** This involves introducing freshly prepared foods such as sandwiches, doughnuts, pies, and pastries, along with fruits and vegetables.

- **Build capability to be able to aggregate orders.** This allows a single order for products to be placed with the wholesaler for all 7-Eleven stores, and the products ordered to be delivered to the respective store in one go.

- **Grow its store base in Australia.** This involves increasing its presence from 360 sites to more than 500 sites.

As for enabling technology in support of these business strategies, 7-Eleven plans to:

- Install a SAP BW (Business Warehouse) and a SAP product called POS Data Manager (which takes POS transactions and feeds them into SAP BW). The POS Data Manager helps aggregate transactional information, allowing 7-Eleven to extend the SAP transaction system with business intelligence capabilities to support a greater level of decision making.
● Upgrade the SAP system to the latest SAP NetWeaver platform, including the upgrade of its SAP Portal to provide more information at the store level.

● Achieve the desired objectives by maintaining the existing headcount of the IT staff.

The current solution in place provided a strong foundation enabling 7-Eleven to further upgrade and expand on in order to support its business objectives. 7-Eleven is confident that they will continue doing "more with less" through dynamic IT.