

Apex networks its "silent salespeople" using SAP ERP

The Land of Vending Machines



Visitors to Japan are immediately struck by its many vending machines. Apex, which operates 6,500 of these machines, needs to quickly and easily call up sales figures to identify sales trends and respond more flexibly to customer requirements. How can it do this?

Machines selling drinks, snacks, and other useful items for travelers and stressed city dwellers can be found on every street corner and at every train and metro station in Japan, even on sacred Mount Fuji. Around half of the vending machines offer drinks – primarily coffee, tea, lemonade, and fruit juices – but customers can also buy toys, umbrellas, and flowers from these silent salespeople.

Vending machines are an integral part of Japan's service culture. The country boasts an estimated six million of these *jidouhanbaiki* – one for every 20 inhabitants – making Japan the undisputed world leader. The boom began back in the 1960s, with Apex Corporation playing a key role. Since the company was set up in 1963, its research staff has focused on designing the perfect vending machine. Multinational corporations like Toyota started installing fully automatic machines in their cafeterias in the 1970s. In the 1980s, Apex was the first company to develop machines that dispensed both hot and cold drinks.

Today, Apex operates 6,500 vending machines all over the country – from the island of Hokkaido in the north to the tropical island of Kyushu in the south of the Japanese archipelago. Most of these machines serve hungry and thirsty office and factory employees in industrial centers. Workers do not even necessarily need to pay cash for their drinks and noodle soups (a great favorite) because most machines accept e-money.

Apex is constantly working to enhance and perfect its machines, focusing first and foremost on customer satisfaction. Pampered customers can choose among different flavors to create their own favorite coffee: The ingredients are freshly mixed for each cup.

Quality, not quantity

The Apex philosophy is to concentrate on high-end products. The company has extensive design expertise, and its engineers build the latest technology into its machines. Energy-saving machines come equipped with sensors to determine whether prospective customers are in the vicinity. If there is no one nearby, the machines switch to economy mode. The machines are smart in other ways, too: They save electricity by producing ice or hot water in off-peak periods.

Apex attaches great importance to environmental protection and provides recycling systems for cups and cans, such as turning cardboard cups into toilet paper. Many Apex customers, which include most of the schools in Japan, take part in recycling programs.

Up-to-date statistics add value

To align these smart functions with customer requirements, Apex needs an IT system that provides fast, reliable data on sales trends and consumer behavior. Monthly sales and operating statistics are particularly important, and the current SAP ERP application supplies these much more quickly than the Apex legacy systems.

Gone are the days when sales staff entered monthly sales figures manually in long lists that then had to be input into the IT system. This process was not only time-consuming – it took a month to complete – but was extremely prone to error. Each vending machine is now fitted with a counting device that calculates the net monthly revenue from the number of cups sold and feeds this data directly into the SAP ERP software. ▶



■ APEX CORPORATION

Founded in 1963, Apex has been one of the pioneers in the development of vending machines. In 1971 it launched the first beverage vending machine in Japan, followed in 1974 by vending machines which sell snacks and cigarettes in addition to beverages. The company develops cup vending machines, raw materials for beverages, and robots used to prepare the vending machines. Apex employs 1,800 people and reported sales of more than 63 billion Yen (approximately U.S.\$594 million) in 2006.

www.apex-co.co.jp/en

“Thanks to SAP we have more visibility in sales and operations, and we can better react to new trends.”

**MASATSUGU KUNO,
IT DIRECTOR APEX**

The machines also record data that can be converted into sales statistics to enable better responses to seasonal fluctuations and faster reactions to changes in consumer behavior. Company executives can now see at a glance which vending machines are profitable and which product ranges are selling well, and they can draw conclusions accordingly. Apex advises customers with on-site vending machines on how to stock the machines.

The ratio of hot and cold drinks is adjusted to reflect seasonal demand. Apex can also detect trends: Lifestyle beverages typically sell better in trendy locations with a younger clientele, whereas older customers prefer traditional drinks such as tea. Statistics and analyses boost the company's earnings by indicating which product lines, machines, and sites are most profitable.

Transparent data supports planning

“The SAP system allows us to see the profitability of the individual vending machine. We can see how many cups have been sold per day,” explains IT director Masatsugu Kuno. “Thanks to that visibility in sales and operations, we can better react to new trends. It gives us real-time information for sales planning.”

Stocktaking has become easier and quicker: Data is now transferred in real time instead of by batch processing. Be-

cause the company makes money only when the vending machines are working, it is vital to minimize downtimes and keep track of malfunctioning machines so they can be replaced as fast as possible. Using a mobile computing device, maintenance personnel can forward this data to the SAP system and call up downtime statistics on site. “The benefit is that we get a general failure trend by machine type. And that has helped us take action,” says Kuno.

The software also helps Apex distribute its machines more efficiently. Real-time inventory data pinpoints which machines are located in which warehouses so that headquarters can arrange to transport them quickly to where they are needed.

Kuno expects the SAP platform to be flexible enough to support Apex in meeting future challenges. One challenge is to design vending machines that can dispense free drinks in the event of a national disaster, such as a major earthquake – Japan experiences around three earth tremors a month.

Apex also hopes it will be easier to extend the payment options, including the e-money function, and adapt them to market requirements. “We want to expand the system to incorporate that level of flexibility,” says Kuno. “And SAP ERP is the platform for both current and future vending machine designs.”

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