



More money with

cashless

vending

Like all major brands, Pepsi manages every aspect of its branding and requires all suppliers to undergo rigorous trademark authorization consisting of lab testing and market research trials to ensure that the consumer experience is what Pepsi expects.

After more than five years of hard work and a USD 10 million investment, TNS recently won brand authorization from Pepsi and will be equipping some 10,000 vending machines for wireless credit-card processing across the US over the next year.



Vending machines are very nearly ubiquitous, at least in populated areas. Not surprisingly, the vending machine industry is dominated by Pepsi and Coca-Cola. Of some five million vending machines in the US, more than half are beverage vending machines, while the rest mostly sell snacks. There are estimated to be an additional three million beverage machines in Europe and an approximately equal number in the Asia Pacific region, bringing the total number of beverage vending machines in the world to about ten millions.

As can be expected, the vending industry, which is also called automatic retailing, is one with razor-thin margins. Even on a hot day with no other source of refreshment, people will resist paying a price for a soft drink from a vending machine that is significantly higher than in a retail store. Yet the vending machines that seem to be almost everywhere must be stocked and serviced and money collected, resulting in overhead costs that are significantly higher than in retail stores. Because they are so commonplace, few people think about the evolution of vending machines. The function of these large boxes about the size of a refrigerator is simply taken for granted. Inside there is a stock of refrigerated beverages in cans or bottles, one of which will be dispensed when the proper amount of money is inserted. Although the advertising on the outside of the machines may change to reflect the latest marketing campaigns, the basic principles on which beverage vending machines operate would not seem to have changed since the early 1920s when they were first introduced.

About 25 years ago, automatic retailing faced a crisis when the price of a soft drink had risen to an amount that was not convenient to pay with coins. Margins were stuck at artificially low levels, thus limiting growth. The solution came with the dollar-bill validator, which revolutionized vending and fueled strong growth for many years. Today, however, automatic retailing is undergoing yet another revolution that promises to be even more dramatic.

Installs in just seconds

"Cashless vending is the greatest innovation in vending in more than 25 years," says John Powell, vice president of sales and marketing at Transaction Network Services (TNS), one of the world's leading providers of data communication services for transaction processing. After more than five years of hard work and a USD 10 million investment, TNS recently won brand authorization from Pepsi and will be equipping some 10,000 vending machines for wireless credit-card processing across the US over the next year. TNS also hopes to deploy its solution in Europe and Asia. Synapse cashless vending is a completely bundled solution offered by

TNS that makes it easy for Pepsi bottlers and distributors to equip their vending machines. Installation takes just 15 minutes and involves mounting a combination card reader/dollar-bill validator that is compatible with virtually all existing Pepsi machines. The Mobitex modem is a separate unit that is mounted inside the

Cashless vending provides key value adds for bottlers

vending machine. There are no moving parts, and TNS uses the same cables and interfaces as found in legacy vending machines.

Achieving this status in which TNS is an exclusive supplier to Pepsi in the vending industry, took considerable dedication and effort. Like all major brands, Pepsi manages every aspect of its branding and requires all suppliers to undergo rigorous trademark authorization consisting of lab testing and market research trials to ensure that the consumer experience is what Pepsi expects. The equipment that TNS supplies to Pepsi bottlers is now trademark authorized, and TNS is the sole supplier for cashless vending.

Value adds for bottlers

"Cashless vending provides key value adds for bottlers," continues John Powell. "Initial field trials at convention centers, for example, show that credit-card usage ranges from 30 percent to as much as 50 percent for some machines. Credit card usage at other high-value locations such as hotels is only slightly lower." On average, the increase in sales was 22 percent in the first eight weeks. This was obviously a key factor in the decision to roll out 10,000 units. Other important concerns were reducing cash handling and improving logistics and reporting. The Mobitex solution supplied by TNS also provided some unexpected advantages. Because the machines employ wireless communications, they are more mobile, requiring only a power source. This is a major benefit in a convention center environment where up to 50 percent of all vending machines are moved. In this environment, a fixed dial-up connection is simply not an option.

Benefits with dynamic routing

As specialists in transaction processing, TNS has fine-tuned every aspect of system performance. Thanks to

Mobitex, transaction times for credit-card validation are almost instantaneous, which is always a critical factor for sales. "We typically do approval of credit-card transactions in less than five seconds. There is no way people are going to stand waiting if the technology introduces any delay," notes Charles Nelson, president and CEO of Velocita Wireless, which provides wireless data communications via Mobitex for the cashless vending solution.

Another important point is that the transaction appears the same as a cash purchase for the bottler. "We don't try to force EFT type settlement on to the bottler," notes John Powell. "In effect, at the processing center, we translate credit-card settlement into cash-based transactions. TNS can also provide reconciliation of all transactions all the way back to the last time the vending machine was filled." The patented TNS system allows drivers to swipe a card telling the machine to reconcile its transactions so that TNS can report back to the bottler all credit-card and cash transactions. Electronic meters are read inside the machine that count card and cash transactions, making the system fully accountable to the bottler. The report produced by the TNS system can be compared with the bottlers' own meter readings. In today's business world where new financial regulations such as the Sarbanes-Oxley Act are placing greater requirements on companies to audit all transactions, TNS thus provides a significant competitive advantage.

An intelligent vending machine cannot only track sales and report errors and malfunctions. Because all transactions are recorded, the system has the capability to determine what machines need servicing. This would allow bottlers to take route management to the next level of dynamic routing.

"Dynamic route management is still in its infancy," notes John Powell. At present, the data needed to monitor stocking of vending machines is not registered centrally, but rather recorded individually by drivers as they complete their routes. However, TNS is working actively with major bottlers to change the process.

"Now that bottlers are beginning to understand that cashless vending will significantly increase sales, we can move to the next level. With dynamic route management, costs can be reduced substantially in an industry with razor-thin margins. The potential is enormous," concludes John Powell.