

Turning Vending Machines into Internet Appliances

Vending machines provide companies with increased exposure of their products to the marketplace. Unfortunately, almost half of the potential revenues from vending machine sales go unrecognized each year. Depleted product inventories, broken equipment, and transaction failures lead some consumers to take out their frustrations on the machine itself.

The current mode of operation for the vending machine industry is not unlike that of other industries deploying remote systems. Routine service schedules and routes are formulated based upon marketing projections and maintenance records. This approach has significant shortcomings, since it is the unanticipated events, such as erratic weather patterns or a blown compressor, which have the greatest impact on product demand and equipment uptime.

Thanks to iControl Incorporated, a new day is dawning for these “dumb” devices. iControl offers products and services that convert remote and distributed systems into Internet Appliances, allowing companies to monitor, control, and maintain their offsite assets “anytime, anywhere”.

Most companies who offer Internet connectivity products provide only passive inventory monitoring of the vending machine. iControl's products fully instrument key discrete and analog signals that report system performance and control motors and switches. This bi-directional connection provides service companies with the ability to predict and prevent equipment failures.

iControl offers a variety of Local Area Network options that support clusters of vending machines. Bluetooth and longer-range 2.4 GHz Frequency Hopping Spread Spectrum (FHSS) embedded radio modems provide a cost-effective means of sharing one Internet data connection point among multiple data collection points.

A variety of connection options are available so that no matter where the vending machine is located, the iControl gateway can reach the Internet. Unlike our competitors who supply passive inventory-monitoring devices only, iControl embeds our affordable, active monitoring and control units that transmit data to our Internet gateway. The gateway converts the data into Internet Protocol and uses a choice of PSTN, cellular analog, CDPD, or satellite connections to the Internet. Our secure Internet site hosts a suite of web applications for trend analysis, threshold monitoring, report generation, and interactive commanding.

Another unique feature of iControl's solution is the ability for our vending machine client to setup pre-paid, online accounts with consumers that enable “cashless, cardless” transactions. Users simply punch in their account codes using the keypads on the vending machine – no need to carry cash or cards. Parent can even control the spending of their kids and not have to worry about lost or stolen money. For those wishing to use wireless devices (PDAs, cell phones) to conduct the transaction, iControl has integrated a Bluetooth-compliant modem. In this representative example, we not only increase our customer's equipment uptime, but we actually extend the reach of our customer's product to new users.

