

Case study - Pfizer Inc. anti-counterfeiting pilot

Feb. 8th, 2006 - Countertop RFID solution provides plug and play functionality to a diverse customer base in Pharmacy retail market.

The Challenge

When Pfizer Inc. decided to pilot its web based drug authentication solution on its Viagra product line it was clear that the data collection device that sat at the end of the supply chain, the pharmacist's countertop, would need to address a number of challenges in order to support the application. These issues included:

- *A diverse IT environment* – There are many Pharmacy computer systems in use throughout North America, e.g. Windows, Linux, mainframes, Mac OS, even DOS, etc. Developing a middleware that could control the data collection device for all these operating systems, coordinating the software installs across thousands of locations and finally supporting the middleware could prove to be a logistical nightmare.



- *Often IT expertise is at a premium at non-chain pharmacies* – All the major chains have support staff available to assist IT issues at the retail level, however in small chains or one-off

pharmacies, outside IT expertise is often used. So in order for the data collection to be effective the implementation had to be as simple as possible.

- *Both barcode and RFID identifiers will need to be read* – Because data redundancy was a requirement both a RFID tag and matching barcode are used at the item level in case the RFID tag is inoperative. This meant two separate systems or a reader at could handle both technologies.
- *Over time many different types of tags may need to be accommodated* – Pfizer is a leader in the drug authentication space and has chosen Tagsys tags for their solution but other drug makers are considering different tag maker partners for their solutions. Eventually the pharmacists could be faced with the prospect of reading a number of different tags and data structures in order to complete the authentication process for various drug makers. However no pharmacy wanted to use more than one device to collect the necessary data.

Revision 1.0

- *Device footprint and cost are important* – Many pharmacy work areas are tight for room and counter space is at a premium. As well there are many thousand pharmacies in North America and the cost of outfitting them for supporting the drug authentication process is an issue. The device had to have a small footprint and be cost effective.

The Solution

Ideally the data collection device which sits on the pharmacist's countertop will be operating systems agnostic, will be plug and play, will have dual reader capability incorporating both barcode and RFID, can read several different types of tags and is inexpensive. The Pfizer pilot team chose the Intelletto Technologies, INT 101 Multiport Companion. The INT 101 has a unique inboard processor allowing it to perform several functions without any computer support thus eliminating the need for operational middleware. This intelligence also frees it from reliance on the connected computer thus the INT 101 can route the gathered data to any computer which has a USB or a serial port regardless of its operating system. The combination of these features makes the INT 101 a simple plug and play installation. As well, the INT 101 can read any type of ISO 15693 tag, i.e. I Code1, Tagit HF, SL1, Tagsys 370, TI ISO, etc. A barcode reader can also be plugged into INT 101 and the barcode read can be routed by the inboard intelligence to the output. Finally the INT 101's footprint is a little bigger than a paperback novel and the device costs out at less than \$1,500 for quantity one.

The Benefits

The advantage to the pharmacy is a fully functioned RFID reader, which reads a variety of tags without reset or changing modes (which means the reader holds its value in a possible mixed tag future) as well as barcodes. It can be easily installed without expert guidance to any existing computer system making integration and installation hassle free. As well there is no middleware layer to install, run or update. The INT 101 has onboard firmware programming that eliminates this middleware layer. Finally pharmacy countertops are not monopolized with new expensive RFID devices as the INT 101 is very cost effective for this application without the burden of expensive implementation.

The advantage to the Drug maker is that the INT 101 is pharmacy friendly which eases the widespread acceptance of drug authentication. As well, the logistics and project management of a wide scale implementation are simpler and less expensive with the INT 101, simply ship the INT 101 to the pharmacies with some easy instructions.

The Government and the Drug maker are more secure that the legitimate drugs are being delivered safely to the consumer without counterfeit drugs being injected into the system.