RFID UPDATE

By Katherine Albrecht

Dept. of Defense to Coordinate Government-Wide RFID

I understood the dangers of the private sector having access to a globally linked database of all consumer activity. It's why I formed CASPIAN, Consumers Against Supermarket Privacy Invasion and Numbering, to fight it. My biggest concern, however, was what would happen if the government started using radio frequency (RFID) technology. RFID consists of tiny computer chips hooked up to miniature antennas that can be slipped into products to silently transmit data about them and the people who own them. This was the worst-case scenario, every Christian's nightmare.

The announcement came much sooner than I had ever expected: The Department of Defense is now organizing the U.S. government's RFID program.

Will there be any place to run and hide?

MIT's Auto ID Center began working on RFID technology in 1999. Within three years they had perfected plans to build a global network capable of tracking every product on Earth. Their work attracted over 100 global corporate sponsors and two significant government sponsors: the Department of Defense (DOD) and the United States Postal Service. The Department of Defense is one of the world's largest consumers of goods, using massive quantities of clothing, uniforms, food, and toiletries every day. Because these items are shipped all over the world, last year the DOD asked its suppliers to start using RFID to help them keep better track of their inventory.

Around the same time, Wal-Mart told its suppliers that they had to put RFID tags on crates and pallets containing products being shipped to their stores, as well. As the world's largest and most powerful retailer,

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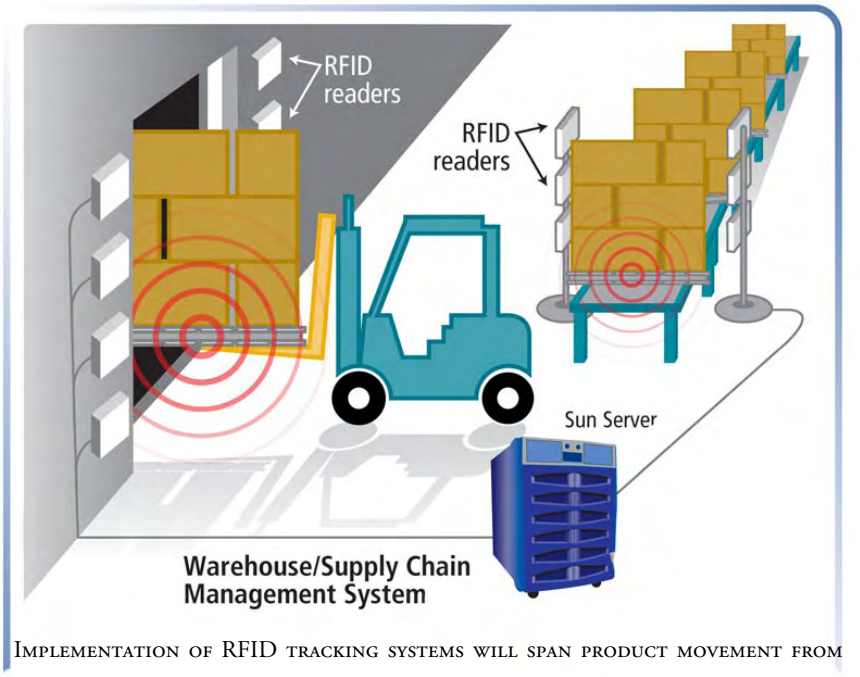

IMPLEMENTATION OF RFID TRACKING SYSTEMS WILL SPAN PRODUCT MOVEMENT FROM RAIL, TO TRUCK, TO FORKLIFT, TO WAREHOUSE, AND FINALLY, DELIVERY TO THE RETAIL STORE. THIS IS THE POINT IN THE DELIVERY CHAIN WHERE RFID TRACKING WILL STOP. IN A FEW YEARS, HOWEVER, TRACKING WILL EXTEND TO THE ITEM LEVEL IN RETAIL STORES. SUN MICROSYSTEMS MANAGES THE INVENTORY DATABASE. IMAGE COURTESY OF DOUG CHANEY FROM DC LOGISTICS IN DALLAS, A COMPANY AT THE LEADING EDGE OF SUCH SYSTEMS, AND WHICH IS HELPING VENDORS COMPLY WITH WAL-MART'S NEW RFID INVENTORY TRACKING REQUIREMENTS.

No Place to Hide continued

Wal-Mart sets the tone for the entire retail industry. Their decision to support RFID technology has reverberated throughout the manufacturing and retailing communities. The consequence is that those companies who choose not to use RFID may soon be unable to sell their products to the retail market.

The domino effect of these two giants—one in government, the other in commerce—demanding RFID compliance from their suppliers has been enormous. But the Department of Defense has taken it one step further. Not content to merely blaze a trail for others to follow, the DOD is actively creating an intra-governmental RFID Council to coordinate RFID plans. Their goal is to ensure that all departments of the federal government are using the same version of RFID technology—and that everyone gets on board.

Fully-coordinated government-wide RFID tracking

The Food and Drug Administration said that it supports and will encourage the use of RFID tags on prescription drug shipments to prevent counterfeiting and to facilitate the flow of products. The U.S. Department of Agriculture has announced that it wants all animals raised for food in the United States to be tagged with RFID and tracked in a federal database. The database would keep track of when they're born, when they cross state lines, when they change ownership, when they're slaughtered and a host of other details. Eventually, all branches of the Federal Government are expected to become involved in the numbering and tracking frenzy.

Ed Coyle, chief of the DOD Logistics Automatic Identification Office (AIT), recently confirmed the plan, saying, "We've jointly decided that we need an intra-government council going. I don't see a lot of inconsistency with what the other government agencies are doing. We all agree we should be [using the same technology]."

On the commercial front, the Uniform Code Council (UCC), which handles American bar codes, has teamed up with its European counterpart, EAN International, to create a global standard for RFID. They have developed something called the EPC or "electronic product code," designed to replace the barcode, which some are hoping will be on every consumer product by the end of the decade. This global standard means seamless, worldwide integration of all product data; the type of inconsistency and incompatibility that emerged with VHS vs. Beta video formats, for example, will not be a problem. They've seen to that in advance this time.

> "companies who choose not to use RFID may soon be unable to sell their products to the retail market."

The makings for disaster

Currently the high price of RFID tags is perhaps the main reason we are not seeing them on socks, pens and pencils, light bulbs, and everything else we own. Once the cost decreases to a fraction of a penny per tag, however, this structural impediment will disappear. As the U.S. government, Wal-Mart, and their suppliers gear up for widescale RFID implementation, millions of dollars worth of contracts are going to the manufacturers of RFID chips, antennas, tags and reader devices. This investment in infrastructure means bigger factories, better fabrication methods, large scale production runs, and other refinements—all of which are quickly lowering the cost of RFID technology and making its production more efficient.

In sum, here are the makings for disaster: a standardized RFID format that can eventually record and track product data anywhere on the globe; widescale RFID adoption driven by both the world's largest retailer and its most powerful government; cheap, ubiquitous tags; and a trend for government and corporations to share people's personal data for security purposes. (Remember last year when Delta and Jet Blue airlines gave passenger records to the government to test an invasive passenger screening program? That was just the tip of the iceberg.)

Of course, eventually all the commercial databases of the world will be linked with the world's governing powers for use against those who follow the Bible's command to resist the global numbering and marking system.

The pieces for that scenario are rapidly falling into place. A time is coming when every human being will have one card—or one chip—used to open the door of their car, get into their office, turn on their computer, pay their bills, receive medical care, and buy their groceries. This one crucial device will be essential to performing the functions of modern life, and it will all hinge on one thing—a computer chip and a number that every person will have in order to buy or sell.

Enter RFID.