



RFID: What does Congress need to know?

It is easy for most individuals involved with the movement of goods throughout the world to understand the benefit of RFID; for the consumer, however, the benefit might not be so obvious. It is important to understand how consumers are affected.

There are three main areas of benefit to consumers worldwide.

- reduced cost of goods,
- a greater insurance of safe goods,
- more availability of goods when they are wanted and needed

1. Reducing the cost of goods to the consumer using RFID encompasses the idea of being able to drive existing cost out of the global supply chain. One area gaining a great deal of traction is the anti-counterfeiting and brand assurance that RFID could provide. Major brands lose millions and collectively would approach billions in lost revenue to this un-lawful activity. This directly affects the cost of goods worldwide to the consumer. All industries see more visibility into the logistic chain as a way to reduce their supply chain cost. More visibility and traceability would reduce the cost of transaction reconciliation and the massive cost of processing returns and claims. As this technology is implemented by industry to reduce the supply chain cost, we as consumers, as well as our public officers, need to be aware of the technology and demand that consumer pricing fairly reflects the gain made in reducing cost.

2. The assurance of the consumer that the products they are buying are safe for consumption and use is a very important reason why RFID benefits the consumer. The very idea of being able to accurately trace the origin and supply chain of goods without human intervention begs for the use of this technology. RFID has the potential to help assure the consumer that the goods they are buying are safe from bio-terrorism, infectious disease, and dangerous products resulting from poorly manufactured goods.

3. The availability of goods is one of the main issues that brought about many of the mandates for RFID use from the retailers. They have publicly stated one of their goals is to reduce out-of-stocks at the retail outlet level. This area seems to be important for all the supply chain owners' world wide, because it could justify the implementation of this technology by increasing revenue. The increase in revenue comes from always providing the consumer with what he or she wants or needs, when they want or need it. Because there is visibility all the way to the outlet shelf, theoretically the replenishment and fulfillment process could approach 100% effective and reliable.

The RFID technology industry is not young in years, but it is relatively small. According to many analysts, this industry is primed for exponential growth over the next three years. The reality is that there are obstacles to the success of the RFID industry as whole.

What are the three primary roadblocks to this technology?

- They are consumer privacy concerns,
- technology, and
- adoption.

1. Consumer privacy is important and should be protected as a human right. The RFID industry should work with government to insure that there is no abuse of privacy and that the public is educated about this technology and becomes comfortable with its massive benefit to consumers.

2. The technology itself needs to improve in the area of readability and cost. The challenge of material such as metal and certain liquids has to be addressed and solved. The industry needs to look at creative ways to reduce the cost of RFID and the cost of implementing RFID. The incremental cost to an item for attaching an RFID label needs to be close to the cost for a label today. Government needs to help increase the availability of grant funds for RFID research by companies and universities. Additionally, as technology companies begin to make revenue from RFID, they must put a portion of the revenue back into research to help solve these technology hurdles and keep the RFID industry moving forward.

3. The benefits from RFID technology are vast and will never be fully realized without global adoption. We know global adoption will be facilitated by global standards. Groups such as EPCglobal, Inc., ISO, EAN, and the UCC are helping with this effort and they are making significant progress. Some US government agencies, such as the FDA and DOD, have made policy statements regarding RFID.

Now it is time for the US congress to take a hard look at this technology and find ways to help assure consumer privacy, make funding for technology research available, and to promote global adoption for the sake of consumers.