

Today's RFID Update

1. [Featured Sponsor: Impinj](#)
2. [Editor's Note](#)
3. [Classified Listings](#)
4. [Top Story: An Interview with RFID Trailblazer H. D. Smith](#)
5. [Vertical News, Sponsors: Domino, FORTE, MTI Wireless Edge](#)



Editor's Note: Today's top story is an interview with Robert Kashmer, the VP of information technology at H. D. Smith, the fourth largest pharmaceutical wholesale company in the US and widely-recognized pioneer in RFID adoption. Leslie Downey conducted the interview. Leslie is principal and founder of [RFID Revolution LLC](#), a Washington, DC-based firm providing RFID marketplace consulting services.

An Interview with RFID Trailblazer H. D. Smith

Monday August 21st, 2006

By [Leslie Downey](#), RFID Revolution

On a visit last month to Springfield, Illinois, home of Abraham Lincoln and now the fabulous new Abraham Lincoln Presidential Library and Museum, I was fortunate to have a chat with Robert Kashmer, vice president of information technology at RFID pioneer [H. D. Smith Wholesale Drug Company](#). In the summer of 2005, the company conducted the nation's first RFID-enabled pharmaceutical e-pedigree trial with Purdue Pharma. I wanted to find out what motivated them to take this plunge, and what they are up to now.

H. D. Smith remains family owned since its founding in Springfield in 1954 by Henry Dale Smith. From six distribution centers nationwide, it delivers more than 35,000 products to independent pharmacies, small retail chains, and hospitals. With \$2.5 billion in sales, it is now the fourth

largest national pharmaceutical wholesale company in the U.S., having ranked seventh just three years ago.

Since joining H. D. Smith in 1995, Kashmer has guided its RFID trials and implementations. In an office lined with boxes (the IT department had just moved to new quarters as part of company expansion), he responded to my questions.

What has fueled your company's rapid growth during the last ten years?

We're extremely customer focused. We provide Level 1 [IT] support -- answering basic questions from our customers concerning our software -- from each of our distribution centers. Level 2 support -- responding to more complex questions -- is provided out of our corporate office.

But, in addition to our immediate customers, we also focus on the end customer, the patient.

We pay attention to our associates, too. We have very low turnover.

When did you begin your first RFID pilot?

In March, 2004, our company began shipping RFID-tagged Class II drugs [narcotics] to a variety of customers -- retailers and hospitals -- at five locations. H. D. Smith actually applied the RFID tags at the bottle level in the distribution center due to the lack of tagged products at the time. That was more than a year before our Oxycontin e-pedigree trial with Purdue Pharma, and nine months before Wal-mart began its RFID roll-out with its "top 100" suppliers.

What motivated you?

Patient safety was and is our primary motivation. RFID was the most promising technology at the time, and we wanted to gain experience using it prior to any state and federal pharmaceutical pedigree requirements coming into effect. Some of these are or will be in force this year. For example, the state of Florida's Prescription Safety Act took effect this month. On the federal side, the FDA will begin enforcing pedigree requirements in the Prescription Drug Marketing Act enacted in 1988 and commonly called "PDMA".

While these allow the use of paper in tracking a drug's pedigree, we want to do as much as we can electronically. Paper is not only inefficient, it's less effective -- it can be forged more easily. We have been experimenting with RFID and other technologies in an effort to build in safeguards that really work.

What RFID technology did you use in your March, 2004 trial?

We used [Class 0 tags from Symbol Technologies](#) that contained only a serial number assigned by H. D. Smith. In other words, the I.D. did not contain a manufacturer code, "the Manager Number" in EPCglobal's EPC. It was a "license plate", so to speak, meaningless without access to our database. Once we verified the tags in the shipment, we sent the customer the ASN [Advanced Ship Notice].

We tagged only objects -- bottles. We believe that tracking cases and pallets in the absence of item-level tracking allows for error. If you don't have to tag all the items in a shipment, the wrong items can be shipped. And across the supply chain it's easier for counterfeit items to be slipped into an order.

How did you select the customers that participated in this trial?

We worked with customers that agreed to remove the tag upon receipt, typically by discarding the bottle as part of repackaging. This was due to privacy considerations. Very few of the products we ship to pharmacies or hospitals end up in the hands of the consumer, but there may be a few, and we did not want to allow for that.

Since then, we've expanded RFID-tagged shipments to many more locations. We're in the process of adding 20 independent retail accounts, but I'm not sure when this roll-out will be completed. We still require tag removal.

Did the customers electing to participate in your March, 2004 trial buy their own RFID readers?

No, we supplied the readers and helped with setup.

Why did you choose UHF?

That was the trend in the retail marketplace. However, we consider ourselves frequency agnostic. We are willing to use whatever our suppliers and customers think is appropriate for their business, and, apart from that, whatever works best in our own business. Today we're receiving HF-tagged shipments from Pfizer using multi-protocol readers.

In fact, we're receiving RFID-tagged merchandise from four or five manufacturers, in all different size containers and orientations. Although Gen2 has helped improve read accuracy, we are continually experimenting with antenna tuning and reducing power.

What's the status of your RFID-enabled e-pedigree tracking?

Our trial with Purdue Pharma ended in October, 2005. It was meant to be a proof of concept, with

a limited project life. However, as a result of the success of this pilot, our company licensed [SupplyScape's software](#) as our e-pedigree solution.

Currently we are not participating in any RFID-enabled e-pedigree trials. We're still receiving RFID-tagged shipments from Purdue, but they're not being authenticated.

In Florida we are authenticating [back to the manufacturer] at the lot level all shipments from our Pompano Beach DC. We're doing this electronically where possible. This is still an "e-pedigree" application, even though it doesn't involve RFID. We are now expanding the application, having purchased a license to use SupplyScape's software in all 50 states.

We've designed every RFID or pedigree pilot with the assumption that we'd proceed to implementation. A lot of energy has gone into developing a flexible IT architecture that will accommodate the differences in regulations and manufacturers' implementations.

When do you expect to see a return on your investment in RFID?

That's a number of years away! There are still too many touches involved with RFID-tagged shipments. However, we are confident there will eventually be ROI, when implementation by pharmaceutical manufacturers is widespread. More comprehensive enforcement of PDMA across all 50 states should help drive that.

To be honest, I get discouraged when I hear people in our industry talking constantly about "finding the ROI". This is about patient safety! Increasing efficiency is a goal, but secondary.

In recent years, criminals around the world have expanded their activity from illegal drugs to counterfeiting prescription drugs. Not only is it lucrative, but the penalties have tended to be less severe. RFID and e-pedigree technology will prevent a lot of this activity, not only making legal drugs safer but allowing law enforcement to focus more on illegal drugs.