

The software giant's stepped-up RFID activities signal the start of the next stage of RFID's development—a massive increase in software applications that leverage RFID data.

By Mark Roberti

Aug. 20, 2007—For the past two years, manufacturers of radio frequency identification hardware—transponders, interrogators and networking devices—have invested millions of dollars developing products that are much improved over what we saw just a few years ago. There has been a great deal of innovation and product enhancement. But what's been lacking in the market is software that allows end users to leverage the information the tags and readers provide. That's about to change.

[Microsoft](#), the world's largest software company, is stepping up its activities in the RFID market, and that signals a movement in the marketplace. Over the next year or so, we will see a lot of companies developing applications that provide cost-effective solutions to business problems. Many of these apps will deliver value quickly, because they will be geared toward a particular industry pain point or address inefficiencies that cross many industries. For instance, some applications will focus on tracking and maintaining assets.



Of course, there is already a good deal of RFID software on the market, and much of the early development has been around middleware. [IBM](#), [Oracle](#) and [SAP](#), as well as smaller companies such as [Avicon](#), [GlobeRanger](#) and [Shipcom Wireless](#), have developed software critical to filtering and managing RFID data. Others, including [OAT Systems](#), [T3Ci](#), [TR3 Solutions](#) and [TrueDemand](#), were among the first to develop applications that could analyze RFID data and turn it into actionable information.

Microsoft, which is playing in the middleware space with its BizTalk R2, is working with partners to deliver applications designed to address specific business problems. Its approach is to provide a foundational layer upon which partners can build applications. Some partners might be focused on retail software and develop applications to reduce out-of-stocks, for instance, while others might be strong in manufacturing and develop systems for tracking work-in-process.

As the cornerstone sponsor of [EPC Connection 2007](#), Microsoft is bringing at least six partners to the conference and exhibition, which we are co-producing with [EPCglobal North America](#), Oct. 2-4, in Chicago. The partners will demonstrate applications built on BizTalk R2, which we'll be writing about in the coming weeks. And one of the big software players will leverage its vast network of independent software developers to provide applications that solve real business problems with RFID.

The reason I believe we are starting to see the next stage in RFID's development is not just that Microsoft is jumping into the market in a big way, but also that software companies can now develop

apps based on data-sharing and networking standards recently completed by EPCglobal. These data-sharing standards enable firms to share EPC data in the same format, which means anyone deploying EPC systems can use software based on those formats. And the EPC Information Service (EPCIS) standard, published in April, allows companies to share the data over the Internet securely and cost-effectively, so applications can interact automatically, machine to machine.

You'll soon see new applications for tracking and maintaining assets, and for tracking work-in-process, that can be used in any industry. But you will also see applications that target specific industries, such as retail, apparel and footwear, industrial manufacturing and food production.

Each of these industries has special needs. The apparel sector, for instance, is very concerned with managing multiple sizes and colors of the same item. The food industry, on the other hand, has to manage the temperature and shelf life of many products, as well as track shipments and record and save the data for regulatory purposes.

This is really the beginning of a very exciting next stage in RFID's maturation. Previously, companies had to either write their own applications or figure out a way to integrate RFID and existing systems that might not be designed to handle unique serial numbers.

At EPC Connection, attendees will see the first applications that will enable them to buy off-the-self solutions from Microsoft, its partners and other exhibitors. These solutions will do most, if not all, of what the attendees need them to do. That means lower deployment costs and a quicker return on investment—and *that* is what end users have been looking for in RFID all along.

Mark Roberti is the founder and editor of RFID Journal. If you would like to comment on this article, click on the link below.