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The RFID Knowledge Vacuum



One of the key factors that appears to be limiting RFID progress is the weak level of knowledge about the technology, or its potential for creating value-added applications. In our view, the majority of corporate personnel have a high degree of ignorance of RFID, and of those with understanding of RFID, the majority only carries limited knowledge. Surprisingly, this weak level of knowledge includes system integrators in addition to end users. Without improved levels of knowledge, there will be only modest interest in the technology, limited ability to develop solutions, and few project champions to drive progress. We believe the industry needs to take a stronger look at increasing general education levels.

We view the lack of RFID knowledge as stemming from three key factors, the newness of the technology, the unfavorable reporting following the initial hype cycle and the severity of the recession.

Newness of the Technology

RFID is an emerging technology, and like all new entrants, it takes time for people to become familiar with its capabilities, understand where it can be used, discover its value and evaluate its ability to scale. It also takes time for vendors to sufficiently develop the technological capability where it can properly function in a live environment. In our view, most people still see RFID as

too new and unproven to even evaluate. They are unaware that RFID is being used in live environments such as the FDIC, JC Penny's, Airbus, Conair, Wal-Mart, Levi's, DHL, Container Centralen, Sony, Coke, Hewlett-Packard and others.

Unfavorable Reporting

Mention RFID to most, and the response is nearly uniform, "RFID...oh, that's the technology that failed at Wal-Mart." The Wall Street Journal ran a story in February of 2007 that suggested high costs and few supplier benefits for RFID. Reports like this surfaced in several publications and simply provided a very public message that RFID was not ready. Following this, many projects were shelved. The result, most executives and their staffs see little reason to spend any time learning about RFID. Again, most are unaware of real improvement in the technology and that it is driving incremental value in live environments.

Severity of Recession

The recession has been long and deep having officially begun in December of 2007, with a meaningful increase in severity beginning in September 2008. While there are signs of recovery, it is slow and uncertain. This downturn has resulted in unemployment reaching 10% and six consecutive quarters of no growth or economic contraction (measured year-over-year in real GDP, based on 2005 dollars). In its wake, two major investment banks failed, 184 commercial banks have been closed, housing prices are down more than 20% from their 2006 peak, and credit markets remain difficult.

Given this, CFOs have been protective of capital, and new projects using new technologies have not been high on the priority list. During the first half of 2009 we highlighted that most RFID projects, even those with established returns, had been placed on hold. According to OTA Training and RFID Revolution, two well established RFID training programs, there was a meaningful reduction in enrollment during this time as companies grappled with budget cutbacks. Such programs offer basic skills development, an important driver in overall industry education, and soft attendance underscores the lack of knowledge. We see a modest pickup in project activity and understand that enrollment is slightly increasing these classes.

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We view it critical that the industry find ways to advance RFID education to drive adoption forward. This education applies to end users and system integrators alike, who in most cases still view RFID as not ready for live deployment. And for those that view the technology as capable, they often lack the basic skills to support a pilot program. As the recession ends, executives are looking for new solutions that can help enhance revenue and streamline operations. We clearly saw this during the National Retail Federation show in January. Given our view of the importance of increasing base knowledge, we wanted to offer a few suggestions to help the process.

- **Educate the channel.** Hardware and software vendors should ensure that their system integration channel partners are educated, capable and properly incented. With this in place, these system integrators, which include automated data capture resellers, will help educate the large number of end users they already service. However, today most system integrators have limited RFID understanding. Basic training needs to be provided, if not

by the vendor, then through third party training. There are several quality classroom and on line courses. Further, integrator partners need to be incented. Specifically, integrator partner sales personnel need to be properly trained and interested in selling an RFID solution. Salesmen need to see a clear path to getting compensated and are looking for solutions that are easy to deploy, and solve a real business problem that cannot be addressed with other offerings. They don't mind educating end customers if the solution offers a strong value add.

- **More educational material.** One of the key problems is that there are few pieces of literature that provide good technical or business insight for those seeking increased RFID knowledge. We look for RFID industry experts to write more technical articles, white papers and case studies. These can easily be disseminated to both system integrators and end users to help answer basic technical questions and serve as the basis for solution development. This type of knowledge advances the decision making process.
- **Leverage academic and trade group efforts.** There are several university programs that are devoting resources towards RFID. Many have labs that are conducting technical and application research and most have engaged industry participants in consortiums and discussion groups. These forums provide a strong mechanism for sharing information on technology, implementation approaches, challenges and successes. The University of Wisconsin, University of Arkansas, Ohio University, UCLA, and others have current programs. Further, industry trade groups such as AIM, VICS and the American Apparel & Footwear Association all have RFID programs.
- **Highlight success stories.** As indicated, most end users and many system integrators see RFID as either not ready or a failed technology. They have been overly subjected to past press, and are unaware of key successes today. We hope those players that are gaining traction understand that communicating about such programs will help their own efforts. Learning about successful implementations will drive increased adoption. In turn, we expect increased adoption will lead to better solution development. We expect the leading players will be in a position to leverage these incremental offerings faster than new entrants, thus enabling these early players with the ability to maintain their first mover advantage to drive more process improvement at a faster pace. These early players need to be more inclined to share success stories.