



Whitepaper

# RFID Goes Mainstream— an Alien Technology Viewpoint

For the last couple of years, the technology industry has been touting the next year as “The Year of RFID.” Every spring, however, the RFID industry gathers and wonders why the prior year wasn’t “the” year. We discuss and elaborate on reasons why RFID has yet to meet the unrealistic “hockey stick” predictions included in investor pitches and footnotes to quarterly market updates.

The reality is that there never has been – and never will be – a hockey stick-like uptick in our industry. The RFID community is incredibly creative, ambitious and insanely entrepreneurial. We work, however, within some very cautious and slow-moving industries. The ecosystem for passive RFID readers and tags is still maturing and there are solid signs that the vendors within this market will be facing significant growth in the years to come.

For 2008, the worldwide market size for RFID products and services is expected to reach \$4.5 billion.<sup>(1)</sup> The contention is that the RFID industry will continue to innovate, expand and grow; only the growth will be of the slow and steady variety. In fact, 10 years from now, the technology industry may look back and realize that “The Year of RFID” snuck up on them.

But, before we celebrate something that has yet to occur, let’s not forget the business we are in and the state of our market. 1) deliver customers real solutions to complex business needs; 2) the market is small now in context of future growth potential and is very much becoming a maturing market.

To help RFID reach the mainstream we need to collectively work together to educate, demonstrate and train our customers and partners. We need to improve collaboration and cooperation among vendors and solution integrators. We need to continue to demonstrate a strong return of investment for RFID. In brief, we need to listen to our customers needs more closely.



In a July 2007 survey<sup>(2)</sup> by Allied Business Intelligence (ABI), ABI identified the seven vendor selection criteria cited most often during their ongoing, regular discussions with RFID end-users:

1. Price
2. Vendor application specialization
3. Vendor experience with RFID implementations
4. Existing customer validation of vendor solutions
5. Total solutions offerings
6. Vendor service and support
7. ROI/total cost of ownership (TCO) assessment tools

RFID will reach the mainstream when implementations become an assumption for businesses, and effectively invisible to consumers. For this to take place – for RFID to become pervasive for consumers and easy to implement for businesses with complex supply chains readers and tags must reach commodity level price points. Volume drives down cost and thus we need to help our customers adopt RFID for this goal to become a reality.

### **So where are we today?**

RFID is no longer simply a supply chain initiative. As one well-known analyst recently put it when talking about closed-loop supply chain applications: “Retail CPG supply chain is not the only game in town.”

As a leading RFID vendor for Gen 2 UHF passive tags, readers and services, Alien Technology has seen a tremendous uptake in requests for proposals and proof that channel partners are serving new segments, primarily for closed loop applications.

This is a positive sign that underscores that RFID is moving from the pilot phase to commercial implementations, a critical transition for any maturing industry. By having horizontal RFID tag and reader solutions for manufacturing, retail, DoD and transportation, we are seeing channel partners offering RFID solutions for access control, asset tracking, food chain distribution, WIP tracking, authentication, access control, contact-less payment, promotions management, and countless other unique applications. In fact, many of the implementations and applications we are being asked to address are those that we would never have considered in the context of RFID just months ago. RFID is about to take on a life of its own. Our mission is to help the technology mature and evolve to meet our partners and end customers’ needs.

The performance for RFID chips, tags and readers is evolving rapidly and has become worthy non-line-of-sight supporting technology, and in some cases a replacement, for the 20-year old line-of-sight barcode technology. In 2008 and beyond, passive UHF tags with support for Gen 2 software-enhanced readers will be able to address market needs otherwise served by active tags and HF solutions.



Whitepaper:  
**RFID Goes Mainstream**

If we do our job right and continue to grow the RFID ecosystem through collaboration and cooperation – RFID will reach the mainstream within a few years. RFID will make its way to cell phones, FedEx and UPS handhelds to enable anytime-access to asset management and work in process (WIP) data, and myriad other applications that many of us haven't even imagined.

Although industry pundits might continue to await "The Year of RFID," the current momentum and market need for RFID support the facts that RFID is here to stay and that RFID is about to go mainstream.

**Sources:**

1. Allied Business Intelligence: RFID Market Data, Q3, 2007
2. Allied Business Intelligence: End User Survey, July 2007
3. Allied Business Intelligence: Q107 Market Forecast



Alien Technology  
18220 Butterfield Blvd.  
Morgan Hill, CA 95037  
866-RFID NOW  
[www.alientechnology.com](http://www.alientechnology.com)

Copyright © August 2007 Alien Technology Corporation. All rights reserved. This document is provided "AS IS" and ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE HEREBY DISCLAIMED. This document is protected by copyright and distributed under licenses restricting its use, copying, distribution and decompilation. No part of this document may be reproduced in any form by any means without prior written approval of Alien Technology Corporation.

Alien, Alien Technology, the Alien logo, Squiggle, the Squiggle logo, Nanoblock, FSA, and Gen 2 Ready are trademarks or registered trademarks of Alien Technology Corporation in the United States and other countries. Other product or service names mentioned herein are the trademarks of their respective owners.