

RFID Products, Applications, and Services Worldwide

A Market Strategy Report

Report Highlights

April 2005

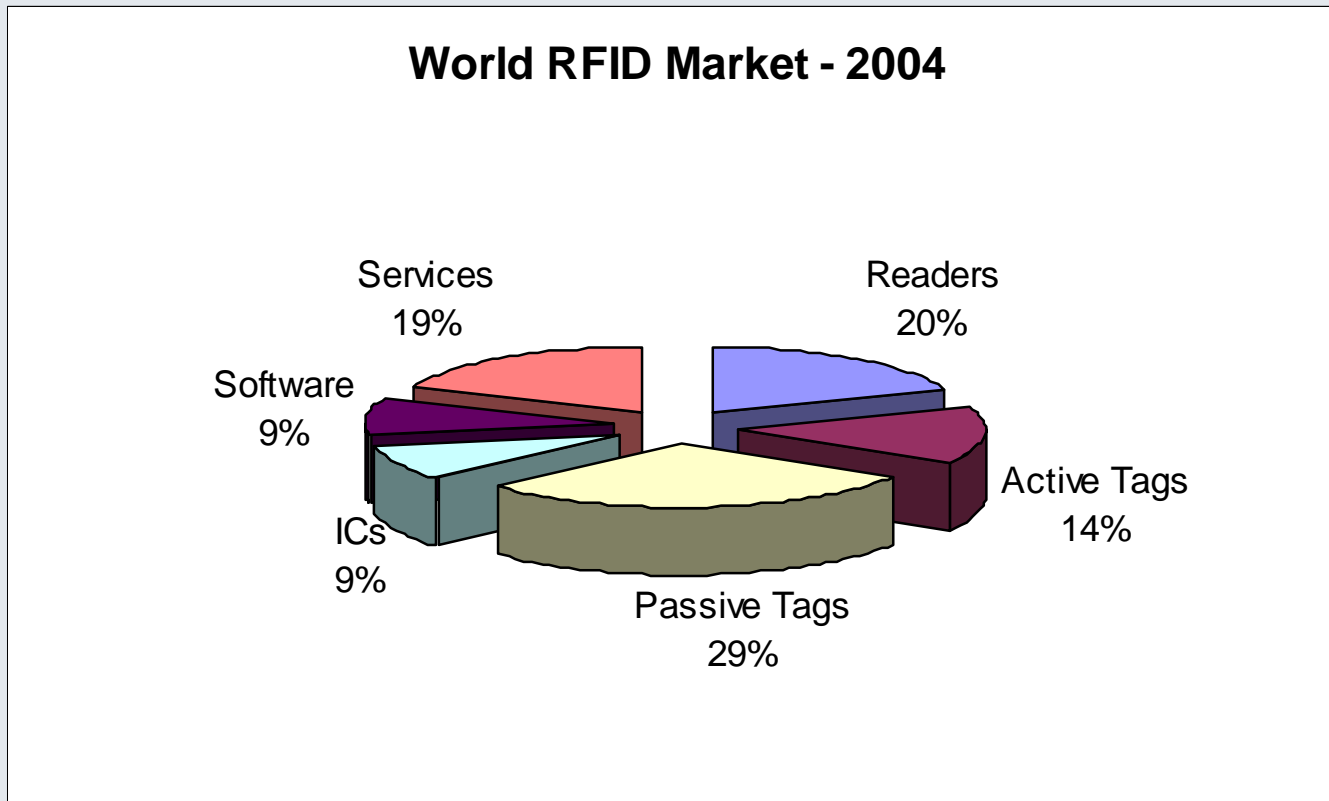
Key Takeaways

- Analyst predictions regarding growth rates and adoption may vary, but there is broad agreement on the potential and opportunities for RFID.
- Companies must have an enterprise-wide and global strategy for RFID technology and infrastructure.
- RFID provides a start, but is not a solution for all business/supply chain challenges.
- The key to success is in collaboration: no single vendor can offer end-to-end solutions with their own products and services.
- Companies must pay close attention to business process and change management issues.
- Consultants have developed ROI models for RFID, but as with most such models, there are limitations.
- Privacy is an important issue.

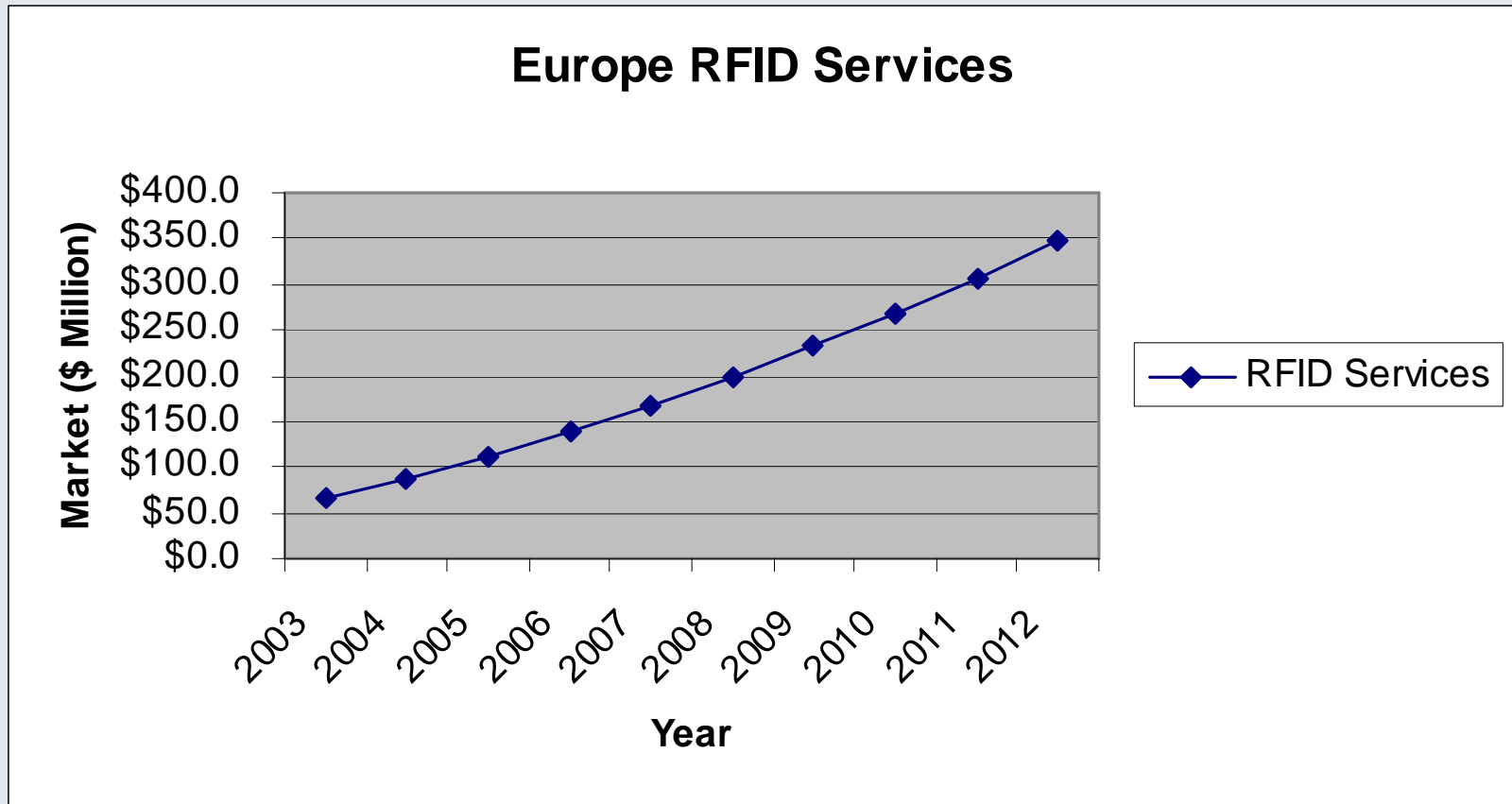
The worldwide RFID Market was \$1.49 billion in 2004

This includes RFID Readers, Active Tags, Passive Tags, ICs, Software, and Services

World RFID Product Market Share

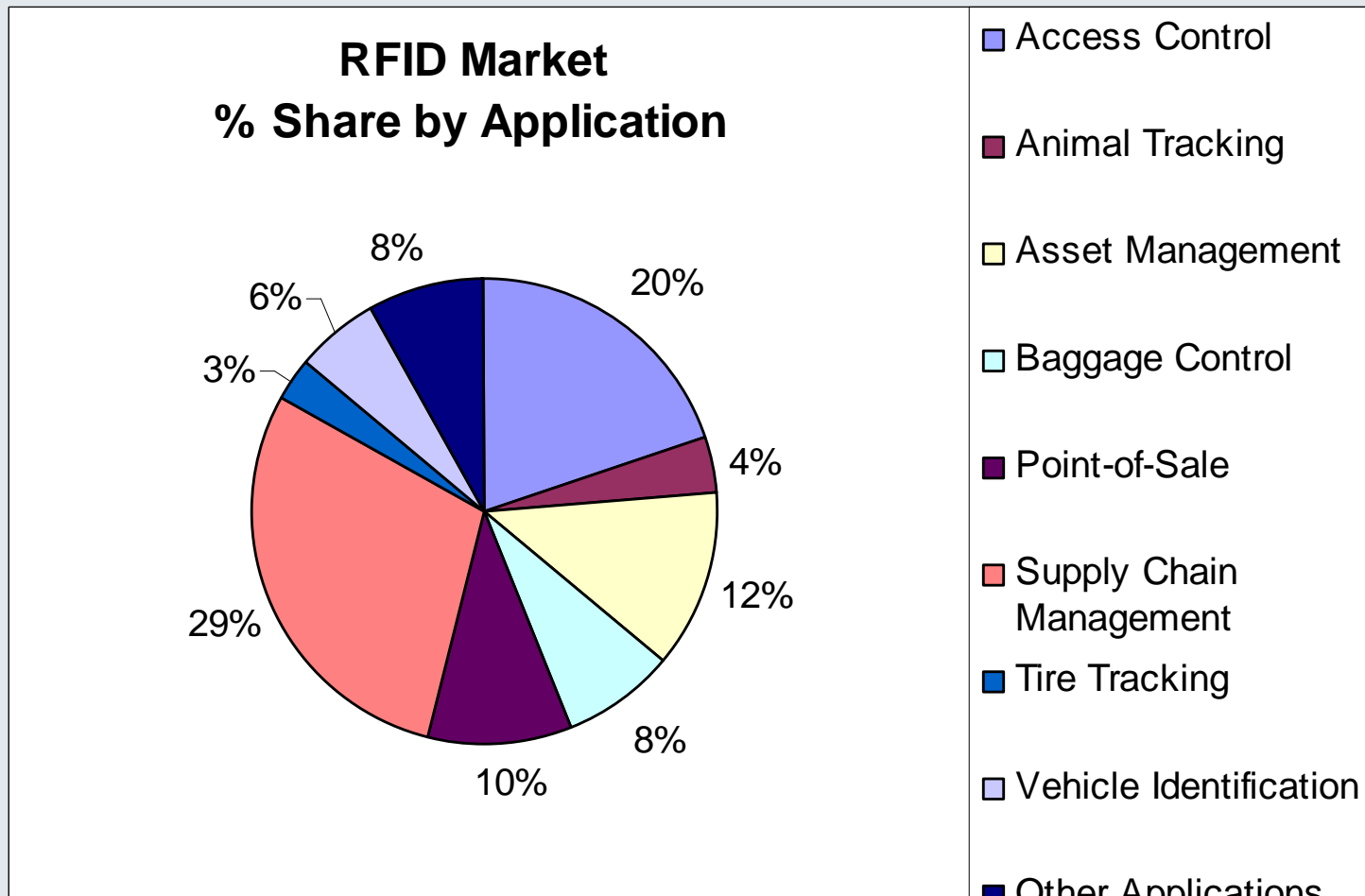


Europe RFID Services Market



- Rapid growth rates predicted for RFID based on Wal-Mart compliance deadline of January 2005 did not come true.
- As companies get deeper into RFID planning and analyze potential business process changes, and with the introduction of Gen2 products, the nature and scope of projects will change, with a long-term roadmap.
- This is a good thing for the RFID ecosystem as a whole, and helps avoid future implosion from poorly planned and implemented solutions.

World RFID Market, Percentage Share by Application



Vendor Segmentation

Positioning	Detail
RFID Hardware pure-play	Companies that design, develop or manufacture tags, readers, chips, inlets, printers, etc.
Diversified Hardware	Companies that make RFID components but also offer a broad range of complementary products and technologies for related applications.
RFID Software pure-play	Companies that design and develop RFID middleware.
Diversified Software	Enterprise software companies (ERP, SCM, WMS, etc) which have RFID-enabled their applications, as well as companies making EAI and analytics software.
RFID Services pure-play	Companies specializing in RFID solutions, bringing together expertise in RFID technology & engineering, as well as domain expertise, and industry experience.
Diversified Services	Large diversified systems integrators with domain and industry knowledge, which have built RFID practices.
Hardware plus Services	Hardware companies (pure-play and diversified) who have developed services capabilities and/or working with services companies.
Software plus Services	Software companies (pure-play and diversified) who have developed services capabilities and/or working with services companies.

Elevator Pitch for RFID Technology Vendors

.... When selling RFID to retailers

- Increase efficiency and effectiveness of returns process
- Increase sales by increasing inventory availability
- Reduce checkout times for customers
- Reduce inventory write-offs, thereby reduce capital charges
- Reduce shrink by dynamically identifying trends
- Reduce labor needs (in receiving, stocking, locating inventory and checkout)

Automotive Industry Market Drivers

- The automotive industry operates in a complex supply chain environment with over 200,000 distinct parts; reliable identification technology will help make significant operational improvements and make a material difference to participating companies.
- Most automotive companies run on JIT inventory management principles, but they also run the risk of major disruptions even with minor errors.
- The documented advantages of RFID over barcodes hold true for the automotive industry as well.
- The automotive industry is generally ahead of the technology curve compared to other manufacturing sectors; they can implement and adopt complex systems provided vendors present them with a compelling financial/deployment model.
- Most automobile companies have already implemented RFID for parts tracking, capital asset management or vehicle-related applications. They are not new to RFID technology.
- Being small in number, auto assembly companies (OEMs) wield significant clout in driving the entire supply chain to implement new technologies such as RFID.

.... When selling to CPG Manufacturers

- Help companies shift focus away from mandates and compliance costs and emphasize business benefits of RFID.
- Help companies look beyond mandates by reviewing supply chain operations and driving for efficiencies through RFID.
- Early adopters of RFID will have a competitive advantage – work with serious players so that they don't wait for specific events to occur before drawing up a deployment plan.

Questions Vendors Should Ask Prospects

- Are there any compliance or mandate deadlines/requirements for your company?
- Have you scoped out your RFID requirements?
- Do you have any plans of extending RFID beyond compliance and supply chain improvement – to product innovation?
- Do you consider RFID as a cost or as a potential source of revenue?
- Do you have a TCO model for RFID? If yes, does it take into account total cost and benefit or simply tag costs?
- Do you have a comprehensive RFID-integrated supply chain strategy?
- What is your role in the RFID ecosystem? Are you working with partners, do you have any partners, white papers, etc?

Key Drivers for Adoption in the Pharmaceutical Industry

- Drug Counterfeiting
- Product Returns
- Product Recalls
- FDA Recommendations
- Industry Pilots
- Cost Savings

Report Stats

Regions Covered	North America, Europe, Asia Pacific, Rest of the World.
Companies Profiled	526 (Makers of RFID equipment - tags, readers, ICs; Labels/ Printers; Middleware; Software; Systems Integrators; Other Service Providers).
Market Data	Estimates/Forecasts for 2003-2012 in US dollars (and units for Readers & ICs), separately by region, by RFID Hardware (separately by Active tags, Passive tags, ICs), Software, Services, Application, and Vertical.
Report Length	800 pages – Two volumes (Volume 1 – Market Analysis & Forecasts, Volume 2 – Vendor Profiles).
Price	\$1,495
Table of contents	http://www.marketstrat.com/pdf/MARKETSTRAT_RFID_TOC.pdf

Contact Information

- Phone: 510-996-7373
- Fax: 510-996-7374
- Email: info@marketstrat.com
- Web: <http://www.marketstrat.com>