RFID Market Forecasts 2009-2019

IDTechEx announces the new report "RFID Forecasts, Players & Opportunities 2009-2019", which addresses the global RFID situation. Areas of growth, undersupply and oversupply and trends are given based on extensive new primary research. The report provides an unprecedented level of forecasts split in many ways. Here the primary author, Raghu Das, gives a summary of the report findings. For more information see www.IDTechEx.com/forecasts.

Total market value in 2009

In 2009 IDTechEx find that the value of the entire RFID market will be $5.56 billion, up from $5.25 billion in 2008. This includes tags, readers and software/services for RFID cards, labels, fobs and all other form factors. The majority of this spend is on RFID cards and their associated services – totalling $2.99 billion. The market for RFID is growing and a large amount of this value is due to government-led RFID schemes, such as those for transportation, national ID (contactless cards and passports), military and animal tagging.

Application highlights

The tagging of apparel by companies such as Marks & Spencer and American Apparel is now in roll out phase with 200 million RFID labels being used for apparel (including laundry) globally in 2009. The tagging of animals (such as pigs and sheep) is growing strongly as it becomes a legal requirement in many more territories, with 105 million tags being used for this sector in 2009. This is happening in regions such as China and Australasia. 350 million RFID tickets will be sold in 2009 for transit schemes in cities around the World.

The tagging of pallets and cases remains to be a failure, with only 225 million passive UHF tags used for this application in 2009 – a far cry from the 35 billion tags that one consumer goods company alone predicted that it would be buying in 2009, when they presented at an event in 2003. The main reasons for this have been technical failures (poor read rates with high moisture content and metal products), lack of infrastructure and lack of mutuality of benefit between retailers and the rest of the supply chain. Work is still preserving however.

In total, 2.35 billion tags will be sold in 2009 versus 1.97 billion in 2008; 1.74 billion in 2006 and 1.02 billion in 2005.

Follow Governments to follow the money

Our forecasts have taken into account the global economic slow down. Looking at the range of applications, the biggest projects, which tend to be government led and are usually profitable for suppliers involved, are unlikely to reverse. For example, governments will not stop tagging passports or cattle to save money. More and more cities around the World are migrating to using RFID cards and eventually RFID tickets and RFID enabled cellphones for transit. The US Military recently

awarded an order involving RFID approaching half a billion dollars. Governments do not need a fast return on investment (ROI). They seek error prevention, improved customer service and efficiency and greater security.

Industry, however, usually seeks rapid ROI. RFID is being applied where it can demonstrate a fairly rapid return on investment – such as apparel tracking, manufacturing, asset tracking, book tagging, etc. Those intending to supply the highest volumes of tags for open markets have had to diversify into many closed loop applications. With some companies having limited funds at this time, some RFID projects will be delayed, but some companies will use this to their advantage and adopt RFID where the paybacks are compelling for competitive advantage and to increase sales. However, it is still very rare for any one customer to buy more than 5 million RFID labels in any one implementation.

RFID progress in 2008 – by value

Table - The number of tags sold by tag location in 2008 is shown in the table below.

Tag Location	Number of tags supplied in 2008 (millions)
Air baggage	60
Animals	90
Archiving (documents/samples)	9
Apparel	130
Books	85
Car clickers	48
Cold retail supply chain	0.01
Consumer goods	8
Conveyances/Rollcages/ULD/Totes	28
Drugs	10
Manufacturing parts, tools	70
Military	55
Other Healthcare	15
Passport page/secure documents	65
People (excluding other sectors)	1.3
Postal	2
Retail apparel	130
Retail CPG Pallet/case	200
Shelf Edge Labels	0.2
Smart cards/payment key fobs	559
Smart tickets	325
Vehicles	7
Other Applications	200
Total	1,968

Source: IDTechEx report "RFID Forecasts, Players, Opportunities 2009-2019" www.IDTechEx.com/forecasts

By value IDTechEx find that $2.23 billion was spent on tags alone in 2008, an average of price of $1.13 per tag. With the launch of printed RFID later this year for transit ticketing and other applications, and the increase use of RFID labels rather than cards, that average will fall to $0.22 in 2014.

IDTechEx has seen increasing RFID manufacture capacity being installed in East Asia over the last 12 months. In particular, after delivery of almost 1 billion RFID cards at HF, China now has a large HF tag manufacture capacity. Many companies in the West have formed alliances or joint ventures with companies in the East.

The leading frequency

The leading frequency in 2008 remained HF (13.56MHz). In fact, HF RFID working at the ISO14443 specification was responsible for more than five times the expenditure on RFID to any other specification, with large new applications added such as passports and RFID enabled phones. Add supply chain, library and secure access RFID to the ISO15693 specification at HF and we continued huge use of this frequency. The market for 18000-6 passive UHF tags resulted in a market size of $145 million for the tags alone.

Leading providers

The IDTechEx report also tracks over 200 RFID companies and provides estimates of the revenues of the leading companies. We find that the largest RFID companies or company divisions that are profitable are still those predominately in HF, active RFID, or systems integration. The biggest and most successful vertically aligned companies (i.e. solution providers) are focussed on no more than two industry segments (such as secure access and ID from Assa Abloy; military and heavy logistics from Lockheed Martin/Savi and animal tagging from AllFlex).

Unrivalled market insight

This 268 page report includes a separate functional spreadsheet of the forecasts and up to one hour of free consulting time with an IDTechEx consultant. Globally researched by IDTechEx technical experts, we analyse the RFID market in many different ways, with over 170 tables and figures. They include detailed ten year projections for active vs passive, readers, markets by frequency, markets by geographical region, label vs non label, chip vs chipless, markets by application, EPC vs non-EPC, high value niche markets, tag format and tag location. Cumulative sales of RFID are analyzed as are the major players and unmet opportunities. It covers the emergence of new products, legal and demand pressures and impediments for the years to come. For more information see www.IDTechEx.com/forecasts.