

## RFID - Good or Bad

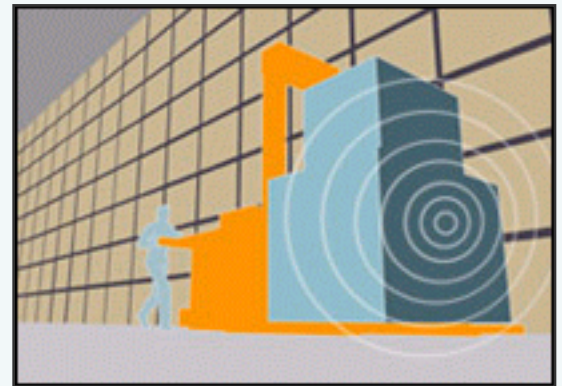
Pulled by the desire to reduce costs and increase information in the supply chain and pushed by mandates from the likes of Wal-Mart and the US army, radio-frequency identification tag usage looks set to explode in the coming months. Unfortunately, there's a shortage in some corners of critical thinking about what RFID is good for and not so good for.

Among the good ideas are the obvious supply-chain improvements that come from being able to better track goods every time they pass a reader-enabled checkpoint. Other uses outside the supply chain include tracing objects through their life cycle. One application is baggage handling: Airports and airlines are interested in using RFID tags to more efficiently and accurately handle passengers' luggage.

However the technology could be vulnerable to a number of scams that could lead to considerable losses for retailers. One possible scam might involve a consumer using a PDA (personal digital assistant) with an RFID reader to scan a product's tag and then replace the item's information with that of a less-expensive product. RFID could also be used in such a way that violates consumers' privacy. RFID tags could be affixed to products without customers' knowledge and that the technology might be able to read the tags of other objects in shopping bags, thus eradicating purchasing anonymity. Data protection is going to be a huge issue as RFID becomes more commonplace.

### Is RFID suited for my Company

Rfid must be applied in a balanced way that takes into consideration a company's strategic objectives, without being carried away by the hype of RFID. Here are three key considerations that will determine success.



### Related Links

[www.rfidjournal.com](http://www.rfidjournal.com)

[www.rfidnews.org](http://www.rfidnews.org)

[www.emeraldinsight.com](http://www.emeraldinsight.com)

[www.rfidgazette.org](http://www.rfidgazette.org)

### About DecisionCraft Analytics

We provide decision-making solutions to improve operational efficiency and business responsiveness. Our consulting services employ our strengths in industry knowledge, conceptual rigor, and information technologies. Developed using concepts from decision theory; our solutions use robust optimization, simulation, and statistical engines adapted to our client's focus areas.

### DecisionCraft Services

**Consider your key business indicators:** Look at the overall business, the industry at large, existing technology options and futures. In this case, enlisting outside expertise can quickly assess where and how RFID can be a strategic enabler. RFID offers significant potential benefits, but you must consider the entire picture of your organization in order to see the greatest benefit.

**Consider as-is and to-be business processes:** RFID is not an IT issue. It is a company-wide opportunity. Business processes will and should shift. Automation will and should occur. People's responsibilities and knowledge must change. New methods of analysis will be employed. New data may even shift the way that companies measure success. Capitalizing on an RFID investment requires championing a new vision, enabling a shift in thinking, and providing simple changes to the way things are done today.

**Ask, What if?:** What do you want RFID to do for you? This question does two critical things. First, it takes your company's mindset outside of the box. It creates a positive and proactive mindset that allows your company to reap seriously big benefits from technology. Second, it generates demand to the manufacturers of RFID hardware and software to make custom tags for your company. For example manufacturers are now creating RFID tags with built-in time and temperature tracking for food and medical applications.

## RFID Implementation

Challenges in RFID implementation include, costs, standardization, privacy, performance, reliability and a need for greater collaboration. Systems integration will be expensive too in most current systems.

### Key implementation issues

**Cost of Tags:** The cost of tags has to be reduced to 5 cents before RFID usage will become widespread. That is especially true when it comes to low-priced consumer goods. The importance of tag costs largely depends on the value of the item being tracked.

**Tag Standards:** Currently there are several different standards for RFID tags. Some suppliers are using "Class 0" tags, others are using "Class 1" tags, and still others are holding out for "Class 2" tags that are being standardized currently by EPCGlobal. Standards are improving and changing so fast that some of the today's implementations will have to be completely changed in a year's time.

## Business Diagnostics

We analyze business processes and transactional data to identify underlying patterns, unravel hidden relationships and recommend areas for improvement that can improve ROI and reduce costs.

### Predictive Analytics

We use historical data intelligently to develop a view of future market trends and help our clients focus on the right audiences thereby developing their competitive edge.

### Forecasting

We use advanced time-series and regression techniques for forecasting behavior of critical business variables that allows our clients to plan for their resources intelligently.

**Tag Placement:** Suppliers are still working through the challenges of figuring where on items (or cases or pallets) to place tags. There are physical challenges (tag signals have trouble penetrating liquid and metal). There is also tension between retailer mandates which simply require case and/or pallet level tagging, and the supplier benefits, which may be much greater through item level tagging.

## Conclusion

Optimally implementing RFID is challenging and requires both creative vision and careful execution. But nothing worthwhile is not challenging, in life and in business. And, when properly approached, that small little RFID tag on your can of tuna just might be a catalyst that takes your company into a state of shareholder bliss.

**Next Issue:** [Supply Chain Risk Management](#)

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