



**RFID In Supply Chain Management  
A Planning and Execution Challenge  
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CEOs of Consumer Packaged Goods companies are being bombarded through industry association periodicals, keynote speakers at industry conventions, and third party vendors about the potential benefits of the “latest and greatest” supply chain technology tools that will provide increased sales and revenue to the CEO’s bottom line. Radio frequency identification or RFID is one of these technologies.

Several leading mass merchandising and grocery retailers have initiated pilot programs to test the feasibility of incorporating integrated RFID technology into their supply chain management processes. The objectives include:

- Optimize product logistics
- Reduce product handling costs
- Decrease the time to get promotional items onto the selling floor
- Optimize the on shelf availability of products
- Obtain a micro view of their consumers’ buying and product demand habits. (on this last objective, a long term objective may be the automated replenishment of the home pantry or refrigerated storage)

While these are ambitious and highly desirable objectives, the objectives are not materially different than other current and proposed supply chain process proposals. Further, RFID technology, driven from the demand or retailer end of the supply chain, offers other up stream challenges to manufacturers that will need to be addressed. The CPG industry should be asking, “How should the CPG industry deal with what is becoming a rapid slide towards RFID automation? Are the benefits real? Are the benefits cost justified? Is the ROI worth the risks? Are the current pilot tests scaleable?” The following are just a few of the challenges facing CEOs and the questions they may want to pose to their respective organizations.

### ***What exactly are we testing ?***

During the current pilot projects, manufacturers are applying RFID tags to pallets, promotional displays, and in some instances, individual product cases. These “tagged” items then pass through “reading gates” at the retailer’s critical supply chain points such as their distribution centers and the store receiving docks. The reading gates electronically identify and record the tagged unit and its associated reading gate location. This tells the RFID system:

- What was sent
- What was received
- Where it was received
- Analytics can then document the supply chain status of the unit

This is actually an old concept, (bar code tracking of pallets, promotional displays, cases and SKUs) using different technology in a new setting.

### ***How do we implement RFID in the supply chain starting at the end, not the beginning of the supply chain?***

Since the pilot projects are being initiated by the retailers, and RFID technology is currently not a part of the manufacturers’ current internal processes, RFID tags are being hand applied to specific units being shipped to the retailer’s test RFID enabled distribution centers. For purposes of the pilot projects, manufacturers are “bolting on” this technology at the end of their supply chain processes rather than creating an integrated internal RFID process. If the pilot projects are even moderately successful, and the retailers expand the RFID tags to all shipments, how rapidly can manufacturers re-engineer their internal product logistics to accommodate the tagging of each and every case and pallet, let alone every SKU? Also, if only a hand full of retailers are utilizing RFID, due to the cost of the RFID tags themselves, packaging runs and palletizing may have to be staged by retailer and the manufacturers’ distribution may have to segregate its products by RFID versus non RFID locations.

### ***How will the multitude of manufacturers and retailers adopt and align/agree with to a set of universal standards to support RFID in the supply chain?***

Is RFID just an electronic bar code with a slightly different set of implementation challenges? The first UPC code to be scanned in a market was a 10 pack of Wrigley’s gum in 1974. Since then many iterations of improvements

to that technology and its data content by the Uniform Product Council have resulted in a fairly stable technology that is currently the backbone of supply chain management. RFID offers several added advantages, properly implemented, over UPC codes that can and should be incorporated into the overall RFID strategy for CPG. What remains is to see how the industry embraces the new technology and how it bands together to create a “URFID” or universal radio frequency identification environment for the CPG industry.

***How strong is my company's current supply chain management and where are its perceived strengths and weaknesses?***

It is difficult, if not impossible, to implement a new technology on top of a poor organizational infrastructure. How the testing and implementation of this technology is being organized and staffed is critical. In many cases, the manufacturers have created an RFID team that is separate and distinct from either or all of:

- Customer Team Management
- Product Management
- Retail Execution Management
- Manufacturing
- Sales
- Marketing
- Logistics
- Internal Audit

When it comes time to implement the RFID strategy internally, will all of the key areas be ready and educated to the level required to smoothly create and implement an entirely new product handling process?

If our supply chain management is weak today, we may fail tomorrow with RFID or any new supply chain process enhancement.

***What is the risk of adopting, or not adopting, RFID in our organization?***

Organizations always run the risk of UNDER PLANNING and OVER IMPLEMENTING. Our goal is to service our customers and become a true business partner by mutually growing our collective businesses. We should not let that pursuit overshadow sound business practices. If we do, it can lead to a lowering of service levels to the very customers we were trying to help to improve!

It is difficult to determine the level of commitment to RFID technology in the CPG supply chain management process. Is the commitment driven solely by the demands of the top retailers or by a genuine commitment to improving the supply chain management process? One possible litmus test may be to look inside of your own organization. If the RFID team you have established is a "silo" within your organization, that is to say, not an integral part of your existing Customer Team, Brand, Retail Execution, Manufacturing, Distribution, Marketing, and Sales management, now is the time to re-engineer your RFID team.

The risk of not implementing an RFID strategy or at least participating with the retailers' pilot test is obviously the potential for alienating your goodwill with the customer. A poor implementation may yield the same result! It is vital for the manufacturers, retailers and their RFID suppliers to work together to establish a functional solution. It would be a major project for a single manufacturer or retailer to undertake RFID automation internally, let alone one that is integrated with potentially thousands of manufacturers and retailers. It took 32 years for bar codes to mature from the first scanned pack of gum in 1974 to the current GTIN (global trade identification number). RFID will undergo a similar evolution in a much more compressed time frame.