

The technology has matured, and can now provide a strong ROI—once the industry overcomes its fear of change.

By Rajesh Kumar

Jan. 11, 2010—When radio frequency identification first began penetrating the retail industry, I thought the jewelry sector would be the first to adopt this technology, as jewelers were well positioned to justify the tag cost, and to use RFID to provide valuable reports and increase efficiency. But RFID did not make a significant mark in this segment—at least, not in India. The primary reason may be that the industry is largely owned by traditional business groups averse to any changes in the processes they have been following for many years. This aversion has resulted in the repulsion of any new technologies. The second major reason could be that the technology itself was not considered mature or reliable enough to handle expensive items like jewelry, for even a little flaw in the system could be catastrophically expensive to a jewelry firm.

Despite these hurdles, the acceptance scenario for India's jewelry companies has also evolved principally because people have seen or heard about successful deployments of RFID within that industry, and about the associated positive return on investment (ROI). I very much understand and accept the fact that the advent of any new technology in India lags behind the West by two to three years. Keeping this timeframe in mind, I believe it's high time for the Indian market to adopt RFID extensively. The new generation, even of traditional business groups, is becoming more tech-savvy and enterprising in its approach. This progressive group of businesspeople now wants to be informed, and to know how well they are competing with peers in other parts of the globe.



To support the wishes and expectations of jewelry merchants, the technology has also evolved to a much higher level. Now we can expect anti-collision capabilities in high-frequency (HF) RFID, thus enabling interrogators to read multiple RFID tags simultaneously. Some RFID hardware vendors have enhanced the hardware to a level at which tags can be read even when stacked one on top of another. Currently, reading tags close to a metallic environment is not a challenge. We can now expect a longer read range, allowing HF RFID to be used in security gates. Thanks to these advancements, systems integrators in India are feeling more confident and encouraged to deploy successful solution in the jewelry industry.

In general, RFID implementation in the jewelry domain is restricted to the two most serious applications: stock taking and security. At little extra cost, however, the technology can enable additional solutions that can provide visibility to decision makers in a great way. For instance, RFID can be useful in tracking the performance of salespeople, in terms of time and the actual business he or she gets. Real-time inventory management and the movement of stock can provide some crucial data that can very useful for production management, shelf management and stock management. With a few changes in processes, we can also keep track of an item's movement

from one group of objects to another—and, in the event of any unauthorized item clustering, we can raise desirable alerts.

The future of RFID solutions in the jewelry sector is undisputedly bright. We just need to overcome a few hindrances, such as the fear of being the first movers, and of not being farsighted. Secondly, people should be flexible enough to modify processes for improved outputs. The Indian economy is growing at an annual rate of approximately 7 percent. Hence, markets will become more competitive and challenging. It will be very difficult for retailers and manufacturers alike to thrive, unless they are well equipped and become more automated in order to reduce the recurring costs on different fronts. This will be a great opportunity for RFID systems integrators to provide these individuals with the proper solutions at affordable price.

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