

## A Supply Chain Traceability Improvement Using RFID

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**Abstract :** Radio Frequency Identification (RFID) is a technology which shares a similar concept with bar code. With RFID, the electromagnetic or electrostatic coupling in the RF portion of the electromagnetic spectrum is used to transmit signals. Supply chain management is aimed to keep going long-term performance of individual companies and the overall supply chain by maximizing customer satisfaction with minimum costs. One of the major issues in the supply chain management is product loss or shrinkage. In order to overcome this problem, this system which uses Radio Frequency Identification (RFID) technology will be able to RFID track and identify where losses are occurring and enable effective traceability. RFID brings a new dimension to supply chain management by providing a more efficient way of being able to identify and track items at the various stages throughout the supply chain. This system has been developed and tested to prove that RFID technology can be used to improve traceability in supply chain at low cost. Due to its simplicity in interface program and database management system using Visual Basic and MS Excel or MS Access the system can be more affordable and implemented even by small and medium scale industries.

**Keywords :** supply chain, RFID, tractability, radio frequency identification

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