

## ▼ Introduction to Implementation and Usage of Radio Frequency Identification (RFID) Minitrack

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Today many organizations are investigating whether Radio Frequency Identification (RFID) can add value to their operations, supply chain partnerships, and customer service relationships. This list includes manufacturers, retailers, third party logistics providers, hospitals, and a variety of other organizations that provide services to customers. Some organizations are in the investigation stage and are concerned about the costs, benefits, and risks associated with RFID. Others have implemented pilots to test the technology and have learned some valuable lessons along the way. A few others have moved into full-scale production mode with RFID. While many companies understand the benefits from better real-time tracking of important mobile items, they are cautious due to the potential costs of developing the infrastructure required to perform these tracking activities.

As many of the technical problems associated with RFID are solved we believe that research on organizational issues related to implementation and usage of RFID are becoming more important. Companies are asking researchers to help them address issues that include maximizing adoption efficiencies, getting a handle on the massive volumes of data RFID produces, understanding the promoting and limiting factors to the RFID value proposition, and how impact can be maximized by integrating RFID with other systems. Clearly, scholars conducting research on these issues have valuable contributions to make to these organizations.

This minitrack aims to provide a platform for investigative research examining issues related to the adoption, implementation, and usage of RFID. As we are holding our third consecutive minitrack on RFID, we believe we are beginning to see maturity in this area of research illustrated by the number of special journal issues on the topic and the emergence of new research journals dedicated to the organizational issues associated with RFID. The papers presented in this minitrack are indicative

of the diversity of organizational issues and the international flavor associated with the proliferation of RFID.

The first paper examines the role of the CIO's perspectives on perceived potentials and strategic importance of using RFID. This study includes survey findings from CIOs in German and Italian firms to analyze the top management's view from two different cultural settings. The study shows that the benefits anticipated do differ across the two settings and does impact the intention to invest in RFID. This has implications for a variety of entities that seek to promote the technology including government agencies, industry associations, and large organizations that hope to promote RFID with their partners.

Considerable anxiety can arise due to the possibility of using RFID's track and trace capabilities to monitor the location of human, especially employees. Pilots have been conducted that show the value of being able to identify the whereabouts of all employees in case an emergency such as a fire or other catastrophe. However, there are many human factors to consider in this context. The second paper in our minitrack proposes a methodology to build an RFID/GPS real-time system to track the location of human resources. The methodology is illustrated through the case study of a Canadian university that implemented such a system. The results show the feasibility of such functionality, but also illustrate a number of interesting impacts on both individuals and the organization.

The final paper is an extension of work presented in last year's minitrack to test a carefully developed RFID adoption and implementation model. The survey data used in this study comes from current and potential evaluators, adopters and integrators of RFID technology and represents an important step forward in empirical research on RFID adoption and usage.