

Research Suggests RFID Is Making A Difference

November 16 2005

Preliminary results of a University of Arkansas study for Wal-Mart Stores Inc. showed that the use of RFID technology reduced out-of-stocks by 26 percent. The RFID Research Center, a subunit of the Information Technology Research Institute in the University of Arkansas' Sam M. Walton College of Business, has released a preliminary analysis of the capability of RFID (radio frequency identification) to reduce stock outs on the retail shelf.

The study, sponsored by Wal-Mart Stores Inc. and conducted by Walton College research faculty from Feb. 14 to Sept. 12, 2005, examined 24 stores, half of which were RFID-enabled and the other half of which were control stores. Preliminary results also found that test stores outperformed control stores by 63 percent, and RFID-tagged items within the test stores outperformed non-tagged items within those same stores by three-fold.

The white paper, "Does RFID Reduce Out of Stocks? A Preliminary Analysis" may be downloaded at itri.uark.edu/research/display...icle=ITRI-WP058-1105 .

"The interest in, and subsequent use of, passive RFID in the retail supply chain has been growing rapidly in the past few years," said Bill Hardgrave, executive director, Information Technology Research Institute. "Several major retailers have launched RFID initiatives with Wal-Mart leading the way both in number of stores and distribution centers and number of suppliers involved. This study endeavors to

answer: what is the business case for the use of RFID in the supply chain?

"In examining this question, a potential area for improvement is in the in-stock position of products on the shelf. A reduction in out of stocks provides benefit for the retailer, the supplier, and the consumer. In an effort to explore this potential business case, Wal-Mart commissioned the study."

In June 2003, Wal-Mart requested that its top 100 suppliers place RFID tags on pallets and cases shipped to stores in the Dallas region. With the request, Wal-Mart jump-started a 50-year-old technology that previously had found limited, but successful use in a variety of areas. Since that announcement, the RFID industry has blossomed.

Source: University of Arkansas

Citation: Research Suggests RFID Is Making A Difference (2005, November 16) retrieved 20 June 2024 from <https://phys.org/news/2005-11-rfid-difference.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.