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United Parcel Service (UPS)

Jack Levis
Director, Package Process Management

- World’s largest package delivery company
- Founded in 1907
- Headquartered in Atlanta, GA
- 425,300 employees in 2008
- \$49.7 billion revenue

In this column for the June 2009 issue, we summarize some of UPS’s experiences with green information systems based on information shared by Jack Levis, UPS Director of Package Process Management, at the January 2009 meeting of the Advanced Practices Council of SIM. Levis was one of the participants in a green IS panel moderated by Rick Watson, APC’s new research director.

UPS has reduced 30 million miles of travel on its delivery routes through a structured approach of gathering data, analyzing that data, and simplifying jobs. It uses telematics, global positioning systems technology integrated with computers, and mobile communications technology in automotive navigation systems to track each truck’s stops and speed. Through this technology initiative, it has developed methods and measures for every job. For example, drivers are told to start their trucks only after putting on their seat belts and making mirror adjustments. This simple job guideline has saved the company \$1 million per year in fuel usage. Advanced mathematical models have helped to optimize delivery routes, including the much-noted reduction of left-hand turns (which are more dangerous and take more time).

Another example of analyzing data for green benefits involves vehicle parts replacement. Analysis of detailed data collected on parts failure indicated that parts could be replaced based on careful monitoring of leading indicators of impending failure (e.g., rising oil temperature or falling oil pressure), rather than wasteful regularly scheduled parts replacement.

UPS wants to reduce another 30 million miles of travel, and Levis is convinced that data analysis will help the company achieve that goal. According to Levis, “Data analysis always helps us to find more that we can do. You never know what’s going to come up. We’ve gotten more from data analysis than from anything else.”

Because of its ambitious goal, UPS actively seeks ideas from multiple sources. Multiple groups within UPS business units are charged with searching for green information systems initiatives. Another group in IT is specifically focused on identifying long-term sustainability initiatives. UPS also encourages and receives

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¹ The Advanced Practices Council (APC) is an exclusive Society for Information Management forum for senior IT executives who value directing and applying pragmatic research, exploring emerging IT issues in depth, and sharing different perspectives with colleagues in other industries. Madeline Weiss is the APC Program Director and Blake Ives was the APC Research Director at the time of this presentation. The column was prepared by Dr. Weiss and Heather Smith, a senior research associate for the APC.

ideas from its stakeholders outside the company. Experiments are being conducted with electric cars and other alternative means of transportation. It is also taking on work that reduces other companies' shipping costs, such as repairing computers for Toshiba and providing just-in-time parts.

UPS recognizes that the testing of ideas and implementation of initiatives require collaboration among business units and IT. In many cases, IT leads projects, but a key component of green IS projects is ensuring that the desired benefits are achieved. At UPS, targeted changes are incorporated into standard processes and become part of people's jobs. Integrating changes into job manuals is essential to success.

Watson summarized some of the lessons learned from UPS and other companies with his formula:

Energy + Information < Energy.

Increasingly, we will have access to a wide variety of energy data sets that can be mined for new insights. "We need to think differently," Watson noted, "and use what we know to make changes in our behavior and processes."