

Lexmark designed, tested and implemented a Distributed Fleet Management framework for a major global manufacturer of agricultural and construction equipment.

Lexmark's output strategy eases the pain of merging global enterprises

The Organization

This case study focuses on one of the top manufacturers of agricultural tractors and combines in the world, as well as a large distributor of construction equipment and equipment finance operations. Revenues in 2002 totaled \$10 billion. Based in the U.S., its network of dealers and distributors operates in more than 160 countries.

The Challenge

In the manufacturing industry, the distribution and logistics environment has become increasingly complex. Many new technological improvements, such as advanced bar coding and database consolidation, have been introduced to help simplify these processes. Warehouse business processes need to be streamlined to reduce human error and increase delivery productivity.

This customer's main business objective was to architect a corporate worldwide Windows NT server-based e-forms solution that would be flexible enough to accommodate the mainframe data flowing from several different legacy systems and provide the capabilities for multilingual support and complex application conditional processing. Forms processed rely on data from many different applications and the data characteristics vary by application.

This organization was trying to integrate the business systems and operations derived from the merger of two major independent equipment manufacturers. The migration from a legacy order fulfillment system to a new e-parts system was required. There was also a need to maintain branding of independent dealers between the two previously separate companies through logos on forms, for example.

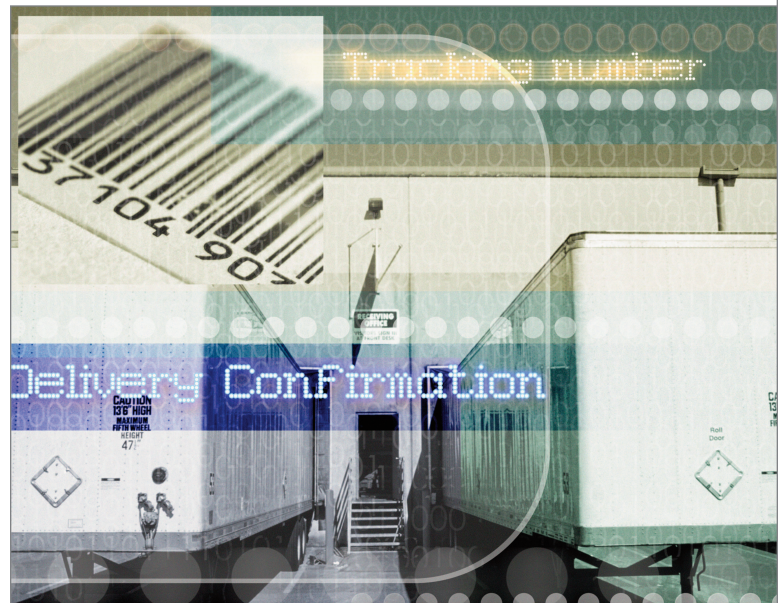
This company migrated a wide variety of pre-printed multi-part forms from line printers to more cost effective electronic forms and more reliable laser devices.

In addition, because this customer ran a large international operation, a solution had to address the need for multiple language support.

The existing output fleet was aging, costly, unreliable and lacked worldwide standardization.

Lexmark's primary challenge was to convert all of the following on the same day:

- 7 warehouses
- 400 users
- 49 new Lexmark laser printers
- 2 Formscape (output management software) servers
- Other miscellaneous printer equipment and networking changes



The Solution

Lexmark utilized a phased approach by working collaboratively in all areas of the cross-functional environment to select, configure, pilot and implement the appropriate output management tools to enhance its printing efficiency. Lexmark's comprehensive focus on the big picture during the project planning and development efforts took into account the implications of application output, formatting, routing of hardcopy, device definitions, configuration, deployment, and impact to end users.

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The re-engineering of the business process involved the implementation of a server-based output management and electronic forms solution that could accommodate legacy print data streams already utilized in the line-printing environment. By using output management tools to intercept the print stream, the solution remained external, therefore non-invasive, to the application code.

Even as changes occur in the environment, such as version upgrades or migration to new platforms or operating systems, these output processes and subsequent workflow remain autonomous of the application. This is essential to continue to meet future needs of the customer.

The Results

This company migrated a wide variety of pre-printed multi-part forms from line printers to more cost effective electronic forms and more reliable laser devices. Output migration from old, proprietary XES data stream technology devices to the new laser standard was achieved, resulting in huge savings in maintenance expenses.

A broad spectrum of forms output was transitioned including warehouse pick tickets, shipping orders, bills-of-lading, inventory listings, status reports, and a worldwide purchase order and invoicing solution.

The revised print architecture permits enterprise-wide device sharing, resulting in print management processes that provide redundancy and fail-safe backup and recovery. A standard server solution eliminates the need for developers to create custom modifications to get different applications to exchange data to meet users' ever-changing information needs.

Other benefits include:

- Product branding improvements, including the ability to switch shipping order logos
- Shipping orders and pick tickets utilize advanced 3D bar coding to reduce human error
- International documents automatically accommodate multilingual application font requirements
- Elimination of obsolete mainframe print architecture, including aged print devices and reduction in telecommunication links
- Reduction and/or elimination of specialty pre-printed forms, related inventory management, carrying costs, procurement costs, and obsolescence.