

# Big R, Little I: How an Analytical Review of Card Payments Can Create Big ROI Returns with Little Investment

## A Case Study Featuring The Lincoln Electric Company

### Executive Summary

By applying Six Sigma business-improvement techniques to its collections cycle, the Lincoln Electric Company achieved impressive cost and operational benefits in three areas:

- ▲ Card processing fee reductions through interchange management
- ▲ Operational cost savings through technology improvement
- ▲ Data security and corporate risk/liability reduction through outsourcing

### Background

A full-line manufacturer and reseller of welding and cutting products and a global leader in the brazing and soldering alloys market, Lincoln Electric celebrated its 113th anniversary in 2008 with \$2.48 billion in sales and net income of \$212 million. The company operates worldwide, with its North American business primarily serviced through distributors.

Like many companies providing goods and services to other corporations or government customers, Lincoln Electric accepts purchasing cards (p-cards) from its customers and vendors as a method of payment.

P-cards are used by buying organizations to streamline their purchasing and payment processes and traditionally have been issued to authorized cardholders for placing routine orders

and making payments directly on behalf of their buying organizations. They are also used to make large purchases and payments in conjunction with purchase order and e-procurement systems and to pay invoices from accounts payable systems.

Unlike consumer or retail credit cards, p-cards have more features, capabilities and controls. A typical p-card, for example, can control the number of daily and monthly transactions being processed, the total daily and monthly spend, and where the card may be used based on merchant-code restrictions.

What differentiates p-cards most is that transactions can be processed with the same level of detail normally associated with an itemized invoice, known as Level-3 line item transaction data. The ability to gather and transmit Level-3 payment data is critical for buying organizations because of the need for greater financial accountability. In most cases, Level-3 information is provided by the merchant and submitted electronically to the buying organization's p-card reporting system, where it can be automatically entered into their accounting system and reviewed each day.

P-card transactions also have tiered interchange rates and are priced differently than consumer or retail card transactions. To encourage merchant participation and support of p-card programs, Visa® and MasterCard® created special interchange

rates to reduce a merchant's transaction costs whenever Level 3 line item detail is transmitted with a financial settlement.

In Lincoln Electric's case, what began as a small, card payment exception process grew exponentially. The company realized that, as its p-card volume increased over time, related processing fees became a material expense. Lincoln Electric knew that, if it could reduce its p-card processing fees, significant bottom-line savings could be realized.

### Analytical Framework Used

Lincoln Electric applies Six Sigma for process review and control—a business management strategy that seeks to identify and remove the causes of defects and errors in manufacturing and business processes. According to Six Sigma, continuous efforts to achieve stable and predictable process results (e.g., reducing process variations) are critical for business success. Six Sigma also asserts that manufacturing and business processes have characteristics that can be measured, analyzed, improved and controlled and that achieving sustained quality improvement requires commitment from the entire organization, particularly from top-level management.

Six Sigma places an emphasis on achieving measurable and quantifiable financial returns from any Six Sigma project; strong and passionate management leadership and support; and a commitment to making decisions on the basis of verifiable data, rather than assumptions and guesswork.

Six Sigma Methodology:

- ▲ **D**efine high-level project goals and the current process
- ▲ **M**easure key aspects of current processes and collect relevant data
- ▲ **A**nalyze the data to verify cause-and-effect relationships. Determine the relationships and attempt to ensure that all factors have been considered.
- ▲ **I**mprove or optimize the process based upon data analysis
- ▲ **C**ontrol to ensure any deviations from target are corrected before they result in defects. Set-up

pilot runs to establish process capability, move on to production, set up control mechanisms and continuously monitor the process.

### Lincoln Electric's Analytical Process

**Define:** At first, p-card use by Lincoln's clients was minimal. In 2005, processing volume was \$18 million, which represented a small portion of its business. By 2008, however, Lincoln Electric's card processing had increased to \$8–\$10 million per month, representing approximately 6% of its net revenues. Further, business acquisitions had resulted in a range of mixed card-processing technologies and different bank providers.

Initially, the company sought to reduce card fees: if transaction-processing fees could be reduced to 1.6%, the company would save \$500,000.

**Measure:** Lincoln Electric's own customer analysis showed that customer use of p-cards increased 3% from 2005 to 2006, with 5% to 6% of all customers paying with cards. Even though the number of Lincoln Electric customers using p-cards has remained constant since 2008, the dollar value charged to p-cards by these clients increased significantly as ticket sizes grew along with more widespread use.

Using a data-driven Pareto analysis, Lincoln Electric found that 26% of customers using p-cards drove 90% of all transaction volume. The company calculated it was paying a blended average of 2.7% to MasterCard, Visa and American Express® per transaction. Lincoln's customers were paying their invoices, on average, within 32 days—comparable to an average U.S. portfolio. However, many customers were then paying their invoices with a p-card to gain additional float, thereby creating an effective trade-terms rate of 3% payable in 30 days.

At this point, Lincoln Electric expanded the project scope to explore and quantify the potential benefits of modifying payment terms and card processing fees for its p-card transactions, with a goal of improving working capital.

**Analyze:** By conducting a thorough situational analysis, Lincoln Electric made some startling

findings. For example, a review by the Credit Research Foundation found that:

1. 93% of companies accepted p-cards for past due payments
2. 97% of companies found the p-card helped with preference issues with bankruptcies
3. No companies imposed fees on their clients to recoup their own bank fees

Lincoln also found internal confusion about bank card interchange fee structures (how the card processing fees are assigned) and a lack of information about the difference between consumer and commercial transactions.

Through its own research and by working with different bank providers, Lincoln Electric learned about less-expensive Level-3 interchange rates for business-to-business (B2B) transactions. They also became aware of large-ticket, reduced-fee p-card programs.

**Expanded Findings:** Beyond the economics of card fees, Lincoln discovered other issues that impacted the effectiveness of their card operations:

- ▲ Existing technology and support services—old hardware and PC-based card processing interfaces—were outmoded, inefficient and difficult to support.
- ▲ Data security issues and operations improvement were needed, especially for evaluating outsourced (or hosted) Software-as-a-Service (SaaS) options versus distributed software in the context of Payment Card Industry compliance and security best practices.
- ▲ New reporting and data access tools would make planning for automated cash application and process improvements in Lincoln Electric's reconciliation functions easier and faster.

**Improvement:** Both a competitive analysis and customer interviews were conducted to gain insights and preferences about p-card usage.

Customers revealed that p-cards were gaining traction and that a reward of some type would encourage their use. Lincoln's competitors allowed their customers a cash discount whenever the card

was used for payment—resulting in an effective 5% card discount—but this offer was eventually withdrawn. Lincoln also found that a full three-quarters (76%) of its distributors accepted p-cards at the point-of-purchase.

As a result, Lincoln Electric hypothesized that its p-card program could be better managed using more favorable payment terms. That is, if a client used a p-card, the payment would be Net 15 days versus Net 30 days if paying by check. The potential improvement in working capital appeared very favorable—a scenario that could produce \$3 million per month in cash flow. Factored against Lincoln Electric's monthly accounts receivables totaling \$125 million, a potential 2.4% (\$3 million/\$125 million) reduction was significant. For these clients, that equated to a 64% reduction in Days Sales Outstanding (DSO).

Lincoln Electric then set out to select a technology provider, taking into consideration the issues uncovered in its analyses. Ultimately, the decision would be driven by the provider's ability to offer Level-3 card processing, compliance with Payment Card Industry Data Security Standards (PCI DSS), business expertise and customer responsiveness.

During the provider search, Lincoln Electric decided that a Web-based SaaS payment model would provide the optimum solution for its p-card program. The online SaaS approach offered important deployment and support advantages, an easy migration path, scalability, growth options, various online applications and the flexibility to handle any of Lincoln's future Web-based initiatives.

After careful consideration, Lincoln Electric determined that 3Delta Systems, Inc.<sup>®</sup> (3DSI) met all of Lincoln Electric's criteria, plus some. A leader in payment solutions, 3DSI services are designed to provide the most cost-efficient card processing solutions by offering multiple payment interfaces that are secure, scalable and easy to implement; on-demand real-time reports; and transaction management through its Web-hosted SaaS delivery model.

The results of a “pilot run” launched in 2008 were overwhelmingly positive. Lincoln Electric saw its baseline interchange fee reduced from 2.7% to 1.4%, thereby saving \$1.4 million in direct interchange fees, with an average 19 days DSO on card customers. In addition, all U.S. entities of Lincoln Electric experienced significant process improvements due to Web consolidation and automation of card payments—whether it was on sales from Lincoln’s welding school (books, class fees and apparel) or product sales at tradeshow. And, instead of a time-intensive process of producing receipts for customers following a sale, receipts were now being generated automatically.

**Control:** One of the most significant operational improvements Lincoln experienced was reporting functionality and multi-user traceability, enabling a crucial “monitor and control” function. Having access controlled by user permissions helped support financial control requirements. Real-time custom and standard reports were downloadable, making it easy to track different types of cards being used by each client and to reach out to them, if need be. Improved interchange compliance reports from the bank provider enabled prompt review and audit of the processing system to ensure that the expected returns and gains were maintained. Flagging of non-compliant data was also available, making immediate troubleshooting and corrective action possible while ensuring overall Six Sigma project objectives were maintained.

## Summary

Lincoln Electric’s p-card business continues to grow, as does the overall B2B market. While it’s imperative to charge competitive fees, the ability to offer clients a card model that offers payment terms of Net 15 days is vital. Like Lincoln, many merchants simply sign up for a convenient card program when volumes are small without conducting any real research or analysis. Unfortunately, interchange fees and other costs can quickly escalate as card usage increases. Card acceptance is a complex environment, so it is important for companies to do their homework and choose a partner carefully.

To learn more about the suite of payment solutions 3Delta Systems offers, visit [www.3DSI.com](http://www.3DSI.com) or call **703.234.6010**.

## About 3 Delta Systems, Inc.

3Delta Systems, Inc. ([www.3DSI.com](http://www.3DSI.com)) is a payment solutions company that delivers the power of secure, Internet-based purchase and credit card processing solutions to enterprise, business-to-business and business-to-government customers. 3DSI’s complete suite of payment solutions—each designed from the ground-up to be scalable, easy to implement and conform with PCI Data Security Standard best practices—enables merchants and buyers to manage, authorize and settle payment transactions in real time. As a leading Software-as-a-Service (SaaS) provider, 3DSI has processed more than 28 million payment transactions worth nearly \$22 billion for over 6,000 corporations and government agencies since the company was founded in 1999.

## About The Lincoln Electric Company

Lincoln Electric is a world leader in designing, developing and manufacturing welders and cutting tools. The company has a 100-year record of business process improvement, has been selected by Harvard Business Review for multiple case studies and has worked with 3DSI to create the case-study framework for this presentation.