



e-business case studies

Norcross Group:

Transforming its role in the value chain
through IBM's Net.Commerce



Putting e-business to Work

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Overview

e-business Case Study: The Norcross Group

Based in Auckland, New Zealand, the Norcross Group provides print management and related products and services to the New Zealand corporate market. Established in 1962, Norcross has 105 employees and an annual revenue of NZ\$20 million. In addition to being one of New Zealand's largest printers, Norcross has also assumed a leadership role in the world of e-business. Using IBM's Net.Commerce, DB2 software and Netfinity servers as building blocks, IBM Business Partner Madison Systems created an extremely robust e-commerce business-to-business platform – known as “e://volution” – whose capabilities include online purchasing and advanced reporting. The system has proven so popular with Norcross's customers that it was recently launched as a separate business unit.

The most striking aspect of the e://volution system is its ability to support purchases from multiple suppliers, thus transforming Norcross's role in the value chain from strategic supplier to e-commerce hub for its corporate customers. In addition to reducing costs for Norcross and its customers, e://volution promises to provide a major boost to Norcross's already-brisk revenue growth. As this case study shows, Norcross and Madison Systems have combined to build a truly world-class e-commerce solution using IBM technology.

The Norcross Group's e-business Solution

- Transform business processes
- Build new applications
- Run a scalable, available, secure environment
- Leverage knowledge and information

- Primary e-business solution attribute
- Secondary e-business solution attribute

The Norcross Group

The Company

- One of New Zealand's largest printing and office products companies with revenues of NZ\$20 million annually
- Employs 105

The Web Site

- www.norcross.co.nz

The Solution

- Web-based business-to-business e-procurement and supply chain management solution

The Benefits

- Expected to achieve 100% payback within one year of deployment
- Generated \$1 million in incremental revenue in first six months of operation, more than 100% above initial projections
- 75 percent reduction in internal administrative costs, including a 50 percent reduction in customer service costs
- Reduction in the cost of processing an invoice from \$120 to \$40 per invoice
- Increased customer satisfaction
- Customers expected to achieve a 25 to 35 percent reduction in inventory-related costs
- Expected long-term increase in customer retention
- Facilitates new business development

The Technology

- IBM Net.Commerce
- IBM DB2®
- IBM Netfinity® servers

Business Partner

- Madison Systems, Ltd.
www.madison.co.nz

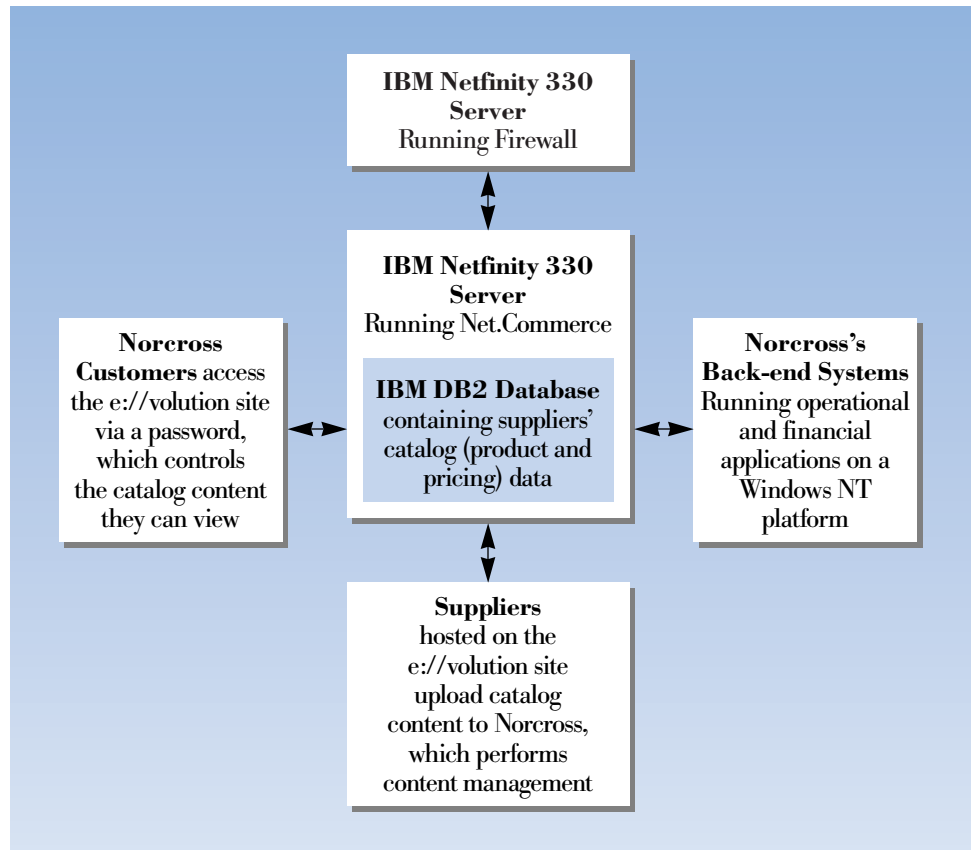
e-business Solution Profile

“What makes the e://volution system stand out is the ease with which corporate procurement managers can define how much each user can spend and which products they can buy. This capability satisfies the common requirement that a company be able to maintain centralized control over purchasing even while it decentralizes its operations.”

— Henry J. Norcross,
Managing Director,
The Norcross Group

Norcross’s e-commerce platform, dubbed “e://volution,” is an entirely Web-based procurement solution that allows corporate customers to purchase non-strategic consumable products, ranging from printing services and stationery to food supplies and uniforms. Norcross refers to the e-business solution as a procurement portal, since it provides corporate customers with access to the products and services of many suppliers through a single interface. According to Henry J. Norcross, Managing Director of the Norcross Group, e://volution’s position as a transactional gateway between corporate customers and smaller suppliers of non-strategic consumable products elevates Norcross’s role from supplier to “super-supplier” to corporate buyers. “Through our e://volution system, we’ve really repositioned ourselves as a procurement facilitator,” says Norcross.

The e://volution system is built on the IBM Net.Commerce platform, with underlying IBM DB2 databases functioning as the core database underlying the solution. To create a multi-supplier portal, Madison Systems uses Net.Commerce to create a master electronic catalog, sorted by supplier, product type, and other variables. Each supplier’s content – including product descriptions and pricing – is customized and stored in a master DB2 database. The solution runs on two IBM Netfinity servers. One server runs Net.Commerce and houses the underlying DB2 database, which includes customer information, such as pricing and discounts. The second server runs Norcross’s firewall. The entire e://volution site employs SSL-based security.



Source: The Norcross Group

Figure 1. Basic System Architecture of the Norcross Group e-business Solution

From a functionality standpoint, one of e://volution's most advanced features is the high degree of internal control it affords to corporate buyers in designating each employer's "right" to purchase. "What makes the e://volution system stand out is the ease with which corporate procurement managers can define how much each user can spend and which products they can buy," says Norcross. "This capability satisfies the common requirement that a company be able to maintain centralized control over purchasing even while it decentralizes its operations." The e://volution system achieves this by creating a decentralized requisitioning environment under which centralized procurement administrators set product or spending limits within different departments based on their specific procurement needs and purchasing agreements with suppliers.

Norcross also designed the e://volution system with an extremely rich reporting capability, a reflection of the rigorous demands of Norcross customers, whose feedback played a large role in shaping the solution. Many of the reports generated by the e://volution system are designed to allow large corporate buyers to measure the effectiveness of their suppliers, thus enabling them to ultimately increase the efficiency and cost-effectiveness of their procurement processes. Reports in this category focus on:

- *Ordering Volume* – The number and value of orders per month, per branch, or per cost center;
- *Supplier Fulfillment Effectiveness* – The number of stock-outs and back-orders per product, per supplier as well as average time of fulfillment per supplier;
- *Logistical Efficiency* – Freight costs, broken down by supplier, into urgent, normal and overnight; and
- *Inventory Management* – Stock status reports allowing users and suppliers to better manage inventory.

In addition to reporting, the e://volution solution also provides buyers with inventory management capabilities, which are designed to increase the efficiency and cost-effectiveness of buyers' procurement processes. According to Norcross, e://volution's inventory management capabilities allow companies to not only improve efficiency but also focus on the more strategic aspects of their businesses. "We've observed that companies tend to employ less than systematic procurement procedures, which typically leads to either over-ordering or under-ordering and is usually a poor use of administrative resources," notes Norcross. "The e://volution system adds value to the procurement process by allowing personnel to focus on strategic tasks such as product line and supplier management. This positions us to establish true supply chain partnerships with our customers." The e://volution solution also provides customers with a single, consolidated monthly invoice, with individual suppliers being paid by Norcross, and Norcross receiving payment from its customers.

Featured IBM Technology

Net.Commerce

IBM Net.Commerce has the features you need to grow your business online. It's scalable, flexible and lets you leverage your current technology investments while offering your customers a dynamic shopping experience. Net.Commerce is ideal for both business-to-business and business-to-consumer applications. www.ibm.com/software/commerce/net.commerce

DB2

The DB2 product family offers open, industrial-strength database management for business intelligence, transaction processing, and a broad range of applications for all types of businesses. www.ibm.com/software/data

Netfinity Servers

IBM harnessed the experience and expertise that went into building its enterprise systems and applied it to the industry standard server environment. Its Netfinity Intel processor-based servers are enriched with tools and solutions to help you control your environment more precisely, with less effort than ever before. Designed to meet your changing business needs, Netfinity servers offer solutions for small and medium businesses, e-business, business intelligence (data warehousing, data mining) and large enterprises. www.pc.ibm.com/us/netfinity

Planning and Decision Environment

“We were favorably impressed with the strong relationship that Madison had developed with IBM, and we saw this as a measure of its commitment to providing advanced e-business solutions using IBM technology.”

— Henry J. Norcross

The e://volution system was conceived as a result of feedback and requests received from a number of Norcross’s prominent customers and prospects, including Air New Zealand, Avis, Sky TV, Fisher & Paykel and Dominion Breweries. “While they all had slightly different specific ideas, they all shared a common goal of reducing procurement costs,” notes Norcross. One of the more common requests received from Norcross’s large customers was to designate a “super-supplier,” which would serve as the umbrella for – and manage all – the “sub suppliers.” As part of the scenario proposed by various customers, Norcross would manage the entire supply chain process and would provide customers with an extensive array of online reports. When this vision was first formally considered, in early 1997, Norcross quickly realized that it far exceeded his company’s capabilities. “Two and a half years ago, we couldn’t do it,” says Norcross. “And for that matter, nobody could. But we saw it as a chance to favorably reposition ourselves, so we decided to capitalize on it.”

Norcross’s planning approach was to lay out the general framework and high-level specifications for the solution internally, and then to hire an external partner to help design and implement the platform. In establishing the early guidelines for the solution, Norcross actively solicited the best procurement practices of its top 10 clients – and embedded the principles embodied in these practices into its plans for the e://volution system. “Some of the most important issues that arose at this stage related to departmental budgeting and pre-approval processes,” says Norcross. “So we knew fairly early how important it would be to provide tight controls for online purchasing to make the system as practical as possible for our customers.”

One of Norcross’s first steps in planning its platform was to select a technology solutions provider that would translate the e://volution concept into reality. According to Norcross, the firm’s selection of IBM Business Partner Madison Systems as the e-business solutions provider reflects Madison’s proven record in New Zealand as a provider of state-of-the-art e-business solutions that deliver real business value. “We were favorably impressed with the strong relationship that Madison had developed with IBM, and we saw this as a measure of its commitment to providing advanced e-business solutions using IBM technology,” says Norcross. “The fact that IBM awarded Madison ‘NZ Solution Provider of the Year’ three times also made us feel confident that we were partnering with a provider who could make our e-business vision a reality.”

Norcross conducted its technology evaluation process in conjunction with Madison Systems, which provided insight on the specific technical requirements of the system. According to Norcross, one of the main criteria applied in the evaluation process was the degree to which each product’s core capabilities matched the functionality envisioned for the e://volution system. Thus, while Norcross and Madison realized that some customization would be inevitable – given the solution’s unique features – they sought a solution that would mitigate customization requirements. “Because we had a clear conception of what we wanted e://volution to look like, we focused our attention on each product’s base features,” says Norcross. “The fundamental question we applied to each prospective technology platform was ‘How closely do its features fit with the capabilities we’re committed to providing to our customers?’ We concluded fairly quickly that the IBM Net.Commerce platform was the closest fit to our needs.”

A good example of the close fit between Net.Commerce’s unique features and Norcross’s requirements is seen in Net.Commerce’s multiple storefront capability. Indeed, this built-in functionality would prove critical to Norcross and Madison because their plans called for each supplier to be considered a separate “store” accessible to customers. Similarly, Net.Commerce’s Shopping Groups feature provided a ready-made means of presenting different sets of prices to different customers using the system. According to Norcross, this functionality represents one of the most important core functions of the solution, because it allows the e://volution system to represent the different discount structures that apply to various customers. “The ability to recognize the unique pricing structures for each client is an absolute requirement for a business-to-business solution like e://volution,” says Norcross. “The fact that this feature was core to Net.Commerce was a really key factor for us.”

Norcross also points to both ease of use and robustness as appealing attributes of the Net.Commerce platform. “Because the ability to handle multiple suppliers on the system was a crucial requirement, we realized that ongoing maintenance – the adding of suppliers and products to the system – was going to be very important,” notes Norcross. “The sophistication of Net.Commerce’s underlying data structure proved to be a real draw for us.”

Aside from strictly feature-based criteria, Norcross and his team were also cognizant of the importance of vendor credibility as they evaluated alternatives. And for Norcross, the credibility factor proved to be the clincher in his decision to go with an IBM-based solution. “Since we’re effectively asking our customers to hand over their procurement processes to us, we need to instill confidence in them that e://volution can deliver the security and robustness needed for top-notch performance,” says Norcross. “Our selection of IBM as a core technology provider sends a strong message to our customers that we can and will.”

Norcross also saw Net.Commerce’s scalability as a strong plus, and a factor that would prove increasingly important as the e://volution system was adopted more widely. “Some of the companies we expect to serve have hundreds of branches and hundreds of users in each branch,” says Norcross. “As we ramp up, it’s understood that the platform has to continue delivering performance with no compromises in speed, quality, and availability. As the leading commerce engine on the market today, we’re confident that Net.Commerce will provide this performance over the long haul.”

“The ability to recognize the unique pricing structures for each client is an absolute requirement for a business-to-business solution like e://volution. The fact that this feature was core to Net.Commerce was a really key factor for us.”

— Henry J. Norcross



Goals and Business Drivers

“The e://volution platform has also succeeded in opening up an entirely new range of strategic opportunities for us by extending the range of competencies that we can offer to our customers.”

— Henry J. Norcross

Norcross was motivated to build the e://volution system by a wide range of factors – some general to its industry, some specific to Norcross’s long-term strategy. Norcross notes that the most important industry-wide factor affecting the development of e://volution was the trend toward supplier rationalization, under which corporations streamline their base of suppliers in order to save costs. “We’ve seen a lot of large corporates move toward a policy of one major supplier – or ‘super-supplier’ – per category,” says Norcross. “We were in a unique position to capitalize on this because printing generally represents the largest line item in a company’s non-strategic consumable budget.”

Norcross saw e://volution as a way to reposition itself in the value chain vis-à-vis its customers, shifting its role from that of a supplier (albeit a prominent one) to that of a procurement facilitator. By assuming a more prominent role in its customers’ value chains, Norcross has forged closer strategic partnerships with its customers while significantly increasing customer satisfaction and customer retention. “The e://volution platform has also succeeded in opening up an entirely new range of strategic opportunities for us by extending the range of competencies that we can offer to our customers,” says Norcross. “In this respect, we have gone well beyond the initial goal we set of providing a single contact and a wider range of services to our existing customers. We’ve really redefined ourselves on the strength of an IBM Net.Commerce solution.”

While the goal of better serving existing customers was the primary impetus behind Norcross’s e://volution initiative, the firm also sought to reduce its internal administrative costs associated with customer service and order processing. As Henry J. Norcross explains, the labor- and paper-intensive nature of order processing before the advent of e://volution severely hampered Norcross’s internal efficiency and threatened to place a drag on future growth. “To understand the complexity that we were facing, one must take into account the extremely broad base of users that buy from us, with some companies having hundreds of branches, and within those branches hundreds of users,” says Norcross. “We had traditionally received orders via phone calls, faxes, and e-mails, and of the orders we received this way, at least half of them needed to be checked for various reasons via an outbound phone call. We were also required to create and maintain sample catalogs for all users. We saw this administrative inefficiency as a real constraint to our growth, and believed that a program that could streamline this would be extremely beneficial for us. So the development of the e://volution system came at a very opportune time for us internally as well.”

Implementation Timetable and Strategy

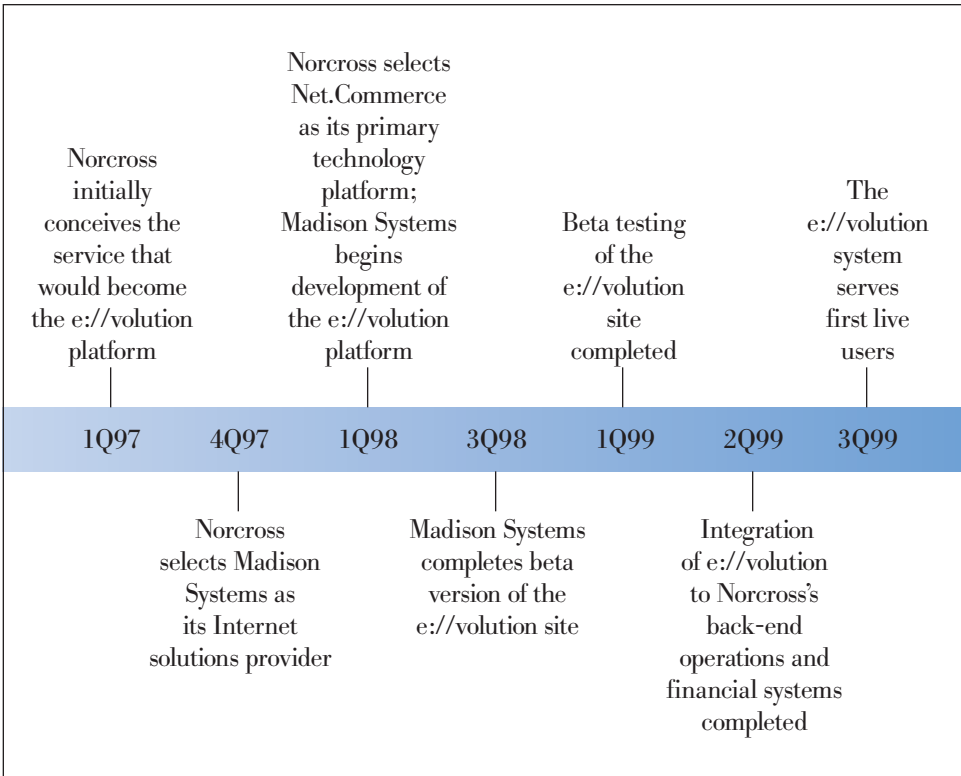
As mentioned previously, Norcross first conceived the e://volution system in early 1997, as a result of feedback and requests from several of its large customers. After further developing the concept internally throughout 1997, Norcross began and completed its vendor selection process in 4Q97, selecting Madison Systems, with whom it already had an established relationship. After Norcross selected IBM Net.Commerce as the core platform for e://volution in 1Q98, Madison immediately began development of the system and completed the beta implementation in 3Q98. Following the completion of beta testing, Madison then proceeded to integrate the e://volution platform with Norcross’s back-end operations and financial systems, completing the integration in 2Q99. The system served its first live users in 3Q99.

According to Phil Kenny, Project Manager on the Madison Systems team that worked on e://volution, one of the first and most challenging aspects of the project was to identify the system’s business process requirements. “We were really breaking new ground at that point because no one had done anything like this before,” says Kenny. “Because this was targeted to suppliers and customers that had existing relationships, it was important that we reflect both the processes of existing relationship and those of the new Web relationship. We saw it as equally – if not more – critical that we understood and took account of these business process factors as we designed the system.”

The next stage of the project, also a challenge, was to modify the Net.Commerce platform to provide Norcross’s customers with the ability to set usage parameters for their employees, including which suppliers and/or products they have access to as well as credit limits. “This was the most challenging aspect from a technical standpoint,” notes Kenny, “and it’s the functionality that sets e://volution apart most.”

“We were really breaking new ground at that point because no one had done anything like this before.”

— Phil Kenny,
Project Manager,
Madison Systems



Source: The Norcross Group

Figure 2. Implementation Timetable for the Norcross Group e-business Solution

Return on Investment

“Our original goal was to generate \$2 million worth of new sales within two years, but we’ve already generated \$1 million within six months. So we’re really moving at more than double the pace we originally projected. At this rate, we expect to achieve 100% payback on the system well within a year of its deployment.”

— Henry J. Norcross

Barely six months after first serving live users, Henry Norcross believes that e//volution has already far exceeded his company’s expectations on a number of different fronts. “Our original goal was to generate \$2 million worth of new sales within two years,” he says, “but we’ve already generated \$1 million within six months. So we’re really moving at more than double the pace we originally projected. At this rate, we expect to achieve 100% payback on the system well within a year of its deployment.” Norcross reports that while two of its corporate customers are now suppliers using e//volution, another eight are in the pipeline and are likely to begin using the system imminently.

In addition to generating incremental revenue for Norcross, the e//volution system has also yielded substantial cost savings for both the company and its customers. Norcross estimates that e//volution has reduced his company’s internal processing costs by 75 percent, including a 50% decrease in telesales and customer service costs. “We’ve achieved these savings because of the reduced need for paperwork and administrative processing,” he says. “For example, we estimated that the total cost to process an invoice, including staff time, faxing and other administrative tasks, has fallen from \$120 per invoice to \$40 per invoice.” Norcross further points out that by streamlining administrative processes, e//volution has also been positioning his firm for faster, higher margin growth. “The e//volution system has made our operations more scalable, since we estimate that we can now handle 300 percent more business without having to add personnel.”

Norcross has also reaped a number of intangible benefits from the e//volution initiative, including a significant rise in customer satisfaction. Henry Norcross sees the increase in satisfaction as a direct result of the amount of value-added information and services his company provides to customers. “Because the e//volution system has positioned us as more of a partner to our customers than a supplier, we expect this increase in satisfaction to translate into higher rates of customer retention in the future.” Norcross has also benefited from e//volution as a new business development tool. Henry Norcross cites a recent demonstration of the e//volution system to which approximately 100 prospects were invited. “About 60 of the companies we invited attended the demonstration,” says Norcross, “but these were by and large companies that we couldn’t even get an appointment with at their offices for the past two or three years. I think that’s clear evidence that we’re already reaping new business benefits from the platform, and the fact that it’s built on an IBM technology platform is a big part of that.”

Norcross's customers are also poised to cut their procurement costs significantly, notes Henry Norcross. "By ordering online through e://volution, our clients are able to cut the time it takes to process an order from requisition through to payment" says Norcross. In addition to increasing administrative efficiency and reducing costs, the e://volution system also provides Norcross's customers with more efficiency in their supply chain by monitoring a customer's inventory and stock levels. "We estimate that our customers will achieve a 25 to 35 percent reduction in inventory-related costs, most of which represents bottom-line savings for our customers" says Norcross.

Overall Benefits	
Area	Benefit
Increased Revenue	Generated \$1 million in incremental revenue in first six months of operation, more than 100% above initial projections Expected to achieve 100% payback within one year of deployment
Cost Savings	75 percent reduction in internal administrative costs, including a 50 percent reduction in customer service costs Reduction in the cost of processing an invoice from \$120 to \$40 per invoice Customers expected to achieve a 25 to 35 percent reduction in inventory-related costs Streamlined cost structure enabled by e://volution will allow Norcross to grow 300 percent without requiring additional administrative personnel
Customer Satisfaction	Increased customer satisfaction Expected long-term increase in customer retention
New Business Development	e://volution platform has facilitated new business development by gaining the interest of numerous large corporate customers who are attracted by its cost saving and information processing capabilities

“The e://volution system adds value to the procurement process by allowing personnel to focus on strategic tasks such as product line and supplier management. This positions us to establish true supply chain partnerships with our customers.”

— Henry J. Norcross

Source: The Norcross Group

Figure 3. Benefits of the Norcross Group e-business Solution

Future Plans

“The e://volution solution appeals to our customers mainly because it was built around Australasian business practices, it is highly cost competitive, and it’s built using IBM technology.”

— Henry J. Norcross

Going forward, Norcross plans to continue adding enhancements to the e://volution platform. A recent example of such an enhancement is the integration of e://volution with a number of enterprise resource planning (ERP) packages, as well as the addition of an automated payment gateway. “The e://volution system can now be linked with the back-end systems of our customers and our suppliers to create a fully-integrated, closed-loop procurement system,” says Norcross. “This further strengthens the functionality of the e://volution platform as well as the value that it provides to our customers and suppliers.”

Other plans to enhance the e://volution platform include the addition of Web-based order tracking capability, as well as improvements to the process by which suppliers maintain their Web catalog content. According to Madison’s Phil Kenny, shifting the responsibility for content management from Norcross to its suppliers will make a lot more sense as the base of suppliers using e://volution grows. “In the not too distant future we see the number of suppliers – and the number of transactions – really ramping up,” says Kenny. “Shifting the content management role to suppliers not only provides them with more control, but also makes the process more manageable for Norcross.” Norcross and Madison plan to achieve this by creating an automated front end accessible to suppliers through a Web interface.

But perhaps the biggest change in Norcross’s future is its long-term strategic direction. Reflecting this strategic shift, Norcross recently established e://volution E business Ltd., an e-commerce company that leverages the Norcross e://volution platform. So far, acceptance of the new service has been “nothing short of phenomenal,” notes Henry Norcross. “Our clients have expressed a strong desire to migrate all of their suppliers of non-strategic consumables to the e://volution platform. Our decision to create a standalone business unit for e://volution is a response to requests we have received from some of our larger clients that we make the system supplier independent.” Norcross adds that many clients have selected the e://volution platform over comparable solutions from major supply-chain vendors such as Ariba and SAP. “The e://volution solution appeals to our customers mainly because it was built around Australasian business practices, it’s highly cost competitive, and it is built using IBM technology.”



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