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## e-Procurement: Finally Ready for Prime Time

*To date, business-to-business (B-to-B) Internet-based commerce (e-Commerce) has been more pomp than circumstance. Delayed ROIs (return on investments) and slow adoption of many e-Commerce technologies and online markets (e-Markets) have caused recent backlash between corporate executives and investors. However, Aberdeen Group finds that electronic procurement (e-Procurement), which automates corporate purchasing processes, is one area of e-Commerce that is delivering rapid and quantifiable results.*

*e-Procurement solutions and services are significantly increasing purchasing efficiencies and reducing costs for the acquisition and ongoing management of business expenditures. Aberdeen research of early adopters of e-Procurement shows that new Internet-based service delivery models — including application service providers (ASPs), procurement service providers (PSPs), and commerce networks — are speeding the adoption of e-Procurement in companies of all sizes. Our research further finds that such Web-based delivery models are significantly reducing the time and expense of implementing e-Procurement. The implications of these findings are twofold: (1) Unlike other e-Commerce technologies, e-Procurement is delivering results today; and (2) e-Procurement adoption is set to take off, thanks to the proliferation of Internet-based service delivery models.*

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### Executive Summary

During the past year, the Internet may have seemed like only a place to lose money, but many companies have realized significant cost

and process savings by using Internet-based procurement technologies to automate the acquisition and management of non-production goods and services.

e-Procurement software applications and services are employee self-service solutions that streamline and support the purchase of non-production materials like office supplies; computer equipment; and maintenance, repair, and operating (MRO) provisions. These items can account for 30% to 60% of a company's total expenditures, yet they remain poorly controlled and costly to process at most organizations.

In late fall 2000, Aberdeen undertook survey research focused on the experiences of recent users of e-Procurement systems and compared the results to similar research conducted in November 1998. During both research efforts, Aberdeen collected information on product selection and implementation, as well as actual benefits realized by user organizations.

The results of this research indicate that e-Procurement users have consistently been able to lower prices paid for goods and services, reduce administration costs, shorten acquisition cycles, increase the use of preferred suppliers, reduce off-contract ("maverick") spending, and improve inventory management. In addition, our research shows that these benefits have been extended across the spectrum of organizations in terms of company size and purchasing volumes thanks to new Web-hosted delivery models from ASPs and e-Marketplaces — which can cut deployment cycles and costs.

These new service-based delivery options, coupled with their low-cost pricing models, are finally making e-Procurement available to a mass audience. Indeed, many enterprises are evaluating e-Procurement as they make their debut in e-Commerce. Recent research indicates that 80% to 90% of companies plan to procure goods and services online by 2003.

With the successful implementation of e-Procurement for indirect items like office supplies, Aberdeen research suggests that these

Internet systems will expand to automate more business processes, including other non-production business costs like travel and entertainment. Moving forward, Aberdeen predicts that these developments will help e-Procurement systems expand to include procurement of production (“direct”) materials as well. Such factors will drive significant sales growth for e-Procurement independent software vendors (ISVs), which have sold over 2,500 e-Procurement licenses to date. Aberdeen expects even greater sales growth for the ASPs and PSPs that will offer Web-hosted e-Procurement solutions to mid-market and small companies, which have been largely underserved.

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**e-Procurement offers the greatest opportunity to improve processes, increase productivity, and reduce costs across the supply chain.**

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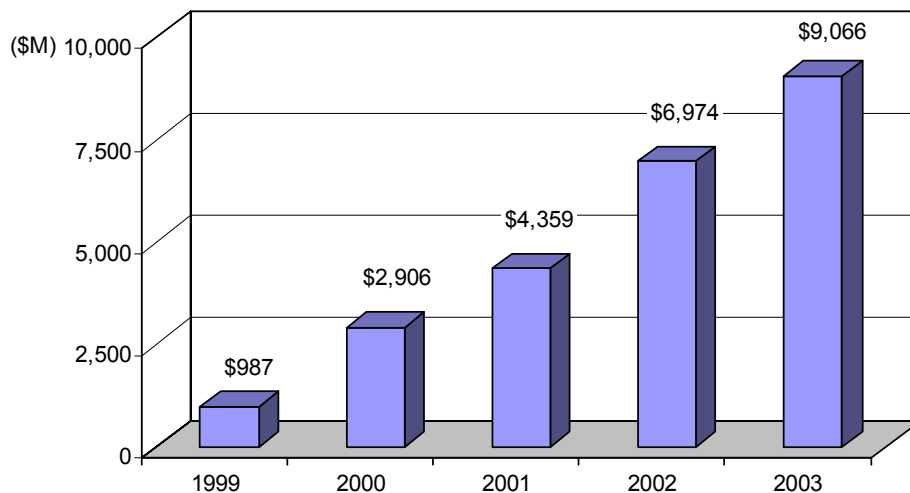
Aberdeen’s review of e-Procurement solution sales, technology vendor revenues, and industry demand for procurement automation suggests that the sales of e-Procurement solu-

tions will increase at a rate of almost 50% per year, growing from \$987 million in 1999 to more than \$9 billion in 2003, including license, implementation, and first-year maintenance fees charged by the ISVs (Figure 1). Such strong growth suggests that e-Procurement will emerge as a major source of revenue for systems integrators whose fees can range from 100% to 400% of the application license fee.

Aberdeen’s growth predictions are supported by recent industry research that indicates that only 8% to 10% of the largest 5,000 companies have purchased e-Procurement systems so far. Aberdeen expects the continued pressures to reduce costs and improve employee productivity will force the majority of these companies to develop an e-Procurement strategy.

Despite the consistent cost and process benefits of e-Procurement offerings, Aberdeen research led to the conclusion that e-Procurement still needs to improve in the areas of supplier enablement and sourcing, and integration with other systems, including payment, logistics, and internal business applications. Aberdeen is investigating these areas in our ongoing Supply Chain Management (SCM) research activities.

**Figure 1: Year-to-Year e-Procurement Vendor Revenue Growth**



Source: Aberdeen Group, March 2001

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## *The Allure of e-Procurement*

Global competition, pricing pressures, and finicky financial markets are forcing organizations to develop new strategies for achieving year-over-year improvements in productivity and costs. As a result, the ability to control costs and coordinate activities across the supply chain is rapidly emerging as a primary source of competitive differentiation within every industry.

Aberdeen research suggests that automating procurement offers the greatest opportunity to improve processes, increase productivity, and reduce costs across the supply chain. Purchased products and services are the single largest expense at most organizations, accounting for \$.50 to \$.55 of every dollar earned in revenue.

Reductions in procurement costs translate into dollar-for-dollar increases in profits. By contrast, improvements in other functional areas like sales are diluted by external factors such as cost of goods and cost of sales.

Aberdeen interviews with early adopters of e-Procurement identified six key business benefits companies use to justify the acquisition of an e-Procurement system:

1. Lowered procurement administration costs;
2. Improved data gathering and reporting on company expenditures;
3. Improved compliance with corporate contracts;
4. Shortened requisition and order fulfillment cycles;
5. Enhanced negotiation leverage with suppliers; and
6. Enablement of procurement professionals to focus on more strategic tasks.

### *Decreasing Purchasing Costs and Cycle Time*

Lowering procurement administration costs starts with reducing the time and/or the number of people required to process purchase order (PO) requisitions. To calculate the cost of manually processing purchases, one must take into account the steps involved with purchasing — from finding a supplier and getting a catalog to selecting a desired item and seeking approval

from a manager. One must also consider the time required for a procurement professional to review and approve a requisition before issuing a formal PO to the appropriate supplier.

Aberdeen research indicates that purchasing professionals can spend one-third of their time reviewing and processing paper-based purchase requisitions. Finally, for each purchase, a company expends time and effort to receive the item, evaluate the invoice, rectify the shipment, and cut the check.

### *Improving Data Gathering and Compliance*

Maverick spending runs rampant at most organizations, with the average off-contract spend among survey respondents representing over 27% of their overall indirect expenditures. Such unauthorized spending limits an organization's ability to understand where it is spending its money, on what items, and with which suppliers. Additionally, off-contract purchasing reduces an organization's ability to meet contractual volume, further reducing a company's negotiation leverage with suppliers.

By taming maverick buying, procurement officers can ensure that existing corporate contracts are respected and utilized, strategically rationalize their supply base, and negotiate better service and pricing terms with suppliers.

### *Enhancing Negotiations and Strategic Opportunities*

Reducing the time and effort spent processing paper-based purchase requests can enable procurement personnel to focus on more strategic areas like supplier rationalization and strategic sourcing. Indirect purchasing is notoriously distributed around organizations, with different departments unknowingly buying similar products from different suppliers in many instances. By capturing transactional data, an e-Procurement system can help an organization understand and control its spending. Such knowledge can empower an organization to aggregate purchasing of like items across the company for the purpose of negotiating improved price and service terms with suppliers.

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## *What Are Buyers Looking for?*

When selecting an e-Procurement system, user organizations reported using three key criteria:

1. Cost;
2. Compatibility with company and/or system requirements; and
3. Product functionality.

Aberdeen research indicates that the average price of e-Procurement systems is \$1.25 million, including license and first-year maintenance. On average, most early adopters of e-Procurement were large organizations that had indirect procurement expenditures of \$200 million per year. Their e-Procurement implementations were justified when a mere 1% savings enabled these companies to more than recover the costs of e-Procurement.

However, the large price tag and additional costs and burdens associated with implementing and maintaining e-Procurement initially made it difficult for many organizations to justify acquiring an e-Procurement solution. New hosted procurement solutions and services are removing the barriers to Internet purchasing automation for smaller organizations. Aberdeen research of early e-Procurement deployments indicates that hosted solutions can offer the following benefits over premise-based applications:

- Reduction in deployment cycles by 23%;
- Reduction in implementation costs by 60% or more;
- Reduction in ongoing operating costs by 40%.

Aberdeen expects that the benefits of these new hosted delivery models will drive the increase in the adoption of e-Procurement.

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## *What Is e-Procurement Delivering?*

Indirect purchasing functionality — primarily desktop product selection and receiving — is the core of e-Procurement systems, with all survey respondents' reporting that their systems support the buying of office supplies, information technology products, and MRO materials. These purchases may seem trivial, but they account for 30% to 35% of a manufacturer's ex-

penditures, and as much as 60% of a service organization's expenditures.

Beyond indirect materials, e-Procurement systems are extending to offer other business process functionality, including:

- Unplanned purchases or "spot buys";
- Auctions and sourcing;
- Travel and entertainment reservations;
- Expense management;
- Employee benefits self-service;
- Asset management; and
- Direct goods/services purchase.

### *Spot Buys*

Respondents indicated that their e-Procurement solutions provide increasing support for unplanned purchases, which can represent between 30% and 40% of all indirect purchases. Spot buys involve a frontline employee requesting that the purchasing department source and acquire an item or service that is not currently represented on the organization's existing contracts. Typically managed through a mix of phone calls and "paper pushing," the spot-buy process is inefficient and time consuming. Aberdeen research suggests that automating the request and sourcing process can reduce the cycle time and costs associated with spot buys.

### *Auctions and Sourcing*

e-Procurement system users also reported that they participate in auctions to acquire new goods or dispose of excess inventory or assets. Reverse auctions let organizations set a price they are willing to pay for goods or services, which purveyors then can bid to fulfill. Forward auctions enable buyers to efficiently disburse excess assets and inventories. In addition, some systems offered support for vendor selection and enablement in the form of sourcing capabilities. These are important features of e-Procurement solution functionality, as they give users more flexibility in product selection and pricing and open the procurement space up to e-Commerce activities other than straight purchasing.

*Travel and Entertainment (T&E) Reservations*  
Survey respondents noted an increase in automated purchasing of indirect services like travel. Typically, a company's third-largest expense —

travel-related expenditures including airline tickets, car rentals, food, and lodging — accounts for 7% of total operating costs. Many organizations have attempted to streamline travel procurement processes by employing travel managers or outsourcing this responsibility to a corporate travel agency. Such strategies are designed to take advantage of volume discounts for aggregated travel purchases, to ensure employee use of the company's preferred travel service providers, and to free employees from spending time making travel arrangements. Although the success of these corporate travel initiatives has varied by company, most of these programs overlook a large travel-related expense: the bureaucratic process of reimbursing employees for T&E expenses.

#### *Expense Management*

Indeed, many respondents have indicated that they are complementing core indirect procurement automation functionality with new modules or solutions that support a broader range of internal operational processes, like expense reimbursement. These tools streamline the cumbersome compensation process by automating the population, calculation, and review of T&E expenses.

Aberdeen research suggests that additional benefits can be derived from linking expense management solutions directly to the reservation booking systems of an internal travel department, external travel agency, or Web-based travel site. Such links could enable changes in employee itineraries to be automatically reflected in the expense reporting system, significantly reducing the time, costs, and potential for data entry errors within the T&E cycle. Aberdeen is investigating expense management as an area for further examination.

#### *Employee Benefits Self-Service*

Related to expense management, employee benefits self-service has entered the e-Procurement solution realm since the first survey was conducted. These are particularly powerful features to see developing as they signify the acceptance of e-Procurement systems as a cornerstone of a category of business solutions known as Employee Workforce Automation

(EWA.) EWA tools, in general, reduce the traditional paper-based, time-consuming, and costly tasks surrounding procurement and expenses, which can account for 5% to 10% of a typical employee's work week, depending on his or her functional role.

#### *Asset Management*

Once purchased, indirect items like technology products, capital equipment, and mobile devices can represent significant assets for an organization. As a result, e-Procurement systems are adding the ability to track corporate assets to their offerings, and we see the traditional asset management systems adding e-Procurement functionality to their systems as well.

#### *Direct Goods/Services*

Finally, respondents also indicated that their e-Procurement solution providers were beginning to offer functionality to support the acquisition and management of direct procurement goods and services. Aberdeen views direct procurement execution — which involves the monitoring, management, and execution of production and logistics plans — as the next major area of procurement that will be automated.

However, user be warned. Direct procurement is a much more complex and critical process than indirect procurement, and will require an entirely different breed of supply chain execution solution. Vendors effectively automating direct procurement processes will need to account for schedule- and replenishment-based purchasing activities, as well as the continual monitoring, management, and collaboration across the supply chain. Aberdeen is conducting research on these systems as well.

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### *Integration Is Critical*

e-Procurement implementations started out placing orders to suppliers through fax and e-mail, EDI (Electronic Data Interchange), and real-time system processing. However, in the most recent survey, most solutions have added XML (eXtensible Markup Language) and access to online marketplaces as means of placing orders as well.

The marketplace now comes in second place to fax and e-mail for placing orders, which is a telling development for online commerce. However, the fact that more than 60% of suppliers continue to receive orders — either from the buyer's e-Procurement application or an online marketplace — via fax or e-mail shows serious room for improvement. To fully deliver on its promise, e-Procurement will have to integrate on the buyer's back-end with financial systems for invoice processing and accounts payable, as well as with Enterprise Resource Planning (ERP) systems to tie procurement in with the rest of an organization's business processes.

In spite of the buyer's need for integration, e-Procurement, as a whole, has been primarily buyer-centric — automating most of the purchasing and order processes from the buyer's perspective — but providing little support for automating and streamlining suppliers' activities. As a result, suppliers must re-enter order data into their own systems, increasing order processing costs and cycles and increasing the potential for data entry errors.

Aberdeen sees the need for better integration with suppliers' existing back-office systems to help streamline the order processes as well. Procurement system vendors that have plans to use XML, supplier-enablement technologies and services, and partnerships with leading enterprise vendors will have an advantage at both the buyer and supplier ends.

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### *Commerce Networks Emerge*

Known by a number of terms like online marketplace, e-Market, or e-Procurement hub, the commerce network has evolved largely to address the major challenges identified in Aberdeen's first e-Procurement survey: catalog management and transaction management. A commerce network is a Web-based business center or section of an online business community designed to manage catalog content and to broker transactions and communications between e-Procurement application users and suppliers.

Since they debuted, commerce networks have become the cornerstones of the e-Procurement value proposition. In the most recent e-Procurement survey, over 60% of users reported accessing a commerce network via their e-Procurement solution. Today, the most popular services available from these networks are:

- Custom catalogs;
- Payment;
- Internationalization;
- Tax computation;
- Shipping/logistics services;
- Reverse auctions;
- Travel reservations;
- Expense reporting;
- Public catalogs;
- Reporting and analysis; and
- Forward auctions (buyer and supplier).

Surprisingly, auctions scored low in terms of availability on commerce networks, but this may be due to the fact that low-dollar, high-volume indirect purchases, like office supplies, are hard to put out for bid. However, auctions will be a feature to watch for as dynamic pricing becomes an issue, and e-Procurement systems expand to offer surplus goods and direct materials.

Payment services at the networks take the form of credit or P-cards, reconciliation, and invoice matching, with one in five respondents reporting that the network used offered digital cash or escrow services. Aberdeen predicts the need for services like escrow will become more important as organizations want to make larger and more significant purchases, and that this will be a key differentiator for successful commerce networks.

Less than one in three of commerce networks used by survey respondents offered tracing and tracking of orders, and only one in five managed returns and freight rating. One point to note is that most indirect procurement orders are delivered in less than two days, so there has been little pressure to develop sophisticated logistics. However, these features will be critical to fully realize the widespread benefits of aggregated procurement.

A relatively high percentage of commerce networks used by survey respondents reportedly offered internationalization; however, few re-

spondents reported actually doing cross-border transactions or using international suppliers in their e-Procurement implementations. More telling is that one in two commerce networks used by survey respondents featured multi-currency and multi-language support, while one in five offered local tariff/taxes utilities, and one in ten offered cross-border logistics or localization rules. Commerce networks will need to improve in these areas, as well as in freight scheduling and cross-border logistics, to fully realize global procurement opportunities.

Overall, value-added services like these at commerce networks are justified when most networks are taking a monetary piece of every e-Procurement transaction. Seventy percent of users reported that they pay a transaction fee for orders routed through the network, with two-thirds of these being flat fees from \$0.25 to \$2.50 per transaction.

Some evidence suggests that the vendors are moving away from the per-transaction fee model to a percentage of sales or a subscription-based model; however, users can expect to pay to access the content and services for the use of any network at either end. These fees will be an important bellwether to watch as e-Procurement evolves.

This prediction is true because whether or not companies are willing — or able — to continue to pay to use an intermediary for services in their corporate purchasing will decide the fate of commerce networks, a closely watched area of e-Commerce, in general. Product cost savings will have to be significant to offset these fees once automation has delivered first-round personnel and process cost savings. Aberdeen advises e-Procurement solution vendors and users to closely monitor developments in the commerce network business model and market. They should look for signs of more integration points and an expanded process footprint to respond to the continued challenges of content management and supplier enablement.

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## *Challenges Remain*

For most of organizations surveyed, the transition to e-Procurement is about halfway done, but they are a bit conservative in their e-Procurement deployment plans, both in number of users and suppliers enabled.

Aberdeen research suggests these limitations are in effect because some deployment promises have gone unmet and a number of implementations are behind schedule. In 1998, 65% of implementations were on course for completion or on schedule. In the most recent study, only 56% were on track to hit promised milestones and/or completion dates.

This change may be linked to new deployment methodologies, as well as to the increased use of systems integration partnerships, which have impacted user levels of satisfaction. In the most recent survey, ISVs saw slips in ratings for overall levels of satisfaction, knowledge of the procurement market, and quality of personnel. System integrators received even poorer ratings in those areas. Prices for implementation are steep, and users expect top-notch service, so Aberdeen advises ISVs to choose their implementation and integration partners wisely and to thoroughly educate them on the intricacies of the product.

Related to deployment issues, catalog management is still a pain-point for organizations rolling out automated procurement applications. Aberdeen research shows supplier enablement is still quite low — with surveyed users having a typical 30 suppliers activated — with plans to implement many more. This typical 30-supplier figure is higher than in 1998 when the average automated procurement implementation had only 10 suppliers enabled; yet, that still does not reflect a company's entire universe of suppliers. In addition, Aberdeen research suggests that the suppliers activated in commerce networks, to date, have been more a reflection of a supplier's e-Commerce readiness than its preferred status in terms of product, delivery, and service quality. These factors are key when procurement personnel make purchasing decisions, so networks will have to represent both more and better suppliers in these

areas to realize the ultimate benefits of e-Procurement.

As an extension of supplier enablement issues, it should be noted that most of today's e-Procurement system implementations do not support the strategic rationalization of the supply base. While the immediate thrust has been to get more suppliers into the systems, some of the promise of efficiencies and savings in automated procurement come from volume purchases from a fewer number of suppliers. e-Procurement implementations must evolve to achieve this where they can.

Finally, the outstanding hands-on duties of procurement administration make e-Procurement not completely burden-free for companies. The average surveyed respondent reported having 2.5 full-time employees dedicated to managing the e-Procurement solution, including catalog management and rules administration duties. While automation can dramatically cut processing costs and time, organizations must account for some administration when implementing e-Procurement automation plans and measuring achievements.

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### *e-Procurement Gains Mass Appeal*

Since Aberdeen first surveyed automated purchasing system use, e-Procurement has clearly arrived. The most recent data undoubtedly shows that automating purchasing through the Internet can be successfully deployed across the board in terms of size of company, type of industry, and level of procurement activity.

Survey data indicates that e-Procurement is now in use in a diverse range of industries, a more equally diverse range of size of companies, and with more diverse expansion plans. The total number of indirect material purchase transactions per month targeted for automation also covers the spectrum from 200 buys a month to over 10,000.

However, surveyed users reported they had only been pushing about 18% of their overall indirect spending through their e-Procurement systems. Within the next six months, though, most companies predicted they would more

than double the amount of transactions channeled through their e-Procurement systems. Ultimately, more than half of the respondents indicated that over 75% of their total indirect purchases will be channeled through their e-Procurement systems eventually.

The key finding in these figures is that companies were initially timid in transitioning their indirect spend through e-Procurement systems, but that they plan to step it up aggressively. With such established confidence in e-Procurement, Aberdeen expects the full benefits of automated systems to be realized.

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### *New Delivery Models Speed Adoption*

As alluring as automation has appeared, setting up an e-Procurement system has not been a small endeavor, often involving significant business process reengineering alongside considerable personnel and IT (Information Technology) infrastructure commitment. As noted, the average system price in the first survey was \$1.4 million, which put e-Procurement beyond the reach of all but the largest organizations.

Solution pricing has decreased somewhat in the last two years, with total pricing — including the license fee, implementation, and the first year of maintenance — averaging \$1.09 million. Lowering the bill, however, are solutions hosted by ASPs, which have emerged as the significant new e-Procurement delivery model in the last two years. Our research indicated that hosted solutions can be implemented 23% faster and at 60% lower cost, with most hosted solutions being fully deployed within six months (Figure 2). More importantly, the hosted model offers ongoing administration savings because e-Procurement does not become an IT staff maintenance burden. The ASP is responsible for the software setup and hardware maintenance, charging the e-Procurement system user organization a subscription fee to host the application.

## *Dawn of the PSP*

In this case, the popularity of the ASP model for e-Procurement signals the emergence of another Internet-based model that will further e-Procurement's arrival: the PSP. The PSP acts as a traditional ASP by hosting the e-Procurement software and hardware, but integrates product, sourcing, and supply-base management services to provide solutions that address the unique requirements — and constraints — of individual organizations. Basically, the PSP model enables organizations of all sizes to maximize the benefits of e-Procurement, while avoiding the associated burdens and risks by providing more comprehensive support for the complete procurement cycle.

Aberdeen research suggests that PSPs are emerging because effective deployment and management of e-Procurement technologies require significant IT resources and levels of product and process knowledge that eludes many organizations. In addition, e-Procurement solutions tend to automate the tactical, front-end processes of indirect procurement, providing little — if any — support for more strategic activities, such as supplier selection and SCM.

As a result, companies implementing e-Procurement must develop a high level of do

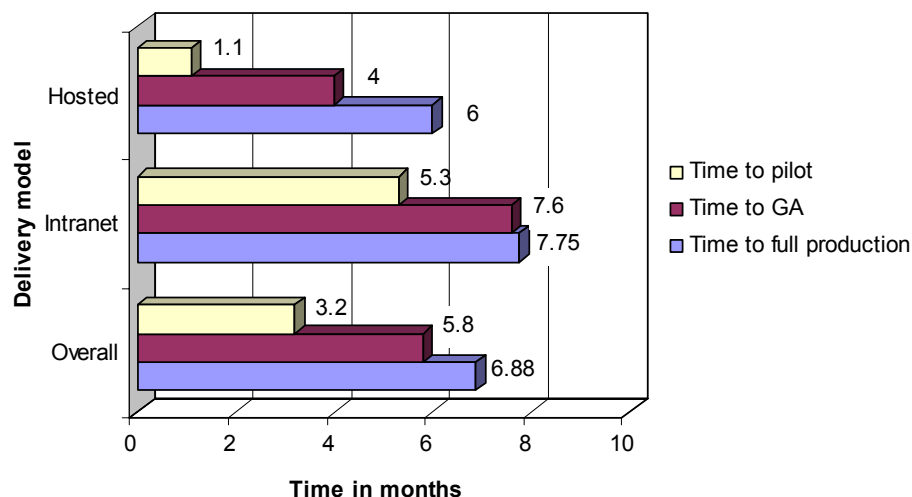
main expertise in specific indirect product categories, a broad range of procurement processes, and overall supply-base management.

PSPs address these challenges by marrying e-Procurement automation technologies with procurement and supply-base management services. PSPs deliver this hybrid procurement offering as a fully hosted, Web-based service, eliminating the need for users to invest in new technology infrastructures.

Aberdeen expects that this PSP model will be particularly attractive to small and midsize organizations that have neither the resources nor the buying volumes to access the full benefits of e-Procurement. In addition to cost, such factors in the past have been part of the reason e-Procurement technologies were inaccessible to most small and midsize organizations.

The PSP model should also appeal to larger organizations that have neither the expertise nor the inclination to dedicate significant sourcing and SCM resources to indirect and commodity items. Many large organizations lack the internal product and process expertise — particularly for indirect and non-strategic goods and services — to speed and maximize their ROI in e-Procurement technologies.

**Figure 2: Hosting Significantly Reduces e-Procurement Implementation Time**



Source: Aberdeen Group, March 2001

### *e-Procurement Still Delivers*

The PSP model also creates opportunities to aggregate spending across various organizations in order to negotiate volume discounts and improved service terms. In fact, Aberdeen expects PSPs to partner with e-Markets to raise the level of transaction volume (“liquidity”) and user return (“stickiness”) necessary to make the e-Markets successful moving forward.

Even as new online offerings have created widespread access to e-Procurement, Aberdeen research shows that the benefits have remained absolutely consistent, whether the application is inside or outside the firewall. e-Procurement is clearly effective in four key areas:

1. Lowering purchase administration costs;
2. Shortening product acquisition time;
3. Curbing maverick spending; and
4. Reducing the price of purchased materials and services.

Based on both surveys, Aberdeen research shows that automating the e-Procurement process dramatically reduces PO requisition costs, as well as purchasing cycle time (Table 1). Overall, survey respondents reported the following:

- Purchase requisition processing expense fell by an average of 73%;
- Purchase requisition processing time dropped 70% to 80%, averaging a week faster;

- Maverick spending decreased by 51%;
- Price of goods paid was 5% to 10% less, on average, from increased use of preferred suppliers; and
- Inventory expense dropped 25% to 50%.

Using these estimates, an average midsize organization can expect to save almost \$2 million annually through automation in process and product costs (Table 2).

In addition, many organizations predicted e-Procurement automation will enable them to *increase* the number of purchase requests they can process each month, improving responsiveness to requesters’ needs. On average, companies expect to be able to boost the number of purchase requests they can process by 277% per month in the long run, which testifies to the shorter cycle times and increased throughput companies expect to achieve with automation. This growth significantly raises the stakes of procurement activities, as a whole, and puts e-Procurement in the pole position in the overall transition to e-Commerce.

Finally, buyers are not the only ones who benefit from e-Procurement automation. Nearly 65% of survey respondents indicated that e-Procurement has provided benefits to suppliers, including reduced transaction costs and cycle time, increased orders and inventory turns, and fewer errors and product returns. Respondents also perceived improved efficiencies for sellers through reduced order entry, processing and invoicing,

**Table 1: Automated e-Procurement Reduces PO Processing Cost and Time**

Activity	1998 Survey	2000 Survey	Average
Manual processing cost	\$107	\$121	\$114
e-Procurement system cost	\$30	\$33	\$31.5
Manual processing time	7 days	9.72 days	8.36
e-Procurement processing time	2 days	2.53 days	2.27

Source: Aberdeen Group, March 2001

and better data analysis of the highest-spend customers. The supplier also sees direct cost savings through less catalog publishing and distribution, lower customer acquisition and sales, and improved payment and cash flow.

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### *What's Next in e-Procurement?*

Users report they want improvements in future e-Procurement system releases in the following six ways:

1. Streamlined catalog management process;
2. Enhanced interfaces with internal systems;
3. Provided automation for T&E;
4. Supported electronic invoicing and payment processing;
5. Improved reporting functionality; and
6. Improved/streamlined user training.

The enhanced interfaces to internal systems and improved reporting functionality will be critical to fully realize procurement process savings and to measure the effectiveness of procurement as it becomes more strategic. In addition, the improvements in electronic invoicing and payment processing capabilities will be key to help realize the promise of e-Procurement as the first end-to-end e-Business success story.

Finally, Aberdeen believes organizations will have to do additional business process re-engineering to change procurement habits as e-Procurement automation is adopted. Employees will no longer have free reign at the local office supply store to buy favorite supplies, and procurement personnel will not be just clerical data processors, but strategic players in business processes and relationships.

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### *Aberdeen Conclusions*

With consistent findings two years into the automated Internet procurement marketplace, Aberdeen research proves that e-Procurement is delivering significant and verifiable benefits. As a result, an increasingly diverse and larger group of organizations are testing the e-Procurement waters.

New delivery models have helped make e-Procurement available to the masses, with hosted solutions and e-Market hubs reducing the expense and burdens associated with e-Procurement. These solutions offer quantifiable cost and implementation benefits over intranet-based software applications. They also provide a channel for reaching the mid-market and beyond.

**Table 2: Bottom Line Benefits — One Scenario**

	Company X Background	Traditional Processes	e-Procurement	Savings
Total indirect expenditures	\$50M	–	–	–
POs/year	19,200	19,200	14,400	–
PO costs/year	–	\$2.19M	\$453,600	<b>\$1.19M</b>
Off-contract expenditures	–	\$13.7M	\$6.99M back on contract (@ 7.5% discount)	<b>\$525,000</b>
Inventory costs	\$100,000	\$100,000	\$62,500	<b>\$37,500</b>
Total one-year savings	–	–	–	<b>\$1.75M</b>

Source: Aberdeen Group, March 2001

As a result, ISVs with effective hosting strategies will likely gain an edge in the market, both in new customer acquisition with firms that cannot commit the resources to an internal rollout and continued operation and in customer satisfaction. In addition, the most successful ISVs and ASPs will be those that can bolster their deployment efforts to help implementations keep on schedule.

e-Markets will have a key role in e-Procurement as the content and transaction brokers of the indirect materials supply chain. However, there is considerable room to add additional services like logistics and internationalization to these hubs to amplify the payback of e-Procurement, as well as secure the role of the marketplaces themselves.

As the e-Procurement market explodes, however, the biggest threat to expansion is supplier enablement, as we have seen the number of sellers represented in most

e-Procurement installations is limited. The upshot is that the ISVs and e-Marketplaces that can enable the most suppliers will be able to deliver greater value to customers and maintain differentiation in the market.

Finally, looking at the bigger e-Business picture, Aberdeen research indicates that as e-Procurement offerings expand to automate and optimize other business processes — including payment, logistics, reporting, and excess asset sales — they will inevitably lead to the procurement of direct goods and services for manufacturing and complete e-SCM.

This is an area ripe for online automation and promises new B-to-B growth and success, and a company already well-versed in indirect e-Procurement can more quickly derive even greater efficiencies and savings in all its purchasing.

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