The E-Payables Solution Selection Report:

A Buyer's Guide to Accounts Payable Optimization

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Executive Summary

In spite of the first indications of an economic recovery, executives continue to focus on trimming operating costs to stay competitive. Of particular importance to finance departments are methods to streamline Accounts Payable (A/P) operations, including automating labor-intensive tasks. Companies are increasingly viewing A/P optimization -- the concept of focusing on process improvements, first, and then supporting them with effective levels of automation, as a competitive differentiator and a means to improve supplier relationships.

In a prior Aberdeen study, *E-Payables Solution Selection: Your 2007 - 2008 guide to A/P Transformation*, surveyed executives ranked the implementation of A/P automation as one of the top investment priorities on their agenda. Additionally, a good number of A/P managers, controllers, and other finance executives admitted that their current A/P processes were inefficient.

Given such industry-level drivers, this report provides guidance on selecting solutions required to optimize the A/P function, including how to effectively align technology with the following facets:

- Purchase Order (PO) presentment
- Invoice submission
- Workflows that manage the matching and approval processes
- Dynamic discounting / discount programs
- Payment and remittance processing

The goal of A/P automation is to reduce cost, speed processes, eliminate potential human-induced errors, and mitigate the risk of payment fraud. Yet automation comes with a price and any investment in technology today is likely to require cost justification. The Return on Investment (ROI) of implementing A/P solutions can be determined by comparing the Total Cost of Ownership (TCO) with the total operational cost savings. Other qualitative benefits, such as improved supplier relationships, become a valuable competitive differentiator.

This selection guide examines best practices from two angles: an optimization perspective, where the various A/P processes are evaluated for their suitability for technology support; and an automation perspective, where the right level of automation is determined for each process. Combined, these assessments serve as guidelines for organizations to select the best-fit solution.

Solution Selection Guide

Aberdeen's Solution Selection Guides provide an in-depth and comprehensive look into process, procedure, methodologies, and technologies with best practice identification and actionable recommendations

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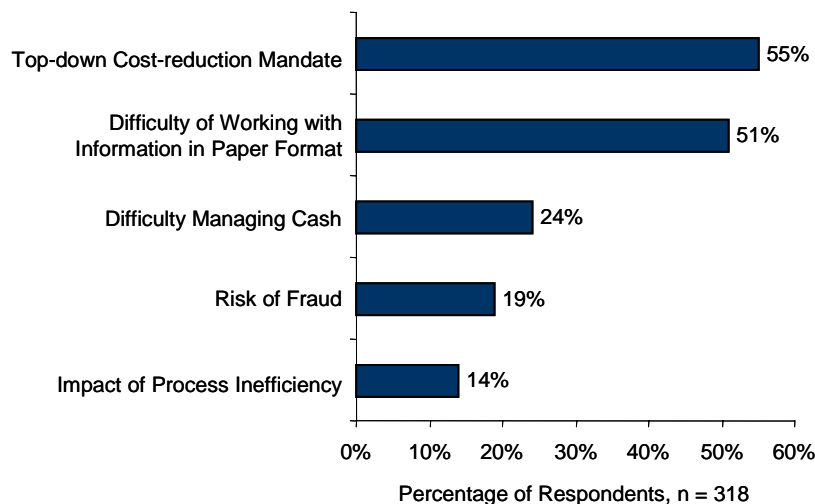# Motivations for A/P Improvement

Evolving Business Pressures

As profiled throughout Aberdeen's 2010 accounts payable research, cost reduction efforts have taken center stage in enterprises across industries and revenue categories. Studies conducted in April (*Invoice Receipt and Workflow*) and May (*Global Payments*) of this year found that along with a general difficulty in working with paper-based documents, cost pressure leads the list of factors driving organizations to focus on improving payables performance, whether the targeted area is front-end receipt and approval or back-end payments. What is clear, when reviewing potential solutions, is that these pressures should not be addressed individually. Rather, the strategies to be discussed serve to mitigate multiple concerns, by removing paper from A/P processes, increasing efficiency, improving visibility, and lowering the cost incurred to fulfill this important function.

Fast Facts

√ 55% of survey respondents must deal with mandates to reduce costs

√ 51% still struggle with paper-based systems

√ 39% do not have the necessary support for process change and technology adoption

√ 62% of respondents cite the automation of invoice receipt and workflow as their top strategic action

Figure 1: Top Pressures that Drive A/P Optimization

Percentage of Respondents, n = 318

Source: Aberdeen Group, August 2010

There is a distinct difference between automation and optimization. To automate an accounts payable processes is to maximize the amount of work handled by software applications. On its own, automation offers only the ability to do the same things more quickly. Optimization, however, focuses on doing the right things more quickly and accurately, which can then be made even more beneficial through automation.

Challenges to A/P Optimization

While it may seem intuitive that optimization is the goal and automation is a necessary component, Aberdeen's *Global Payments: Maximizing Cash Flow with Electronic Payments and Process Automation* (May 2010) found A/P

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processes in most businesses are far from optimized. Table 1 outlines the
top challenges that impede optimization.

Table 1: Key Challenges

Top Challenges that Impede Payments Optimization	Percent of Respondents, n = 161
Lack of integration between electronic payments and accounting systems	38%
Inability to send or receive automated remittance information with electronic payments	31%
Shortage of IT resources for implementation	27%
Difficult to convince suppliers to accept electronic payments	27%
Check system works well	26%
No executive sponsorship	20%

Source: Aberdeen Group, May 2010

At the top of the list was the difficulty in integrating electronic payments
and accounting systems. Of course, by implementing an accounting system
that includes these features, this challenge is avoided. Yet legacy applications
and incremental purchases of non-integrated solutions for different
electronic payment methods may result in disparate systems and lack of
integration. Nearly a third of respondents (31%) also cited the inability to
send or receive automated remittance information with electronic payments
as an impediment to A/P optimization, making this an important feature to
look for.

Twenty seven percent (27%) of the respondents also cited a shortage of
Information Technology (IT) resources as a key impediment for
implementation of automated A/P solutions. Therefore it is important to
look beyond the features available in any solution and also consider the ease
of implementation and the availability of resources from the technology
vendor and/or independent third parties to assist in the implementation.

While companies may be actively implementing A/P technologies, not all
suppliers necessarily have supporting accounts receivable technologies by
which they may easily process electronic payments. Companies may be
forced to concurrently use electronic and paper-based systems, preventing
them from achieving full optimization. Conversely, the company itself may
express a certain level of complacency in being satisfied with paper-based
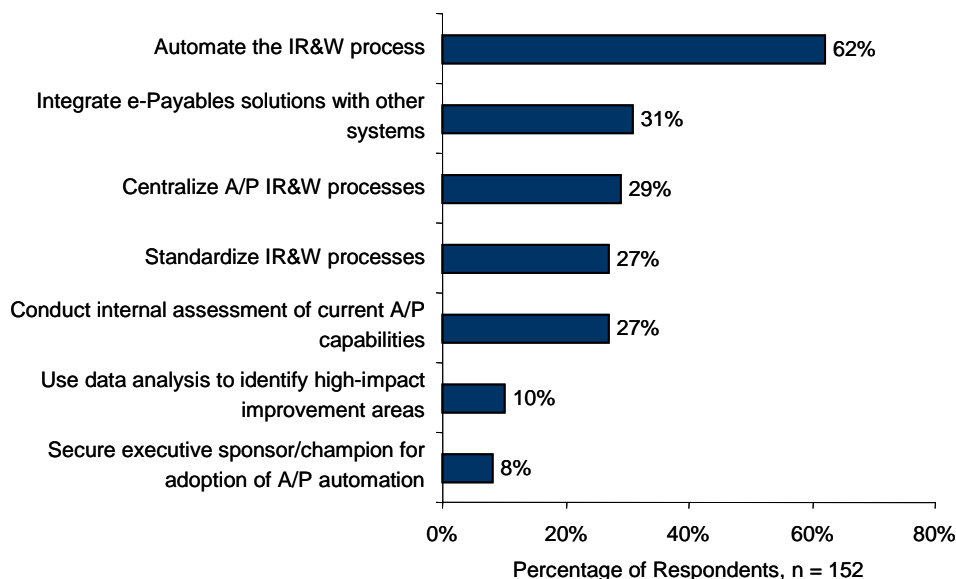checks. In these cases, it will be difficult to truly achieve optimization.

And finally, lack of executive support or sponsorship to undertake new
technology initiatives was also cited as a key factor by 20% of the total
respondents. Without active participation and clear communication from
senior executives, first and foremost, software and implementation projects

may not be approved. But once approved, it is important that senior management clearly communicate the value proposition offered by new technologies and build a case for adoption of new technologies by highlighting the (anticipated) ROI for A/P technologies, based on the TCO. Senior management should also make a concerted effort to provide training resources for all impacted units, especially the end-user.

Strategic Actions

Recent research on payments, invoice receipt and workflow all leads Aberdeen to observe that automation has become the top strategy for addressing the pressures to reduce cost and optimize processes. For example, 50% of companies surveyed in Aberdeen's *Global Payments: Maximizing Cash Flow with Electronic Payments and Process Automation* (May 2010) had increased the use of ACH, 43% had increased the use of wire transfers and 57% had decreased the use of paper checks. *Invoicing and Workflow: Transforming Process Automation into Operational Cost Control* (April 2010) found 62% of respondents selected automation of the Invoice Receipt and Workflow (IR&W) process as their top strategic action (Figure 2).

Figure 2: Top Two Strategic Actions - IR&W

Source: Aberdeen Group, April 2010

This collection of strategic actions is a good example of how process and automation can combine for optimization. With automation, workflow rules can be established such that invoices are automatically routed to the appropriate approvers, based on total price, cost center, or other applicable criteria. Electronic transfer replaces inter-office mail, but the underlying process remains the same. Optimization would begin with an examination of the criteria used to determine which invoices require managerial approval, such as a reevaluation of dollar thresholds which would trigger a secondary

review. In this case, not only could individual approval time be decreased, but the number of instances of review could be minimized as well, leading to a greater overall savings.

This prioritization of actions is premised on two fundamental ideas: technology solutions require a not-inconsequential investment, and that the investor should do everything in its power to maximize the potential benefit that these solutions can contribute to their operations. What is required here is a view of the accounts payable function and technology footprint as an interconnected whole, where process design can improve the benefit of automation. Organizational structure (or division of labor) can reduce redundant tasks, information from one system can be shared with others to minimize the labor of manual data entry and to provide executives with a centralized view of A/P-related data (balances, incoming invoices, scheduled payments, etc.).

The main purpose of this document is to share the insights of your peers as to where they have focused, and what difficulties they have encountered – so that you know what to keep in mind, and what questions to ask as you explore options. While Table 1 listed impediments to payments optimization, _Invoicing and Workflow: Transforming Process Automation into Operational Cost Control_ (April 2010) asked A/P professionals about the top challenges they faced in delivering on their improvement strategies for invoice receipt. Many of these challenges, not surprisingly, overlap with those that end-users face in optimizing payments (Figure 3).

Figure 3: Top Two Challenges to Improving Performance

Percentage of Respondents, n = 152

Source: Aberdeen Group, April 2010

Again we see the need for executive commitment to policy, processes and technology solutions, and for integration. But we also see that non-standard

and multiple invoice formats, lack of automation, and supplier reluctance to electronic methods present barriers to performance.

Therefore, as in any solution selection, it is critical to communicate the value of A/P improvement internally and articulate the role technology can play in that improvement process. Without this important connection, lack of commitment and support will continue to present barriers. Executive support is likely contingent upon a persuasive illustration of potential ROI. But what about staff adoption of the prospective solution? Will there be processes in place to prevent invoice handling outside of the system? Does the interface make it more difficult (or time-consuming) for A/P staff to complete their work?

Systems integration is key, and solutions should not be chosen without an evaluation of their (and their provider's) ability to support the exchange of information between applications. Does the A/P system maintain its own copies of vendor, item, and employee data, or does it communicate directly with the underlying ERP? What level of integration is necessary for your business?

Solution selection is not a one-size-fits-all project. In an ideal world, you would flip a switch and receive 100% electronic invoices from all suppliers. In reality, however, you will still receive a sizeable amount of invoices through the mail, or fax, or email attachment – or in some form other than direct data transmission between trading partners. The key is to understand this reality, accept invoices in all of their many variations, and utilize existing technologies or services to ensure that they are converted to efficiently-handled formats after initial receipt.

The Advantage of Leveraging A/P Automation

An automated A/P solution can expedite payment processes and achieve cost efficiency by streamlining operational processes. Some of the commonly used A/P functions include e-invoicing, scanning and workflow, online tracking and reporting capabilities, electronic invoice dashboards and supplier portals, as well as supplier networks, payment services and spend analytics for all invoices. Automated A/P solutions can reduce manual processes, allowing re-assignment of human capital to more complex, analytical tasks.

Automated A/P processes also provide better visibility to the entire payment workflow from approval to receipt to payment by maintaining a consolidated repository of all records and providing easy access. This in-turn enables executives to practice greater financial control and ensure regulatory compliance. Automated solutions also ensure standardization of receipt and workflow processes by using the same electronic medium instead of relying on different paper documents. Table 2 highlights the main advantages of implementing A/P automation.

Table 2: The Key Benefits to Adopting A/P Automation

A/P Process	Performance Advantage
Electronic Invoicing	▪ Speed invoice reconciliation and payment processes ▪ Offer one-to-many benefit of supplier enablement ▪ Connects supplier base in a virtual environment for transaction processing
Workflow and Imaging	▪ Manage all facets of in-house invoice scanning and documentation ▪ Provide an effective electronic repository and archival system
Standard Remittance	▪ Reduces costs of using paper checks ▪ Improves security and reliability of payments by eliminating manual processes ▪ Improves cash flow forecasting

Source: Aberdeen Group, October 2010

In building a business case for investing in an A/P solution, it is important to establish a baseline to measure the current state of these processes:

- Determine the current cost of using paper checks and set a goal for cost reduction

- Measure the time it takes to perform certain processes such as invoice matching, reconciliation and payment processing

- Identify which steps of the process can yield the most significant results

- Describe your current "as is" means of archiving and retrieving information – this may not only provide a means of cost and time savings, but also identify risk

These are just some of the ways in which an investment in automation may be cost justified and will also help to provide a process improvement plan, with the goal of A/P optimization.

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Chapter Two:
The ROI of A/P Optimization

The selection of automation solutions based on best-fit to each A/P function plays a crucial role in an organization's ability to reduce operating time and cost.

Accounts Payable Automation in Oil and Gas

Struggling to keep up with the approximately 9,000 invoices flowing into a Midwestern site, this North American oil and gas company was paying suppliers late and incurring unnecessary penalties. The site's Director recognized the issue, and knew a change was required to keep up with a growing business. The previous system, implemented by A/P and IT at other sites, just didn't fit the needs of this, their largest asset.

They focused on an A/P automation solution specifically tailored for the oil and gas industry. "We decided this was a solution we were going to investigate," says the company's Project Coordinator. "Through a software implementation project, we determined cost. From there, it went to the VP level, to compare that cost with projected gains." The implementation decision was driven at the site level, rather than from the central A/P or IT groups. "It was pretty unorthodox because we told [those departments] that this is the software we're going to use because it will allow us to process this volume, at reduced costs. It was almost embarrassing to the A/P department that they weren't paying attention to it."

The company chose a Software-as-a-Service (SaaS) solution that enabled the receipt of electronic invoices. It also contained functionality to scan paper invoices from suppliers not sending electronically, to allow all transactions to flow through coding and approval within the system. Though on-boarding efforts are continuing, the company has signed up 86% of all potential vendors to date. The solution has allowed them to handle greater numbers of invoices with the same number of people. "As we continue to ramp up rig count, we're still able to maintain the same level of coders," says the Project Coordinator. "It's so good, we could probably double the invoice count of today and maintain the same level of personnel handling volumes."

Fast Facts

√ 44% of respondents identified the ability to reduce invoice processing cost as critically important in evaluating A/P solutions

√ Aberdeen found a $4.55 (29%) differential between the processing costs of manual and electronic PO-based invoices

√ Aberdeen also found a $1.01 (7%) differential between the processing costs of manual and electronic non-PO-based invoices

√ The cost per transaction of payment by check is almost double (1.8 times) the cost of commercial cards and 1.5 times higher than using an Automated Clearing House (ACH)

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Accounts Payable Automation in Oil and Gas

Looking ahead, the company's expectations have changed. "First, we looked at this software as a tool to address one asset's needs," according to the Project Coordinator. "It has been so successful, we've been able to save so much money, that we've asked ourselves 'how does this software look, and how could it work for us in a similar way in other assets we have?'" In addition to eyeing a broader implementation, the company has begun looking into extending the provider's solutions to other processes. They are currently working with the provider on an effort to increase efficiency in the processing of Purchase Orders (POs).

Asked for what advice he would give those currently exploring A/P solutions, the Project Coordinator offered; "Many decisions are made based on the cost of software, or on the costs a vendor is providing you. Some are made to go with a software package that might appear to be cheaper. Ultimately, you get what you pay for. You may initially have to pay more to get something more suited to your needs. But ultimately you're going to pay for it anyway, because you'll need to go back to your software provider to get that functionality added later on."

Where to Start

Aberdeen has established a four-part solution framework to help A/P managers better define their current state and identify logical areas for improvement (originally set out in Aberdeen's June 2004 *Invoice Reconciliation and Payment Benchmark Study*). The framework remains highly relevant and useful in developing an approach to automate the A/P function. The four areas are:

1. **Receipt**. Invoice receipt may occur in any one of numerous paper or electronic formats – EDI, XML, or other file formats including credit card statements, evaluated receipt settlement, web-based order / invoice creation, or PO flip. A distinguishing characteristic for EIPP is that receipt (as with settlement) may be enabled via a supplier or trading network.

2. **Approval and inquiry**. Once received, an invoice may be processed utilizing rule-based logic that analyzes certain invoice attributes (supplier, amount, buying entity, etc.) to define the proper routing and approval workflow. Notification / alert capabilities as well as direct integration to transactional systems are used to track invoice status and identify issues.

3. **Validation and reconciliation**. The verification of invoice accuracy and the resolution of any errors, discrepancies, or disputes prior to payment are accomplished by automated matching engines, collaboration with suppliers and internal end users, and integration to transactional systems. The information captured in this segment is used for audits (internal and external) as well as spend analysis.

4. **Settlement**. After the efficient capture, tracking, and approval of enterprise liabilities, the next step is payment processing, utilizing a payment method that may include Electronic Funds Transfer (EFT), ACH, card or supplier / trading networks. Capabilities like dynamic discounting, rebates, tax management, and trade financing are available in advanced solutions to optimize the management of cash flow.

Solution Selection Checklist

In conjunction with its four-part framework, Aberdeen also recommends creating a solution selection checklist which minimally includes the following components:

- Build a business case to define the expected value to be derived (use benchmarks such as those described later in this chapter)

- Define the goals and objectives for this initiative, including ROI targets

- Document a formal scope of the project

- Engage other key stakeholders in the definition of solution requirements

- Understand the solution provider landscape

- Measure a baseline of performance against which progress may be tracked and ROI measured

- Include a TCO analysis

The key to A/P optimization is the ability to understand the relative importance of automation in each segment of the procure-to-pay process. Will the most gains be made by automating the invoice matching function? Intelligently scanning paper invoices? Indexing invoices and images? This evaluation will vary greatly based on buyer-supplier transaction frequency, as well as delivery logistics that are impacted by geographic distance.

For example, organizations leveraging a heavily paper-based system (including postal delivery) will have a more difficult time managing the delivery of purchase orders, invoices, and payments with long-distance suppliers. With that said, should the organizations choose to electronically scan / capture the documents to shorten delivery time, there's still the issue of how they would manage high-frequency transactions. Table 3 reveals how organizations are weighing the relative importance of A/P solution attributes.

Table 3: Relative Importance

A/P Solution Attribute	Avg. Score (1-5)	Percent Critically Important
Ability to reduce invoice processing cost	4.14	44%
Quality of invoicing data capture	4.09	39%
Ability to effectively execute invoice matching	4.00	38%
Ability to index and search stored invoices & images	3.99	36%
Ability to store images of scanned invoices (image repository)	3.98	40%
Ability to integrate with ERP (separate solution)	3.94	38%
Ability to reduce invoice cycle time	3.93	33%
Inclusion as part of ERP (same solution)	3.29	20%
Ability to handle AP and AR in the same solution	2.88	11%
On-Demand / SaaS deployment model	2.53	7%

Source: Aberdeen Group, April 2010

Which Solution Type Makes the Most Sense?

The relative priority of the different attributes listed in Table 3 will help decide which type of solution or which features to prioritize in optimizing A/P. Some vendors will offer simply a piece or multiple pieces of the pie. The following are some of the solutions that may be on the table:

- **Electronic invoicing** solutions automate the invoice reconciliation and payment process and address the majority of invoice types. Many of these solutions provide a one-to-many benefit of supplier enablement via a network of participants. As with the procurement space, this type of solution blurs the line with offerings such as supplier networks and other supplier enablement initiatives, connecting enterprises to the supplier base in a virtual environment for transaction processing.

- **Workflow and imaging** solutions can manage all facets of in-house invoice scanning and documentation, as well as provide an effective electronic archival system. They are often part of a larger cross-functional enterprise solution.

- **Payment automation** platforms specialize in accounts payable and accounts receivable processing and offer relief in disbursements for payroll, benefits, regulatory and tax issues, as well as intra-company transfers. These solutions range from Automated Clearing House (ACH) and general payment processing to holistic A/P solutions.

- **Enterprise financial solutions**, which manage the budget and general ledger of an enterprise, consist primarily of Enterprise

Resource Planning (ERP) providers. They typically offer basic financial functionality, such as a general ledger, however, more advanced capabilities like supply chain auto-reconciliation and A/P workflow are among the newer features incorporated into some solutions. While these solutions have helped move accounts payable automation forward, most offer limited electronic transaction capabilities beyond EDI.

- **Outsourcing or managed** service providers can offer labor arbitrage, A/P expertise, and the ability to leverage licensed or homegrown automation tools. Specializing in fulfillment services, outsourcing is an option that is readily available to many enterprises and can be leveraged as part of their A/P makeover.

- **Purchasing cards** (p-cards) were designed to streamline both the front (purchase) and back (payment and reconciliation) ends of the procure-to-pay process by introducing greater levels of control and visibility for management of low-dollar, high-volume categories.

- **Supply chain finance** solutions provide full A/P invoice dashboards, allowing an enterprise to more easily manage their payables. With ERP integration and supplier portal capabilities, these solutions can assist in moving to an automated accounts payable platform.

- **Treasury management** services offer advanced forms of financial administration by consolidating cash forecasting and handling foreign exchange affairs. These services provide management for deals and trades, as well as providing analytics and risk management.

Justifying the Cost: The ROI of A/P Optimization

Any ROI calculation is a balance of cost versus benefit. Prospective solution providers can help to determine the overall cost of the solution. Generally this will include:

- Software costs, either as an up front payment (usually associated with an on-premise solution) or a subscription based cost (most likely payment method for SaaS but more and more vendors today offer this alternative even for on premise solutions)

- Cost of services to implement

- Cost of ongoing maintenance and software upgrades (maintenance)

- Cost of hardware, if needed – note that no hardware is required beyond laptop or desktop personal computers for a SaaS solution

- Internal IT costs, which may in fact be the most difficult to estimate as these will be resources shared with other functions and applications

But at the heart of justifying the cost of investing in A/P solutions is in determining the potential value derived.

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Identifying Value to the Business

There are several ways to measure cost and cost reduction as a result of automating various A/P functions. The cost to process a single invoice is not the easiest measure to capture for A/P organizations. At its most basic, this could simply be the division of total A/P cost (labor plus IT) by the number of invoices over a fixed period of time.

Perhaps a better indication of the impact of a technology solution is to measure the reduction in cycle time, as it will have a very visible and direct impact. In fact Aberdeen used both cost and processing time to determine the Best-in-Class in the context of invoice receipt and workflow. In fact the cost of processing a single invoice in an average Best-in-Class company was less than a quarter of the cost among all others. So aspiring to this level of performance can be a direct source of cost justification.

But perhaps more visible to the entire A/P staff is the reduction in cycle time. Not only does this result in efficiencies, but, in fact, "time is money." Yet in A/P, this can also be a source of other related cost savings in terms of gaining additional discounts and avoiding late payment fees.

As illustrated below, there is a significant performance gap between top-performers and their peers – which also represents a significant potential for improvement. Figure 4 and Figure 5 present a two-part approach to improving performance: Increasing process efficiency to lower overall time required; and, improving the accuracy of invoice information to decrease the number of exceptions.
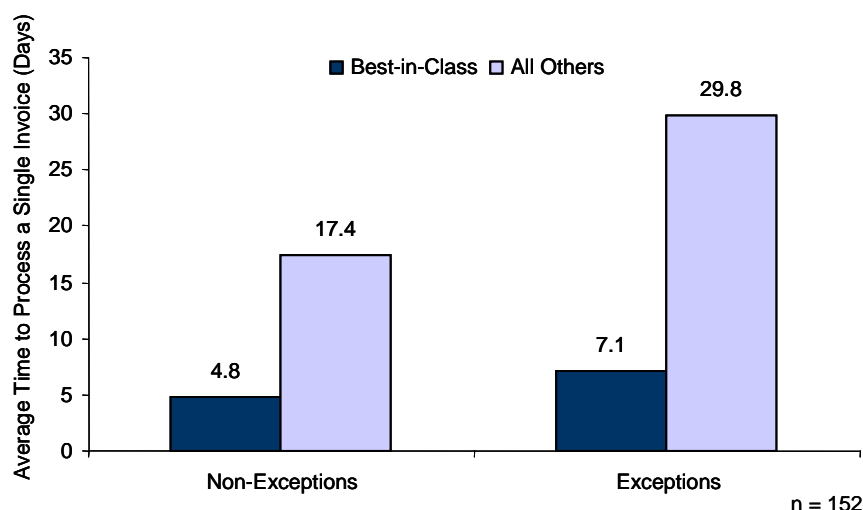
Best-in-Class Criteria

The following criteria were used to determine Best-in-Class performance:

√ Cost to process a single invoice

√ Cycle time to process an invoice

Best-in-Class is determined to be the top 20% of aggregate performance scores

Figure 4: Invoice Processing Time

n = 152

Source: Aberdeen Group, April 2010

As illustrated in Figure 4, Best-in-Class enterprises have reported the ability to process invoices in roughly one-fourth the time required by their lower-performing peers. The practical implications of these numbers are quite

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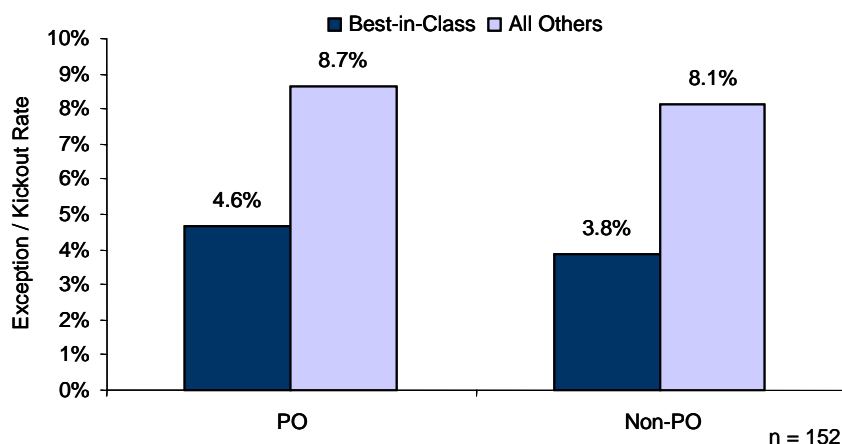A Harte-Hanks Company

apparent when viewing this data within the context of typical negotiated payment terms such as 2/10 net 30. Even for those transactions that raise red flags due to disagreements between elements of the invoice and original purchase order (exceptions), Best-in-Class enterprises still have the potential to complete payment early enough to capitalize on negotiated early payment discounts. For the majority of respondents, however, even transactions where the PO and invoice match perfectly, typical processing times are well beyond the discount window. In the more difficult cases, where deviations require further inquiry, the purchaser risks incurring penalties by submitting payment outside of the 30-day net payment date. Eliminating late payment fees and capitalizing on discount terms can go a long way in justifying the investment in a solution that can help drive down these costs or lost opportunities for savings.

Of course, the actual impact of such exception processing is a function of not only processing time, but also of the frequency that such exceptions occur.

Terms
Terms determine payment due date, including a discount if paid within a shorter time frame. For example, 2/10 net 30 indicates the invoice is due in 30 days, but a discount of 2% may be taken if paid within 10 days.

Figure 5: Exception Rates for PO- and Non-PO-based Invoices

Source: Aberdeen Group, April 2010

The comparison in Figure 5 shows that Best-in-Class firms have also done a better job of minimizing the volume of exceptions that require manual intervention. This is the case for purchases executed via PO, where inconsistencies with the invoice, receipt document or other source (depending on the specific matching approach) trigger an exception, as well as for non-PO purchases, where other rules violations (incorrectly formatted data elements, for example) prevent normal processing. It is possible that these estimates for the receipt and approval process include substantial amounts of waiting time, rather than pure A/P resource consumption. Table 3 helps translate some of these processing-cost differences into actual dollar terms, based on the responses of those who have quantified the applicable costs.

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Table 4: Comparative Invoice Processing Cost

Invoice Type	Avg. Processing Cost	Differential
PO-based, Manual	$15.95	
PO-Based, Electronic	$11.40	29% savings
Non-PO-based, Manual	$14.89	
Non-PO-based, Electronic	$13.88	7% savings

Source: Aberdeen Group, April 2010

How do we interpret the results of Table 4? Manual PO-based invoice processing costs are clearly the most expensive. Aberdeen found a $4.55 (29%) differential between the processing costs of manual and electronic PO-based invoices. Consider the number of PO-based invoices that are processed, and do the math. Savings can be substantial. While the difference in non-PO-based invoices was smaller ($1.01 representing a 7% difference) given any kind of volume, this will only serve to strengthen the business case for going electronic.

To summarize the preceding data, invoice processing cost is a function of the time required for all tasks from initial receipt through payment scheduling. Costs are driven down by maximizing the number of invoices that can be easily handled, and minimizing those that require manual intervention for inquiry and discrepancy resolution. An ideal state is one where invoices are received electronically, automatically matched with POs (to discover potential exceptions), and efficiently routed through the approval process to prepare invoices for payment within the existing discount period.

After proper receipt and approval of an invoice, it is also important to consider streamlining and automating the payment process. Several categories of applications and tools come into play for consideration:

- **ACH** is an electronic network for financial transactions in the United States. ACH processes large volumes of both credit and debit transactions, which are originated in batches. ACH credit transfers include direct deposit payroll, expense reimbursements, and supplier payments. Many payment automation solutions offer functionalities that extend beyond the core of ACH, commercial cards or wire transfer - such as check-to-ACH conversion as well as straight-through-processing.

- **Commercial card** systems are issued by banks and other financial institutions, and support debit and credit products for use by enterprises with their supplier base. The most common formats of commercial cards are purchasing cards (p-cards) and corporate cards. While historically leveraged for the purchasing process, enterprises are now using commercial cards as a method to pay invoices.

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- **Wire transfer** is utilized to transfer finances from one enterprise to another, typically from a one bank account (buyer) to another (supplier). Transfers are conducted through an electronic system and its assignment of routing numbers to uniquely identify each bank.

- **EDI / XML remittance information** is a major step over paper-based checks; much like the advent of supplier / payment networks, an EDI or XML connection can seamlessly send and receive sensitive financial information nearly instantaneously.

- **Electronic Invoice Presentment and Payment (EIPP)** involves the web-enabled presentment and sharing of invoices between buyers and sellers. EIPP allows an enterprise to receive invoices via an electronic portal and subsequently provide payment. Aberdeen research has found that enterprises leveraging EIPP solutions have seen a 66% reduction in payment-processing costs, as well as a 50% reduction in payment cycle times.

- **Spend analysis** is most often associated with driving enhanced visibility into enterprise spend and allowing procurement executives to conduct more informed sourcing decisions. However, spend analysis can be leveraged to segment an enterprise's supplier base into electronic payment categories. Best-in-Class enterprises have utilized this core procurement technology to categorize each supplier by the most appropriate electronic payment method.

The choice of payment type, combined with its type-specific transaction fees, can lead to a significant difference in total transaction costs. As shown in Table 5, cost per transaction for paper checks is 45% higher than the transaction cost incurred by using commercial cards. While the table highlights the cost savings, it does not imply that implementation costs of alternative methods are meager but the over all value proposition of automated payment methods, evaluated in terms of ROI on the TCO, is worth exploring.

Table 5: Average Transaction Cost by Payment Type

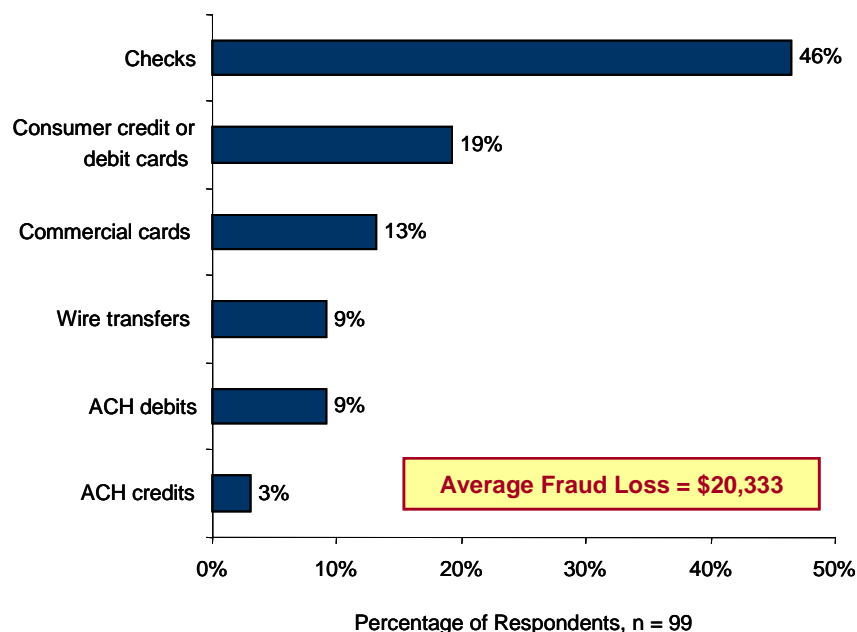|	Payment Method	Cost Per Transaction
Paper	Paper Checks	$7.15
Electronic	ACH	$4.72
	Commercial Cards	$3.96
	Wire Transfer	$9.86

Source: Aberdeen Group, May 2010

In addition to high costs, paper checks also carry additional liability in terms of fraud risks (Figure 6). According to the May 2010 study, *Global Payments: Maximizing Cash Flow with Electronic Payments and Process Automation,* companies were particularly more vulnerable to frauds as a result of

producing checks than in processing payments in any other way. Frauds reported by those using electronic payments were a comparatively small percentage. It is worth noting that after commercial cards (debit / credit cards), corporate cards were the second most frequent source of electronic payments fraud. However, corporations are reducing fraud risk with emerging payment solutions such as the virtual card (that doesn't have physical existence) to generate one-time use only, card numbers or numbers for only a specific set of A/P transactions.

Among organizations that did suffer a financial loss as a result of payments fraud (35%), the average loss was $20,333. In this case, solutions which help automate the processes and add a measure of safety can be viewed more as tools for cost avoidance.

Figure 6: Fraud Associated with Payment Methods

Percentage of Respondents, n = 99

* Respondents who experienced attempted or actual payments fraud.
Source: Aberdeen Group, May 2010

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Chapter Three:
Selection Recommendations

For enterprises interested in improving accounts payable performance, there are many potential avenues to investigate. The sections below provide Aberdeen's recommendations for approaching each step of the process, along with targeted questions to keep in mind when evaluating potential solutions - and solution providers.

Receipt

1. Segment prospective vendors to prioritize migration to electronic invoicing. Even for Best-in-Class firms in April's study, fully 60% of incoming invoices were paper-based. Focusing on suppliers with the greatest transaction volumes (or offer the most sensitivity to late payments) will help maximize the benefits of your on-boarding efforts.

    o   How will the provider support on-boarding efforts? How active a role will they play in soliciting participation and guiding suppliers through the process?
    o   How will the provider handle suppliers who are not ready for direct data transmission? Do they also provide portals? What about services to handle physical document imaging and data extraction?

2. Do not allow paper-based invoices to lead to manual processing. It may require additional work in-house, or through a service provider, but the performance gains of handling approvals electronically is significant. Companies utilizing automated data capture reported a 34% cost advantage and a 22% processing time advantage when compared to those handling indexing and approvals manually.

    o   When looking to extract data from document images, how successful is the provider's solution (i.e. what is the solution's effective read rate)? How much human oversight will be needed to check the results, or to key-in missing/misread information?
    o   How well does the solution handle new document formats/layouts, and how much human intervention is required to handle the unexpected?

3. Utilize pre-receipt validation to prevent submission of erroneous invoices. As detailed earlier, even for the Best-in-Class, exceptions took significantly longer to process (7.1 days versus 4.8, or 48%) than non-exceptions. The difference was even greater for lower-performing companies - 71% longer (29.8 days vs. 17.4). Addressing these problems earlier on in the process offers the ability to remedy the issues and complete approvals more efficiently.

    o   How flexible are the rules that can be set to pre-screen invoice submissions?
    o   How are errors flagged, and how easy does the solution make it for suppliers to remedy problems?

Fast Facts

The following application categories of A/P automation are today readily available for deployment:

√ Electronic invoicing

√ Workflow and imaging

√ Payment automation

√ Enterprise financial solutions, including accounts payable, accounts receivable and general ledger

√ Outsourcing or managed services

√ Purchasing cards

√ Supply chain finance

√ Treasury management

Approval and Inquiry

1. Pay attention to a solution's ease of use, with an emphasis on how outstanding tasks are highlighted. In April's study, Best-in-Class respondents were 68% more likely than Laggards to have automated reminders for outstanding items. This is an area where the distinction between automation (providing an electronic means to approve invoices) and optimization (introducing new elements into the process) is paramount.

   o Does the solution have customized interfaces for each employee? Does it suffer from clutter because it presents information not applicable to a specific person's role?

   o Does it provide a to-do list for outstanding tasks, or are workers required to complete a search to find waiting transactions?

2. Look for a solution with workflow rules that allow for contingency planning. This is an area where companies across-the-board are lagging, with only 16% of respondents able to automatically re-route approvals based on employee availability. With such short windows available for capturing payment discounts, solutions offering this capability are well-positioned to help deliver the expected ROI necessary to justify investment.

   o How are approval hierarchies defined? Can pending invoices be automatically routed to an alternative approver, or escalated to a supervisor, based on the amount of time they have been open, or based on the vacation/out-of-office status of the primary approver?

   o How detailed are your current approval routing rules, and can the solution capture them accurately without added customization?

3. Focus on the availability of status tracking and reporting for both internal management and external trading partners. Best-in-Class companies are more than twice as likely as all others to currently utilize dashboards for internal visibility and supplier portals for external visibility of A/P status and performance. These technologies help keep all involved parties informed, and ensure that no transactions fall through the cracks.

   o How easy is it to find a tally of outstanding invoices? How quickly can you see how many are currently at different stages of processing, or awaiting action by a specific approver?

   o Does the solution provide a self-service portal to allow suppliers to see where their invoices are in the approval process?

   o Will suppliers be actively alerted when questions arise during processing, or must they log-in to find out?

Validation and Reconciliation

1. Ask about the ability to integrate with other systems to improve matching. Integration difficulties were the second-most cited challenge for companies looking to improve their A/P performance - and occupied the top position for the lowest-performing firms (a full 50% of Laggards).

   o Can the solution query other systems (ERP, WMS, etc.) to compare information on goods received? What about a contract management application to compare invoiced price and terms with negotiated contracts?

   o How flexible are the matching criteria (i.e. only 2-way PO/Invoice, only 3-way PO/Invoice/Receipt, or user-definable "n-way" matching)? What level of detail is currently used by A/P, and can this be accommodated by the solution?

   o Does the provider offer integration services through an in-house department, or do they partner with an outside company? Do they have available references who can speak candidly about their experience?

2. Make your suppliers' lives easier, and provide an efficient forum for dialogue to resolve discrepancies. Best-in-Class firms were twice as likely to report having a solution in place to handle supplier inquiry and dispute resolution. Fixing problems in a timely manner is in the best interest of all parties, keeping payments on-time and supporting long-term supplier relationships.

   o Can you exchange information and/or documents with your suppliers directly through the system, or are communications handled outside of it?

   o Does the solution maintain a conversation history that can be referenced by both parties? Does it facilitate internal communication that is tracked but *not* made visible to suppliers?

3. Go beyond comparing one document to another, and also evaluate them for internal agreement. This level of detail is an advancement upon the common header-level validation, which the Best-in-Class employ nearly two-and-a-half-times as often as their peers.

   o Does the solution recognize relationships between elements in the invoice? Can it independently calculate quantity times price and compare to the stated line totals? Can it independently sum the line totals and compare to the stated total amount?

   o Does the solution allow for analysis of additional items, such as discount terms and tax rates, to ensure accuracy of all stated entries?

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Settlement

1. Transition to electronic payments. Writing and mailing checks can result in lost discounts, late fees, increased fraud risk, and compromise supplier-buyer relationships. Electronic payments on the other hand can greatly expedite payment process, significantly reduce the number of frauds, and can be customized with auto-deduct features, making them more predictable and timely. According to the *Global Payments* study, usage of paper checks resulted in per-transaction costs 34% higher than for ACH, and 45% higher than for commercial cards.

    o   What protection does the provider offer against fraudulent payments? Does it provide support services for on-boarding suppliers to accept alternative payment types?

    o   In addition to facilitating payments, what level of support does the provider offer for additional improvements (in timing payments, managing float, monitoring balances, extending payment terms, etc.)?

    o   What steps does the provider take to protect the financial information of all trading partners? How extensive is its network of currently on-boarded / accepting institutions?

2. Revisit current guidelines and limitations to increase the amount of spend placed on purchasing cards. The goals of most purchasing card programs are to minimize costs, ensure greater compliance, and provide greater transparency in reporting and spend analysis. For leading companies in Aberdeen's 2007 purchasing card study, higher single-transaction dollar limits translated into higher volumes of monthly spend placed on these cards.

    o   What level of remittance data can the provider offer? Does it provide any reporting tools for analyzing card-based spend, or must that be handled separately based on summary files?

    o   Does the provider's network match your enterprise's needs for acceptance across multiple geographies, using multiple currencies? To what extent does it offer assistance with assessing the applicability of local taxes, with a view toward the ability to recoup these amounts?

Solution Selection Checklist

√ Build a business case to define the expected value to be derived (use benchmarks such as those described later in this chapter)

√ Define the goals and objectives for this initiative, including ROI targets

√ Document a formal scope of the project

√ Engage other key stakeholders in the definition of solution requirements

√ Understand the solution provider landscape

√ Measure a baseline of performance against which progress may be tracked and ROI measured

√ Include a TCO analysis

Aberdeen Insights — Summary

Regardless of where you are today in the pursuit of A/P optimization, it is important to create a plan for evaluating current processes along with options for automation.

Be cognizant of the four-part solution framework presented earlier and determine your current state, identify logical areas for improvement and set goals for the solution selection in terms of timelines of selection, implementation and time to value. The framework in summary once again:

1. **Receipt**. Invoice receipt may occur in any one of numerous paper or electronic formats – EDI, XML, or other file formats including credit card statements, evaluated receipt settlement, web-based order / invoice creation, or PO flip. A distinguishing characteristic for EIPP is that receipt (as with settlement) may be enabled via a supplier or trading network.

2. **Approval and inquiry**. Once received, an invoice may be processed utilizing rule-based logic that analyzes certain invoice attributes (supplier, amount, buying entity, etc.) to define the proper routing and approval workflow. Notification / alert capabilities as well as direct integration to transactional systems are used to track invoice status and identify issues.

3. **Validation and reconciliation**. The verification of invoice accuracy and the resolution of any errors, discrepancies, or disputes prior to payment are accomplished by automated matching engines, collaboration with suppliers and internal end users, and integration to transactional systems. The information captured in this segment is used for audits (internal and external) as well as spend analysis.

4. **Settlement**. After the efficient capture, tracking, and approval of enterprise liabilities, the next step is payment processing, utilizing a payment method that may include Electronic Funds Transfer (EFT), ACH, card or supplier / trading networks. Capabilities like dynamic discounting, rebates, tax management, and trade financing are available in advanced solutions to optimize the management of cash flow.

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Appendix A:
Research Methodology

Between March and May 2010, Aberdeen surveyed finance professionals in to identify their accounts payable including payments practices.

The online survey was supplemented with interviews with select survey respondents, gathering additional information on A/P strategies, experiences, and results.

The research sample included respondents from two separate surveys that looked at invoice receipt and workflow and payments processes with the following demographic information.

Table 6: Study Demographic Information

	Invoice Receipt and Workflow	Global Payments
Job title	• C-Level Executive / President (14%) • GM / EVP / SVP / VP (14%) • Director (20%) • Manager (31%) • Other (21%).	• C-Level (35%) • Managing Director / Principle (5%) • EVP / SVP / VP /GM (2%) • Controller (19%) • Treasurer / Assistant Treasurer (4%) • Director (11%) • Manager (13%) • Other Staff (10%) • 1% no response
Industry	• Software (10%) • Financial services (10%) • Insurance (6%) • Retail (5%) • Food and beverage (5%) • Government / public sector (5%) • Health / medical / dental services (5%) • Automotive (4%)	• Financial services (13%) • Education (9%) • IT consulting / services (8%) • Consumer goods (6%) • Industrial product and equipment (6%) • Healthcare (8%) • Software (6%) • Wholesale / distribution (5%)
Geography: Company headquarters of responding companies were located in	• North America (72%) • Europe (18%) • Asia/Pacific (7%) • Middle East / Africa (3%).	• North America (76%) • Europe (10%) • Asia/Pacific (9%) • Middle East and Africa (4%) • South / Central America and Caribbean (1%).

Study Focus

Responding finance executives completed an online survey that included questions designed to determine the following:

√ The degree to which automation technologies are deployed in their accounts payable departments and the financial implications of the technology

√ The structure and effectiveness of existing A/P implementations

√ Current and planned use of supporting technologies to improve A/P activities

√ The benefits, if any, that have been derived from A/P improvement initiatives

The study aimed to identify emerging best practices for A/P automation usage, and to provide a framework by which readers could assess their own management capabilities.

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	Invoice Receipt and Workflow	Global Payments
Company size	▪ 42% of respondents were from large enterprises (annual revenues above US $1 billion) ▪ 35% were from midsize enterprises (annual revenues between $50 million and $1 billion); ▪ 23% of respondents were from small businesses (annual revenues of $50 million or less).	▪ 35% of respondents were from large enterprises (annual revenues above US $1 billion) ▪ 40% were from midsize enterprises (annual revenues between $50 million and $1 billion) ▪ 25% of respondents were from small businesses (annual revenues of $50 million or less)
Headcount	▪ 64% of respondents were from large enterprises (headcount greater than 1,000 employees) ▪ 20% were from midsize enterprises (headcount between 100 and 999 employees) ▪ 16% of respondents were from small businesses (headcount between 1 and 99 employees)	▪ 41% of respondents were from large enterprises (headcount greater than 1,000 employees) ▪ 37% were from midsize enterprises (headcount between 100 and 999 employees) ▪ 21% of respondents were from small businesses (headcount between 1 and 99 employees) ▪ 1% no response

Source: Aberdeen Group, October 2010

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Appendix B:
Related Aberdeen Research

Related Aberdeen research that forms a companion or reference to this report include:

- *E-Payables 2010: The Strategic Value of Accounts Payable Automation*; August 2010
- *Evolving Dynamics of Corporate Banking Relationships: Enhanced Payments for Improved Cash Flow*; July 2010
- *Invoicing and Workflow: Transforming Process Automation into Operational Cost Control*; April 2010
- *E-Payables 2010: An Exit Strategy to the Paper Quagmire*; December 2009
- *Selecting the Right Payment Solutions Mix: Optimizing for Success*; October 2009
- *E-Payables Benchmark 2009: Accounts Payable Rising*; September 2009
- *E-Payables: Invoice Receipt and Workflow: Cut Invoice-Processing Costs and Time by Over 90%...Now*; May 2009
- *The CFO's View of Accounts Payable: Cash is King*; February 2009
- *E-Payables: Electronic Payments Reduce Your Payment-Processing Costs;* July 2009
- *E-Payables Solution Selection: Your 2007-2008 Guide to A/P Transformation;* September 2007

Information on these and any other Aberdeen publications can be found at www.Aberdeen.com.

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