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Purchase-to-Pay Transformation in the Oil and Gas Industry

Leveraging Purchase-to-Pay (P2P) Automation to Meet the Energy Sector's Unique Business Needs

Q2 2016 **| Featuring insights on...**

- Business Process Characteristics of the Oil and Gas Industry
- P2P Challenges for Oil and Gas Companies
- Process Automation Tools Designed for Oil and Gas P2P
- P2P Transformation Stories of Leading Oil and Gas Operators

Underwritten in part by

Oildex

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Introduction

For many industries, the Procure-to-Pay process is relatively similar in organizations' back offices; it mainly revolves around managing procurement, purchasing contracts, purchase orders, and invoices. In order to manage these processes as efficiently as possible, some organizations adopt a P2P software solution to achieve automation, control, and savings. For companies in the oil and gas industry however, back-office processes are very different and much more complex than those in other industries, and a one-size-fits-all P2P solution cannot handle these companies' diverse and nuanced requirements.

In oil and gas P2P, companies must consider a variety of unique factors as they handle their operations, suppliers, and business documents. These factors include industry-specific regulations such as environmental guidelines, operational reporting, and supplier qualification. For most companies, processing business documents also entails the widely-used PIDX coding standards that are specifically designed for eCommerce documents in oil and gas.

Oil and gas companies also struggle with the standard pains of paper invoices and limited process visibility that come from manual P2P processes. The industry has a complicated P2P process and workflow, often involving high volumes of invoices that are tied to service-based contracts rather than purchase orders, and that cover services involving varying quantities and types (e.g., fluctuating output from an oil well on a given day). For these reasons, oil and gas companies must code, validate, and process their invoices at higher rates than in other industries.

Even as these companies seek to improve their invoice processing, many struggle to find an automation tool that fits their unique needs. In order to find technology that complies with their special process, these organizations must look beyond the normal scope of P2P automation into the niche, oil and gas-specific software market. This report explores the unique characteristics and challenges of oil and gas companies. It also explores what automation looks like for these companies when they use a niche business solution tailored specifically to their needs and those of their suppliers.

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Oil and Gas Processes, Requirements, and Challenges

The oil and gas industry has several characteristics that make it a particularly unique business sector, both operationally and in P2P processes. It contains geographically diverse suppliers, with many companies working with a variety of internationals and local suppliers. Government and legal requirements can also play a big role in many businesses' operations, especially due to the impact oil and gas activities have on the environment.

Some of the main characteristics of the oil and gas industry include:

» **Complex Process Flow** – The P2P process flow for field-based oil and gas operations can be much more complex than the traditional flow of requisition to PO to receipt to invoice to payment. Oil and gas companies generally have extensive service contracts, with field contractors performing a variety of services often at remote locations and at unplanned times. For example, the volume of oil that a well produces often varies from day to day, making it difficult to anticipate what the operation will require from a contractor beforehand or to predict the correlating costs of processing the material. In another example, an unforeseen circumstance can arise in the field, such as an oil well catching fire. This would require the buying company to quickly order new products and services to address the problem, departing from the normal routine of P2P processing, such as issuing a PO to a supplier.

  Circumstances like these often mean that the AP department does not know what labor, materials, and equipment may be needed for a service until the job is already underway. The majority of companies in the industry simply issue a direct invoice after a service is completed, and the AP department typically relies on a paper field ticket and an approver's signature to confirm the service and validate the invoice. In all, this process requires more hand-coding and manual involvement than other invoicing scenarios, and because there is rarely a purchase order involved, AP professionals spend a lot of time manually verifying services against supplier contracts.

- **Widespread, Remote Field Locations** – Because oil and gas wells are often widespread and located in remote areas, such as along a Midwestern mountain range, many companies have numerous field offices far removed from a town or a city—often with a minimal staff presence. This scenario can cause delays in P2P processing, and can also create communication difficulties between suppliers that visit the remote site (e.g., a transporter extracting and moving an oil well's yield) and the party that originally placed an order (e.g., a purchasing officer from an administrative location).

- **Industry Regulatory Requirements** – Oil and gas companies must adhere to a variety of regulatory requirements, depending on where the company is operating. For example, an oil and gas operator working offshore typically encounters more complex requirements than an operator working in Wyoming, as an equipment failure can have a more costly impact in the ocean than on land. There are also additional requirements such as operational reporting for oil and gas companies working on federal land.

  Oil and gas companies must also follow regulations when onboarding new suppliers, and these suppliers have to meet a set of stringent requirements to qualify to work in the industry, especially in offshore environments. Because the buying company is responsible for each supplier's qualification, it must provide new suppliers with a variety of environmental health and safety training programs during onboarding. These trainings ensure that the companies are only working with qualified, compliant, and certified suppliers.

- **PIDX Standards** – Standardization can be very difficult in the oil and gas industry, as there are many different types of operators and suppliers, and each has a unique business process, strategy, and level of technical maturity. In order to maintain some unity in the industry, many organizations follow electronic PIDX standards in their P2P processes.

  Formed in 1987 by the PIDX (Petroleum Industry Data Exchange) committee, PIDX standards streamline the electronic exchange of data between oil and gas companies by filling in the gaps of electronic B2B communication.[1] For example, the PIDX codes facilitate data exchange for things like well name, well location, field name, or lease name—details not covered in generic B2B coding. These standards mandate that invoices enter the ERP in

[1] PIDX International. "Why Use PIDX Standards?" April, 2014. Accessed April 8th, 2016.

a consistent format so as to enable smooth processing through the system. They are in place for 14 different business documents used in the Purchase-to-Pay and Order-to-Cash processes, including field tickets, purchase orders, invoices, and payments.[2]

The PIDX standards were developed by the industry, for the industry, and have been widely adopted; they are currently used by approximately 120 companies in over 30 countries, and are applicable to all types of oil and gas businesses.[3] When both buyer and suppliers use the PIDX standards in invoicing, B2B interaction is much more streamlined, efficient, and secure. The PIDX committee reports that major oil and gas operators using the PIDX standard for invoicing have seen a huge reduction in invoice cycle times, as well as improvement in process efficiency and management of paper in their Accounts Payable departments.[4] However, when a buying company is dealing with a small or technically outdated supplier that has not implemented the PIDX standards, invoice processing times lengthen and efficiency suffers.

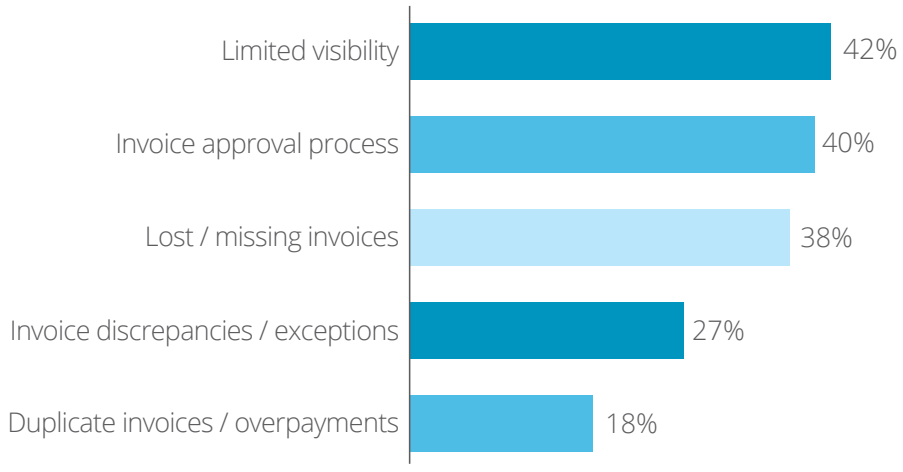
In addition to the unique regulatory and process flow challenges for oil and gas companies, companies in this industry also experience P2P pains that are consistent with manual-based processing. PayStream has found that the majority of oil and gas companies have little to no back-office automation, and experience substantial problems in process visibility, invoice approval times, and control over invoices, see Figure 1.

Figure 1

Oil and Gas Companies Suffer from Limited Visibility and Long Approval Times in Their Invoice Processes

"What are your top three challenges in invoice management?"

Top Invoice Management Challenges for Oil and Gas Companies



[2] Ibid
[3] Ibid
[4] Ibid

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The majority of oil and gas companies struggle with high volumes of paper invoices, many of which are not connected to POs and must be manually checked against service contracts. It is also difficult to maintain compliance with PIDX standards when processing paper invoices; often, the codes are hand-written into the margins of paper invoices. In addition, decentralized operations cause major workflow issues as companies try to route paper invoices between remote locations and accounting teams at administrative branches. Control and data accuracy weaken when using paper-based, manual workflows, causing general delays in processing and payments, and limited visibility into outstanding payables balances. In addition, 76 percent of oil and gas companies are unable to regularly capture early payment discounts. These companies cite lengthy approval times and a high number of invoice errors, including exceptions and missing invoices, as the leading causes for missed discounts.

All of these problems are amplified by the industry's economic challenges. With recent fluctuations in costs for energy resources, many companies have had to rapidly adjust their back-office processes to accommodate the changing demand. Although cost control is increasingly important for the industry, manual methods can be very harmful to an organization struggling to keep afloat, as they lead to high processing costs, late payment fees, and lost early payment discounts.

Unfortunately, when oil and gas companies do want to adopt P2P automation to get rid of their process pains, their options are limited. Most P2P software is not suited for their complex needs, and they must be very selective when choosing a system. In addition, because of these companies' unique business structures and process flows, as well as the industry's cost pressures, it can be very difficult for an oil and gas company to adopt an automation solution in their back office. These issues cause many companies to carry on with inefficient manual processes rather than face the challenges of transformation.

Fortunately, there are solutions that are specifically designed to support and optimize oil and gas P2P—solutions that seamlessly integrate with companies' existing back-office systems. These tools do not try to disrupt current methods or replace a company's ERP; instead, they build value in existing buyer and supplier relationships, and work to support and enhance unique oil and gas P2P processes.

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Niche Business Solutions for Oil and Gas

In order to rid themselves of the pains and high costs of manual processing, oil and gas companies must select a solution that has specific industry expertise. These niche solutions have the following attributes:

They follow the PIDX standard and support industry practices. The PIDX system is free to use and is technologically agnostic, making it simple for oil and gas companies to integrate it within their existing systems. These factors have resulted in high adoption across the industry by operators, suppliers, and third-party technology providers that cater to oil and gas companies. According to the PIDX committee, 18 major third-party solution providers who offer services to the oil and gas industry are committed to using the PIDX standard in their eCommerce solutions, including AP providers offering supplier networks.[5]

When an oil and gas company moves to automate its AP processes, it is in its best interest to find a solution provider that is highly experienced in the industry, and that is already compliant with PIDX standards. This decreases implementation time and costs exponentially, and reduces the maintenance and support that would be required for a proprietary solution. Solutions built only for generic B2B processing are often restrictive to use, as many are designed to fit one specific ERP, while PIDX-compliant systems are built to easily integrate with oil and gas company systems.

They work with a variety of suppliers to promote automation. Because these niche networks are tailored for oil and gas companies, they feature mostly oil and gas suppliers. This means that oil and gas companies do not have to risk low supplier adoption of the network or spend money onboarding suppliers. In addition, many oil and gas network providers work with the supplier base to provide automation methods for all types, which helps incorporate suppliers that are generally less automated and resistant or unable to digitize their B2B processes.

For example, a popular method is for buyers to digitize parts of the process for suppliers while encouraging gradual adoption of the

[5] Ibid

complete invoice solution and business network. A buyer can scan and index invoices on behalf of the supplier, either internally or through a third-party service. The buyer can then engage with suppliers through email, notifying them about the status of their invoices that are being processed in the solution. The suppliers are given the option to register for limited access to the business network to see real-time invoice statuses, or to complete their registration in order to perform actions on their invoices and participate in payment transactions. Fully-registered suppliers save time and money through online PO collaboration, immediate invoice submission and routing, pre-populated and/or pre-validated fields, faster invoice dispute resolution, and ultimately, quicker payment.

Even though the gradual supplier onboarding approach does not immediately eliminate all of the paper in the AP department, it does work towards that goal in the long run. This approach allows suppliers that are unable or unwilling to participate in invoice automation to eventually embrace the use of a business network without too much stress on their business structures. By consistently working with their entire supplier base to move towards automation and get rid of paper, oil and gas companies are able to eliminate workflow bottlenecks and pay suppliers more quickly, capturing more early payment discounts along the way.

They bring full visibility, compliance, and anytime access. Oil and gas business networks enable better communication and B2B processes by offering software specifically tailored to the industry's unique process flow. For example, an oil and gas solution may offer an integrated interface in which invoices are validated against contracts in real time, clearly displaying all contract details for a particular service company to an approver. This entails automatically checking line items against contracts to ensure that the supplier is charging in compliance with the agreed terms, and re-routing all invoice discrepancies to the appropriate reviewer. The system also allows approvers to see any charges that were not defined in the original contract, allowing them to send the invoice to the sourcing department for further evaluation.

The solution may also improve control and visibility through enhanced mobility, such as with an electronic field ticket program. This enables a field worker to submit field tickets into the system from a mobile device. After the field ticket data is captured, the solution can match an invoice against the field ticket at the line item level. With field ticket and contract matching, some invoices can be processed straight through to

payment. This process also creates more efficiency in the AP workforce, as coders and approvers only touch invoices with exceptions.

Electronic field ticket programs and mobile solutions facilitate compliance with regulatory requirements by streamlining the acquisition of operational reporting data. The feature helps field workers catch important ancillary details such as oil and water volumes—information that would otherwise be gathered manually and hand-keyed into the system. In addition, mobile solutions enable organizations with many remote locations to improve their workflow and speed up processing times—even across decentralized processes.

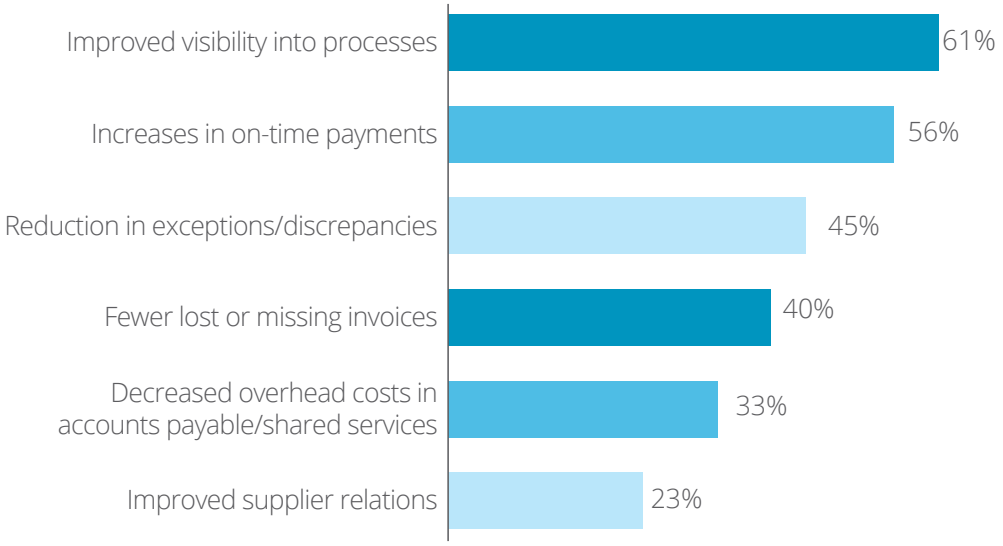
They bring buyers and suppliers major process improvements. Oil and gas companies that have adopted automation solutions consistently report a host of benefits, including more on-time payments, fewer exceptions and discrepancies, and more control over invoices, see Figure 2.

Figure 2

Oil and Gas Companies Experience Improvements In Visibility, Payment Times, and Accuracy with Invoice Automation

"What are the three greatest benefits you have achieved by automating your invoice management?"

Invoice Automation Benefits Achieved by Oil and Gas Companies



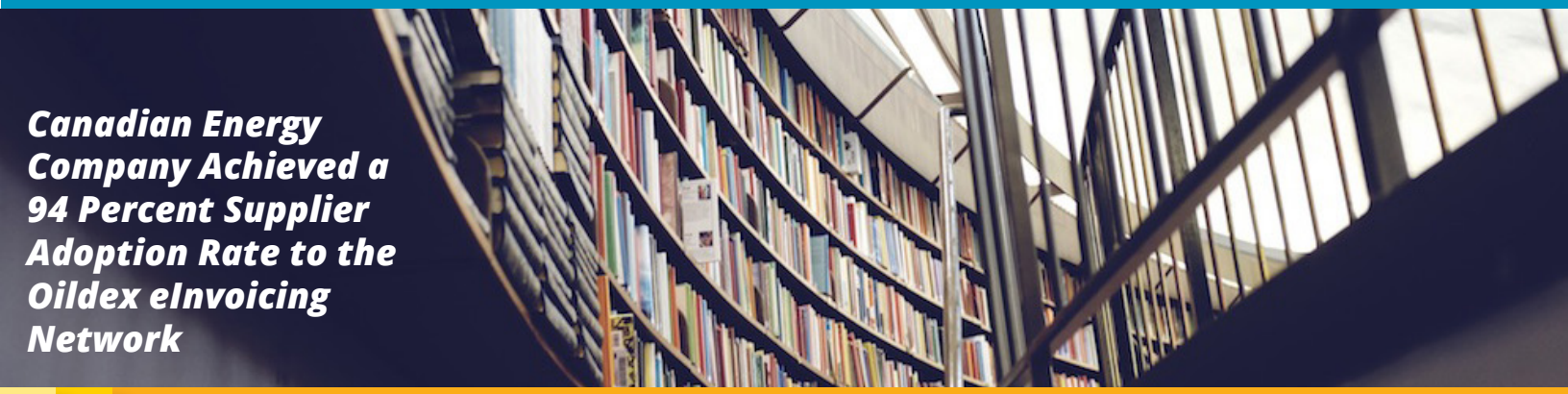
Oil and gas companies with automated processes also experience much shorter approval times, averaging 19 fewer days than those using manual processes. Other improvements include:

» **Visibility** – An automated system gives companies real-time visibility into their invoicing process, with more accurate data on invoice and payments statuses. In addition, it improves the accuracy and timeliness of companies' financial reporting and helps them in operational budgeting.

- **Efficiency** – By automating AP, organizations are cutting out people-based processes and people-based issues. This increases efficiency, leads to reduced cycle times, and brings about more opportunities for early payment discounts.
- **Scalability** – With automation, oil and gas companies can grow without losing efficiency in invoice management. The solutions scale with the size of a company and its AP processes, allowing the company to acquire new properties or companies without having to worry about increasing AP staff to handle the new influx of invoices. This scalability is also beneficial across complex supply chains and fluctuating market demand.
- **Compliance** – Companies can enforce their policies much more easily in an electronic environment, and can also easily validate pricing and service contract compliance. This leads to greater cost control and significant savings, and saves time on audits. Automation also improves a company's ability to capture important item data for operational reporting, and improves compliance with industry requirements.
- **Supplier Relationships** – Automation greatly benefits suppliers by enabling faster payment times and improving cash flow, resulting in stronger B2B relationships. Suppliers also greatly appreciate the visibility that automation brings, as it enables them to the check the status of their invoices at any time.

In order to give a clearer example of the efficiency and savings possible with a P2P solution tailored for the oil and gas industry, the following case studies outline the P2P transformation of two large North American oil and gas corporations. These companies were both suffering under the challenges and pains of manual processing, and each turned to Oildex and its solution, OpenInvoice, for help. Oildex is a leading provider of P2P software specifically designed to accommodate the needs of the oil and gas industry.

Case Study:



Canadian Energy Company Achieved a 94 Percent Supplier Adoption Rate to the Oildex eInvoicing Network

Challenge and Needs

Company Type: Energy

# of Employees: 250

This Oildex client is a natural gas weighted exploration and production company based in Calgary, Alberta. Its work is concentrated in Western Canada. A few years ago, the company experienced a burst of quick growth that resulted in a sudden and substantial increase in monthly invoice volume. Still operating under manual P2P processes, it was receiving numerous paper invoices from suppliers in a variety of remote locations, and it struggled to efficiently route invoices and field tickets back to the head office for coding, approving, and payment on a timely basis.

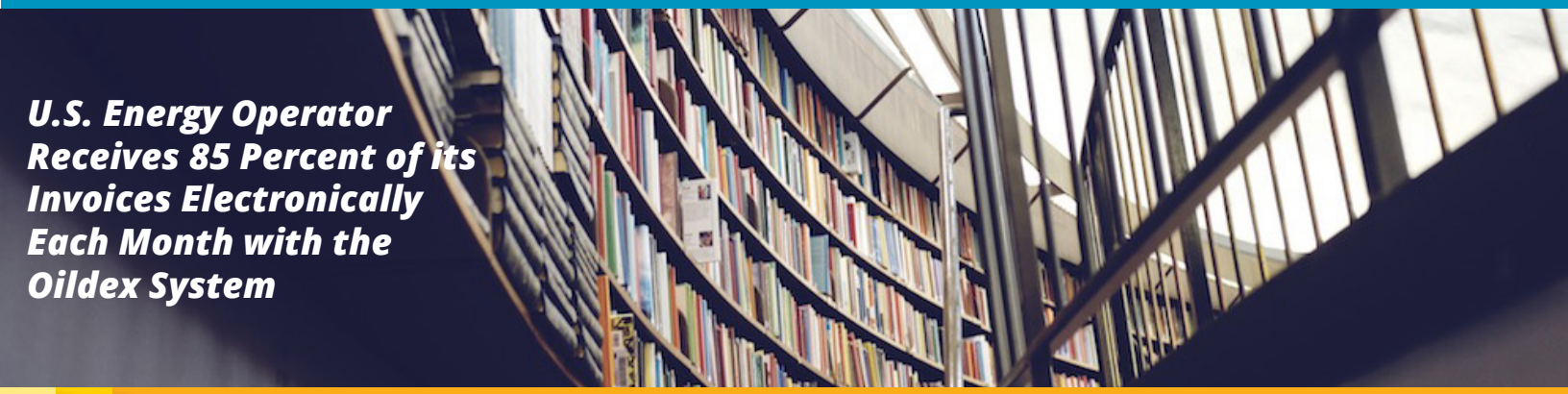
Implementation and Results

The energy company implemented OpenInvoice by Oildex to automate invoice management. This implementation included functionality for coding, validating, and routing invoices, and for communication with suppliers through the Oildex B2B network. The company also used Oildex's Pricebook contracts solution to manage rate validation with suppliers and reduce backend auditing.

The Oildex client's supplier onboarding initiatives were very successful, and today, 94 percent of the company's vendors submit invoices electronically through the OpenInvoice system. The company reports great improvements in its invoice processes, and has much better control of invoice volume and approval times. The company is also especially pleased with the Oildex solution's ability to route invoices for approval based on existing approval structures, and with its integration with the financial system. In addition, OpenInvoice helps the company reduce the risk of duplicate invoice payments and allows payment information to move easily between the solution and the company's financial system so that all parties have visibility into payment status.

In addition to savings in processing costs, the Oildex client is now able to capture a much higher rate of early payment discounts. AP staff are also able to determine which discounts were missed and why, and can now tighten their timelines and controls to improve future discount capture.

Case Study:



U.S. Energy Operator Receives 85 Percent of its Invoices Electronically Each Month with the Oildex System

Challenge and Needs

Company Type: E&P – Operator

# of Employees: 1140

This Oildex client is a multi-billion dollar oil and natural gas producer based in Oklahoma City, Oklahoma. The company also has large holdings in North and South Dakota, Montana, the Niobara formation, and Wyoming. A few years ago, the remoteness of its numerous locations was causing trouble for the company's P2P processes. The company was struggling to handle the different PIDX coding requirements across these locations, and was having trouble successfully leveraging electronic invoicing and electronic field tickets to improve processes. In addition, even though many of the company's vendors worked on site at oil wells, not every location had a regular company representative on site.

During this time, the energy company had very little automation in AP other than handling payments through its accounting system. Over 30,000 invoices were manually processed each month, with invoices being received at both the corporate office and field offices in multiple states. Inefficient workflows lengthened the payment cycles, as invoices were coded and approved by the receiving office and then sent to the AP department at the corporate office for manual input into the accounting system. The company's manual processes could not stay ahead of the influx, and the company found itself with an overwhelming number of late payments.

Implementation and Results

In order to manage the high volume of invoices and decrease payment times, the energy company decided to automate its AP process with Oildex. Since implementing, the company now receives 85 percent of its invoices electronically each month. Prior to implementation, the company's accounting teams had no knowledge of which invoices were outstanding without reaching out to each department to provide this information. Now, the company has complete visibility into the status of all invoices throughout the entire process. In addition, Oildex has enabled its client to achieve early payment discounts, something that was previously impossible due to lengthy approval times.

About the Sponsor

Oildex provides a complete, holistic B2B automation offering for oil and gas companies. Solutions and services include digital and scanned invoice processing (SpendworksTM and OpenInvoiceTM), owner relations web portals (Owner Relations ConnectTM), royalty check stub detail and reporting (CDEX), joint interest bill processing (JIB), crude oil data exchange (CODE), gas plant document exchange (GPEX), production and sales volume reporting, and much more. Oildex is a privately held company backed by Accel-KKR and is headquartered in Denver, Colorado with offices in Houston, TX, and Calgary, Canada. For a full view of Oildex offerings visit www.oildex.com

About PayStream Advisors

PayStream Advisors is a technology research and consulting firm that improves the way companies plan, evaluate, and select emerging technologies to achieve their business objectives. PayStream Advisors assists clients in sorting through the growing complexities of IT applications related to business process automation with the goal of making objective, analytical, and actionable recommendations. Wherever business process automation technology is an issue, PayStream Advisors is there to help. For more information, call (704) 523-7357 or visit us on the web at www.paystreamadvisors.com