CHANGING BUSINESS NEEDS AND ELECTRONIC PAYMENTS SOLUTIONS

In this issue

A NOTE FROM JEFF FELSER, SENIOR VICE PRESIDENT

In this issue of *Payment Solutions News*, we look at how changing business needs are spurring increased demand for electronic commercial payment solutions and driving innovation at PNC.

As we strive to better meet the needs of our clients, we are continually refining and improving our various commercial payments products and services.

As we discussed in the Spring 2015 issue of *Payment Solutions News*, electronic services and automation are becoming essential to the commercial payments landscape. More and more of our clients are leveraging electronic services and there are a number of reasons why this makes sound business sense. We believe there are five strategic priorities that are leading to greater adoption of electronic payment services. While it is not an exhaustive list, it does touch on business objectives that are applicable to many companies.

CUTTING COSTS AND OPTIMIZING WORKING CAPITAL

Following the 2008 financial crisis and the subsequent recession, many U.S. businesses had to focus on cutting costs significantly in order to generate a profit or, in some cases, to stay in business. Since then, the U.S. economy has recovered, but many companies have found revenue growth opportunities elusive.

Firms have continued to focus on maintaining operational efficiency, including optimizing their working capital. According to Deloitte's CFO Signals survey for the third quarter of 2015, 30% of CFOs are focused on cost reduction.[1]

Electronic payments in general—and commercial cards in particular—can play a significant role in enabling companies to reduce costs and optimize working capital. Electronic payments can:

- Reduce administrative costs: the Institute of Financial Management found that automation can reduce the average cost to process a purchase order invoice from $7.58 to $3.70[2].

- Increase Days Payable Outstanding (DPO) and generate revenue share.
- Provide insights on spending patterns that enable companies to more effectively deploy working capital and negotiate volume and early-payment discounts with suppliers.

GROWING PRESENCE IN INTERNATIONAL MARKETS

A number of indicators point to U.S. firms growing their international presence:

- As of 2013, more than 304,000 U.S. firms were exporters.[3]
- There has been a strong rise in trading volume: merchandise export and import volume of almost $4.0 trillion in 2014 is up 52% from 2009.[4]
- International business travel has seen significant growth: international travel is expected to grow 5% in 2015 and 6.9% in 2016.[5]

In addition, while the recent appreciation in the value of the dollar relative to other currencies like the euro has hindered export growth in 2015, it also has the effect of increasing the buying power of U.S. companies looking to establish an overseas presence via acquisition.

As companies grow their international exposure, they are looking for solutions that will ensure that their commercial payments systems work seamlessly across international borders. Many have turned to PNC for the wide range of international commercial payment solutions we provide, including:

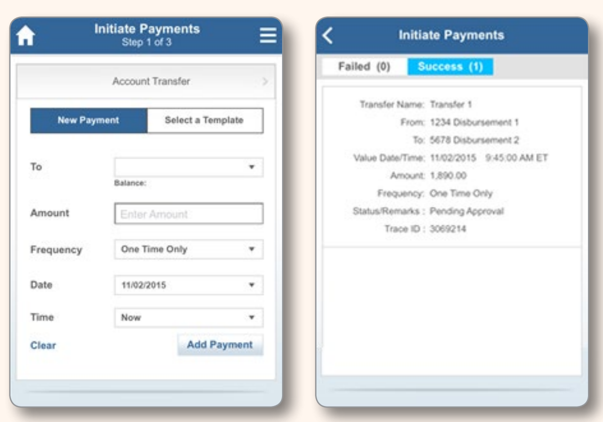
- EMV®-enabled corporate cards for employees traveling overseas, where EMV is the dominant payment acceptance standard
- Multinational card program for U.S. companies operating in Europe
- Suite of treasury management solutions in Canada through our PNC Bank Canada Branch, including our newest A/R Advantage Lockbox site in Toronto
- Multicurrency accounts in more than 30 currencies
- International funds transfer in USD and foreign currencies

ADOPTION OF NEW TECHNOLOGIES

The increasing speed of doing business, the rise of globalization, the continued drive to identify and capture efficiencies, and the need to optimize relationships with suppliers and customers are driving companies to incorporate new technologies into their business processes. To ensure success, companies need to identify the potential benefits new technologies can provide, allocate budget to make the investment, and have a plan for integrating new technologies into their current business processes.

In treasury management, there are a number of banking and payment technologies that offer proven benefits for companies. Many of these solutions have evolved from their roots in consumer banking and payments. Online and mobile banking and person-to-person (P2P) payments have reached critical mass in the consumer space. As executives become accustomed to using these technologies in their personal lives, they increasingly see business applications for these same products and services.

PNC closely monitors the latest payment technologies and looks for ways to apply them to the challenges facing our clients. For example, we launched the PINACLE® Mobile App to support growing business usage of mobile technology for corporate banking needs. And we added new functionality to the app throughout 2015, including the ability to approve batches of ACH payments, view information about PNC credit facilities, initiate transfers between PNC accounts, and use Touch ID™ for authentication as an alternative to entering login credentials.



PNC's PINACLE® Mobile App brings commercial payment functionality to smartphones for 24/7 access.

ENHANCING EMPLOYEE SATISFACTION AND PRODUCTIVITY

The steady decline in the U.S unemployment rate—from 10% in 2010 to 5.1% in August 2015[6]—means that the labor market is becoming tighter. According to PwC's 18th Annual Global CEO Survey, 73% of global CEOs identified the availability of key skills as a concern. For them, retaining skilled employees becomes a key priority.

At the same time, companies are looking for ways to grow labor productivity, mainly by providing solutions that enable employees to spend more time on activities that improve the bottom line for the company. According to the September 2015 Duke University/CFO Magazine Business Outlook survey, U.S. firms expect to grow productivity by 3.2% in the next 12 months.[8]

Commercial payments have an integral role to play in the attainment of these objectives.

Enhancing Employee Satisfaction	Growing Employee Productivity
Mobile solutions (like Visa IntelliLink® Spend Management) simplify expense management for travelling employees (see this issue's *Product Spotlight*).	Automated payments solutions such as **invoice automation** reduce the need for repetitive payment processing, which frees up skilled administrative staff to focus on more value-added activities.
Corporate cards reduce the administrative burden and provide additional individual benefits for traveling employees.	

BUILDING EFFECTIVE SUPPLIER RELATIONSHIPS

Maintaining good relationships with key suppliers is essential to any successful business. The effective deployment of commercial payment services can help. Faster and more accurate payments will make any supplier happy, while buyers have the potential to save money. It's this kind of win-win scenario that makes strong relationships a priority for suppliers and buyers.

The Benefits of Electronic Payments

For Suppliers	*For Buyers*
▪ Fewer disputes	▪ Fewer disputes
▪ More on-time payments	▪ Lower costs from automating payments
▪ Opportunity to win more of the buyer's business	▪ Opportunities to earn volume discounts

IN THIS ISSUE

- In the *Product Spotlight*, we highlight a number of new innovations that demonstrate how PNC is continuing to adapt and grow our range of commercial payments solutions to meet these dynamic business priorities.
- This issue's *Industry Spotlight* focuses on the U.S. energy sector, which has undergone dramatic changes in recent years. With many energy firms seeking expense reduction and greater efficiency in the current economic climate, better commercial payment systems can help.
- In *By the Numbers*, we show that U.S. commercial card volume is continuing its strong growth rate, with huge potential for additional growth in the years to come, as more companies recognize the advantages commercial cards provide over traditional paper-based commercial payment methods.
- Finally, under *In the News*, we look at some recent developments in the commercial payments sector, and link directly back to previous issues in the PNC *Payment Solutions News* archive that relate to these topics.

Discover how PNC can deliver ideas, insights and solutions to help you achieve your objectives. Contact your Treasury Management Officer or Account Manager, or visit *pnc.com/treasury*.

PAYMENTS SUPPORT FOR STRATEGIC PRIORITIES

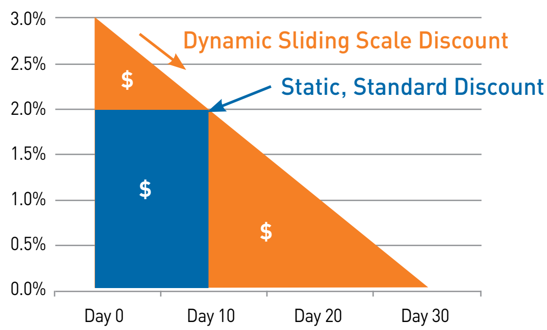
To support our clients and best respond to their evolving business priorities, PNC works to continually improve our commercial payment solutions. This can mean adding new products or services, or refining existing offerings by adding new features. In the introduction to this issue of *Payment Solutions News*, we touched on strategic priorities shared by many of our clients. Here, we focus on three commercial payment services that support some of these priorities: **Dynamic Discounting**, **Visa Intellilink**, and **Same Day ACH**.

DYNAMIC DISCOUNTING

One of the main challenges between suppliers and buyers is the timing and accuracy of payments. Suppliers want to increase cash flow by reducing their days sales outstanding and reducing the costs associated with collections. Buyers are looking for ways to streamline the payment process and reduce costs, and preserve working capital by elongating terms.

To address both supplier and buyer priorities, PNC is planning to introduce a new Dynamic Discounting module as part of A/P Advantage in mid-2016. (Note: This product is currently under development and is subject to change.) This is an alternative early payment incentive program, where buyers offer their suppliers an optional, accelerated payment of approved invoices in exchange for a non-standard term spot discount that decreases as the payment term nears expiration.

As the discount offered by buyers is often a lower cost than alternatives for accelerating collections (like factoring), Dynamic Discounting represents a cost-effective way for suppliers to accelerate collections. For buyers, Dynamic Discounting offers a risk-free return on short-term excess cash. With benefits for both suppliers and buyers, Dynamic Discounting also fosters improved long-term relationships.

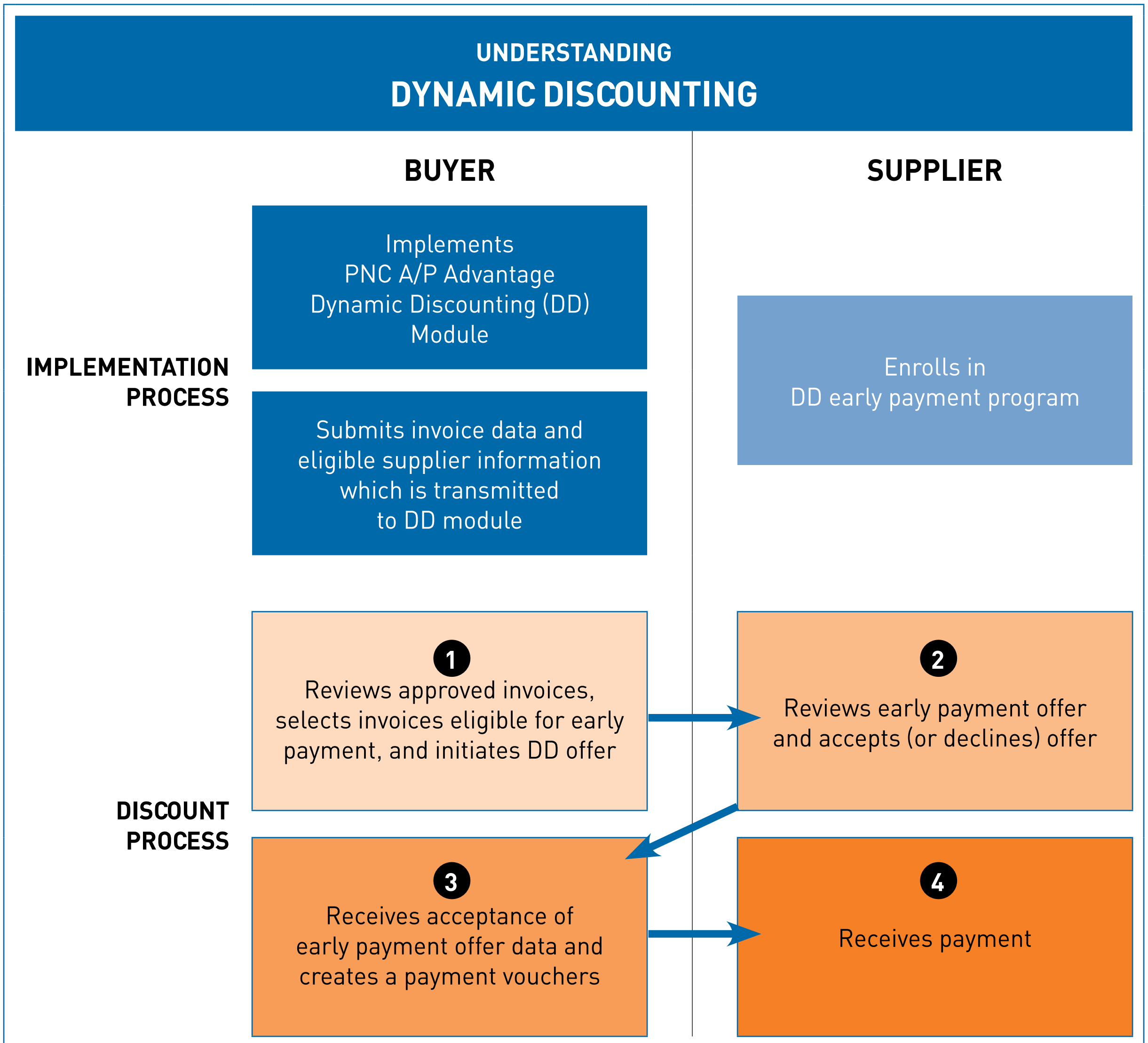


Dynamic Discounting offers benefits to both buyers and suppliers.

Dynamic Discounting is gaining popularity in the market. A 2014 PayStream Advisors study found that 84% of payment practitioners viewed capturing discounts as a priority, further evidenced by a 63% growth in Dynamic Discounting utilization from 2013.[9]

For Dynamic Discounting to work, buyers need an expedited invoicing review and approval process, which PNC already provides through A/P Advantage. PNC's solution displays approved invoices, allowing buyers to review and select invoices to be made eligible for early payment in exchange for a discount. Suppliers, in turn, will review and accept (or decline) early payment offers. If they accept the offers, buyer are notified to execute early payment to receive discounts. Furthermore, Dynamic Discounting can also be integrated with other invoice automation and payment services.

PNC



Note: This product is currently under development and is subject to change.

VISA INTELLILINK

As increasing numbers of our clients have adopted consumer payment technologies on their smart phones, extending treasury management functionality to mobile platforms is our next logical step. In Q1 of this year, we are planning to introduce new mobile capabilities to assist clients with expense management. The Visa IntelliLink Spend Management mobile website will provide tools for those approving expenses and for cardholders. Both will be able access the power of Visa IntelliLink optimized for mobile. (Note: This product is currently under development and is subject to change.)

By providing streamlined and more convenient access to treasury management solutions, the Visa IntelliLink Spend Management mobile website can enhance employee productivity as it relates to expense reporting and approvals.

BENEFITS OF VISA INTELLILINK SPEND MANAGEMENT MOBILE CAPABILITIES

- **For those approving expenses:** The mobile site will include support for the approval of card and cash expenses (for companies using a transaction-based workflow) and the approval of employee expense reports (for companies using an Expense Report workflow). The site will also offer the ability to view receipt images, view policy breach information, and request more information from cardholders.
- **For cardholders:** The mobile site will enable them to create cash expenses, view posted card transactions, and review previously created cash transactions. Clients will also have the ability to capture receipt images using a mobile device camera (receipt images captured while logged-in to the mobile site will be uploaded to the cardholder's image library) and attach receipt images captured using the mobile device camera to posted card transactions, previously created cash transactions, or cash transactions created by the user through the mobile site

SAME DAY ACH

In May 2015, The Electronic Payments Association's (NACHA) voting membership approved changes to its Operating Rules that will allow ACH participants to originate transactions for receipt on the current business day. This will allow the ACH participants to speed delivery of transactions that are more time sensitive than traditional ACH transactions. The Same Day ACH service is not intended to replace the traditional uses of ACH for transactions such as weekly payroll and other predictable payments. Same Day ACH will be offered as a premium service and will provide opportunity for many consumer and business payment applications requiring faster delivery. Examples of Same Day use cases include: Person-to-Person (P2P) payments (between individual consumers), same day bill payments, and expedited payroll files due to processing delays.

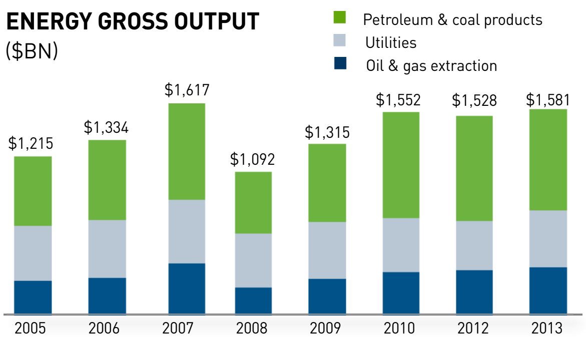
Same Day ACH will be rolled out in a phased approach beginning with ACH Credits only in September 2016 followed by the addition of ACH Debits in September 2017. All ACH transaction types are eligible for Same Day with the exception of International ACH Transactions (IATs). Same Day transactions will be limited to $25,000 per item.

Although it is optional for ACH banks to offer Same Day ACH Origination, it is required for all ACH banks to receive same day ACH transactions which guarantees same day funds availability to the receiver. When the rules become effective, PNC will support Same Day Origination as an optional ACH service through all of our current ACH origination channels.

PAYMENTS SUPPORT FOR THE ENERGY INDUSTRY

In recent years, the U.S. energy industry has undergone a huge transformation due to a number of factors, including huge growth in domestic production of oil and gas, falling oil prices, and the rapid growth of renewable energy sources. U.S. daily domestic oil production has risen by 10.7%, increasing from 8.4 million barrels in 2014 to 9.3 million in 2015.[10] And natural gas production of 90.9 million cubic feet per day in August 2015 represented an increase of 28% from August 2009.[11] The impact of growing U.S. production is reflected in the rise in industry output.

ENERGY GROSS OUTPUT
($BN)



Source: Bureau of Economics Analysis

The growth in oil and gas production has led to a huge decline in the U.S. dependence on imported fuel. The percentage of the U.S.'s petroleum and liquid fuel needs that are imported is expected to fall from 60% in 2005 to just 25% in 2016 and the country's trade deficit in petroleum products is at its lowest level since 1994.[12]

Recent growth in U.S. oil and gas production has led to a sustained lowering of oil and gas prices, which in turn has led to disruption in the energy sector in recent months.

LOWER PRICES DRIVING COST CUTTING

While energy executives remain optimistic about prospects for the industry over the next three years, the sector has been recently impacted by continued low oil prices, a glut in production, and global economic uncertainty. According to Pearson Partners' Oil & Gas Executive Outlook, key business challenges in the next five years for oil and gas executives include an oversupply of oil and gas, unfavorable oil prices, an increased regulatory burden, as well as talent shortages.[13]

As a result of these headwinds, the industry is expanding its focus on optimizing existing operations. KPMG's 2015 Energy Industry Outlook Survey found that the volatile price environment is effecting a strong focus on controlling costs.[14] According to the BDO USA 2015 Energy Outlook Survey, 56% of U.S. energy CFOs would use hedging programs along with cost cutting and efficiencies in order to bolster profitability in 2015.[15]

COMMERCIAL PAYMENTS NEEDS

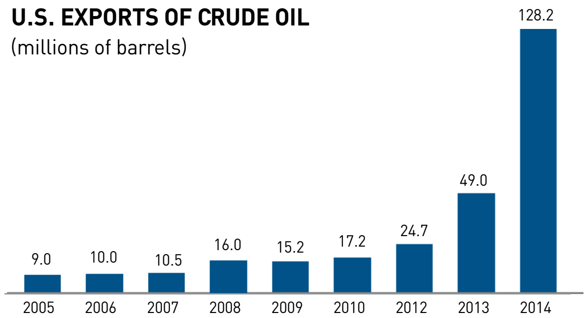
With the increased emphasis on *controlling costs and optimizing working capital,* energy companies are seeking out financial firms with expertise and broad experience in providing treasury management services to the industry.

Energy firms typically have relationships with a wide range of suppliers, so solutions that enable effective *supply chain management* are vital. Commercial payments play a critical role in this regard.

Finally, U.S. energy firms are expanding internationally, as evidenced by huge growth in crude oil exports between 2007 and 2014. And this growth has continued in 2015, with crude oil exports rising 52% y/y for the first eight months of the year.[16]

This increases demand for treasury management and commercial payments solutions to support energy firms' *international operations*.

U.S. EXPORTS OF CRUDE OIL
(millions of barrels)



Source: Energy Information Administration

PNC'S DEEP DOMAIN EXPERIENCE

PNC has built significant expertise in serving the unique financial needs of firms in commodity-based industries. We have traditionally supported energy firms within our retail footprint, including energy clusters in Ohio, Pennsylvania and West Virginia. More recently, PNC has expanded beyond our retail footprint to serve energy firms throughout the country, including the energy-producing states of Texas, Louisiana, Oklahoma, Kansas, Colorado, California, Arkansas and North Dakota. Underscoring the bank's commitment to the sector, PNC opened an energy banking office in Houston in 2013.

Within the energy industry, PNC serves a range of segments, including upstream oil and gas producers, midstream companies, oilfield service and equipment companies, refiners and petrochemical firms. We provide commercial payments services that reflect the unique characteristics of the industry and offer solutions to support energy firms' current focus on optimizing efficiency and reducing costs.

PNC is committed to serving the financial needs of energy firms for the long term, even as the industry works through different economic cycles. We have a history of serving commodity-based industries and our work to support clients in the energy sector is a natural extension of that. Our team-based approach ensures that clients have access to the full complement of PNC services. Our energy industry specialists have the expertise to provide advice and insights on best practices, and help energy firms obtain the most from their relationship with PNC.

Did You Know?

PNC's treasury management support for the energy industry is just the beginning. We offer robust commodities derivatives trading capabilities and reserve based lending, and retain a geologist on-staff.

WORKING WITH ENERGY CLIENTS

One of the key areas where PNC supports our energy clients' commercial payments needs is in enabling our clients to switch a significant portion of their commercial payments volume from checks to more efficient electronic payments. This can reduce administrative costs, favorably impact Days Payables Outstanding (DPO) and cash flow, and in some cases may even drive an income stream for our clients. This involves a tried-and-trusted process, which starts with PNC working with our clients to analyze their supplier list. This analysis identifies both:

- Suppliers who have already signed up for electronic payments; and
- Other suppliers who have not yet signed up for electronic payments, but who do a lot of business with the client

Having identified and prioritized these suppliers, we deploy our team-based approach to recruit these suppliers to accept electronic payments from our client, and to work with our clients to adapt payment systems to switch from checks to electronic payments.

Similar efficiencies may be gained with receivables. PNC offers solutions that can help digitize paper receipts and then consolidate that activity into a common stream of payments of all types (wires, card, ACH, etc.). This results in increased straight-through processing, ability to identify exceptions more quickly, and ultimately increase automated application rates.

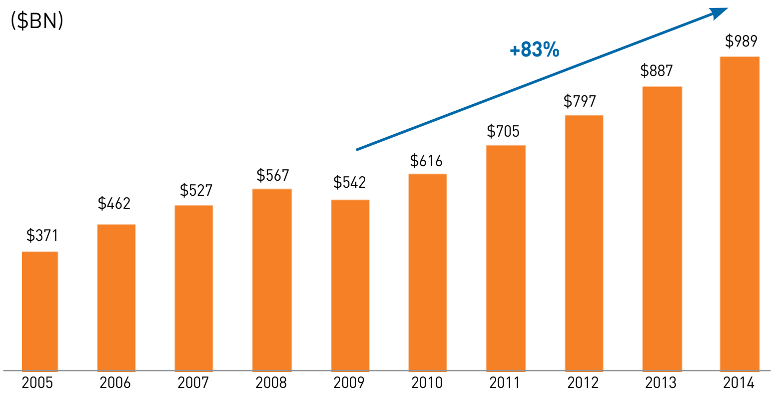
To find out more about our work with clients in the energy industry, contact your Treasury Management Officer.

PAYMENTS VOLUME
IN COMMERCIAL CARDS

Commercial card volume has grown strongly in recent years, rising 83% between 2009 and 2014 (vs. 42% consumer card volume growth over the same period).

Note: PNC's volume has increased by 200% over the same period.

U.S. COMMERCIAL CARD VOLUME*
($BN)

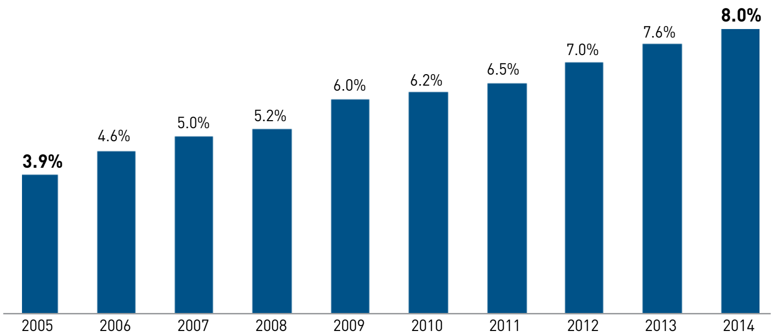


Source: The Nilson Report, issues 863, 886, 911, 933, 957, 1002, 1026, 1049 and 1072

** Includes small business, corporate, purchasing and prepaid cards*

Commercial card's share of business expenditures has grown steadily, but remains below 10%. There is significant opportunity for commercial card growth as more companies see the benefits of a commercial card program.

U.S. COMMERCIAL CARD SHARE OF BUSINESS SPENDING**



*** Note that spending on intermediate inputs (gross output minus value-added) is used as a proxy for business spending*
Source for intermediate input spending is the U.S. Bureau of Economic Analysis

Intermediate inputs are goods and services that are used in the production process to produce other goods or services rather than for final consumption.

A LOOK AT COMMERCIAL PAYMENT TRENDS

In recent years, *Payment Solutions News* has covered many of the key topics in the commercial payments sector. The following is a list of recent news on the sector with links to previous *Payment Solutions News* issues that covered the same topics.

Commercial Payment Topic	Recent News/Trends	Topic Covered in Previous Issues of *Payment Solutions News*
International Payments	According to a Currency Cloud survey, 37% of U.S. businesses cite slow transaction times as a key pain point in processing international payments.	*Spring 2014 issue*: Illustrated how PNC addresses clients' international payment requirements through its multinational card program and other solutions.
Electronic Invoicing	The U.S. Federal Government is mandating the use of electronic invoicing for business-to-government (B2G) transactions by 2018. PayStream Advisors' Invoice Receipt Management Report 2015 found that 54% of respondents wanted to automate invoicing procedures.	*Fall 2014 issue*: Discussed the benefits of electronic invoicing and summarized the invoice automation relationship with Tungsten Network.
Payables Automation	According to the 2015 AFP Transaction Banking Survey, 51% of businesses centralize the accounts payable function, and 48% centralize accounts receivable. RPMG Research's 2015 Electronic Accounts Payable Benchmark Survey Results found that: • For all electronic accounts payable (EAP) programs, EAP's share of purchasing card spending rose from 49% in 2012 to 58% in 2015. • EAP spending is expected to rise from $65 billion in 2014 to $110 billion by 2019. • Average cost of an EAP invoice is $9, vs. $31 for a traditional check.	*Fall 2014 issue*: Identified reasons why companies are resistant to payments automation, and summarized key advantages of automation. Also provided a series of steps that companies should follow to fully embrace payables automation.

[1] Deloitte CFO Signals, Q3 2015.
[2] "A Clear Path to A/P and A/R Automation," Treasury & Risk, 6/18/2015.
[3] "U.S. Export Fact Sheet," U.S. Department of Commerce, 6/3/2015.
[4] "Global Patterns of U.S. Merchandise Trade," U.S. Department of Commerce.
[5] Global Business Travel Association.
[6] U.S Department of Labor, Bureau of Labor Statistics.
[7] "18th Annual Global CEO Survey," PWC.
[8] Duke CFO Global Business Outlook.
[9] "How to Maximize Discount Capture," PayStream Advisors.
[10] Weekly Petroleum Status Report, U.S. Energy Information Administration.
[11] Natural Gas Gross Withdrawals and Production, U.S. Energy Information Administration.
[12] "Survey Reveals Big Growth, Challenges for Energy Industry," Petroleum Accounting and Financial Management Journal, Fall 2014.
[13] "Pearson Partners' Oil & Gas Executive Outlook 2015 Predicts Tough Year, Strong Five-Year Outlook," BusinessWire, 2/17/2015.
[14] "Rapidly Changing Energy Marketplace Forcing Energy Execs To Focus On Business Models, Growth Strategies: KPMG Survey," PR Newswire, 5/13/2015.
[15] "BDO Survey: Declining Oil Prices Rattle Industry," BusinessWire, 12/2/2014.
[16] U.S. Exports of Crude Oil and Other Petroleum Products, U.S. Energy Information Administration.

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