



# Measuring the Effectiveness and Value of E-Payment Solutions

A benchmarking survey from ISM, CAPS Research and American Express identifies the benefits and effectiveness of electronic payment solutions for supply management organizations.

By D. Steven Wade

## Table of Contents

- Introduction** . . . . . 1
- Most Use E-Payment Systems** . . . . . 1
- Benefits of Using E-Payment Systems** . . . . . 2
- Moving From Paper-Based to Automated Systems** . . . . . 2
- Average Values** . . . . . 3
- Optimizing and Integrating Systems** . . . . . 4
- E-Payments Providers** . . . . . 4
- E-Payments Considerations** . . . 4
- Why Some Are Not Currently Using E-Payment Systems** . . . . . 5
- Respondent Data** . . . . . 5
- Conclusions** . . . . . 6

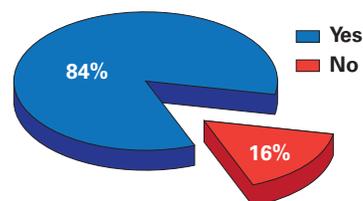
Institute for Supply Management™ (ISM) and CAPS Research, in conjunction with American Express, recently conducted a short benchmarking survey that asked organizations about the effectiveness and value of electronic payment (e-payment) solutions. The term “electronic payments” has different meanings to different supply management organizations worldwide, but the basic, most commonly understood definition generally defines it as “financial transactions conducted electronically using computer-based systems.”

### Most Use E-Payment Systems

Eighty-four percent of survey participants answered “yes” to the question, “Does your organization utilize an electronic payment (e-payment) system to pay suppliers?” Of the 16 percent who reported they do not currently employ e-payment systems, 75 percent reported they are planning to do so within the next two years. Interestingly, the companies that reported they will not employ e-payment systems within the next two years reported average revenue of US\$800 million.

Those who currently use e-payment systems, or plan on doing so within the next two years, reported average annual revenue of \$7,485 million (or \$7.5 billion), which is more than nine times the revenue of those who reported they do not currently use or plan to use e-payment systems, as shown in Figure 1:

Figure 1: Percent of Survey Participants Using E-Payment Systems



# Measuring the Effectiveness and Value of E-Payment Solutions

## Benefits of Using E-Payment Systems

The CAPS Research survey asked participants to list the top three benefits realized from their optimized payment processes. The most common response was simply cost reduction. Other frequent responses included: cash flow improvement; discounts; extended terms; improved customer service; improved cycle time for invoice approval through payment; improved working capital; increased compliance; increased operational efficiencies; maximized compliance to policies and procedures; minimized risk of lost invoices; process efficiencies; rebates; reduced workloads; and reduction in the number of lost checks.

One survey participant reported that the company “received fewer supplier phone calls; and an increase in the number of satisfied customers, operating units and suppliers.”

## Importance to Organizational Goals and Objectives

The survey asked participants to rate the importance of e-payment solutions to 10 different organizational goals and objectives. The most highly rated was the capability of e-payment solutions to reduce check processing and enable payment automation. The ratings, from highest (very important) to lowest (not important) were as follows:

Scale: 1=Not Important, 5=Very Important

Reduce Check Processing and Enable Payment Automation	4.57
Improve Fraud Control and Compliance	4.07
Improve Relationships With Suppliers	3.80
Maximize Cash Incentives	3.79
Increase Days Payable Outstanding (DPO)	3.16
Dynamic Discount Solutions	3.00
International Payments	2.98
Access to Short-Term Liquidity	2.95
Supply Chain Financing	2.47
Payment Warehousing	2.40

The overall rating for “Other” organizational goals and objectives was 3.00. The objectives listed included: avoid payments lost in the mail; enhance record of payment receipts by different suppliers; and move away from paper-based approval and processing of invoices.

## E-Payment Program Assessment

CAPS Research asked survey participants to assess the effectiveness of their e-payment programs using the following best-practices attributes. Using a scale of 1 to 5 (1=strongly disagree, 5=strongly agree), the participants reported the following in order of importance:

Scale: 1=Strongly Disagree, 5=Strongly Agree

The organization’s e-payments program has streamlined our payment process.	4.03
The organization’s e-payment program has reduced the accounts payable workload.	3.79
Suppliers reported that they find e-payments valuable.	3.90
Fewer payment inquiries are received from suppliers to accept e-payments.	3.58
The process of onboarding suppliers meets our expectations.	3.29

## Moving From Paper-Based to Automated Systems

For organizations that have transitioned from paper-based systems to e-payment systems, the transition ranged from being very difficult (rating=1) to very easy (rating=5). Most companies that answered this question reported their transition was average (rating=3) or better than average (rating=4). The overall average rating of 3.12 is just about right down the middle. Figure 2 summarizes the ratings:

Figure 2: Summary Overview of How Organizations Rated Their Transition From a Paper-Based Payment System

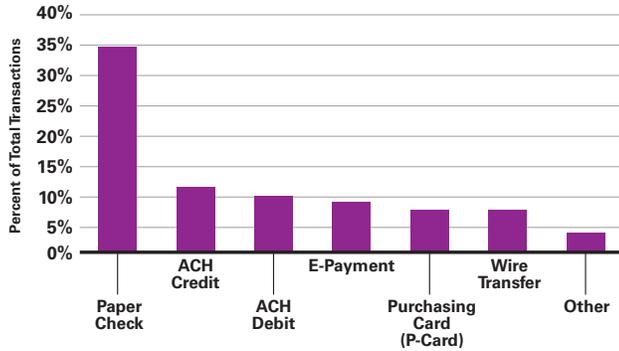


## Paper Is Still Important

As noted throughout this survey, companies are moving toward adopting a number of different e-payment solutions. Figure 3 shows the overall summary of the solutions that companies are using for affecting their payment transactions:

# Measuring the Effectiveness and Value of E-Payment Solutions

**Figure 3: Payment Transaction Solutions**



Survey participants reported that approximately 3 percent of their payment transactions were completed using other solutions or systems. Although some of these “Other” observations can more correctly be identified as being e-payment solutions, they are repeated here:

- Direct Deposit (to Suppliers)
- Entertainment Credit Cards; Payment Cards; Travel Cards
- Electronic Funds Transfer Through Automated Invoicing Platform.

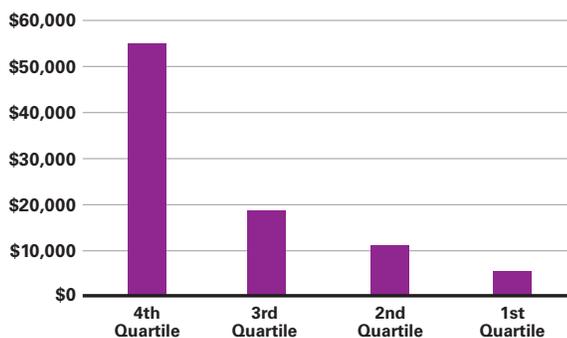
## Average Values

Respondents provided average per-transaction values as well as average number of transactions per month.

### Average Dollar Values

The average dollar value reported by all of the survey participants ranged from a low of \$5.00 per transaction to a high of \$55,000 per transaction. On average, the dollar value of each transaction was reported to be \$15,280. One way to review the data is by quartile representation, as shown in Figure 4:

**Figure 4: Average Transaction Dollar Value (Quartile Representation)**



The 1st through 3rd quartile ranges are fairly consistent and show expected progression from \$6,000 average per transaction (1st quartile), \$11,400 average per transaction (2nd quartile) and \$18,000 average per transaction (3rd quartile). The significant increase noted between the 3rd and 4th quartile is due to the observation that the average dollar value within the 4th quartile range is \$35,500. That amount is 2.5 times the average dollar value of the 3rd quartile range.

### Average Number of Monthly Transactions

Overall, the survey participants reported an average of 31,800 monthly payment transactions, of which 35 percent were settled by paper check. When we strip out the data provided by those companies that do not currently use e-payment systems, the average number of monthly payment transactions (reported) is 24,600. Those companies not currently employing e-payment systems reported an average volume of 12,600 monthly transactions. That number represents one-half of the e-procurement-enabled survey participants.

Based on the survey results, manufacturers are likely to process about four times the number of monthly transactions than nonmanufacturers. Manufacturers reported processing an average of 69,000 transactions monthly, and nonmanufacturers reported processing an average of 16,900 monthly.

Overall, larger companies reported they use e-payments more than smaller or midsized companies. That fact is borne out by looking at the number of transactions against the revenue reported (by quartile):

	Avg. no. of monthly e-payment transactions:	
1st quartile revenue:	\$2,800,000,000	7,900
2nd quartile revenue:	\$4,899,000,000	10,000
3rd quartile revenue:	\$10,052,000,000	39,300
4th quartile revenue:	\$26,000,000,000	37,000

Clearly, the larger companies participating in the survey reported a significantly higher number of e-payment transactions. Using the quartile data above, the largest companies (3rd and 4th quartile revenue) released more than four times the number of transactions of smaller companies.

# Measuring the Effectiveness and Value of E-Payment Solutions

## Optimizing and Integrating Systems

Survey participants were asked to rate their ability to pay electronically. Additionally, CAPS Research asked them to tell us how they were optimizing their P2P process and integrating with other systems.

### Rating Your Ability to Pay Electronically

CAPS Research asked survey participants to rate their purchasing organizations' ability to pay suppliers electronically both today, and two years from now. On a scale of 1 to 5, (1=totally manual, 5=totally electronic), the survey participants rated their current abilities to pay suppliers electronically at 3.25, which indicates the participants are very positive about their *current* abilities to pay suppliers electronically. The survey participants rated their *future* abilities to pay suppliers at 4.0, meaning that the majority of participants believe that payments to suppliers will be totally electronic within the next two years. It is important to note that 98 percent of the survey participants who rated their ability to pay suppliers electronically *today* as 2.0 or 3.0 rated their ability to pay suppliers electronically *two years from now* at 4.0 or 5.0. In summary, participants expect a significant reduction in the number of transactions that will be processed manually as they increase their use of e-payment systems and solutions.

### Optimizing Your P2P Process

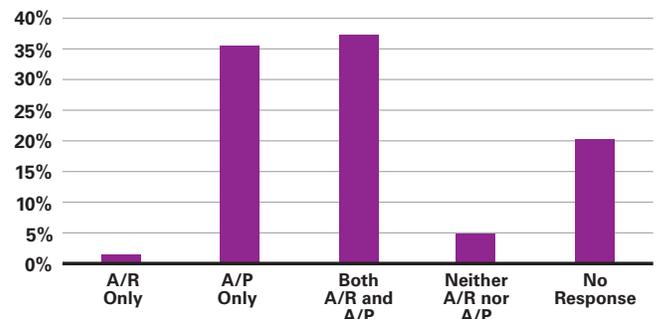
About 30 percent of the survey participants reported they have optimized their procure-to-pay (P2P) process to better manage costs, normalize days payable outstanding (DPO) and so on. Of those who reported they have optimized their P2P process, only one survey participant responded "yes" to the question asking whether or not suppliers were required to purchase additional hardware and/or software, or otherwise make systems upgrades to enable them to implement the purchasing organization's e-payment process. Based on the large number of "no" responses to this question, suppliers are not being tasked to invest in additional hardware and/or software to support the purchasing organizations' shift to electronic payments.

### Integrating Your ERP (or Equivalent) System

As noted in Figure 5, about one-third of the participants reported that accounts payable is fully integrated into their ERP or equivalent system; and another one-third reported that both their accounts payable and accounts receivable

are integrated into the ERP or equivalent systems. Five percent reported that neither accounts payable nor accounts receivable is so integrated:

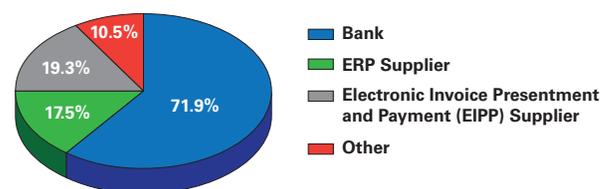
Figure 5: ERP Integration With Accounts Payable and Accounts Receivable Functions



## E-Payments Providers

Figure 6 shows how the survey population reported the types of providers being used to process their e-payments programs or solutions. Banks are still the number-one source. In addition to the providers listed in Figure 6, participants reported that their providers include the American Express vPayment solution, Ariba or an in-house ERP solution:

Figure 6: Types of E-Payments Providers



## E-Payments Considerations

One of the last questions on the survey asked participants to rate on a scale of 1 to 5 (1=strongly disagree, 5=strongly agree) their willingness to consider different approaches to increase the use and acceptance of e-payments solutions and/or programs. Organizations reported they are more likely to mandate e-payments in future contracts than they are to forego incentives themselves to enable more

# Measuring the Effectiveness and Value of E-Payment Solutions

suppliers. The following are the points for consideration as well as the aggregated ratings:

	Scale: 1=Strongly Disagree, 5=Strongly Agree
Mandate the Use of E-Payment in Contracts	3.90
Share Incentives to Enable More Suppliers	3.00
Forego Incentives to Enable More Suppliers	2.48
Forego All/Part of Incentives to Increase Day Cash on Hand	2.33

## Why Some Are Not Currently Using E-Payment Systems

The reasons most commonly reported for *not* employing e-payment systems were: perceived technical barriers; funding (of e-systems) not being a priority; and the belief that the organization’s check-based payment system is working just fine. A few survey participants also reported other reasons for not adopting an e-payment system, including the need for additional research (on different e-payment applications), existing contract payment terms and security (of different applications). There is sufficient evidence suggesting that these perceived barriers to e-payment adoption can be resolved.

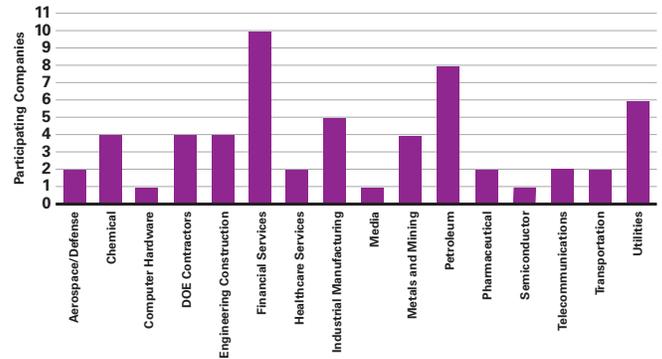
## Respondent Data

The following provides information on who responded to the survey, as well as total revenue for the responding organizations.

### Respondent Demographics

This survey generated responses from companies representing 16 different industry sectors. Figure 7 shows that the number of industry-specific participants ranged from a low of one participant in the Computer Hardware, Media and Semiconductor industry sectors to a high of 10 participants in the Financial Services industry sector:

**Figure 7: Number of Survey Participants Representing Different Industry Sectors**



Of those who reported for *other* than the whole organization, most were at the division/business unit level. We could assume that the participants who did not answer this question were reporting for the whole organization, but we decided not to because there are differences in the revenue as reported and the revenue as reported in mainstream publications (for example, *Hoover's*).

### Total Revenue Dollars for the Organization

The survey results show an unequal number of participating nonmanufacturers and manufacturers. Although two-thirds of the responses were from nonmanufacturers, there wasn’t much difference in the average revenue reported:

Average revenue (reported) for nonmanufacturers:	\$6,631,628,607
Average revenue (reported) for manufacturers:	\$9,431,747,777

The revenue (reported) ranges from a low of \$450,000 all the way to a high of \$67,000,000,000. For this survey, data associated with two participants who reported revenue of \$450,000 and \$1,060,000, respectively, have been removed as outliers. Data associated with the participant who reported a high of \$67,000,000,000 have also been removed — not because it was an outlier, but because there was no cluster of similar-sized companies and therefore could not be compared with other survey responses. When these revenue values are removed, the range of data shows maximum revenue of \$26,000,000,000 and minimum revenue of \$178,000,000.

# Measuring the Effectiveness and Value of E-Payment Solutions

Figure 8 shows the range of data including minimum and maximum values, means and median values, and quartile revenue:

**Figure 8: Range of Data (Revenue Reported)**

Revenue Value	Revenue Function
\$7,174,374,041	Average
\$3,799,000,000	Median
\$178,000,000	Minimum
\$2,800,000,000	1st Quartile
\$4,899,000,000	2nd Quartile
\$10,052,000,000	3rd Quartile
\$26,000,000,000	4th Quartile — Maximum

## Conclusions

Organizations reported that they were adopting e-payment solutions or systems for different reasons. In addition to cost reduction, reference was made to a number of other benefits, including improved customer service, improved working capital, increased operational efficiencies and cycle times, processing efficiencies and enhanced compliance to organizational policies and procedures. And, as noted in this survey, only a few companies that participated in the survey reported they will not employ an e-payment capability within the next two years. Most larger, multi-billion-dollar companies are finding that the benefits of e-payment solutions to pay suppliers far exceed the risks.

### **Key survey observations also include:**

- Companies are using e-payment solutions primarily to reduce check processing and enable payment automation.
- Larger companies are finding that e-payments are a best practice as they continue to process larger numbers of transactions electronically.
- While some companies perceive technical barriers for suppliers as a reason for not using e-payment solutions, the survey results indicate that suppliers are not being asked to invest in additional hardware or software to enable e-payments.

What we're not sure of is the number of companies that have outsourced or offshored their e-payment functions. That topic will be addressed in a future survey that will look at the electronic tools being used by global supply management organizations.

CAPS Research and Institute for Supply Management™ (ISM) would like to thank the companies that participated in the survey. In particular, we extend our gratitude to American Express for sponsoring this benchmarking survey. The outcomes of this type of exercise will allow participants to answer the question, "How are we doing compared to other companies?" by providing averages and ranges for characteristic e-payment solutions and systems performance. CAPS Research and ISM welcome the opportunity to continue this work with the survey participants and others interested in furthering this research.

---

**D. Steven Wade** is director of benchmarking programs for CAPS Research in Tempe, Arizona. For information on this report and other CAPS Research benchmarking activities, please send an e-mail to [metrics@capsresearch.org](mailto:metrics@capsresearch.org).

**CORPORATE**  
PAYMENT SOLUTIONS



### **About American Express Corporate Payment Solutions**

Through its Corporate Payment Solutions group, American Express provides the Corporate Card, Corporate Purchasing Solutions and other expense management services to mid-sized companies and large corporations worldwide. In the U.S., it is the leading issuer of commercial cards, serving more than 70% of the Fortune 500, as well as tens of thousands of mid-sized companies. American Express issues local-currency commercial cards in more than 40 countries, and International Dollar Corporate Cards in an additional 100+ countries. For more information, visit [www.americanexpress.com/corporate](http://www.americanexpress.com/corporate).