



Pay it forward: Solving three key challenges in payments processing

Mastering payments enables frictionless omni-channel commerce, strengthens security and minimizes complexity





Payments and the omni-channel experience

A century ago, a merchant’s top payments concern was having an adequate supply of the right coins and bills in the till to make change for the customer. Times have changed, to put it mildly.

Retailers, merchants, financial institutions and payment processors face daunting new challenges and complexity in payments processing across multiple fronts. These fast-changing dynamics include:

- High expectations among omni-channel customers
- Demands for multiple, relevant payment options
- Rapid growth in mobile and card-on-file solutions
- Ever-changing security, privacy and fraud risks
- Increasing complexity in managing a multichannel payment ecosystem
- New chip-enabled card requirements to comply with the EuroPay, MasterCard and Visa (EMV) standard for card-present US transactions

Three key challenges in payment processing
The stakes are high. In this ebook, IBM analyzes the top three payments challenges that confront merchants and billers, and outlines solutions to address immediate needs while future-proofing a payments system to adapt to continued change. The three key challenges are:

- **Challenge 1:** Satisfy customer demands for payment options and localization
- **Challenge 2:** Meet security, privacy and regulatory requirements
- **Challenge 3:** Minimize complexity across the payments ecosystem

Table of contents

Payments and the omni-channel experience..... Page 2

The importance of payments amid rapid e-commerce and mobile growth Page 3

Challenge 1: Satisfy customer demands for payment options and localization..... Page 5

Challenge 2: Meet security, privacy and regulatory requirements..... Page 6

Challenge 3: Minimize complexity across the payments ecosystem..... Page 8

IBM Payments Gateway: A complete cloud payments and reconciliation solution..... Page 10



The importance of payments amid rapid e-commerce and mobile growth

Payments are a crucial step in the customer journey. While merchants have made great strides in helping guide the consumer's path to purchase with personalized marketing and mobile-friendly websites, payments present a potential stumbling block that can derail a superior customer experience.

Satisfy customer demands for payment options

Limited payment options, a cumbersome checkout process and concerns over a retailer's payments security can prompt shoppers to purchase elsewhere. Today's demanding omni-channel consumers expect a seamless, secure checkout across multiple touchpoints, including e-commerce transactions over smartphones and tablets, and cashless in-store payments through smartphones.

Rapid growth in e-commerce spending makes the checkout experience and payment processing top concerns for retailers. Worldwide, retail online sales are expected to soar 56 percent from USD 1.6 trillion in 2015 to USD 2.5 trillion in 2018, according to eMarketer.¹

Much of that growth is occurring over smartphones and tablets, which as of March 2015 accounted for 39 percent of e-commerce sales in the UK, and 24 percent in the US, according to IBM Digital Analytics Benchmark, which aggregates anonymized data from hundreds of participating merchants. For retailers, the challenge is to ensure that checkout and payments, either through mobile apps or mobile-optimized websites, is on par with the desktop experience.

56% growth
in global e-commerce spending
from 2015-2018³

370% rise
in mobile payments in the UK by 2020⁴

Payments on the go

The use of contactless digital payments for in-person transactions over mobile phones is another high-growth area. For instance, Visa Europe predicts that the average UK shopper will spend GBP 27 per week via mobile by 2020, up 370 percent from GBP 10 in 2015.² In the US, Forrester Research forecasts mobile payments growth over five years at 173 percent, from USD 52 billion in 2014 to USD 142 billion in 2019.⁵ Meanwhile, many retailers are replacing proprietary in-store POS systems with mobile options. About 80 percent of US retailers are expected to have enabled mobile in-store payments by 2019.⁶

Along with these growth areas, merchants need to support retailer-branded or digital gift cards, international transactions, digital coupons or promotions, and more. These alternative payment methods introduce complexity and risk to the payment process. They also exacerbate the challenge that merchants face in using disparate platforms and services for e-commerce, mobile and physical POS, from processing to reconciliation and reporting, all while striving to deliver a seamless and secure payments environment for customers.



Challenge 1: Satisfy customer demands for payment options and localization

Consumer expectations are far ahead of merchant capabilities in most areas of omni-channel commerce, and payments is no exception. Inconsistency and limitations in checkout flow and the point of purchase can drive up cart abandonment in e-commerce, measured at 74 percent in the US in March 2015 by IBM Digital Analytics Benchmark.

Cart abandonment has steadily increased since 2009, suggesting that merchants need to identify and implement improvements to every aspect of checkout, including payments. A weakness in payments can do more than derail a single sale—it can hurt long-term customer loyalty and funnel business to the competition.

Payment choice is fundamental

Offering customers a wide variety of payment options is a prerequisite to long-term success. Consider: 52 percent of shoppers want to see a variety of payment options at checkout, and 24 percent of consumers have abandoned an online purchase because their preferred payment option was not offered, according to a UPS study.⁷

For global business, regional support of local currencies, banks and languages in payments is another checklist item, yet the inherent complexity of international sales makes it difficult for merchants to effectively offer and manage payments across borders. Meanwhile, consumers expect to be able to buy anywhere, anytime with digital devices—over mobile websites and apps, and increasingly in stores.

For most retailers, the top objective in all aspects of commerce, including payments, is to deliver a cohesive and rewarding omni-channel experience for the customer. Of the many moving parts in the customer journey, payments is among the most difficult to master, while presenting a risk to vital security and privacy of customer data.

“[Consumers’] increasing reliance on their mobile phones gives rise to higher expectations—it has ushered in the emergence of mobile moments in which businesses can find new opportunities to meet or surpass customer expectations in payments and commerce.”

—Forrester Research⁸

80% of customers dislike the checkout process because it’s inefficient or inaccurate⁹

52% of shoppers want to see a variety of payment options at checkout¹⁰

24% of consumers have abandoned an online purchase because their preferred payment option was not offered¹¹

Key takeaway: Provide customers with a frictionless shopping experience regardless of when, where and how they want to pay.

Challenge 2: Meet security, privacy and regulatory requirements

High-profile data breaches involving such companies as Target, Barnes and Noble, Home Depot and other household names underscore the ongoing data security and privacy threat that confronts merchants worldwide. Despite heavy investments in Payment Card Industry (PCI) compliance and security systems, the “black hat” threat to the privacy of customer and payments data continues to escalate.

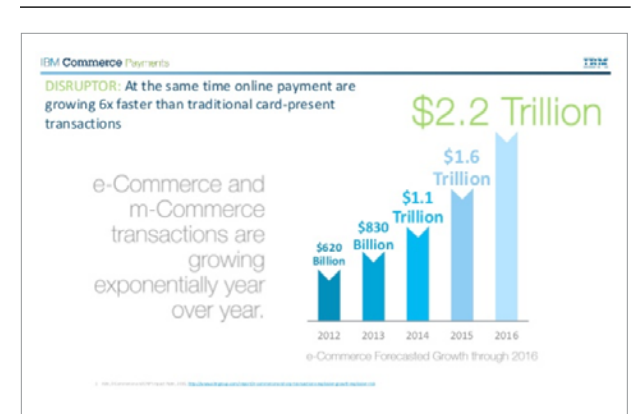
Consumers fear data insecurity

The cost to the bottom line and consumer confidence is high. In US retail, losses to credit card fraud leapt 39 percent in 2014, from USD 23 billion to USD 32 billion, according to a study by the research arm of Business Insider.¹² Meanwhile, 59 percent of consumers are afraid of having their credit card data stolen and abused — rating higher than consumer concerns on US national security in relation to war or terrorism, and the security of shopping or banking online, a Unisys study found.¹³

To improve security of card-present transactions, US merchants are required as of October 2015 to utilize the EMV standard, with terminals that can read chips embedded in credit cards and accept entry of a personal identification number (PIN). This milestone event is also an opportunity for merchants to reassess the viability of their security and payments acceptance systems in adapting to ever-changing requirements.

The migration to EMV poses a number of challenges:

- **Liability.** Merchants and card issuers (banks, credit unions) that accept transactions made with cards not EMV-compliant assume liability for any fraudulent purchases.
- **Cost.** Upgrading POS terminals to accept EMV cards introduces a major cost for US merchants, estimated at USD 2.6 billion across the industry.¹⁴
- **Rising CNP fraud.** Experts expect that making card-present fraud in the US more difficult will simply prompt criminals to focus more on card not present (CNP) fraud.



[View the Slideshare >](#)

The rising threat of fraud

European and Canadian merchants saw an increase in CNP fraud after EMV adoption in 2005 and 2009, respectively. In Europe, the CNP fraud rate soared from 25 percent in pre-EMV 2004 to 64 percent by 2010, according to a European Central Bank report.¹⁵ In Canada, CNP fraud leapt from CAD 128 million in 2008 before EMV adoption to CAD 299 million in 2013, the Aite Group reported.¹⁶ Meanwhile, losses from counterfeit, lost and stolen cards declined correspondingly. (Figure 1)

Changes in Canadian credit card fraud losses, 2008 to 2013

in CAD millions

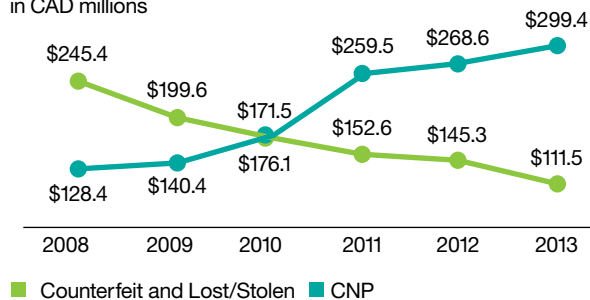


Figure 1. CNP fraud soared in Canada after the migration to EMV.

Based on experience elsewhere in the world, Aite Group expects that CNP fraud in the US will more than double, from USD 2.8 billion in 2013 to USD 6.4 billion by 2018.¹⁷ (Figure 2). For merchants, payment processors and financial institutions, the pressure is on to implement enterprise-grade processes and systems to combat the inevitable criminal focus on CNP fraud in a post-EMV world.

U.S. CNP credit card fraud losses, 2011 to e2018

in USD billions

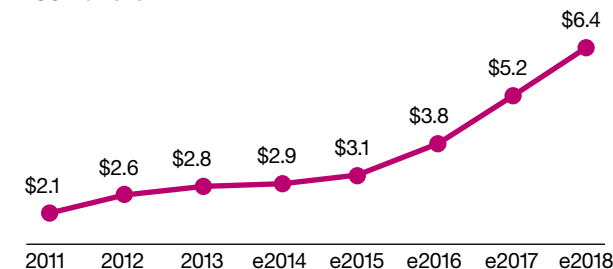


Figure 2. CNP fraud in the US is expected to rise rapidly after EMV adoption in 2015.

USD 32 billion

lost in US retail credit card fraud in 2014, up 39% from 2013¹⁸

75% of consumers

expect online payment systems, stores and banks to protect them from fraud¹⁹

59% of consumers

fear having their credit card data stolen or abused²⁰

49% of consumers

feel vulnerable to security risks when transacting online²¹

Key takeaway: Empower customers with the peace of mind to shop with confidence.



Challenge 3: Minimize complexity across the payments ecosystem

Continued growth in consumer expectations and complexity of the payments ecosystem have made it more difficult than ever for merchants to juggle multiple priorities. Looking ahead, the uncertainty that surrounds new technologies, payment methods, regulatory requirements and security risks leaves many executives uneasy making tactical decisions and charting strategic direction.

Growth and choice brings new risk

Rising costs and resource requirements are another consideration. Operational and support expenses increase as merchants attempt to manage integrations across legacy POS, newer mobile and digital payments, global e-commerce channels and even paper-based processes. For many, reconciliation and reporting on high volumes of bank transactions around the world through a variety of payment methods is increasingly complicated and fraught with risk that can impact the bottom line.

Key takeaway: Easily manage global payments with a single view of settlement and accounts across channels.





Ensuring PCI and other security mandates becomes even more costly and onerous as new channels are added, while at the same time merchants are under more pressure than ever before to ensure that payment-related data is secure and compliant. In a survey by Retail Systems Research, half of the top responses related to payment systems integration, consolidation and security risks.²² (Figure 3)

Given the ceaseless complications, many merchants are looking to transition from in-house payments management to a proven, trusted provider with a cloud payments platform that can deliver simplicity, security and visibility at levels that are exceedingly difficult to achieve in today's typical payments ecosystem.

Top 3 Retail Payments Operational Challenges

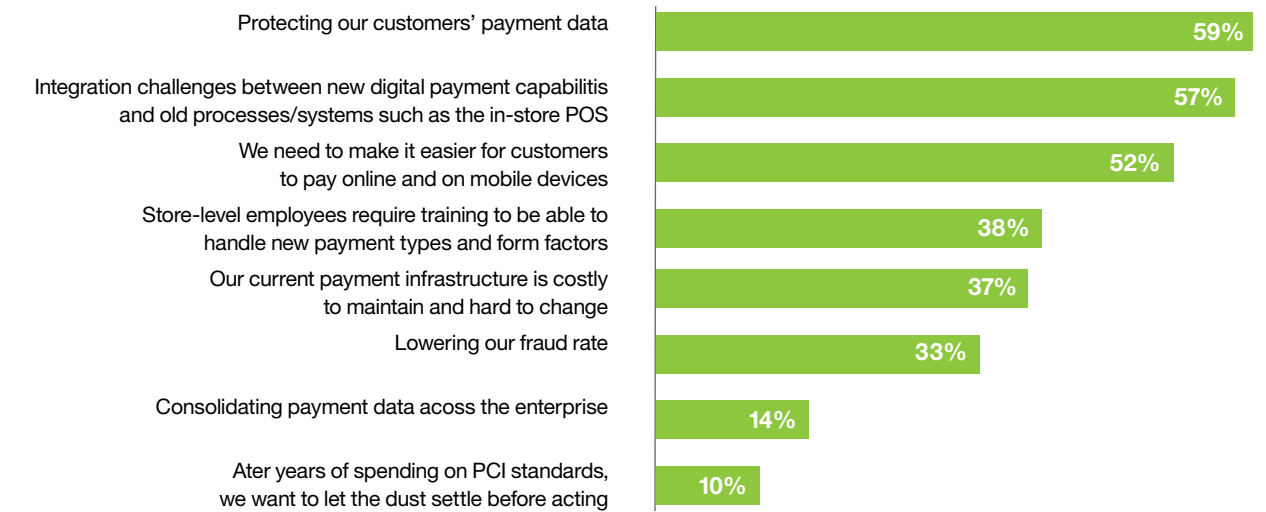


Figure 3. Protecting customer payment data is the top operational challenge for retailers. Source: RSR Research, April 2015.

IBM Payments Gateway: A complete retail payments and reconciliation solution on the cloud

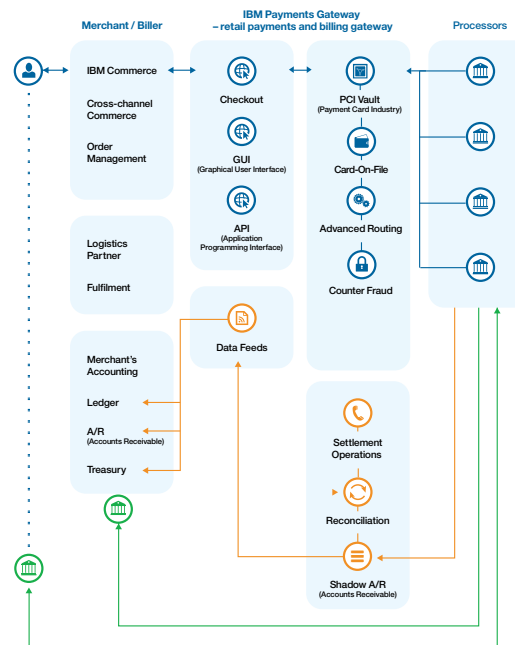
IBM addresses key payments pain points with IBM® Payments Gateway, a prebuilt cloud solution designed to give your customers a secure, frictionless shopping experience across multiple channels and devices. A core element of IBM Commerce, IBM Payments Gateway combines innovation with proven IBM technology to provide your organization with greater simplicity, security and visibility.

Integrating seamlessly into websites, mobile sites, smartphone apps and call center tools, IBM's software-as-a-service (SaaS) solution enables global merchants to set up and manage a robust payments platform quickly, easily and cost-effectively. Support for more than 170 payment methods in over 70 countries gives you flexibility and scalability to meet customer demands on a global basis.

IBM Payments Gateway is easily accessed from a company's existing payment platform, helping to significantly reduce or eliminate the investment of time, money and IT resources for payment processes. This approach helps companies offer a secure shopping experience consistent across multiple channels and devices, including mobile, and enables consumers to buy products and services anywhere, anytime.

Highlights

- Deliver a consistent payments experience across channels and devices
- Securely accept payments on any device, anywhere in the world
- Simplify management with a single view of settlement and accounts across channels
- Leverage connections to over 170 payment types in more than 70 countries
- Minimize security and privacy risk of handling payments and customer information



[View the document >](#)

Provide superior customer payment experiences

IBM Payments Gateway gives merchants, billers and payment service providers a complete solution to quickly bring to market retail payments with card-on-file support to improve interactions with customers worldwide. The solution provides capabilities to accept, connect, manage and secure payments across multiple channels and devices.

Accept

IBM Payments Gateway is highly configurable, giving your customers a consistent experience across channels. Delight customers with added services such as card-on-file for easy repeat purchasing.

Connect

IBM Payments Gateway will help your business grow globally with local market analysis, worldwide support and the globally recognized IBM brand as your business partner.

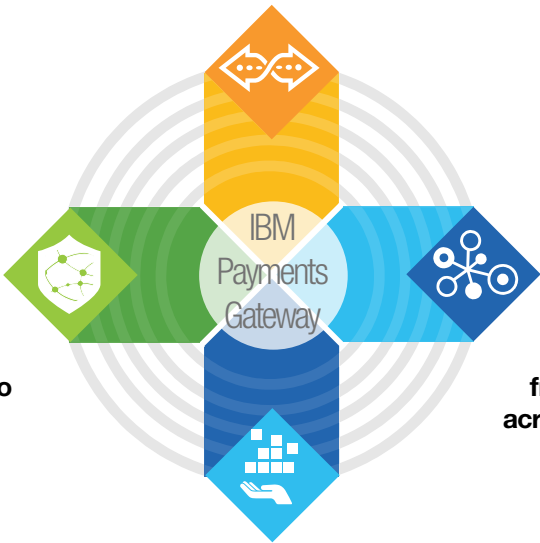
Manage

IBM Payments Gateway manages routing and automates settlement, presenting your business with a straightforward data feed and no settlement burden.

IBM Payments Gateway

Accept
any payment anywhere
with a deployment-ready
cloud solution

Secure
customer data to allow them to
shop with confidence



Connect
to over 170 payment methods
in over 70 countries

Manage
from a single view of payments
across all channels and locations

Figure 4. IBM Payments Gateway supplies a complete solution for digital commerce payments.

Secure

Empower customers with the security to shop with confidence, knowing their sensitive information is saved in a PCI-compliant vault. IBM Payments Gateway takes all payment credentials, sparing your business from arduous, expensive compliance responsibilities.

Learn more about the IBM Payments Gateway solution



-
1. eMarketer, "Retail Sales Worldwide Will Top \$22 Trillion This Year," December 23, 2014.
 2. Visa Europe, "Smart devices on track to replace cash and cards," news release, June 4, 2015.
 3. See note 1.
 4. See note 2.
 5. Forrester Research, "US Mobile Payments Will Reach \$142B by 2019," news release, November 17, 2014.
 6. Business Insider, "The Trends Creating Winners and Losers in the Card-Processing Ecosystem," May 15, 2015.
 7. UPS, "UPS Pulse of the Online Shopper: A customer experience study," June 2015.
 8. See note 5.
 9. Cognizant, "Getting personal with shoppers: The Cognizant UK Shopper Study," November 2013.
 10. See note 7.
 11. See note 7.
 12. Business Insider, "Payments Security Report: 5 new security protocols aim to fix the massive credit-card fraud problem," April 2015.
 13. Unisys, "Credit and Debit Card Fraud Tops American Security Concerns Amid Widespread Cybersecurity Attacks," news release, May 13, 2014.
 14. Digital Transactions, "U.S. Readiness for EMV at a Low Ebb Despite Looming Deadline, Report Warns," May 6, 2014.
 15. European Central Bank, "Third Report on Card Fraud," February, 2014.
 16. Aite Group, "Card-Not-Present Fraud in a Post-EMV Environment: Combating the Fraud Spike," June 2014.
 17. See note 16.
 18. See note 12.
 19. Kaspersky Lab, "Consumer Security Risks Survey 2014, Multi-Device Threats in a Multi-Device World," July 2014.
 20. See note 13.
 21. See note 19.
 22. Retail Systems Research, "Retail Payments: Consumer Control and the Need for Speed," April 2015.
-

© Copyright IBM Corporation 2015

IBM Corporation
Software Group
Route 100
Somers, NY 10589

Produced in the United States of America
August 2015

IBM, the IBM logo, ibm.com, Cognos, SPSS, Tealeaf and WebSphere are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.



Please Recycle