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WHAT YOU NEED TO KNOW
CARDS

Global Trends in the Payment Card Industry 2012: Processors

Key challenges faced by card processors and their implications for the payment card industry

People matter, results count.

Table of Contents

1. Highlights

Despite uncertainties around the global economic recovery, the card payment industry continued to show high growth rates worldwide in 2011. Throughout 2011, card transactions continued to increase driven by consumer preference for non-cash transactions. Cards are now increasingly used for low-value transactions, and with significant growth in online and mobile commerce, card payments are expected to grow strongly in the near future.

The stakeholders in the card industry—including acquirers, card processors, and card issuers—are all witnessing shifting trends due to changing customer preferences as well as technological advancements and innovations.

The continued growth in e-commerce and mobile commerce has not only revolutionized the payments industry, but has also created more methods and opportunities to defraud merchants and their consumers. Although security measures are improving globally, cyber criminals are also adapting to these changes and are always working to exploit any gaps. In an online, or card-not-present transaction, it can be difficult to validate a shopper's true identity and this characteristic is often exploited by fraudsters to impersonate a consumer and monetize card data that has been illegally obtained. Most of the times, the cost of fraud has to be borne by the e-commerce merchant. Processors can play an important role in reducing these fraud losses through increased investments in fraud detection and prevention technologies and by keeping merchants updated about emerging fraud schemes and best practices to mitigate risks.

In addition to security concerns, the payment processing industry is increasingly becoming commoditized, putting pressure on the profitability of the cards processors. Card processors are looking to offer differentiated value-added services in several areas including: fraud and risk management; business data analytics; and loyalty programs. These services will not only help the various stakeholders of the payment cards industry but will also help processors maintain profitability and competitiveness. This trend has led to a growing focus on the development of new tools and technologies that allow processors to provide these services which can differentiate them from new entrants and competitors.

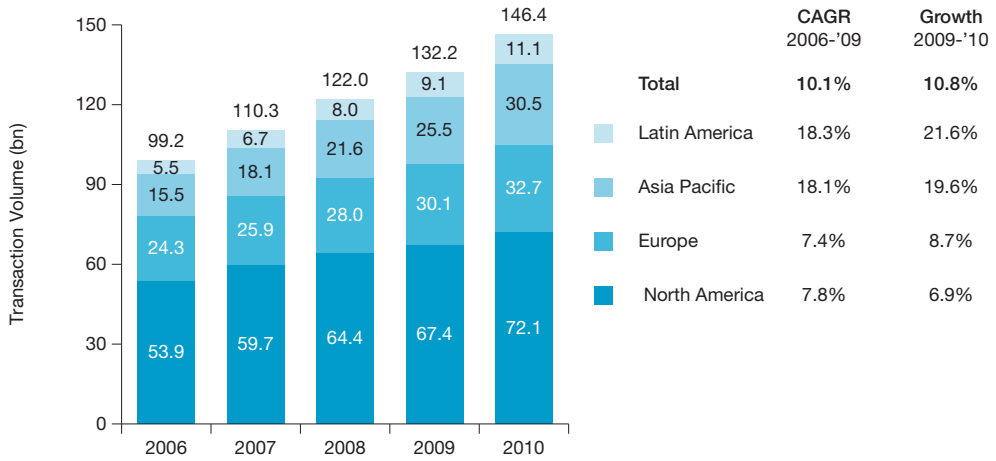
2. Introduction

2.1. Global Payment Card Industry Performance

According to the World Payments Report 2012 from Capgemini, RBS and Efma, cards usage across the globe gained momentum in 2010 after the financial crisis of 2008-2009. Card transaction volume grew at an annual growth rate of 10.8% in 2010, compared to 8.4% growth in 2009, as a result of signs of recovery across global markets, as well as a boost in consumer confidence. In 2010, cards were one of the most preferred non-cash payment instruments globally, with an estimated 55.8% of the global non-cash payments routed through cards. Some of the primary factors leading to the high growth of cards usage may include: increased acceptability of cards; growth of e-commerce; industry collaboration, and government support globally[1].

In developed countries, the market trend of using non-cash payment instruments such as cards for lower value transactions has led to higher transaction volumes. In Europe, consumers have shown a greater tendency to use debit and prepaid cards versus credit cards for low value transactions. Based on a regional comparison, Asia-Pacific has been one of the fastest growing regions in terms of card usage as noted in the following exhibit.

Exhibit 1: Global Card Transactions by Volume (bn), 2006–10



Source: Capgemini Analysis, 2012; ECB; Red Book 2010; World Payments Report 2012, Capgemini, RBS and Efma

In 2010, the payments card industry witnessed strong growth in developing nations, and a relatively slower growth in developed nations. While the transaction volume growth in developed countries was modest, with the U.S. growing by 7.2% and the Eurozone growing by 8.6%, developing nations witnessed higher card usage, with China growing by 38.9%, Russia by 49.8%, and Brazil by 23.3% annually in 2010[2].

In terms of number of transactions per inhabitant, North America had the highest prevalence of card usage globally. This trend is due to the high adoption of cards as the non-cash payment instrument. Emerging countries have a high growth potential and card usage could grow faster due to the growing culture of using plastic over paper money. Increased acceptance of cards at various points of sale (POS) units could also be the reason for higher volumes in most emerging countries.

1 World Payments Report 2012, Capgemini, RBS and Efma
2 Ibid

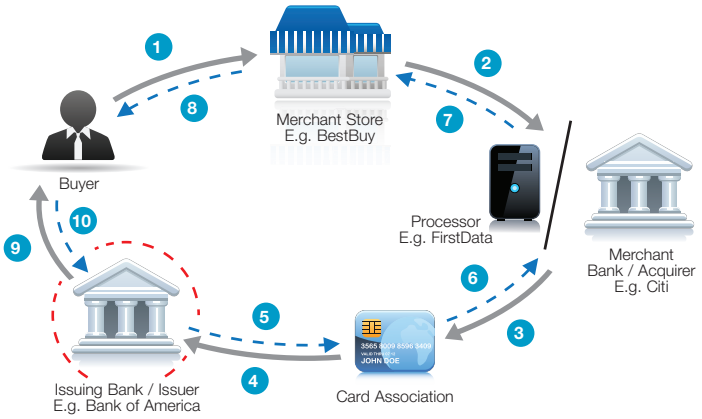
2.2. Key Payment Card Industry Participants

A simple card transaction between a cardholder and a merchant involves several players:

- **Card acquirers:** the merchants' banks.
- **Card processors:** third party organizations that aid in card authorization and settlement processes.
- **Card issuers:** the cardholders' banks that issue the card and maintain the customers' accounts.

Additionally, card association network providers—typically MasterCard® or Visa®—play an essential role in completing the card authorization and settlement cycle, as illustrated below.

Exhibit 2: Typical Card Transaction Flow Structure



1. Cardholder uses a credit card to pay for a purchase transaction
2. Merchant sends transaction information to the acquirer by swiping or manually feeding card information at the POS terminal
3. The acquirer or third-party processor on acquirer's behalf sends the transaction information to the card association
4. The card association sends the transaction information to the issuer for authorization
5. Issuing bank pays the card association network once it validates the transaction (after deducting their charge)
6. Card association pays the acquirer processors on acquirer's behalf (after deducting their charge)
7. Merchants account is credited for the transaction amount by the processor (after deducting their charge)
8. Purchase transaction is completed
9. Issuer bills the buyer for the transaction based on the billing cycle
10. Buyer settles the bill

Source: Capgemini Analysis, 2012; www.yahoofinance.com, August, 2012

This paper focuses on the key trends that card processors have been experiencing and how the industry is responding.

3. An Overview of Emerging Trends in Payments Cards Industry: Processors

Processors are third-party non-banking firms which offer payment processing services to the participants in a card transaction—though there are some larger banks that have in-house card payment processing services. In a typical card payment transaction, processors play an important role which usually involves a two-step process:

- Authorization
- Clearing and settlement

In addition to payment processing services, card processing firms provide certain ancillary services to the acquiring side of a card transaction. These ancillary services may include acquiring new merchants, providing fraud protection services, and offering training and other terminal operation support activities to the merchants.

Rapidly growing e-commerce and advancements in technology are driving the growth in card transactions. However, these same advances have increased losses as they have enabled fraudsters to develop new techniques to defraud merchants and their consumers. As a result, payment processors are increasingly offering fraud protection services to e-commerce merchants and this has become a primary unique selling point to merchants.

On top of security concerns, as basic processing services are increasingly becoming commoditized, the card processing industry is finding it difficult to maintain bottom-line growth. Card processors are therefore focusing on the development of new tools for offering differentiated value-added services to merchants and other industry participants.

Demand for higher fraud management measures from online merchants, coupled with the processors' need to maintain profitability, has led to two major trends for the cards processors:

1. Increased focus on e-commerce fraud-fighting technology.
2. Increased focus on the development of new tools to offer differentiated services.

Several trends that were covered in the 2011 *Global Trends in the Payment Card Industry* series are still relevant but are not discussed in detail again in this paper.

Global Trends in the Payment Card Industry: Processors

Global Trends in the Payment Card Industry: Acquirers

Global Trends in the Payment Card Industry: Issuers

4. Trend 1: An Increased Focus on e-Commerce Fraud Fighting Technology

Rapid growth of e-commerce industry and its vulnerability to card frauds has led to increased focus on e-commerce fraud fighting technology.

4.1. Background and Key Drivers

With the continuing increase in e-commerce transactions, online card payments and other card-not-present (CNP) payments are on the rise. This has attracted sophisticated scammers who defraud e-commerce merchants and their customers. The merchants working in the online card payments and other CNP environments are exposed to higher fraud risks, related costly chargebacks, as well as the challenge of protecting customers' personal information.

Fraudsters may attempt small transactions to validate that the victim's card is good before making a higher-value transaction. These scammers are using high-end technology and sophisticated techniques to find loopholes in fraud detection systems. These factors have increased the need for the development of new security measures, fraud detection, and prevention methods, tools and technologies.

Historically, merchants have shouldered most of the burden of fraud. With the rise in sophisticated methods employed by cyber criminals, there is a growing demand from e-commerce merchants for card processors to provide better fraud detection and prevention services. This growing demand for improved fraud fighting technologies has made it crucial for processors to focus on the development of e-commerce fraud detection and prevention technologies, specifically:

- Protecting against the theft of customer data
- Protecting against fraudulent transactions

The key drivers for an increased focus on e-commerce fraud fighting technology are:

- The increasing sophistication of cyber criminals which has exposed e-commerce merchants to greater fraud risks.
- Growing demand from e-commerce merchants for fraud protection due to the associated severe charge-backs and penalties generally borne by these merchants.

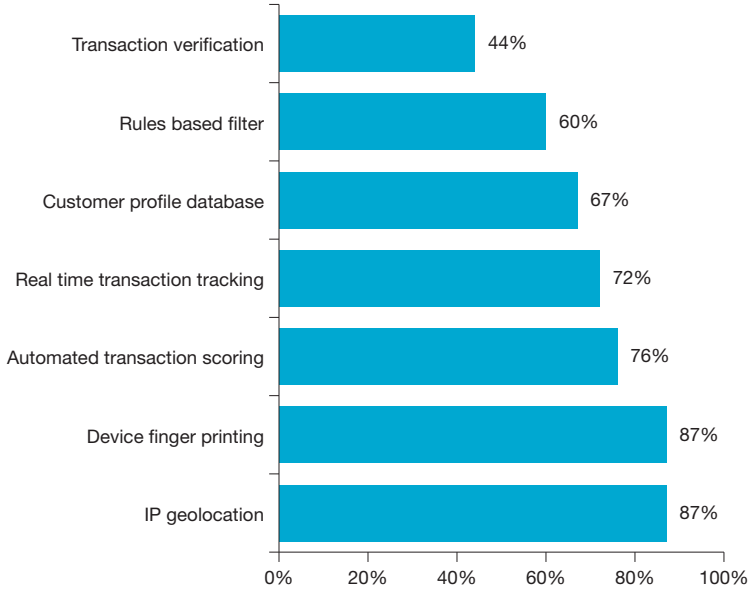
4.2. Analysis

In an online transaction, it is the responsibility of the e-commerce merchant to confirm the identity of the shopper and to deal with disputes associated with unauthorized purchases. As a result, in most of cases, merchants have to bear the losses associated with fraud.

To counter the threat of online card frauds, some smaller merchants perform manual reviews of online purchases which can be very costly and also distracts the staff from more important revenue generating activities. These cost factors have also increased the demand for reliable fraud management technology.

Many online retailers still use basic methods such as address verification, card code verification, and the card network's authorization to check the legitimacy of purchase. These basic verification methods may not be enough to manage fraud successfully since cyber thieves are using increasingly sophisticated techniques. According to the research conducted by LexisNexis in 2011, merchants have not been using all of the latest fraud prevention tools.

Exhibit 3: Merchants Not Using Online Fraud Detection Tools



Source: *True Cost of Fraud Study*, LexisNexis, 2011

To fight fraud challenges in e-commerce, merchants should continue to use basic address verification, card code verification but should also look into stronger solutions—some already developed and some on the horizon—offered by card processors. These include detection and prevention systems that score the risk level of a transaction based on an expanded database of information. The score is used during the authorization process to determine if a transaction should be accepted, rejected, or flagged.

As a result, the role of a card processor as a qualified partner of merchants in developing and implementing sophisticated automated fraud prevention and detection solutions has become crucial. Processors also need to provide training to the e-commerce merchant community on the latest fraud techniques and best practices to check risks.

4.3. Implications

Card processors need to respond to the growing demand from e-commerce merchants for fraud detection and prevention services. Processors need to invest in the development of innovative technologies such as predictive models and real-time transaction tracking to fight cyber criminals and help the e-commerce merchant community minimize fraud risks.

Furthermore, just developing fraud fighting technologies may not be enough to combat the growing threat of cyber crime. Processors also need to invest in training the merchant community on evolving card fraud techniques that can minimize risks.

5. Trend 2: A Focus on Developing New Tools for Differentiated Service Offerings

5.1. Background and Key Drivers

Over the past several years, the growth in card transaction volumes has remained the key to success for most large processors globally. However, increased commoditization of payment processing services has led to the decrease in their pricing power, affecting their profitability, and has led the processors to concentrate on differentiated value-added services. While size and presence across geographies still remain significant differentiators for a processor, the value-added services they provide are increasingly being looked at as the key value differentiating factors by the market.

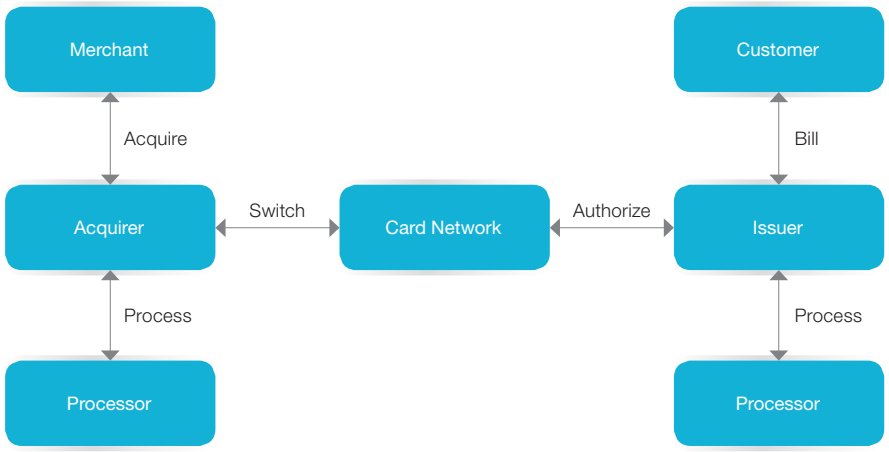
The payments industry is becoming increasingly more complex with the advent of new technologies and changing consumer behavior coupled with new fraud threats. This trend has resulted in a growing demand from merchants for value-added services. As a result, processors are focusing their energies towards the development of tools and services in several areas including: data analytics; fraud and risk management; loyalty programs; and dispute management to merchants and merchant acquirers. Other services that result in increased customer trust, merchant satisfaction, and growth in accounts for the issuers and acquirers can also be considered as key differentiating value-added services.

In addition, the regulatory limit to interchange fees has resulted in increased demand from card issuers for the development of new value-added services. Cards processors can help these players due to their capabilities and the strong role they play in the cards industry.

5.2. Analysis

Card processors play an important role in the payment card industry and have the capability to impact every stakeholder including customers, merchants, financial services institutions, issuers, and acquirers.

Exhibit 4: Card Authorization Cycle with Stakeholders



Source: Capgemini Analysis, 2012

Card processors are helping different stakeholders by focusing on the following areas:

- **Fraud and Risk Management:** With the high growth in online and mobile commerce and increasing sophistication of cyber criminals, merchants are demanding better security measures to protect themselves from costly chargebacks and other related penalties.

  Processors are developing and offering fraud management services to the merchants to combat this growing threat. These services are increasingly becoming the differentiating factor for choosing one processor over the other.
- **Business Data Analytics:** Processors can leverage the enormous amount of valuable customer information that they have in their possession from their day-to-day payment processing business. This information can be used by issuers, acquirers, and merchants to improve their products and services—as well as to target customers with the right offering.
- **Loyalty Program Services:** Most traditional loyalty programs are built around rewarding consumers for using a particular bank credit card. However, these loyalty programs are all similar across banks and are losing their appeal to the customers. Processors are helping merchants and issuers offer more targeted merchant funded loyalty programs. These types of programs can result in increased card usage, improved customer acquisition and retention, and strengthened relationships between issuers and consumers and merchant partners.
- **Seamless Customer Experience Across Payment Methods:** Processors are looking to link up with stakeholders to offer an integrated and personalized consumer experience across mobile commerce, e-commerce, and in-store shopping.

Overall, processors are expected to show merchants a greater value per transaction to support a higher price for their service offerings and to differentiate themselves from the competition.

5.3. Implications

Card processors have to focus on the development of new and better differentiated services to improve their offerings in order to remain competitive in the fast changing payments industry and to sustain profitability.

Card processors therefore need to invest in the development of better fraud management tools and services to remain ahead of cyber criminals. Data analytical tools, customer retention programs, and a focus on customer service offer a wide range of opportunities to processors, which can ultimately benefit the entire cards industry.

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The *What You Need to Know* series from Capgemini Financial Services is written by our Strategic Analysis Group and provides trends, research, and analysis on key topics for financial services firms.

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