

# Evolving E-Commerce Market Dynamics

## Changing Merchant Payment Needs and the Impact on Banks



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# 1. Highlights

The e-commerce industry continues to evolve and experience high growth in both developed and developing markets. With the emergence of non-banking players in the payments industry, the e-commerce market is also growing at a rapid pace. Global e-commerce sales, which stood at \$661 bn in 2011, are expected to grow at an annual rate of 20.7% to reach \$963 bn in 2013, and Asia is expected to become the biggest e-commerce market in the world<sup>1</sup>. A rapid increase in the number of smartphones, broadband connections, and innovative payment products, has driven the growth in online shopping, though security remains the biggest concern.

Merchants' payment needs are also changing with the evolving market dynamics. As merchants focus on enhancing the user experience and providing secure ways of transacting online, they are partnering with both banks and non-banks to create consumer-oriented, innovative payment solutions. Key challenges for retailers are to integrate the online and offline channels, expand payment options, and personalize the online shopping experience for users.

To service consumer and merchant payment needs, banks are realigning their business models to adapt to the changing market structure. Banks are now heavily investing in mobile payments and developing robust mobile applications. Banks are also collaborating with other banks, and in some cases, with non-banks to make payments cheaper, faster, and more secure. Through industry wide initiatives, banks are looking to take advantage of their huge payment network and infrastructure. Banks are also partnering or acquiring non-bank players in retail payments. The bottom line is that, though late, banks are now changing the way they conduct their retail payment business.



1 "Nothing But Net: 2011 Internet Investment Guide," Imran Khan et al., JP Morgan, 2011

## 2. Overview of the Global E-Commerce Market

Online retailers are looking to understand consumers' buying behavior and are aligning with consumers' desire to shop from the comfort of their homes and offices, and even on the move. This change in consumer behavior, along with the availability of cheap and reliable technology for secure transactions, has led to a significant growth in online sales around the world. This growth is also fueled by the increasing number of tablets, smartphones, and broadband connections. The contribution of online sales to total global retail sales is still quite low, but is growing at an increasing pace.

However, the road ahead is not as smooth as it seems for e-commerce, as the industry is facing challenges on multiple fronts. As e-commerce is a relatively new industry, the majority of online retailers still lack in digital marketing skills and do not have the proper governance structure in place. Security remains the number one concern for consumers as the complexity and sophistication of online fraud attacks continue to rise.

Despite being mired in many issues, the e-commerce industry is growing and changing rapidly. The constantly changing dynamics of the online retail industry has put pressure on all the stakeholders to realign their business models if they want to stay competitive and grow.

### 2.1. Market Size, Growth Drivers, and Challenges

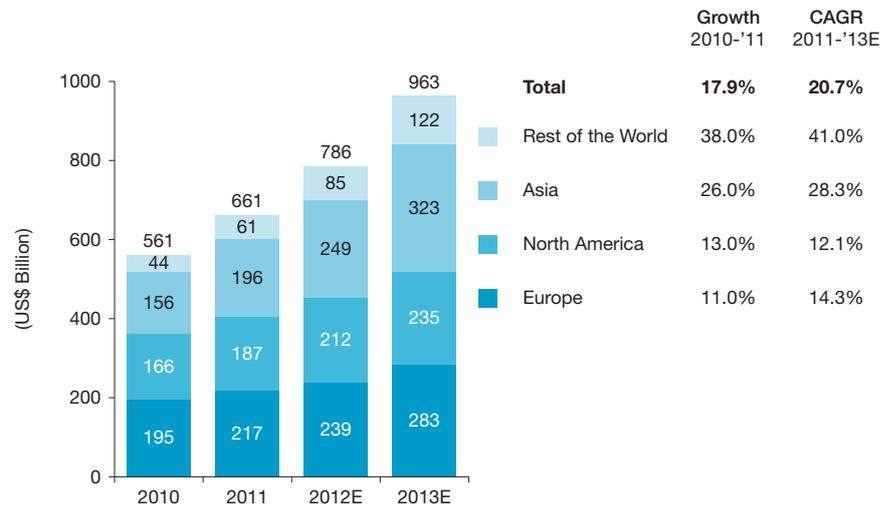
Driven by high growth in developing economies, global e-commerce sales continued to grow at a rapid pace to reach \$661 bn in 2011, and are estimated to grow by 20.7% annually till 2013. Asia and the rest of the world grew at a rate of 26% and 38% in 2011, mainly driven by rapidly increasing computer and internet penetration. Europe and North America contributed 61% to global e-commerce sales in 2011, down from 64% in 2010, and their share is expected to further decline to 54% in 2013<sup>2</sup>.

Driven by China and India, Asia is expected to overtake Europe in e-commerce sales in 2012 and is expected to reach \$323 bn in 2013. E-commerce is seeing wider adoption in China mainly due to convenience, lower prices than traditional retail, and enhanced security features. At the end of 2011, China's internet population was around 40%, which is still quite below that of developed markets (over 70%), indicating the growth potential e-commerce has in the region<sup>3</sup>.

2 "Nothing But Net: 2011 Internet Investment Guide," Imran Khan et al., JP Morgan, 2011,

3 China Internet Network Information Center (CNNIC) Report, July 2012

### Exhibit 1: Global E-Commerce Sales Volume (US\$ Billion), 2009–13E



Source: Capgemini Analysis, 2012; "Nothing But Net: 2011 Internet Investment Guide," Imran Khan et al., JP Morgan, 2011

In the short term, online sales are likely to be driven primarily by an increase in the number of broadband connections and smartphone usage in developing economies. Other forces driving e-commerce growth across all major geographies include:

- Advancements in technology:** The availability of fast, secure, and cheap technology has enabled many new players to enter the e-commerce market, making it highly competitive and price-effective. Over the last 20 years, technology has evolved from command-line interface to drop-down menus to apps, making it simpler and easier to use. Consumers now have a higher level of comfort in using technology and this has positively impacted online commerce.
- Evolving consumer needs:** Online retailers are now focusing on identifying consumer needs and understanding their shopping behavior to better serve them with innovative products and services. Retailers are not only targeting customers on the basis of demographics, but are analyzing their spending patterns to better market their products. This precise targeting is helping online retailers to convert more leads into sales.
- An increase in internet and smartphone users:** In 2011, the sale of smartphones and tablets exceeded those of desktops and laptops for the first time. In the next couple of years, more consumers are expected to access the internet through their mobile devices than from their desktop computers. Miniaturization of components and wireless technology has allowed consumers to shop and interact over the internet while they are on the move.
- Social media:** Social networking platforms have opened a new channel for online retailers to promote and raise awareness for their products. Social media is mainly used by the population in the age group of 18-34 years, which has made it an important medium for branding and loyalty. Social marketing programs are a must-have for today's user experience, and they provide an excellent platform for retailers to get customer feedback.

The e-commerce industry is facing key challenges including security concerns, poor digital marketing skills, lack of proper governance, and poor technology integration.

The bottom line is that capturing customers' product and payment preferences in order to deliver an enhanced online shopping experience is driving e-commerce growth. But there are certain challenges that the e-commerce industry is facing. Without tackling these issues it will be difficult for the industry to continue on this growth path. Key challenges include:

- **Security concerns:** The number of online fraud incidents decreased from 2009 to 2010. At the same time the cost of combating fraud has increased as incidents increase in volume and occur in more lucrative sectors. This indicates that the complexity and sophistication of online fraud attacks is on the rise and still weighs heavily on many consumers choosing not to shop or transact online.
- **Poor digital marketing skills:** E-commerce is a new concept and marketing teams of online retailers are still exploring relevant ways of reaching out to consumers. Unlike traditional media (purchased airtime or ad space), social media such as Facebook and Twitter are free. However, the learning curve to use them effectively has been steep for online retailers. Poor marketing skills are negatively impacting the firm's brand equity, sales, customer acquisition, and retention.
- **Lack of proper governance:** In the face of changing market dynamics, new product lines, and new sales channels, online retailers are struggling with governance of their e-commerce efforts. As firms move from traditional retail to online retail, improper governance and a flawed control structure can lead to inefficient processes.
- **Poor technology integration:** Improper, or lack of, integration of systems and business processes (such as order-to-cash management and customer relationship management) has had a negative impact on the customer experience. For online retailers, it will be difficult to retain customers if they do not integrate their back-end systems seamlessly with their front-end systems. Many online retailers do not provide a multi-channel payment option which has also negatively impacted their businesses.

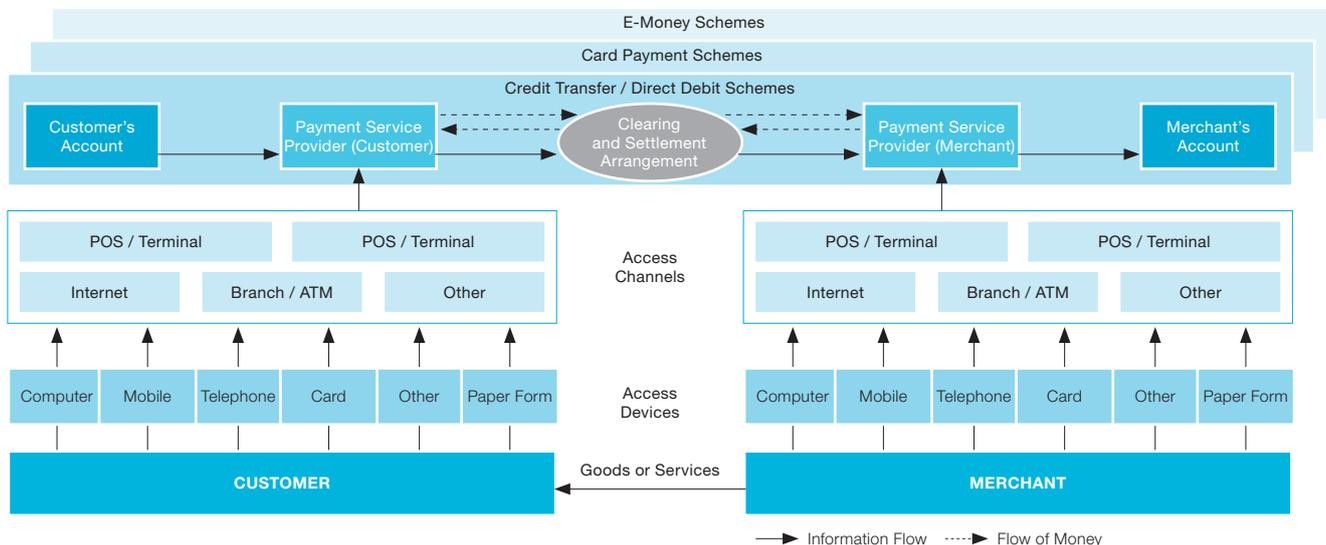
## 2.2. State of Online Retail Payments

Over the past decade, the retail payment market has changed structurally and continued to focus on innovation. Entry of non-banks and availability of cheap, fast, and reliable technology have changed the focus of payment industry to providing innovative, secure, and fast payment methods. However, only a few innovations have been game changing so far. It has also been observed that most innovations are first developed for domestic/niche markets and then, if successful, applied to other regions. Financial inclusion is driving innovation in retail payments in developing countries with huge unbanked populations.

In a retail payment system, four parties are involved: the customer, the customer's payment service provider, the merchant, and the merchant's payment service provider. Over time, technological advancements have led to the subsequent addition of new access channels and devices. The latest additions in the new payment scheme are mobile access channels and mobile devices.

More and more non-bank players are entering the e-payments market, making it more competitive. But banks still are the most significant players in the payments market. Innovation in retail payments has attracted more consumers to online shopping, and with the entry of new players, transaction costs are going down. The use of innovative and new payment instruments is much lower than traditional payment instruments, but is increasing rapidly.

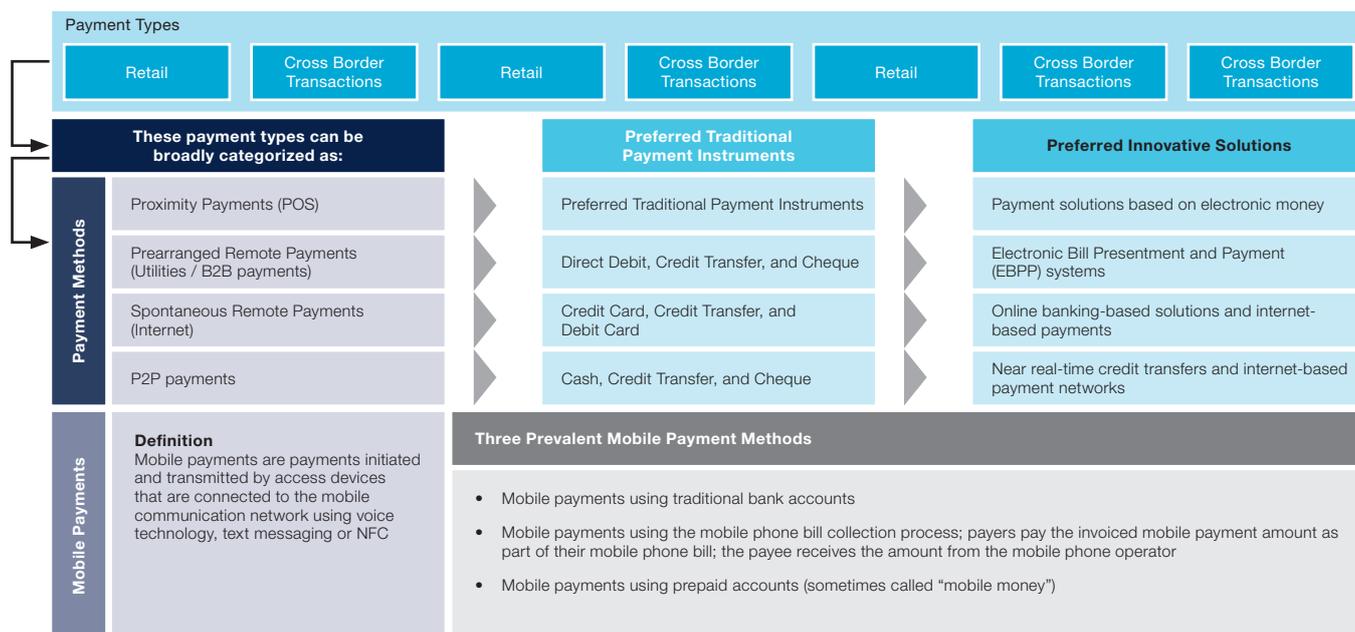
Exhibit 2: Payment Process in Retail Payment



Source: Innovations in Retail Payments, Committee on Payments and Settlement Systems, May 2012

Over the coming years, the retail payment market will likely change structurally, driven by the latest technological and regulatory developments. Access devices and access channels will likely become interchangeable in the future. Adoption of new technologies such as near field communication (NFC) will likely revolutionize the way people make payments. Developments in retail payments will have a significant impact on online retail, and e-commerce firms will continue to focus on improving their payment infrastructure.

Exhibit 3: Use of Traditional and Innovative Payment Instruments by Situation



Source: Capgemini Analysis, 2012; Mobile Phone Technology: "Smarter" Than We Thought, Federal Reserve, Bank of Boston, November 2012; The Mobile Payments and NFC Landscape: A U.S. Perspective, Smart Card Alliance, September 2011; Innovations in Retail Payments, Committee on Payments and Settlement Systems, May 2012

# 3. E-Commerce Growth is Changing Merchant Payment Needs



*Anyone who is going to break the mobile payments barrier in the U.S. has to overcome the resistance to try anything new when everything we have works really, really well, even cash, which is very convenient. But if a big merchant jumping into some mobile payment solution signals to other merchants that there is an opportunity here, that might change the psychology for other merchants.”*

## **Bill Maurer**

Director of the Institute for Money, Technology and Financial Inclusion at the University of California,

August 8, 2012

With the emergence of new payment technologies and players, growing smartphone sales, and increasing adoption of online card payments, the retail sector has moved away from traditional business models. Merchants, online or brick and mortar, are realigning their market strategies with the constantly changing business environment. Merchants are also focusing their efforts on providing innovative mobile payment options, managing risk, and enhancing the customer experience—both online and offline at the point of sale.

In addition, increasing competitive pressures are shaping key technology investment decisions. Online retailers are increasingly seeing technology as a key differentiator from their competition. Big merchants are investing in technology enhancement projects to make online transactions more secure, faster, and easier to process. Furthermore, the entry of non-banking players in the payment industry has also enabled online merchants to provide multi-channel payment options to their customers.

## **3.1. Key Merchant Payment Trends**

As the retail sector evolves, retail merchants are increasingly looking to integrate online and offline stores, expand payment options, and personalize the customer's shopping experience. The increasing use of smartphones (and other mobile devices such as tablets) and the growing internet-savvy population are driving the change in the retailer's business model and strategy. Key trends include:

- **Online and offline integration:** Retailers are aiming to bring the offline shopping experience to the online marketplace. This requires seamless integration between front-end and back-end operations and processes. Online retailers are looking to reduce the time between the purchase made and final delivery of the product. Brick and mortar retailers are aiming at providing an enhanced shopping experience to their customers through their online portal. For example, Swedish home products store IKEA has built an app which enables consumers to visualize how the displayed furniture will look in their living room.
- **Expanding payment options:** Whether online or in the store, customers are still using traditional payment instruments. But now they are demanding that retailers also include mobile and other innovative payment options. Merchants are now increasingly offering various channels for payments in order to attract more customers. Merchants are partnering with payment service providers for transaction processing, which lets them focus on enhancing the customer shopping experience.
- **Personalization:** Retailers are targeting consumers with personalized advertisements and products to enhance their sales. For merchants, maintaining and assessing a detailed client profile is increasingly becoming more important. Retailers want to know more about their customers and what customers are thinking at the moment they are shopping.

- **Focus on discovery sites:** To tap into the online retail market and to be able to reach a whole new audience via the internet, small businesses, retailers, and craftsmen are increasingly using search engines and discovery sites. Firms are using analytical tools to understand the shopping behavior/lifestyle of a customer through data on their historical searches. This analysis is then used to determine which products to advertise when a specific individual uses that search portal again.
- **Focus on social-media:** Social networks offer a platform that allows both online and offline retailers to market their products and interact with consumers. Many companies are valuing their Facebook page more than their own websites. Firms are using social platforms to raise awareness about their products and manage their brands. Firms are also using social media to get firsthand feedback from consumers about their products.

### 3.2. Challenges Faced by Merchants

Retailers are analyzing different ways to better reach out to their potential customers and enhance the shopping experience. However, the dynamics of the retail industry have changed in past few years and merchants are facing certain challenges to achieve their objectives:

- **Overcoming poor digital commerce skills:** The marketing executives at most retail firms have minimal digital marketing skills. Firms are finding it difficult to reach out to their customers effectively and then convert leads into sales. Many companies have still not developed their digital marketing skills to achieve best practices in an environment that continues to evolve.
- **Generating and leveraging customer insights:** The most pressing challenge that retailers are facing is producing and using consumer insights to drive sales and customer engagement. The majority of retailers collect data on their customers, but they don't know how to best use this information to attract more customers.
- **Measuring the impact of online tools:** Existing parameters and metrics to measure the financial impact of digital tools on the business are not accurate in quantifying the derived benefits. Merchants are still struggling to develop the right metrics and then use these parameters to generate insights that can influence consumer behavior.
- **Providing fast and secure multi-channel payment options:** Retailers are looking to provide multiple payment options but are having problems in its implementation, especially small retail firms. Banks charge high fees per transaction processed, making it difficult for small retailers to provide multiple payment options. On the other hand, for firms partnering with payment service providers for payment solutions, integration remains a challenge.

All in all, understanding, analyzing, and then successfully capturing consumer needs are the key challenges which are having the greatest impact on merchants.

### 3.3. Merchants' Payment Needs

One thing is clear, that retailers are not happy with their current payment infrastructure and are trying different ways to improve their payment services. Before going further, both online and offline, retailers should understand their payment needs:

#### Online Retailers

- To meet payment card industry compliance and country-specific regulations
- To accept payments from international customers
- To provide consumers with the option to pay via alternative channels, such as mobile phones and tablets
- To decide on which payment brands to accept, such as PayPal, Visa, MasterCard, Amex and alternatives like PaySafeCard and UKash
- To set up merchant accounts with business models that are often hard for traditional banks to understand
- To provide a payment experience that does not impact the consumer's desire to buy the product

#### Physical Retail Stores

- To procure merchant accounts and card processing agreements at reasonable rates
- To deal with outdated point-of-sale technology which is not flexible enough to accept the new payment products consumers are willing to use – such as mobile wallets or Groupon discount vouchers

Though the e-commerce needs of online and offline merchants vary, the underlying need for both is to enhance the user experience.

### 3.4. Merchants' Key Focus Areas in E-Commerce

In this competitive and ever changing business environment, the key focus areas for merchants include:

- **To improve purchase conversion rate:** Most consumers use the internet for comparison purposes and for choosing their products, hence firms are investing heavily in digital marketing and data analytics to convert consumers into customers.
- **To enhance fraud control:** Security is the main concern for many online customers, therefore controlling fraud is one of the key focus areas for retailers. Merchants can use third-party vendors for fraud control, but first they need to clearly identify their risk areas.

- **To improve ease of use:** Retailers are focusing on improving their web portals and are making them easy to explore. This will help in reducing customer dropout rates due to the inflexible structure of the website. Easy navigation and efficient check-out services are also key focus areas for retailers.
- **To diversify payment channels:** Retailers have realized that they have to improve their payment services or customers will move out. Firms, big or small, are partnering with payment service providers to provide their customers with different payment channels at an affordable price.
- **To optimize the business model:** Most retail firms are focusing on defining their online business model to foster customer engagement and loyalty. Firms have realized that there is no one model that fits all, and they need to find out what works best for them.

Going forward, investments in enhancing the user experience are likely to remain a top priority, followed by investment in developing mobile and commerce platforms. Investments in enhancing the user experience are seen as the largest opportunity to drive additional revenue. Merchants are also investing in rewards and loyalty programs to attract and retain customers.

Planned investments in developing mobile platforms are likely to increase significantly in the coming years. Retailers who do not have an online sales channel are looking to invest in developing their e-commerce platforms and integrating them with their offline sales channels.

Retailers will likely invest in increasing their social presence. They have realized the necessity of social programs in engaging large numbers of customers and meeting their expectations. Retailers are likely to invest more of their resources in developing value-for-money products and also in providing new payment methods such as e-invoicing.



# 4. Impact of Changing Merchant Payment Needs on Banks

Traditionally, banks have been the sole provider of payment solutions to merchants. However, over the past decade payment markets across the world have changed structurally as many new players have entered the payments industry. Non-banking players brought innovative payment products into the market in response to the growing payment needs of merchants. As a result, non-banks have established themselves strongly in this marketplace and their importance is expected to grow in the future.



*I hate to come out with a commodity product, but every bank should have one.”*

## **Trevor Rubel**

on mobile payments, VP-Strategy and Emerging Products, Bank of America.

Source: “Another Square Copycat: Bank of America Launches Mobile Payments.” Tricia Duryee, *All Things D*, November 12, 2012

As the e-commerce market continues to grow and evolve, merchant payment needs will likely get more complex in nature. To address these issues and regain their dominant position in the industry, banks are changing their business models and are looking at different ways to adapt to the changing market conditions. Banks are exploring all channels to fulfill merchant payment needs in order to capture the growing e-commerce market. For example, banks are:

- **Focusing on mobile-payments:** Banks are looking to meet the growing need of safe and secure mobile payments by providing mobile applications for online banking. Banks have been slow in this area, but their vast network and reliability is still a major advantage for them.
- **Coming together for improving online payments:** In many countries, banks are coming together to develop standards for online payments and to build the online payments infrastructure. Banks are now focusing on providing low-cost, error-free, fast, and hassle-free ways of making online payments.
- **Partnering with non-banks for innovative solutions:** In order to provide innovative solutions, banks are also partnering with non-banks. One such example is Dwolla, which is a P2P money-exchange platform. Banks are combining their strong network strength with innovative non-banks to capture customers' online payment needs.

Apart from these steps, banks are also streamlining their business processes according to the changing demands. For example, in order to accelerate their cards business, banks are using analytics to determine customers' online payment behavior and mixing it with their rewards and loyalty programs for more transactions.

## **4.1. Banks Focus on Mobile Payments**

Banks have been slow in providing mobile payment options to their customers, but now they have realized that the power has shifted to the customers who own, manage, and control the device in hand. Banks are now considering mobile payments as a channel of the future and they have started working in that direction. Banks across all geographies are launching their mobile apps with standout features and functionalities. There is still a lot of scope for improving mobile apps for payments and banking, but banks are concentrating on how to better manage the technology requirements of this channel.

Apart from mobile apps, there are other revolutionary technologies which have the potential to change and transform the payment industry. One such example is near field communication (NFC). Non-banking players have already started working on bringing NFC technology to payments, and firms have launched their mobile wallets based on NFC. To maintain their leadership position in payments, banks will have to focus on mobile wallets and NFC. Slowly but surely, the emergence of mobile wallets will put pressure on banks to provide NFC-based solutions. Moving forward, if mobile wallets present compelling offers and reward programs for consumers, banks will be at risk of losing their customers. Banks must come up with a well-thought out NFC strategy if they want to maintain their dominance in payments.

In the coming years banks will continue to roll out and enhance their mobile-based products and services. To gain the competitive edge in mobile payments, banks are likely to increase their partnerships and alliances with non-banks. Many players crowd the mobile space, indicating an increase in mergers and acquisitions activities in the future.

On the technology side, there still appears to be no industry convergence on a single model or platform for mobile banking. The payments industry continues to debate whether mobile web or apps are the better technology. Therefore banks will continue to offer their services using both these technologies.

#### 4.2. Banks Collaborating to Improve Online Payments

Banking industry and regulatory authorities are coming together to develop online payment standards for faster and more secure transactions. For example, in Europe SEPA will make all online payments across the euro area as easy as domestic payments. EBA's MyBank initiative is geared at making it easier and safer to shop online at a pan-European level. These collaborations are not limited to Europe only. In other regions banks are also collaborating in order to create a secure and fast infrastructure for all kinds of payments, especially online payments.

#### Exhibit 4: EBA MyBank: Unique Selling Points

MyBank is an online authorization solution for electronic payments that will help PSPs meet their payment needs and will allow internet shoppers to pay for products and services and through credit transfers or direct debits, which they can initiate via their existing online banking service

<p>MyBank will enable consumers to shop online all across Europe and pay for these purchases "at home" – i.e. within the online banking environment they use on a regular basis</p>	<p>MyBank is a very safe solution, because it is based on the existing highly secured online banking platforms and allows consumers to pay for their online purchases without disclosing any critical data to third parties</p>	<p>MyBank will be simple and easy to use and/or connect to – for consumers, for e-merchants and for payment service providers</p>	<p>MyBank will not require much investment at the level of e-merchants and payment service providers, because a great deal of the technical infrastructure that is needed is already in place</p>
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Source: Capgemini Analysis, 2012; John Broxiss, Director at EBA Clearing: "MyBank takes a pan-European approach from the start", The PAYPERS, 9 December 2011

More and more of such joint and industry-wide initiatives are required. The banking industry should focus on faster development and actual implementation of these industry-level initiatives. The banking industry should collaborate more in developing innovative payment solutions and take steps to increase the adoption rates of new technologies such as NFC.

In the short term, industry initiatives will impact a bank's profitability, but will have a positive effect in the long run. Apart from huge investments putting pressure on a bank's profits, banks will have to explore new areas for differentiation.

### 4.3. Banks Partnering With Non-Banks

In the past few years, non-banks have emerged as a main driving force for improvement in the processing of retail payments. Non-banks are already prominent in the USA and are expected to grow significantly in certain European countries. The main reason behind their growing dominance in retail payments is their ability to provide innovative, fast, secure, and cheap payment solutions to both consumers and merchants.

Banks, on the other hand, were reluctant to change or adapt initially. They lost the opportunity to gain significant competitive advantage over non-banking players by not providing payment solutions which catered to consumer needs. To capture merchants' payment needs, banks are looking to partner with non-banks to provide innovative payment channels. Non-banks offer an ability to innovate and are increasingly important (especially in online/mobile payments). Banks are now more in favor of collaborating with them rather than competing with them. One such example is Dwolla, a peer-to-peer payment platform which allows users to exchange money quickly, safely, and at a lower cost. Dwolla is quickly gaining acceptance among customers and merchants in the U.S., not only because of its low transaction fee, also because it is an easy and secure way to transact online.

#### Exhibit 5: Dwolla: Key Features and Its Impact on Banks

Key Features	Impact on Banks
Payments are made directly from user's bank account. Credit or debit cards are not used resulting in low transaction fees	Dwolla is partnering with banks so it can access user bank accounts, enabling real-time transactions
Users can send money using an email address or a phone number, but the most popular method is to connect to Facebook and type in a friend's name	Banks integrating with Dwolla will benefit from satisfied customers who can transact at a lower price, but it may lose out on their credit card business
11% of Dwolla's business is person-to-person and the large majority is business-to-business, consumer-to-business and business-to-consumer	Banks who are facing trouble being relevant in mobile can tap into the m-commerce market by just integrating with Dwolla
PayPal is built on top of networks like Visa and MasterCard while Dwolla is building its own network	As Dwolla does not use debit or credit cards for transactions, it is directly challenging card networks such as Visa for transaction market share

Source: Capgemini Analysis, 2012; Online Paypers, Vol. 4 Issue 15, 22nd November 2011

Banks, who cannot wait for long development periods, should be looking to acquire or form joint ventures with innovative non-bank players. Advantages of this approach include a strong competitive edge, ownership of technology assets, and availability of skilled resources. Partnership with non-banks will help banks reduce their go-to-market time and hence will have a positive impact on their profitability. Technology costs in developing payment products will also decrease for banks.

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