A Series of White Papers on Mobile POS Part 2

The MPOS Impact: Leading a Wave of Change in Card Payments and Mobile Shopping

MPOS Workgroup
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MPOS Workgroup

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Supporting and adjacent documents

Mobey Forum whitepapers are available at www.mobeyforum.org
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1. Introduction

After releasing “The MPOS Breakthrough: How the Power of Mobile has Disrupted Payments” in May 2013, Mobey Forum’s members continued discussing the impacts of the MPOS breakthrough. Though initially a “minimally viable” payments acceptance play focused on underserved verticals, MPOS and its broader disruption to tradition POS is quickly evolving beyond its roots.

Mobey Forum’s members, both in the MPOS Workgroup its editorial team, have pushed the topics for this whitepaper beyond the MPOS “dongle plus smartphone” innovation to surrounding issues of interchange models, PSP models, networked commerce and the merchant/customer relationship.

Following Mobey Forum’s tradition, we have woven these complex topics together and offer a framework at the conclusion for strategic focus and critical assessment.

2. Content Summary

THE BALANCE OF POWER: WINNERS AND LOSERS
What are the factors surrounding mobile card payments and how have rapid changes in the space affected the relative strength of each market participant? Is there an evolution to today’s interchange model on the horizon?

THE NEW PAYMENT SERVICE PROVIDERS (PSPs)
How have PSPs created whole new models for value extraction? Are these models sustainable for the long-term or are they evolutionary steps to an end-state?

STRATEGIC ALTERNATIVES FOR BANKS
How should a bank go about assessing the factors affecting alternatives and choose their move? Following the Mobey Forum tradition, we propose a framework and decisioning model to filter the complexity for its members.
# A Quick Primer on the Four-Party Model

The traditional model for card payments involves four parties:

- **Cardholder**: Any consumer or business using a debit/credit/prepaid card to make payments.
- **Merchant**: Any entity — a store, restaurant, craftsman, taxi driver, etc. — that accepts card payments.
- **Acquirer**: Financial institution that initiates and maintains contractual agreements with merchants for the purpose of accepting and processing card payments from customers.
- **Issuer**: Financial institution that provides branded cards (credit, debit, prepaid) to consumers and businesses. The financial institution facilitates access to the cardholder’s account (debit or prepaid) or “lends” the cardholder the funds (in the case of credit) to complete the transaction.

Other parties with key roles in enabling the four party model:

- **Processor**: The Processor actually processes the sale on behalf of the Acquirer. The Processor receives the transaction data from the merchant, routes the transaction to the appropriate network, processes authorizations, settles the completed transactions with the issuer and deposits the funds into the merchant’s account. In many cases the Processor and the Acquirer are the same entity.
- **Independent Sales Organizations (ISOs)**: ISOs resell the products and services of one or multiple Processors and may offer their own value-added products. They typically service small to medium-sized merchants.
- **Networks**: The networks — Visa, MasterCard, American Express, Discover, JCB — route transactions between issuers and Acquirers and facilitate settlement of all transactions. The networks also establish the rules of the card system, establish pricing for card transactions, and develop, maintain and promote the standards and brands that enable ubiquitous card acceptance.
3. Factors Influencing the Balance of Power Among the Four Parties

Traditionally, the majority of power resides with the enabling players in the Four Party Model, primarily the Issuer and the Network. These players define the rules of engagement, set the technical standards and run the certification, set pricing and ultimately extract most of the economic value.

However, a number of factors are now changing the traditional dynamics of the Four Party Model:

a. **Regulation:** Increased government scrutiny in many markets, driven by merchant coalitions lobbying for change, is shifting power to the merchants. Interchange is the primary target, with margins historically realized by issuers and networks coming under great pressure.

b. **Card Preference:** Consumer payment choice continues to shift away from cash and check in favor of credit and debit, creating greater pressure on merchants to accept cards. And in many cases merchants want their customers to be able to pay with credit or debit as they are more likely to complete a purchase, generally with higher ticket values and increased checkout speed. TSYS and Mercator Advisory Group recently published an informative study of consumer payment choice\(^1\) tracking consumer payment choice:

c. **Card Acceptance Enablement:** A preference for card payments has, in turn, put pressure on Acquirers and networks to enable more cost-effective card acceptance in the long tail of merchants who have traditionally not been well served by the card network players.

d. **New Market Entrants:** New, non-traditional players first emerged in 2009 to exploit the smartphone revolution and fill the gap in card acceptance offerings to “long tail” merchants, particularly those who couldn’t or chose not to accept credit cards with traditional POS equipment.

e. **Mobile Commerce:** At the same time, consumers increasingly use their mobile devices for all aspects of purchasing – whether seeking advice, show-rooming an item prior to purchase, or completing a payment via mobile app or web.

These influences are shifting the balance of power from the Issuers and Networks in favor of Merchants and Consumers.
3.1. MPOS and Its Impact on the Balance of Power

Traditional MPOS is a card-reading apparatus (“the dongle”) attached to a smartphone in the hands of a merchant. However, aspiring mobile apps and their backers are creating new customer experiences integrating handsets and merchant infrastructure to enable payments. MCX, PayPal and apps from Starbucks, Uber, and Chipotle are recent examples.

This effectively puts the MPOS in the hands of the consumer, at the same time opening the door beyond debit and credit cards to payment options such as P2P ACH, prepaid accounts, and direct to DDA. Mobile wallets acting as both container and POS could create significant disruption to the Four Party Model and could blur the line between merchants and consumers. If we define a merchant as anyone accepting a payment, then anyone can be a merchant.

Consumers and merchants will not be content to just complete a payment transaction via mobile device and/or MPOS. Both parties will look for more value-added services such as enhanced shopping experience, delivery of proximal real-time offers, greater control and flexibility, etc. Recent research by McKinsey & Co. reveals that merchants are eager for expanded capabilities that were previously only available to large corporate retailers.
3.2. Winners and Losers

As mobile devices become an integral part of the commerce experience, the balance of power is shifting away from those players facilitating the transactions toward those players actually conducting the transaction: consumers and merchants.
Most to Lose

- **ISOs** have the most to lose, because they are fighting for the smallest slice of a shrinking pie, and with the democratization of payment acceptance, their value proposition is in question.
- **Processors** will continue as key players, but become increasingly commoditized in this mature space. Like First Data, processors will need to diversify, wrap value-added services around the payments and/or move into the acquiring and merchant services space to expand their value proposition. Over time, margins will erode leading to consolidation and making it difficult for new players to enter the market.

Much to Lose

- The **Networks** will also remain critical players in the payments network, but they potentially have much to lose as well. In the near term, the movement of card acceptance down the long tail of merchants will increase total transaction volume, but at the same time average revenue per transaction will likely decrease. Meanwhile, Merchant Customer Exchange (MCX) and big community providers (e.g., Amazon, Chase Merchant Services – anyone that can bring buyers and sellers together in a closed network) are working on “networked commerce” models which may compete with - and will definitely put pressure on - the existing card networks. Many disruptive startups are targeting the same interchange model for the long tail of merchants. The card networks face competitive pressures from many directions, perhaps leaving them little alternative but to reduce their margins to remain competitive. Debit card networks lose in the near term, while credit card networks are watching out for new regulation and innovations in both MPOS and disruptive private label funding. Players with a high dependency on physical POS are the most at risk: as transactions slowly migrate to mobile POS and legislated competition eats away at margins, these players must innovate or face extinction.

- **Issuers.** Interchange pricing transparency is clearly in the scopes of both regulators and emerging players. If interchange rates decline, whether through regulation, competition, or both, traditional card issuing could become less attractive to financial institutions and they may start charging additional fees to make up the lost margin. Increasing fees and decreasing card rewards will drive both consolidation and migration. Some consumer segments will consolidate credit cards to maximize rewards. Other segments will migrate away from credit and towards debit impacting both total transactions and profits. It’s true that MPOS and mobile wallet strategies could offer issuers an opportunity for “top of wallet” plays, but the overall magnitude of the impact to issuers hinges on the future of interchange pricing and transparency.

That being said, there will always be a segment of consumers who want to use credit. More than likely they are affluent consumers who want points, cash flow management, rewards, etc.,
and who are valuable enough to merchants, financial institutions, and others to compel a credit offering of some sort. Even in a hypothetical world with a large and thriving player, such as MCX, driving considerable transaction volume away from the card rails, consumers will still demand a variety of credit offerings. The volumes and the economics may look different, but this portion of the ecosystem will not be extinguished.

**Little to No Change**

- **Acquirers.** MPOS can both increase and decrease fraud. Until the risks are better understood, quantified, and controlled Acquirers will maintain their margins because they still bear the most risk in the network. Emerging solutions will not want the regulatory burden and risks associated with merchant acquisition, nor can a startup match the breadth of solutions and economies of scale offered by the incumbents. Expect continued consolidation between Acquirers and processors as the big get bigger.

**Much to Gain**

- **New Entrants.** Large community providers such as MCX, Apple, Google and Amazon will find a way to change the consumer shopping experience and will grow to become the primary influencers in the space. It is unlikely – though not unbelievable – that these communities will develop new payment rails; rather they will use the leverage of the new consumer shopping experience to threaten the business models and margins of Card Networks, Issuers, ISOs, Processors, and Acquirers. Watch for alliances with large financial institutions.

- **MPOS Innovators and Mobile Payment Providers.** *(but not all of them)* The innovators and providers who find a way to integrate and disguise the payment within engaging physical and virtual consumer shopping experiences will win. Innovators and providers that focus solely on the payment will lose.

**Most to Gain**

- **Consumers.** As mobile blends the online and offline worlds together, consumers will enjoy better shopping and buying experiences, more competitive pricing, increased rewards/deals/loyalty benefits, and a greater array of payment options. Merchants may believe they can dictate payment options, but at the end of the day consumers will vote with their feet.

- **Merchants.** After years of having little say in the pricing and approach offered by the card networks and Acquirers, power has shifted to the merchants. With the growth of MPOS and integrated mobile commerce capabilities, merchants not only will have a greater say in how the payments system works, but will also have far greater control over their customers’ shopping experiences. The potential outcome for merchants? Higher ticket values, greater customer loyalty and declining cost of payments. Merchants are open to the MPOS change:
3.2. **The More Things Change, the More They Stay the Same**

Despite all the shifts in influence and regulatory impacts on pricing, the basic tenets of the four-party model still remain: Acquirers still hold the merchant risk, issuers hold the card risk and merchants compensate those players for taking on those risks.

Most, if not all, of the new market entrants and the MPOS providers are leveraging the existing four-party system, building their offering and experience on the basis of those existing rails. The majority of these players do not want to become banks (with all the associated regulation) or to displace other players in the model. What they do want is to become a value layer on top of that existing infrastructure, covering that last mile of card acceptance to the merchant and the consumer.

Mobey Forum believes that the functional groups will remain - in some capacity - over the long haul, although their roles, scope of control and pricing models will continue to shift through consolidation and
vertical integration. The question is the balance of power and the value/margins these groups can create and maintain.
IS THERE ROOM IN-BETWEEN CARD-PRESENT (CP) AND CARD-NOT-PRESENT (CNP)?

One idea frequently discussed at Mobey Forum is the creation of a new transaction class in-between CP and CNP. The notion of CP and CNP are vestiges from an “analog” past that allowed payment networks to facilitate commerce when the cardholder and plastic card was not present when the transaction was being processed. Historically, CNP transaction fees were associated to mail order and telephone order (MOTO) transactions. Since the merchant cannot verify the identity of the consumer face-to-face and the presence of the physical card for these types of transactions, there is an elevated risk for fraud. The incremental cost to accept a CNP transaction was used to offset the cost of increased liability due to this higher risk of fraud.

With the advent of the Internet, and subsequently always-connected mobile devices, CNP transactions were extended into e-Commerce and m-Commerce since, again, the cardholder and the plastic card was not present at the time the transaction was processed.

However, the evolution of mobile devices into general-purpose computing devices with very advanced sensors has unlocked novel ways to authenticate the purchaser. Mobile payment providers, like PayPal, are experimenting and deploying the use of geo-location, Bluetooth and a user profile picture for a second, third and even a fourth factor of authentication (above and beyond a username and password) to limit fraud when processing a payment transaction. Apple has introduced a fingerprint scanner in the new iPhone 5S offering biometric authentication to unlock the device and purchase through iTunes. Conceivably, the fingerprint authentication could be encapsulated into a form of identity token passed to merchants and retailers to ensure the authenticity of the purchaser and payment vehicle.

CNP rules and regulations were established well before the digital-age. As mobile technology becomes better equipped to identify and verify who you are, and thus reduce the inherent risk of a payment transaction, the question that is being asked is “is there a room between CP and CNP for a third transaction type; a device-present transaction?” Payment networks, and their issuing and acquiring bank partners will need to agree to the revision of operating rules and regulations to enable this new transaction type. Based on the additional forms of authentication provided by mobile, can a “device-present” transaction type be modeled after a lower-risk and lower-priced transaction class than CNP?
4. Payment Service Provider Business Models

There are a multitude of new players in the young and evolving MPOS sector, each pioneering revenue and business models. For banks evaluating this sector, it is important to clearly understanding how each business model makes money and their relative strengths and weaknesses. Not only will this enable better predictions of winners and losers, it is vital to partnership assessments. Across the broad set of providers in the MPOS sector, we see four major models emerging, with deep-dives into each provided by McKinsey & Co.

1. Hardware providers (e.g., Infinite Peripherals, ROAM, Ingenico):

   Figure 6: Business Models – Hardware providers

   This group of providers is focused on developing hardware solutions that enable mobile phones and tablets to accept payment information and complete transactions. Their primary focus is on developing a suite of hardware solutions for the rapidly evolving mobile commerce marketplace. Typically, these providers partner with existing value chain players that have
distribution access, such as merchant Acquirers and banks and chose not pursue payment-related economics or establish direct relationships with merchants.

- **Product set:** The evolving hardware product set for these companies includes mobile payment dongles, hand-held printers, scanners, and other attached devices that enable merchant staff to complete mobile transactions. Key factors for this group are superior product design and efficient production to maximize margins on per-unit sales.

- **Pricing:** Per-unit pricing is typical, with a wide range of price levels based in peripheral functionality. Trailing revenues from service contracts and consumables (e.g., printer paper, ink cartridges) can provide ancillary income for some.

- **Promotion / Scaling:** Distribution models typically focus on partnerships with highly scaled partners, such as merchant Acquirers. Some providers, however, are promoting custom-built solutions for specific clients. Apple’s in-store payment experience, for example, is enabled through partnership with Infinite Peripherals, which also produces scanners, printers, and card readers for iOS devices.
2. **Payment transaction services (e.g., Square, iZettle):**

**mPOS – Business Models**

**Example 2: Payment Transaction Services**

<table>
<thead>
<tr>
<th>Square Mobile</th>
<th>Square Register</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept payment through mobile phone and dongle peripheral</td>
<td>Payment and basic business applications for tablet - item management, analytics, etc.</td>
</tr>
<tr>
<td>2.75% merchant fees; or $275 per month</td>
<td>Free for Square merchants</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Square Wallet</th>
<th>Square Marketplace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer digital wallet; allows geo-location based payment</td>
<td>2.75% merchant fees for online sales, no additional fees</td>
</tr>
<tr>
<td>Starbucks integration allows for payment with Square Wallet</td>
<td>Online marketplace enables multi-channel sales for small businesses</td>
</tr>
</tbody>
</table>

**Figure 7: Business Models – Payment providers**

Another group of providers focus on leveraging mobile and tablet-based devices to deliver payment services to merchants. This group drives revenue based on transaction volume and is looking to scale a payment business; it therefore presents the most disruptive model for mainstream banks. Low cost, fast merchant sign-up, ultra-low-cost dongles and rapid funds settlement has ignited MPOS with the under-served small business segment. Over time, we see them marching up-market, pursuing larger merchants. They compete directly with existing payment providers for both (1) merchants just starting with card acceptance, and (2) displacement of incumbent POS systems in existing merchant businesses. While an early leader, Square is now being pursued by a group of PSPs that emulate this model. A major profitability issue for this group is (i) loss-making transactions and (ii) high merchant fraud.

- **Product Set:** While the core offering is robust, reliable payment service, many in this group are broadening into related areas. By connecting merchants and consumers, they are looking to establish “commerce platforms” that will let them offer additional revenue-generating services based on relationship networks and transaction data history.
Marketing, customer acquisition, money transfer, gift cards, etc. are potential applications that drive value based on the size of the existing user-base.

- **Pricing:** Disruptive price points and models are the hallmark of this group. Notably, Square’s 2.75% pricing to small businesses marked a departure both in rate and simplicity for many merchants. That rate soon became the reference rate for other players that offered slightly lower rates (e.g., PayAnywhere). Increasingly, payment transaction-focused PSPs are varying the pricing model even further. Intuit’s GoPayment, for example, has a hybrid monthly fee ($12.95) plus low rate (1.75%) and iZettle has debuted a sliding price scale based on merchant volume that ranges from 2.75% to 1.5% based on monthly sales volume.

**Promotion / Scaling:** Achieving scale for this group typically requires either an existing sales force (e.g., Intuit) or a virtual sales model (e.g., Square) to drive growth. The economics of this model are deeply tied to scale returns. Because of the inherent competition for payments revenues, partnerships here are less common. Square has partnered with U.S. Bank to promote Wallet, but no major distribution partnership for merchant services has been launched.
3. Small Business Platform Suite (e.g., Shopkeep, NCR Silver):

**mPOS – Business Models**

**Example 3: Small Business Platform Suite – ShopKeep POS**

ShopKeep POS is a comprehensive iOS-based POS solution that allows small businesses to accept payments and manage their business both in-store and remotely. Similar to its competitors, ShopKeep’s cloud-based interface allows for the access of real-time sales and inventory data from any device with an internet connection. To date, ShopKeep has over 3,500 users, and processes over $300M in transactions annually.

- **Features**
  - Ring up sales in-store on an iPad and iPad Mini
  - Accept cash & card payments (with the iDynamic card reader)
  - Send email customizable receipts to customers
  - Accept PayPal payments at a flat rate of 2.7%
  - Accept mobile payments via Dwolla and LevelUp
  - Track sales and view profitability analytics
  - Explore sales data by item, day & hour in prepopulated graphs
  - Generate reports that track trends, such as best-selling items and most frequently returned items for a set period
  - Access real-time sales data remotely from the mobile app
  - Manage inventory in-store and remotely via the iPhone app
  - Monitor employee productivity with Employee Time Tracking Tool
  - Integrates with PayPal Mobile Payments App (iPhone)
  - Allows PayPal account holders to browse and locate nearby participating merchants in the app Store Directory

**Value Proposition - ShopKeep differentiates itself in 4 distinct ways:**
- One of the first to offer an iPhone app solution that allows remote access to real-time sales and inventory data
- For a one-time fee, merchants can purchase a complete terminal hardware bundle, including an iPad register
- One of the first cloud-based POS providers to partner with PayPal to offer it as a built-in payment option in the virtual terminal
- Integrated mobile payment options Dwolla and LevelUp as well

**Pricing:**
- 1 register: Flat fee of $48/month
- 2 registers: Flat fee of $98/month
- 3+ registers: Fee determined on case-by-case basis
- Product bundle (incl. iPad 2, iDynamic card reader, iPad stand, receipt printer, cash drawer): $1,155

*Figure 8: Business Models – Small Business Platform*

A third group of providers is focused on capitalizing on the shift brought by new, open, low-cost, general-purpose mobile technology. These players focus on developing productivity platforms and solutions that give business owners more tools on general-purpose platforms to grow their business – sales, inventory, customer management, order management – and typically leverage tablet-based platforms. When successfully adopted, these solutions tend to be sticky with merchants due to high switching costs, much like traditional Integrated Software Vendors (ISVs) in merchant acquiring. This is causing some new entrants to take aggressive pricing moves to expand the business. PayPal, for example, is waiving processing
fees in 2013 for small businesses choosing to replace their cash register with a PayPal Here\(^2\). In the spring and summer of 2013, we observed peripheral package pricing for cash drawers, receipt printers and barcode scanners drop from $499 to $299 to $99 to $0 in open pricing warfare.

- **Product**: The primary focus is designing higher quality business solutions that are open-architecture and maximize the functionality of general-purpose smart devices. While focused predominantly on software tools, payments is also a critical service. Often these providers seek to work with a broad set of providers and develop preferred referral relationships, while providing merchants the ability to mix-and-match capabilities through an app-store approach. Shopkeep POS, for example, works closely with Global Payments and Clover OS is collaborating with First Data.

- **Pricing**: The revenue model is predominantly a monthly licensing fee to merchants based on the number of units running the platform. Fees typically range from $50-$150 per month per user.
  1. **Peripherals**: Charges for related equipment (e.g., tablet stand, tablet casing, printers) often provided for a fee.
  2. **Ancillary services**: Some providers capture recurring revenue from payment volume paid by the Acquirer, in addition to referral “bounties” paid by merchant acquiring partners.

- **Promotion / Scale**: Providers are taking two primary paths to building scale. First, they are distributing through app-marketplaces to quickly turn tablets into business machines. Second, they are partnering with scale distribution partners to grow through direct sales. Vantiv, for example, has a partnership with NCR’s Silver.

4. **Transaction-Driven Marketing Services (e.g., Level Up, TrialPay):**

   **Example 4: Transaction-Drive Marketing Services - LevelUp**

   **Figure 9: Business Models – Transaction Driven Marketing Services**

   The fourth group of providers leverages payment transactions to provide a different set of services. Often, these providers appear to “transform” the payment transaction economics with radical pricing, but beneath the covers lies a modernized marketing scheme. LevelUp, for example, provides smartphone-based payment acceptance for merchants and offer zero-interchange transactions, provided the merchant enrolls in a LevelUp marketing program. Merchants share revenue for new customers or return visits from loyal customers resulting from mobile marketing – both incremental and recurring sales are highly valued, and the revenue share is in line with traditional schemes. Notably, many of these providers seek to complement the primary means of payment at merchants, rather than displace them. Because of this, their potential to scale into large merchant segments is thought to be higher than those who compete head-on with the incumbents.
- **Product:** The focus of these players is to use smart-devices to drive new marketing and loyalty programs to consumers. A major priority for this group is proving attractive ROI on marketing spending by merchants.

- **Price:** Often, these providers charge merchants for customer activity – new visits or frequent returns – and will give away traditional payment economics trading low single-digit transaction margins for healthy double-digit marketing revenue shares.

- **Promotion / Scaling:** Growing a merchant base can require aggressive direct sales or the use of distribution partners. Like the platform providers above, many in this group are looking to drive mass adoption by forming partnerships with distributors looking to broaden their merchant offerings. The partnership between Level Up and Heartland Payments is a good example.

### 3.2. Additional Factors in the PSP Space

In its workgroup discussions, Mobey Forum members surfaced other important factors influencing the nature of the PSPs’ role and the environment they’ve enabled:

#### 1. Regulatory Changes

5. **On July 24, 2013,** the European Commission (EPC) released proposed regulations in the area they called Payment Account Access. While these changes have no direct bearing outside the European zone, they do influence global regulatory strategy.

- Under the proposed guidelines, PSPs could initiate payment without cards, provided that they can positively identify the payer through other means, and issuers must process the transaction as though it were a payment instruction from the consumer.

- Likewise, under this environment PSPs are granted access to card issuer/bank data (e.g., funds available) without contract or enrollment, requiring only the mutual customer’s consent.

While this regulatory effort is clearly focused on reducing friction in the payments ecosystem, there are concerns with granting access to core capabilities with identification and authentication taking place on the edge in an ad hoc fashion.

#### 2. Fraud & Risk Management

- Mobey Forum believes that MPOS has exposed greater risk to merchant fraud in the card payments ecosystem by lowering the barriers to entry. While PSPs are known to closely monitor initial transactions by new merchants, it is not known how well they have been able to prevent successful attacks by sophisticated fraud rings.
When consumers are defrauded by merchants either through MPOS directly or through the casual exchange of card data in an MPOS interaction, they turn to their bank issuer with the dispute. PSPs are looking for ways to increase the speed of collection of fraud reporting feedback from bank customers; the quicker the feedback, the sooner the bad guys can be shut down. At the same time, banks are eager to fight fraud but are cautious about ceding their customer interactions to a third party with a knack for disintermediation.

3. **Regional Developments (e.g., Mexico, Brazil, Europe, NA)**

- **EMV-Markets:** Chip & PIN markets pose challenges for MPOS providers, since the advanced technology required by EMV rules is expensive and bulkier than card-swipe readers. The cost of EMV readers, for example, can be [5x] simple dongles, changing the economics for MPOS providers. Nonetheless, EMV markets are seeing strong adoption, with firms like iZettle striking partnership and growing users in Europe and the Americas.³ Apple’s launch of PayLeven for European retail stores in May represents the first commercial use of retail MPOS chip & PIN.

- **Developing Markets:** Emerging markets with less developed payment infrastructure provides another compelling case for growth. Low-cost, readily available mobile phones have the potential to vastly open the market for card-based payments. Card issuance, however, remains a different challenge. In addition, challenges in these markets can stem from a high cultural preference for cash and the perception that card-based payments increase overall fees for merchants (e.g., through tax charges, loss of tips, etc.)

5. **Banks are Reacting and Making Moves in MPOS**

Most banks have followed a “wait and see” strategy with regards to investing in the MPOS space since it began in 2009. This was largely due to the prevailing belief that the target segment of ‘Micro Merchants’ was unprofitable. Bankers’ complacency, coupled with a few technical revolutions (smartphones, cloud, and app distribution) and business revolutions (rapid enrollment, breakthrough interchange pricing, and PSP business models) allowed non-traditional payment providers and technology start-ups like Square (North America) and iZettle (Europe) to ignite the market and establish themselves firmly as market leaders.

Of late, however, banks are adapting their plans to deliver customized mobile solutions for their small business customer base, such as Banco Santander partnering with iZettle in Mexico, Lloyds Bank with Monitise in the UK, or Bank of America and First Data’s collaboration on BAMS Mobile Pay on Demand™

in the U.S. Mobey Forum believes this change is brought on by the numbers – a rapidly increasing proportion of POS transactions are now originating from mobile devices:

1. MPOS terminals owned 17% of the total POS terminal market in 2012 – this number is expected to increase substantially and reach 46% by 2017.4
2. From 2011 to 2012, the number of MPOS terminals registered an annual growth of 111%, from 4.5 million to 9.5 million, and it is expected to reach 38 million in 2017.5
3. 70% of merchants in the U.S., approximately 19 million businesses, do not currently accept electronic payments and could benefit from MPOS solutions. When the spending at these merchants is added together, it represents an opportunity to migrate more than $1.1 trillion yearly from paper to electronic payments6

More importantly, as providers offer MPOS apps with Value Added Services (VAS) in addition to basic card acceptance, banks need to revisit this segment and formulate definite strategies driven by their specific profile/ market environment to adequately exploit the opportunity. Small business owners are planning now to use mobile commerce to drive sales and customer interactions.

4, Timetric, 2020 Foresight: Mobile Point of Sale Technology, April 2013 http://timetricmarketing.wordpress.com/2013/05/03/paying-with-your-phone/

5 Ibid

Small businesses planning to use mobile commerce to drive sales and customer interactions

<table>
<thead>
<tr>
<th>Consumer funnel</th>
<th>Pre-visit</th>
<th>Decision-making</th>
<th>Transaction</th>
<th>Post-visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate demand</td>
<td>Find local merchant</td>
<td>Compare local merchants</td>
<td>Contact/Arri ve at store</td>
<td>Decide on purchase</td>
</tr>
</tbody>
</table>

**Small Business**

Percent of SBs "Very Likely" to use mobile services for their business:

<table>
<thead>
<tr>
<th>Service</th>
<th>Customer Comms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ads and Marketing</td>
<td>38%</td>
</tr>
<tr>
<td>Offers &amp; Coupons</td>
<td>43%</td>
</tr>
<tr>
<td>New Retail Format</td>
<td>24%</td>
</tr>
<tr>
<td>Self Checkout</td>
<td>21%</td>
</tr>
<tr>
<td>Mobile POS</td>
<td>34%</td>
</tr>
<tr>
<td>Loyalty Programs</td>
<td>23%</td>
</tr>
<tr>
<td>Customer Comms</td>
<td>44%</td>
</tr>
</tbody>
</table>

Reduce costs 40%

- Expected likelihood of deploying mobile commerce services remains largely constant from prior year; with slightly moderated expectations for main services (e.g., marketing, cost reductions)

1 Small businesses planning to use mobile commerce services in next 1-2 year (55% of respondents)


**Figure 10: Small Business Drive Sales with MPOS**
## 5.1. A Bank’s Profile Should Dictate its Strategy

Mobey Forum has developed the following framework to help banks focus their MPOS strategy:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
<th>Why is MPOS relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td>Small, Medium or Large as defined by a financial institution’s market capitalization</td>
<td>Greater impact to Medium to Large Banks.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Retention: Banks need to defend their small business client deposit base from poaching by innovative MPOS offerings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Acquisition: Opportunity to attract net new small business clients through attractive MPOS packaging with other Value Added Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Revenue Potential: Opportunity to leverage Value Added Services through bundling for new/ existing SMB clients</td>
</tr>
<tr>
<td><strong>Primary Customer Segments Served</strong></td>
<td>Whether the primary focus of the bank is on Retail, Small Business or Large Corporate customers</td>
<td>- For banks with significant small business merchant services, irrespective of size, there is a need to defend the deposit base and also potentially acquire new SMB clientele</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- MPOS is also a significant opportunity for banks with an existing suite of merchant services (deposits, loans, treasury services etc.) to bundle their offering with MPOS and deepen relationship with their merchant base</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- However, for banks focused primarily on large corporate customers, we see no immediate threat due to MPOS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Niche / Specialized MPOS implementations for line-busting at large retailers (e.g., Nordstrom) do not alter traditional treasury management relationships with their bank.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Established merchants typically have elaborate POS functionality and competitive rates due to the high transaction volumes. Further, regardless of how large retailers may deploy, the types of liquidity products they purchase are not threatened by PSPs</td>
</tr>
<tr>
<td>Acquirer</td>
<td>Does the bank have an existing Acquiring Service (direct/indirect) and the size of that business</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Acquirer and Issuer (Chase, Bank of America, U.S. Bank etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Acquirer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Acquiring through JV (Bank of America Merchant Services)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With MPOS transactions now accounting for a significant share of the overall POS volumes, there is a direct impact on the Acquirer’s transaction volumes and hence margins</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For banks involved in both Acquiring and Issuing, a tightly coupled card acceptance and issuance model provides potential for a new customer experience and revenue opportunity (e.g. us-on-us, or “connected commerce”)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o An interesting development to watch out for is the recent partnership between Visa and JPMorgan Chase (and Chase Paymentech) to enable direct links between Chase and its merchants to offer cardholders discounts and special offers at the POS. Not likely to be offered to small business merchants (through MPOS) in the near term, but connected commerce between a bank’s merchant and consumer customers is a growing trend that must be monitored.</td>
<td></td>
</tr>
<tr>
<td>Issuer Only</td>
<td>Does the bank issue cards and the size of its card portfolio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Issuer Only (Wells)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With MPOS Acquirers/ Merchants bundling VAS with basic card acceptance, this is a risk of poaching / losing eyeballs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MPOS Acquirers can potentially influence customer behavior via eReceipts etc. through future promotions, links to apps, cross-selling etc.</td>
<td></td>
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<tr>
<td></td>
<td>Potential impact to Mobile Wallet Strategies for issuers (e.g. Square Wallet)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Top of wallet impact</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>Region/ country specific dynamics relevant in determining a profitable MPOS strategy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Impact of local debit schemes - Certain countries like Canada have a strong volume of debit transactions making acquiring less profitable. Also with a single debit network, Interac, additional certification requirements may result in slower time to market</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evolving EMV Market Dynamics/ EMV Penetration levels</td>
<td></td>
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<tr>
<td></td>
<td>Potential for bypassing EMV at POS in favor of cloud SE (Convergence of cloud and proximity - ING MC in Netherlands)</td>
<td></td>
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<tr>
<td></td>
<td>New Networks in certain markets – E.g. MCX, Dwolla</td>
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</tbody>
</table>
5.2. A Bank’s Profile Should Dictate its Business Case Drivers

At a high level, based on the particular profile of the bank, the primary business case drivers could include:

1. For all banks with small business customers
   a. Deepening customer relationships – Servicing, growing, and retaining small business client deposits and cash flow
   b. Acquiring new small business customers
   c. Monetizing value added services, offers platforms, eReceipts, P2P

2. For banks with an acquiring business line
   a. Defending acquiring transaction volumes (specifically for Acquirers)

3. For banks who issue cards
   a. Increase funds managed and small business deposits base. The balances from small business clients are significant, while interchange margin income is a fading factor after sharing with PSP and the merchant Acquirer.
### 5.3. Go-to-Market Alternatives Based on Profile

<table>
<thead>
<tr>
<th>Entry Play</th>
<th>Details</th>
<th>Pros</th>
<th>Cons</th>
<th>Strategy</th>
</tr>
</thead>
</table>
| Buy        | Buy into a distribution from your payments provider to provide MPOS  
Capital One’s Spark Pay (through acquisition of VeriFone Sail) | - Get instant Market Share and potentially increase Business Banking accounts  
- Acquire IP and build new capabilities in-house | - Integration  
- Rapidly changing Market Dynamics: may diminish value proposition long term and may end up paying a premium | Large Banks – Either entering or expanding  
Acquiring Business |
| Build      | Development/exclusive app and reader  
Bank of America/ First Data Mobile Pay on Demand™ | - Provide Most Flexibility  
- Opportunity to offer a fully integrated Mobile Banking offering  
- Custom solution with VAS opportunities: (Accounting and Taxation, eReceipts etc.) | - Cost  
- Time to market  
  - Changes in Technology can render the offering obsolete  
- Banks’ strengths lie in KYC and customer processes and not so much in building technology – better left to specialized providers | Medium to Large Banks with established SMB clientele and a capable technology organization  
Should be integrated with mobile banking and value-added services for a rich offering |
| Partner    | Partner directly with a MPOS solution provider  
Offer a third-party solution: iZettle  
Banc Santander  
Resell a white-labeled device and service: Lloyds Bank and Monitise; First Trade Union Bank with LevelUp  
Partner with a larger payments provider/ money transmitter: PayPal, Western Union, etc. | - Fast to market  
- Low Cost  
- Potentially increase Business Banking accounts | - Limited Customization  
- Revenue Share model can impact profitability of service  
- No control of IP/ Roadmap | Small banks – Licensing Model  
Medium – Strategic Partnership |
5.4. Execution Risk: Can MPOS Thrive In Your Bank?

Having considered the technologies, the business models, the enablers and the competition, your bank may be in the right position to enter the market. Since MPOS cuts across several organizations at your bank, your leadership must be aligned and united if the offering is to thrive.

To complete your strategic thinking, Mobey Forum suggests you consider these perspectives:

- **Merchant services / acquiring business** – Do they see offering MPOS as a complement to their current services, a counter-measure to the disruptors, or a threat to the traditional platform?
- **Fraud, risk and security** – Do they believe the controls are in place to prevent fraud and security attacks from a new vector? Can the bank mitigate and accept the residual of new risks introduced?
- **Digital banking** – Do your online and mobile banking groups see MPOS as a complement to their platforms or is MPOS viewed as “somebody else’s app”? Without integration to mobile apps and online portals for value-added services, MPOS will be constrained as just a payment app.
- **Branch network and distribution follow-through** – One of the distinct advantages banks have in the MPOS space is their direct distribution capability, but will your branch staff promote MPOS? Bank of America has their own branded MPOS reader and app, yet they have not activated their 5,000 branches to promote and distribute them. Imagine the positive brand message in handing a complimentary MPOS reader to your small business customer as they bring in a large deposit and explaining how they can now take card payments “on the go” instead of cash and checks. Branches have actively promoted remote check deposit, so promoting MPOS in the same way rounds out the payments acceptance solution for small businesses.
- **Marketing and promotion** – Do your customers think of your bank when they think of MPOS? Sure, they’ve heard of Square and Intuit and PayPal, but is your brand in mind when they make a choice to add MPOS to their business? Sustained, impactful messaging from your marketing group across all their touch points will be needed to implant your brand in your small business customers’ consideration set.
6. Conclusion

Mobey Forum believes MPOS to be the leading edge in a wave of change in shopping and payment experiences around the world, as well as the underlying infrastructure enabling it. MPOS has revolutionized convenience for consumers and democratized card acceptance to small businesses.

Today we are witnessing changes in real-time with the disruption of traditional POS with tablet solutions, line-busting sales staff, integration with self-checkout, personalized promotions, new commerce networks, and the integration of two-factor biometric authentication on handsets. In the coming year we expect more alliances which integrate value-added services to merchants, shopping offerings from MCX across a variety of merchant types, low-power Bluetooth-enabled payment zones on merchant premises and the mainstream introduction of “wearables” (glasses and watches) which may simplify payment acceptance even further.

Banks have the opportunity to participate in these innovations but must adopt a strong mindset to maintain their position and extract value. Join us in Mobey Forum to continue the conversation and analysis.