EXPANDING CARD ACCEPTANCE TO SMALL MERCHANTS GLOBALLY THROUGH MOBILE POINT OF SALE (MPOS)

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Characteristic of merchant acquirers is their constant search for opportunities to drive incremental payments volume. In developed payments markets, where acceptance has been generally widespread, some markets focused on intensifying card spend in everyday purchase categories during the 1990s, displacing cash and checks. In emerging markets the challenge has been more complex, emphasizing expansion of acceptance in new and existing categories in parallel with card issuance in order to increase the overall utility of electronic payments.

IN BOTH DEVELOPED AND EMERGING MARKETS, VALUE CHAIN PARTICIPANTS HAVE FACED STRUCTURAL BARRIERS AS THEY HAVE SOUGHT TO EXTEND ACCEPTANCE TO THE SMALL BUSINESS SEGMENT.

The small business segment is an area of acceptance expansion that has not been fully explored. In both developed and emerging markets, value chain participants have faced structural barriers as they have sought to extend acceptance to the small business segment. One barrier has been the prohibitive cost of point of sale (POS) devices. In emerging payments markets, this cost barrier has been exacerbated by several market characteristics: low card usage due to the absence of widespread acceptance, a fairly small card base, and the relative importance of small merchants to overall economic activity, which is particularly pronounced for some consumer segments.

FIGURE 1: FACTORS DRIVING THE ATTRACTIVENESS OF MPOS DEPLOYMENT

FACTOR	TREND
Mobile Phone Economics	Increased ubiquity of smartphones enabled by falling prices for entry-level phones.
Business Adoption	Use of existing or low-cost smartphones reduces terminal costs and drives increased merchant revenues
Business Models	Innovative business models leveraging lower cost technologies have reduced barriers to entry

A number of factors have come together to make small business acceptance a viable and attractive business opportunity for merchant acquirers.[1] Falling prices have reduced costs for entry-level smartphones, resulting in one of the highest rates of adoption ever observed for a new technology (see Figure 1). This widespread acceptance provides a broad and geographically dispersed base for increasing payments. Furthermore, this expansive phone base can deploy payments functionality with essentially no marginal costs; smartphones enjoy economies of scope with respect to payments acceptance.[2] The ability to remove this cost barrier to wider acceptance by small merchants presents merchant acquirers with an attractive growth opportunity. In developed markets, there is an opportunity for cardholders to conduct commerce with an expanded set of merchants. In emerging payments markets, cards themselves will become more attractive as the transaction costs associated with their usage diminish relative to cash as a result of widespread acceptance.[3] Finally, new business models have emerged with the potential to achieve scale in the small business segment under a variety of market conditions.

A number of companies providing MPOS technology and pursuing innovative business models have emerged. Their approaches range from the provision of necessary hardware to enable MPOS (e.g., card reader accessories, sometimes referred to as *dongles*) to innovative processing models for acquirers that bring these processing capabilities in-house or provide them on an outsourced basis (e.g., Payment Platform model and Payment Facilitator model). In assessing the business opportunity of expanding acceptance into this new merchant segment, a number of critical questions need to be considered to clarify your organization's objectives, the paths available to you, and how you will execute on this opportunity.

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Determining the Appropriate Path to Market Expansion

1. How large is the addressable market, what is the nature of the target segment, and what are the unique needs of small merchants in the market?
2. What is the state of payments system development, and what implications does the corresponding market structure have for developing my target segment?
3. Which of my organization's assets and capabilities can be leveraged, and what gaps need to be filled?
4. What is the appropriate business model for my organization to fill the gaps necessary to pursue this opportunity? Should I manage it internally or is there an option to outsource these services?
5. Who are the value chain players with whom I can potentially partner to provide an economically viable value proposition for the target segment?
6. Finally, what business processes does our organization need to possess to realize this new market opportunity?

CRITICAL CONSIDERATIONS FOR STRATEGY AND EXECUTION

This paper begins by highlighting the importance of market structure and the choice of an appropriate business model for developing a strategy for expanding into the small merchant segment. There is no single approach to monetizing this opportunity. Instead, a strategic approach must be crafted that accounts for critical market factors, including the level of development, the nature of acceptance in the market, and the availability of merchant information. Next, essential features of the business models that have emerged for commercializing the small business segment are explored. Finally, we highlight key elements of critical thinking required for developing and executing a successful MPOS strategy for small merchants.

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1. Implications of Market Type for Acceptance Expansion

In establishing an acceptance strategy, a critical consideration is understanding the implications of the market in which you operate when developing your small merchant strategy (see Figure 2). Payment systems are quintessential examples of two-sided markets in which a platform, in this case a payments network, brings together the two sides of the market: cardholders and merchants.[4]

Developed payments markets have an installed base of cardholders and acceptance. The opportunity here is to drive acceptance by deploying devices that bring additional value to an already well-developed ecosystem. In emerging payments markets, the challenge is more complex as both sides of the market must be considered. In addition to driving acceptance, consumer payment needs must be addressed to ensure a sufficient base of users to make acceptance an attractive proposition.

FIGURE 2: MARKET STRUCTURE DRIVES STRATEGIC FOCUS
Acceptance is the focus in developed markets; however, emerging payment markets require a focus on both acceptance and payments behavior.

PAYMENT MARKET TYPE	MERCHANT ACCEPTANCE	PAYMENT BEHAVIOR
Developed *Need to address acceptance*	• Drive acceptance into new merchant segments • Drive acceptance into new merchant categories • Replace existing acceptance devices	• Drive greater usage of installed card base by expanding acceptance to small merchants
Emerging *Need to address acceptance and payments behavior*	• Drive acceptance into new merchant segments • Drive acceptance into new merchant categories • Extend acceptance functionality to recurring payments, "Cash-in" and "Cash-out"	• Catalyze expansion of limited card base: - Enhance the utility of card usage - Reduce the transaction costs of card usage

Developed Payments Markets: In developed payments markets, the opportunity is straightforward, given the existing base of issued cards: merchant acquirers should focus specifically on driving merchant acceptance. Generally, developed markets are characterized by lower cash usage, usually in the range of 20 to 30 percent of all retail purchases. In addition, they are well served by extensive POS networks, typically with more than 15 devices per 1,000 residents (see Figure 3).[5] Developing an acceptance expansion strategy will be critical in identifying your organization's use cases for MPOS. For example, will your small business acceptance efforts focus on specific merchant categories? Do these merchants have different needs? Or should your efforts be broader, focused on enabling merchants to improve their customers' shopping experience through the deployment of MPOS-enabled tablets by retail staff that augment or replace existing POS terminals?

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Opening up card acceptance to small merchants through MPOS deployment will expand the addressable market for merchant acquirers. In the U.S. alone, Aite Group reports that this segment will grow from $2.5 billion in GDV in 2011 to an estimated $80 billion in GDV in 2016, generating approximately $1.0 billion in net revenue.[6] Furthermore, Aite estimates a considerable upside as MPOS becomes more pervasive. Similar opportunities for expanding acceptance into the small merchant segment exist in other developed payments markets as well. A well-developed acceptance strategy will bring focus to your organization's efforts to monetize this opportunity.

FIGURE 3: THE MPOS OPPORTUNITY DIFFERS BY MARKET TYPE

PAYMENT MARKET TYPE	ACCEPTANCE	CARD USAGE	MPOS OPPORTUNITY
Developed	• Generally more than 15 POS devices per 1,000 inhabitants	• Electronic transactions typically account for >50% of retail payments	• Expand acceptance into non-accepting small merchants • Augment and/or replace existing POS devices to enhance customer experience
Emerging	• Typically fewer than 6 POS devices per 1,000 inhabitants • Less than 1 device in a number of markets • Urban concentration	• Electronic transactions typically account for <15% of retail payments	• Drive commerce through broad-based expansion of acceptance • Extend payments acceptance beyond merchant purchases • Extend capabilities to "Cash-in" and "Cash-out"

Emerging Payments Markets: High cash usage, generally assumed to be more than 90 percent of retail purchase volume, makes emerging payments markets particularly attractive for MPOS development. These markets, however, present additional development challenges; namely, their poorly developed electronic payment ecosystems create a chicken-and-egg syndrome.[7] They are characterized by geographically spotty and underdeveloped acceptance networks, typically with fewer than six devices per 1,000 individuals and in many cases less than one device per 1,000 residents (see Figure 3).[8] This situation is further compounded by the absence of a robust issued card base in these markets.

A properly formulated and executed acceptance strategy can foster deepening and expanding payment systems in emerging markets by focusing efforts so as to have the largest impact on card utility. In turn, increased usage of card payments will drive greater card issuance (e.g., prepaid cards), helping to resolve this chicken-and-egg problem by igniting a virtuous cycle of payments growth in the market. Increases in card utility can be maximized by focusing development efforts on those areas of greatest value to consumers, such as everyday spend categories, and on those merchants where mass market consumers are typically engaged in commerce. In addition, there are opportunities to craft value propositions focused on recurring payment categories such as utility payments and insurance premiums, as well as supporting valuable segment functionality like "cash in" and "cash-out." Convenience stemming from lower transaction costs associated with consumers' use of cards, as well as safety, will drive consumers to move their cash into electronic stores of value, such as bank accounts accessible by payment cards, and thereby help to drive the electronification of payments in economies with high cash usage.

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2. Selecting an Appropriate Business Model to Drive Small Merchant Acceptance

In order to expand acceptance and grow the MPOS market, merchants must engage a knowledgeable provider, and a number of new and traditional POS providers have entered the market to support MPOS services. Square is a unique provider that has received a great deal of attention in the press and has created interest in MPOS and its potential in the United States. Other new entrants include iZettle, RevCOIN, Swiff, Ezetap, and ROAM Data. Traditional providers that have entered the fray include Intuit, NCR, and Ingenico. With the entrance of new and existing providers, several models for extending payments acceptance to small merchants through mobile devices have emerged. The challenge in seeking to capitalize on this opportunity is selecting the model that best aligns to your target market, the corresponding market structure, and your organization's unique capabilities and needs.

The two processing models that have emerged to support MPOS are the Payment Facilitator and the Payment Platform models. The Payment Facilitator (PF) model, which has received the most attention, outsources market development to a new market entrant—the MPOS partner. An alternative approach, the Payment Platform (PP) model, is characterized by close collaboration between a financial institution (FI) and an MPOS technology provider. Each of these approaches possesses its own unique characteristics for driving acceptance with small merchants and must be evaluated to ensure fit with your particular market structure, acceptance strategy, time to market objectives, and organizational capabilities.

Payment Facilitator Model: In the Payment Facilitator (PF) model, the PF works with a merchant acquirer to extend the acquirer's capabilities in a number of areas, all under the brand name of the Payment Facilitator. The PF plays several critical roles, including market development, merchant of record, risk underwriting, and management, and operates as an outsourced partner of services targeting the small merchant segment. The FI earns revenue through incremental purchase volumes generated by the partnership while the PF owns the customer relationship, providing processing services for its own merchants. As the merchant of record, the acquirer effectively sees the PF as a single merchant, and has no direct commercial relationship with the PF's sub-merchants. The PF aggregates its merchants and routes authorization requests to its acquiring partner within the market, providing the back-end processing to settle directly with sub-merchants.

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Two of the key capabilities possessed by PFs are their ability to effectively execute mass marketing efforts to reduce the costs of customer acquisition and their innovative approaches in using third party data to manage merchant risk. Additional competitive differentiation is provided by the cost reductions they achieve through streamlined and simplified approaches to merchant on-boarding and customer service. On the downside, by outsourcing responsibilities to a partner under the PF model, the acquirer gives over control of merchant relationships. Lost is the ability to set pricing, establish branding, control market positioning, or cross-sell additional bank products.

Payment Platform Model: In contrast, the Payment Platform (PP) model enables an acquirer to leverage its own brand into the small merchant segment to deliver MPOS services by using the white-labeled capabilities of the Payment Platform provider. This model enables FIs to deepen customer relationships by cross-selling MPOS capabilities to existing customers as well as to gain new customers who may be attracted to product constructs that have been enhanced by the addition of acceptance to traditional banking products (e.g., small business debit, other liability products). Furthermore, the existence of merchant accounts in other parts of the FI mitigates acquirer risk, as due diligence has already taken place. In the case of a retail bank, funds can potentially be held as a "reserve" for the acquirer. A relationship view focused on driving customer retention enhances customer profitability by increasing the lifetime value of the acquirer's customer base. In addition, acquiring organizations can leverage relationships with merchant organizations and associations to drive customer acquisition costs lower. Finally, the PP model enables the FI to leverage technology as well as processes developed and updated by the payment platform to cost-effectively reach small merchants.

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FIGURE 4: KEY BUSINESS MODEL CHARACTERISTICS

	PAYMENT FACILITATOR	PAYMENT PLATFORM
Market	• PF will partner with one acquirer in a given market	• PP enables several acquirers to compete with MPOS in a given market
Model	• Provides acceptance capabilities as outsourced provider to an acquirer • PF owns branding and customer positioning	• Extends acquirers' capabilities to reach new segment using own brand • White-label approach enables acquirer to deepen customer relations and generate volume
Pricing	• PF owns pricing, but pays acquirer a fee • Replaces high fixed terminal costs with a flat merchant discount rate	• FI sets merchant prices, but pays fee to the PP • Replaces high fixed terminal costs with flexible relationship pricing
Settlement	• Acquirer transmits funds to PF, which in turn settles directly with its sub-merchants	• Acquirer settles directly with its merchants
Customer Acquisition	• Leverages mass marketing capabilities to lower merchant acquisition costs	• Acquirers can leverage traditional vertical (e.g., existing bank customers, trade groups, other entities)
Customer OnBoarding	• Streamlined process via online applications achieves cost reductions • Requires access to identify information for Know Your Customer (KYC)	• Leverages existing bank customer base to perform KYC, underwrite and register merchants • Acquirer needs to streamline the registration process and rapidly on-board merchants
Risk Management	• Requires third party data source	• Monitoring capabilities of respective bank business lines mitigate risk exposure
Customer Service and Dispute Resolution	• Outsourced to payment Facilitator to achieve cost reductions	• Leverage acquirer's existing personnel and automated customer service capabilities

In pricing, both models have eliminated fixed costs associated with purchase or rental of terminals and moved toward a flat discount rate in the case of PFs or relationship pricing in the case of PPs (See Figure 4). This approach has removed a significant structural barrier to small merchant acceptance of electronic payments and increased its viability. Card readers and applications are typically free, and there are no commitments, long-term contracts, or associated minimum fees. Instead, MPOS pricing is based on a transparent *ad valorem* approach by transaction. Similarly, while their approaches may differ, both models achieve operational cost reductions necessary to profitably serve small businesses. These include new approaches to customer acquisition, customer on-boarding, and customer service.

Having highlighted some key characteristics of the two business models, there are several additional aspects of your market environment that need to be understood in order to craft your organization's approach to the development of the small business segment.

Merchant Data: Access to merchant data plays a critical role in risk management and mitigation. In some markets there is a ready source of third party providers such as credit bureaus able to provide this necessary data. However, in many of the markets presenting the largest MPOS opportunity, there is a dearth of third party merchant data.

Bank Assets: There may be an opportunity to leverage banking relationships. In addition to providing a ready pool of potential customers, existing relationships can offset the barriers presented by the absence of traditional market institutions such as credit bureaus.

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Regulatory Landscape: Market regulation must be reviewed to determine implications for business model adoption and structure.

A functional view of acceptance and the different roles played by merchant acquirers in each of the business models further highlights the differences and similarities. The most striking difference is that, in the PF model, the acquirer outsources activities to develop this new merchant segment to another party. In the PP model, the platform is an extension of the acquirer's own capabilities. Furthermore, the PP model enables additional FI assets, such as merchant relationships and liability product holding, to be leveraged in the construction of equitable value exchanges. Beyond the front-end interfaces, the remaining aspects of payment transaction flows are the same as with traditional merchants, with data being routed through payment scheme networks to the appropriate issuer.

Additional Considerations for Expanding MPOS Adoption

Two additional points need to be considered in developing your approach to MPOS deployment. First, beyond the small business segment examined here, there may be additional merchant opportunities to consider in your market. Second, there are a number of players interested in entering this market such as MNOs (Mobile Network Operators), which are particularly attractive because of their extensive customer base.

Additional Merchant Segments: While the focus has been on small businesses, acquirers need to examine the opportunities within their markets and identify additional merchant segments that would benefit from the mobility and low cost of MPOS payments. For example, input suppliers providing delivery of manufactured goods to businesses or sales agents selling a variety of services door to door that rely on mobility could realize tremendous benefit from these capabilities.

Mobile Network Operators (MNOs): MNOs possess large customer bases. Acquirers can partner with MNOs to support MPOS acceptance by MNO customers, providing incremental revenue for both acquirers and MNOs. This additional service will enable the MNO to deepen customer relationships, thereby reducing churn rates. Strengthening their relationships with MNOs will enable acquirers, especially in markets with underdeveloped payments systems, to pursue and collaborate on opportunities that leverage the MNO's ability to leapfrog infrastructural shortcomings. An MNO's existing customer base, in addition to reducing acquisition costs, presents other benefits for acquirers. Two in particular should be highlighted: the opportunity to leverage existing MNO risk and evaluation processes to onboard customers and the ability to use payment mechanisms to establish relationships with new customers.

3. Key Elements of Critical Thinking

MasterCard Advisors has developed a six-step methodology for driving expansion into the small merchant segment (see Figure 5). Because one size does not fit all, there is a need to design the proper approach for your organization to effectively develop this opportunity in your market.

1. An **acceptance expansion strategy** will give your efforts direction and help you stay on track. This strategy will be influenced by the level of acceptance in your market.

2. A detailed understanding of the **market structure** in which you operate is critical when determining your strategy and its execution. Some of the relevant dimensions of market structure include industry concentration in payments, regulatory structure, authentication methods (e.g., magnetic stripe or PIN), and mobile money deployment.

3. A review of your **organizational readiness** lets you inventory deployable assets that can be utilized during the execution of your strategy.

4. **Business model selection** is an opportunity to evaluate and adapt business models to ensure alignment with your acceptance strategy and leverage your assets. For example, there may be an opportunity to leverage your FI's positioning with small business, both directly and through the extensive agent banking relationships that exist in some markets.

5. In the **partner selection** analysis, you can determine if there is enough revenue for another value chain participant based on the market structure analysis. This will inform you of your ability to partner across the value chain to fill in remaining capabilities gaps necessary for the success of your strategy. For instance, can partners help you to mitigate risk or is this an activity best carried on within your organization?

6. Finally, during **implementation**, you will develop or refine the process through on-boarding, customer service, and risk management to properly address the opportunities afforded by your acceptance strategy.

FIGURE 5: SIX PHASE APPROACH FOR DRIVING MARKET EXPANSION

1. ACCEPTANCE STRATEGY
- Current state of acceptance and size addressable market
- Characteristics and unique needs of target segment

2. MARKET STRUCTURE
- Nature of payments system development
- Market structure and critical value chain players

3. ORGANIZATIONAL READINESS
- Assess organizational capabilities to serve segment
- Identify gaps that need to be addressed

4. BUSINESS MODEL SELECTION
- Identify potential business models to close gaps
- Evaluate and select appropriate business model

5. PARTNER SELECTION
- Identify potential value chain partners
- Evaluate potential partnership arrangements

6. IMPLEMENTATION
- Identify necessary business processes
- Adjust current and develop new processes

Technological innovation and subsequent market entry of new and existing payments players have reduced the structural barriers to small merchant acceptance. This development presents an opportunity to profitably expand acceptance and drive further development of payments systems, especially in less-developed systems that may exist in emerging markets. A number of critical questions must be answered to clearly define a strategy and successfully execute your realization of this opportunity. MasterCard Advisors can partner with you to design an approach for your organization to realize the opportunity to expand into this new segment and help you deploy a mobile point of sale solution.

ENDNOTES

1 Given the focus of this article on expanding acceptance, it will not address the alternative MPOS use case of replacing and augmenting existing POS terminals to provide currently accepting merchants with new checkout options for their customers.

2 Economies of Scope characterize the ability to leverage a fixed set of assets, such as a platform to provide additional products for a lower cost than on a stand-alone basis.

3 Transaction costs refer to those costs associated with a good or service that are not explicitly incorporated into the price, but represent the cost of purchase or usage. Some examples of transaction costs include the opportunity cost of time as well as transportation and other indirect costs.

4 Evans, David S. and Schmalensee, Richard S. *Paying with Plastic: The Digital Revolution in Buying and Borrowing*, 2nd edition, The MIT Press, 2005.

5 Lafferty, *World Card Intelligence*, 2010. The World Bank, *Payment Systems Worldwide: A Snapshot*, Washington, D.C., 2011.

6 Olgesby, Rick, "Quasi-Merchant, Meet the Quasi-Terminal: Merchant Acquiring Growth via the Mobile Device," Aite Group, Boston, April 2012.

7 Gawer, Annabelle and Michael A., "How Companies Become Platform Leaders," *Sloan Management Review*, Boston, Winter 2008. Eisenmann, Thomas; Parket, Geoffrey and Van Alstyne, Marshall W., "Strategies for Two Sided Markets," *Harvard Business Review*, Boston, October 2006.

8 Op Cit. 4.

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