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## MOBILE IS COMING IN COMMERCIAL PAYMENTS

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Previous hurdles slowing the adoption of commercial mobile spend are beginning to fall.

*While consumer adoption of mobile payments has been tepid, it is showing signs of increase and we expect that the commercial wave is directly behind, leading to rapid growth by the decade's end.*

by Steve Murphy,  
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## Introduction

During the past five years, much has been written and forecasted about the impending conversion to mobile payments in the United States. Typically the subject is related to the potentially dynamic growth prospects in consumer transactions, expected to follow a pattern similar to the almost ubiquitous use of mobile devices in other parts of daily living. In prior research Mercator Advisory Group has discussed how the mobile communications revolution continues with regard to technological advancements in the devices and their capabilities but has yet to extend to their use as the primary vessels for making purchases at the physical point of sale (POS). The present ForeSight report provides a summary version of the broader discussion including the various channels where the use of mobile devices and capabilities will have an impact moving toward 2020 and beyond. We identify and define these channels, suggest the factors driving growth, and then provide a forecast of growth rates of commercial spend through the relevant channels up to 2024. A complete discussion of the topic with detailed volumes is available to members of Mercator's Commercial and Enterprise Payments Advisory Service in the report titled [\*Mobile Usage in Commercial Payments May Be Just Around the Corner\*](#), released June 2017.

## Commercial Mobile at a Glance

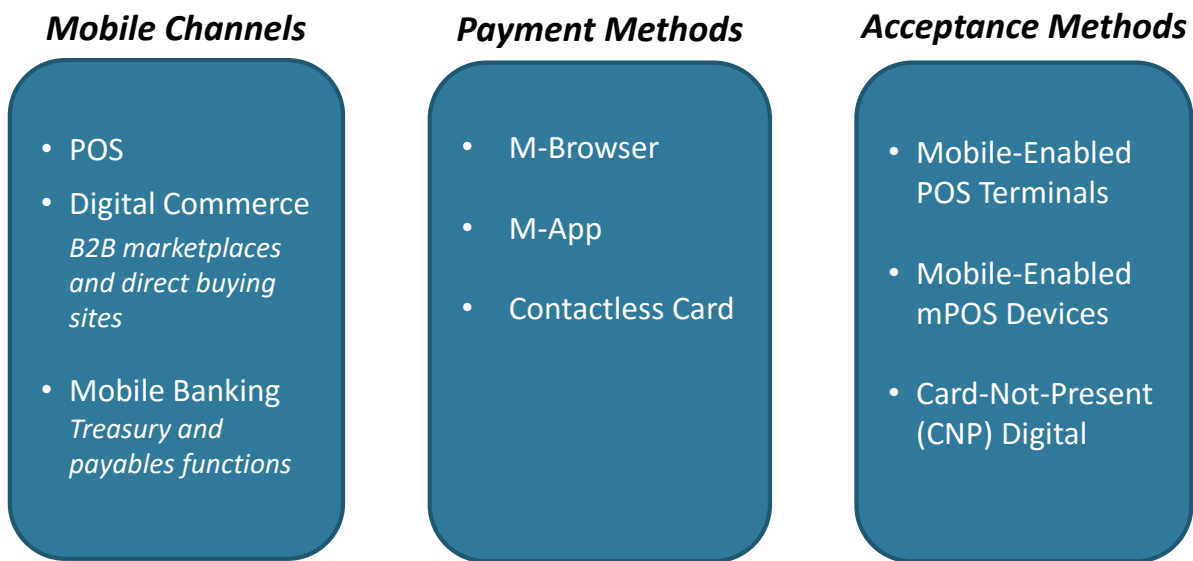
### Payment Sources

The commercial mobile landscape at a high level consists of channels for activities related to three dimensions: actual payment initiation, payment vehicles, and card acceptance methods. In previous reports Mercator Advisory Group has concentrated on the expected consumer adoption of mobile payments at the point of sale, which aligns with corporate cards for travel and expense categories such as hotels, restaurants, and car rentals. However, there are several commercial channels where mobile capabilities are being utilized and payments are either initiated or authorized through mobile technology. Channels include the POS, digital commerce (which has several subchannels), and various mobile banking solutions that incorporate treasury and payables functionality. The following terms are necessary to understand the use of mobile technology when initiating payments:

- **M-browser/m-app.** A browser or an application that facilitates purchase of products and services, including travel, via the internet using a mobile device (smartphone or tablet) for any payment method, including network-branded cards and on-demand payments. These transactions are part of the e-commerce category.
- **M-card.** POS payment transactions made using a smartphone (not a tablet) by scanning, tapping, swiping, or logging in at the point of sale using any payment method, including network-branded cards.
- **Contactless cards.** For commercial purposes, the potential for contactless-enabled EMV cards is where issuers and their clients may have this preference, now commonly being accepted for transit systems and prevalent in Europe.

Figure 1 summarizes the overall landscape of commercial mobile payments, and in the following sections we discuss each component in more detail.

**Figure 1: The Commercial Mobile Landscape, 2017**



Source: Mercator Advisory Group

### Digital Commerce

Digital commerce (also known as e-commerce) for the business-to-business (B2B) market space incorporates a range of capabilities that have increased substantially during the past five years. Although digital commerce involves numerous delivery models and access points, at a high level there are three subchannels: industrial direct sell, procurement networks, and general B2B marketplaces. The B2B digital commerce space includes the actual marketplaces themselves, which are based on disparate business models, as well as payments service providers (PSPs), which provide access interfaces and other value-adds.

Examples of a companies that have successfully built direct models include the agricultural manufacturer Massey Ferguson and MSC Industrial Supply Company. Procurement networks follow several different business models that may or may not involve proprietary access and membership for either buyer or seller. These platforms are now trending toward more end-to-end solutions to include some or all of the various elements of the cash conversion cycle.

Mercator Advisory Group now sees the general access B2B commerce sites as key growth channels for mobile origination volume, or m-commerce. A good example is Amazon Business, which uses some of the familiar approaches from its dominant consumer marketplace to deliver simplified B2B solutions to sellers, especially smaller businesses. Launched in 2015, it is already experiencing high growth.<sup>1</sup> Amazon also specializes in what is

called a “punchout,” which enables an existing procurement system to have the Amazon experience but with a separate order created just for the Amazon checkout cart.

### Mobile Banking

A transformation to digital capabilities in the delivery of treasury and accounts payable solutions is underway. This is an area where banks continue to deliver high-value, high-quality services, including adaptive mobile versions of online banking systems and mobile apps for certain services.

Wells Fargo’s CEO Mobile was developed as a mobile channel in the CEO portal, which is Wells’s online banking solution. Another example is Citi’s CitiDirect BE Mobile and Tablet versions, which the bank claims have now passed the \$1 trillion payments threshold for payments processed.<sup>ii</sup> City National Bank also provides treasury functionality through its Treasury Net for Mobile service. Corporate treasurers can review and approve payments for downstream processing.

It is important to note that this channel does not directly utilize the payment credential (card account, other transaction account data) for purposes of exchanging value, but the mobile capabilities streamline or accelerate the execution of corporate payments. There are of course any number of treasury management solutions on the market, in some cases forming the underlying platform for branded bank offerings. Vendors in this space include Axletree, Bloomberg, Finastra, FIS, Kyriba, and Reval.

Mercator Advisory Group has covered accounts payables systems in several research reports during the past year. Often these solutions are integrated through enterprise resource planning (ERP) systems or treasury management systems on the front end and various other payments channels on the back end. Incorporation of mobile access for payables professionals is relatively new and typically starts at the CFO or controller level for approvals. We believe it will increasingly find its way into daily payables department work processes.

### Related Concerns

If you find this piece of interest and would like to explore this issue further, proprietary project work could be done to examine questions like these:

*Which specific mobile technologies will soon find their way to commercial payments?*

*Which commercial payments organizations are leading the introduction of mobile fintech innovations?*

*When will I need to have a commercial card wallet solution to satisfy client demand?*

*Do I need mobile applications to drive additional card usage for B2B commerce?*

*How will security solutions evolve to safeguard new mobile payment technologies?*

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## Drivers of Commercial Mobile

### Supply and Demand

The normal laws of supply and demand do not seem to apply in the case of mobile payments. In that economic relationship, price is regulated by a balance between available supply and the demand for a product or service.

#### *Supply Side*

In the case of mobile payments, the supply side of things has been scarce due to the combination of industry inertia attributable to both cost considerations and overarching indecision about POS infrastructure. In effect, merchants have to pay for upgrades to facilitate acceptance of mobile payments, while card-issuing banks and payments service providers (PSPs) need to develop new capabilities. Banks already have profitable cards businesses, and without intense deal pressure for mobile capabilities, motivation to provide capabilities has been lacking. The POS supply side is changing, however. As reported by Apple, merchant locations enabled for Near Field Communication (NFC) reached a 35% level of U.S. mobile penetration in late 2016, building from 4% at the launch of Apple Pay in 2014.<sup>iii</sup> Apple projects that by the end of 2017, 66% of U.S. merchant locations will be NFC compatible.

In earlier research, Mercator Advisory Group predicted that a significant EMV milestone at the POS would be reached by mid-2018, such that about 94% of U.S. terminals will be EMV capable and 84% enabled (certified). From that point on, NFC capabilities are expected to lag by about 6–12 months, which could then signify a tipping point for consumer adoption of mobile payments. As mentioned previously, the number of countertop acceptance terminals capable of processing NFC transactions is growing. Another indication is the adoption of mPOS-specific terminals, of which newer versions are capable of accepting mobile payments. There are several leading providers in this space, including First Data, Ingenico, PAX, and Verifone. One report predicts that the installed base of mPOS terminals will exceed 31 million by 2020, which is about double the number from 2016.<sup>iv</sup> The assumption is that mobile enablement will be the norm for newly manufactured models.

In terms of the other POS supply-side capabilities, there is obviously a need for mobile wallets or apps that incorporate commercial card capabilities. We know of two major commercial card issuers that have officially launched wallets to service their clients. The cards payment processor TSYS announced the ability to tokenize payments across its commercial card platforms, enabling mobile wallets and digital commerce.<sup>v</sup>

#### *Demand Side*

The demand side of mobile POS payments is a bit trickier, since in this case, greater supply should help to drive greater demand, in contrast to normal economic theory. Through discussions with various industry participants, Mercator Advisory Group has observed that the perception of demand is changing. Looking back only a year, there was sparse demand for mobile POS payments. However, issuers and processors are now seeing more tangible interest among their clientele, although not yet to the point where a deal may be decided by the absence of special wallet solutions.

Mercator believes that international travelers will help to shape this demand as well, especially Europe, Australia, and Asia, where mobile proliferates. The demand side of other channels, especially digital commerce, will be somewhat in line with demographic preference. Technology hurdles are less daunting as suppliers' acceptance of electronic payments is a given and although the payer apps and mobile channel access present more design challenges, they are already available in many cases.

### Adoption by the GSA

Adding fuel to the demand side of things is the SmartPay program, managed by the General Services Administration (GSA), which was established in 1949 as an independent agency of the U.S. federal government. The program was launched in 1998 as an initiative to streamline government agency spending by sponsoring a card program to track spending and eliminate paperwork. Program contracts for SmartPay2 were awarded in 2007 for a 10-year term starting in 2008, and the GSA has recently announced contract awards to Citibank and U.S. Bank for SmartPay3 starting in 2018. For the full year 2016, SmartPay spending across all card types and agencies reached \$28.5 billion, which is larger than the gross domestic product of 89 countries.<sup>vi</sup> The GSA has been tasked with managing SmartPay since its inception. One need not look far into the GSA SmartPay3 RFP<sup>vii</sup> before finding references to mobile, of which there are 32 mentions throughout the 319-page document (not including amendments, updates, and modifications). For the RFP, GSA defines and categorizes mobile in two ways:

- **Mobile application.** The ability to access EAS (electronic access system), pay invoices, receive text/email alerts, and view statement and payment information over a mobile device.
- **Mobile payments.** The ability to make payments via mobile device at the point of sale.

Through GSA SmartPay3, the amount of spending that might shift from traditional plastic to mobile wallet-based transactions includes travel and fleet card volume in excess of \$8 billion combined. In addition, mobile application spend means potentially gaining mobile device access to the substantial purchasing card (P card) spending of roughly \$18 billion. So merely through the contract requirement, U.S. government commercial cardholders will have access to mobile solutions by end of 2018.

### Millennials and Gen Z

Consumerization is the common term for the spread of technology used in our personal lives over to the workplace. With regard to mobile technology, that dynamic would not have taken hold so quickly without the influence of the millennial generation, a growing presence in global workforces. Millennials have adapted to the unified communications and collaboration systems that have improved and expanded throughout enterprises during the past five years.<sup>viii</sup> These are the systems that combine enterprise communications (telephony, email, instant messaging, videoconferencing, etc.) into common interfaces via multiple channels with ongoing internal collaboration. Don't look now, but this trend will continue to escalate since Generation Z is almost here as well. For this generation that basically has grown up in a cyberspace world, life without a smartphone is almost unknown.

## Commercial Mobile Usage and Growth

### Tokenization

Tokenization is a general term for a technique that keeps data being communicated a secret, which is well suited for protecting card data. The concept is simple: A token replaces the card number in the smartphone and is passed to the merchant for payment. The merchant sends the token to the network, which uses the received token to look up the original card number, which is then sent to the issuing bank for approval. Tokenization helps to secure payment credentials and is critical to enable a safe environment for electronic payments from mobile today to browser e-commerce and internet of things (IoT) in the future.

Mobile commercial card payments at the POS can be delivered via tokens or without. Although we have not been able to gain detailed technical information through Amex, we assume that tokens are in play via the various wallets using an Amex commercial card, given the network's 3-party system. In this case, we would expect that there would be the capability to re-associate the token with the PAN and Level III transaction data.

In the case of the 4-party networks, the token issue is more complicated. The difficulty with communicating card data at the POS is associated with multiple card types (including magnetic-stripe card whether signature or PIN, token (signature or PIN), or multiple NFC types (V1 non-EMV and V2-EMV Enabled). These variabilities create challenges for acceptance at the point of sale. Does the merchant support NFC V1 or V2? If V2, how does the merchant tie that encrypted/tokenized PAN to the customer's merchant loyalty program or determine to deliver Level III data? However, the official solution to the hidden PAN is the new EMVCo standard called PAR (Payment Account Reference), which is designed to resolve these problems. Implementing PAR is a complex task for acquirers and merchants, and PAR itself is only just now being rolled out by the networks, so it will likely be 2019 and beyond before these issues are broadly resolved.

For the present, issuers can resolve these issues by delivering nontokenized virtual cards to the wallet in the form of single use accounts (SUA), which can then be recognized by the merchant. While this method is not as secure as using a token, the nature of SUA allows for one-time use only, so even if the transaction is compromised somehow at the POS, the damage is contained.

### Mobile Volumes

Mercator Advisory Group provides the following high-level points for helping to shape the predicted growth rates for commercial mobile payments (actual volume estimates are available to members):

- **Total applicable U.S. commerce** averages 2.2% year-over-year growth, driven in large part by expected economic growth.
- **E-commerce** annual growth will average 5.5%, which Mercator anticipates will peak in the 2019–2023 timeframe driven by rising online shopping for business purposes at the workplace.



- **M-browser/m-app** usage should see a substantial dollar volume growth from a small current base after 2019 as more mobile applications enter the normal working process of departmental and enterprise business spend.
- **M-card** in the corporate space now and for the next two years is somewhat constrained by both the lack of appropriate POS supply (merchant NFC acceptance) and sparse issuer solutions (mobile wallets), but adoption is expected to reach a tipping point sometime in 2019.

### Payments by Category

Our view essentially incorporates somewhat conservative commerce growth coupled with a rapid adoption of mobile access and usage through all indicated channels after we reach a projected POS tipping point in the late 2019 to 2020 timeframe. For example, the commercial POS channel is associated with hand-held mobile devices and smartcards but in 2019 will still represent only about 1.5% of spend, after which we assume more rapid growth. This is a relatively conservative expectation but can be adjusted based on further availability of adoption data. On the m-commerce side, there is already a relatively large digital wholesale market and as mobile devices proliferate at the workplace, along with applications to ease the user experience, volumes accelerate. Mercator Advisory Group sees a roughly 55% CAGR for overall commercial mobile payments through 2024, which incorporates about 66% growth for the M Card payment method.

### Conclusions

A combination of factors has heretofore constrained the adoption of consumer mobile payment technology. A lack of supply contributed to a lack of demand given reasonable alternatives.

Commercial always trails consumer adoption, so commercial mobile has been almost nonexistent to date. This is beginning to change through both B2B marketplace advances and a brightening outlook for mPOS capabilities. Mercator Advisory Group believes that because of the millennial and Gen Z demographics, consumer demand and commercial demand will essentially converge, and that with better rationalization of value, along with more ubiquitous access to simpler payment experiences, the commercial mobile market will reach a tipping point by the end of this decade.

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## Endnotes

- <sup>i</sup> Applico, <https://www.applicoinc.com/wp-content/uploads/2017/02/Disruption-at-the-Gates-Monitoring-the-Threat-of-Amazon-Business.pdf>
- <sup>ii</sup> Forbes, <https://www.forbes.com/sites/tomgroenfeldt/2016/02/24/citis-mobile-platforms-for-corporates-have-processed-1-trillion-since-2011/#68cf486967d4>
- <sup>iii</sup> <http://www.theverge.com/2016/12/6/13864376/35-percent-apple-pay-us-merchants>
- <sup>iv</sup> Paybook, Verifone, <https://www.slideshare.net/verifone/paybook-vol-5-may-2017-75858209>
- <sup>v</sup> TSYS, <http://tsys.com/news-media/press-releases/tsys-2017-press-releases/20170530-CommercialTokenization.html>
- <sup>vi</sup> Knoema, <https://knoema.com/atlas/ranks/GDP>
- <sup>vii</sup> General Services Administration, [https://www.fbo.gov/index?s=opportunity&mode=form&id=01d50dc555041f4a146bad11a578bb3e&tab=core&\\_cview=1](https://www.fbo.gov/index?s=opportunity&mode=form&id=01d50dc555041f4a146bad11a578bb3e&tab=core&_cview=1)
- <sup>viii</sup> Raconteur, Embrace the Millennial Workspace, <https://www.raconteur.net/sponsored/embrace-the-millennial-workspace>



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