

## Mobile Financial Services: Unlocking the Potential

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A Manager in EDC's San Francisco office, Ginger provides strategic planning and analysis for clients including global payments associations, consumer products companies, issuing banks, processors and technology suppliers. Her work for clients involves new product development and business strategies, market assessment, and evaluation of emerging payment products and technologies for consumer application. Ginger works with issuing banks and other global payments industry players in evaluating opportunities and challenges in the emerging mobile financial services sector, producing go-to-market strategies and competitive analyses. She recently led a series of surveys to assess the collective vision for mobile financial services of global thought leaders in payments and financial services.

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Samee is a Director in EDC's London office. He advises some of the world's largest financial services organization in Europe and North America on competitive strategy, operations and technology. His expertise covers retail banking and retail payments, especially Internet and mobile payments. He has deep experience in helping clients set-up Internet and phone-based banking and brokerage operations, including the selection and management of technology providers and outsourcing partners. He has written several articles in leading publications, has spoken at conferences including the Visa Business School in Cambridge, United Kingdom (on emerging alternative payments), and has recently co-authored a book on retail card payments. His most recent article focusing on mobile payments was published in the American Banker.

Mobile phones are poised to become the world's first ubiquitous technology and are now an essential part of everyday life. A mobile telecommunications device such as a mobile phone is as likely to be in use in urban Western Europe as in rural India; and as likely to be used by a wealthy stockbroker as a poor fisherman. Around 40% of the world's population uses mobile phones, and that number is expected to grow to 60% by 2011, representing a base of nearly 4 billion mobile subscribers. A large and growing proportion of these mobile phone users are low-income and unbanked consumers, many of them in developing economies around the world. In countries where the fixed line infrastructure is limited or too expensive, mobile phones offer the only viable communications option for millions – or rather billions – of people. Such phenomenal success is due largely to the immense convenience these devices offer people in both developed and undeveloped countries alike.

The explosion in mobile phone growth and use, resulting from consumers' love affair with their mobile phones and significant advances in data connection speeds, offers unprecedented opportunities for banks and other financial institutions to provide their customers with convenient anytime and anywhere access to mobile financial services. It also is opening the door to new products and services created solely for mobile telecommunications devices.

Industry players have experimented with mobile banking and mobile payments for years but have failed to offer the consumer a better alternative than the payment instruments already available, such as cash, checks and cards. These mobile financial services projects failed, in part, because consumer attitudes are notoriously hard to change. A new product must clearly convince the consumer that it delivers great value – significant enough for the consumer to change their behavior. Successful products and services are created based on consumer perceptions and not because of the advanced nature of the technology they use. This is a lesson that those involved in emerging payments have often overlooked to their peril. Complex set-up requirements, limited availability for use, endless waits, and counter-intuitive operating processes all combined to ensure that consumers remained lukewarm to such innovations in the past.

Only now are mobile financial products and services finally gaining traction. This is partly due to the fact that the number of mobile users is growing exponentially, but also because new technologies enabling fast and secure data access are promising to deliver greater consumer convenience and ease of use. 2006 saw the introduction and continuation of many mobile financial services initiatives in markets in every region of the world. Financial institutions and some mobile operators introduced fast access to mobile banking services, card associations, MasterCard and Visa experimented with mobile payments and information services offerings, enter-

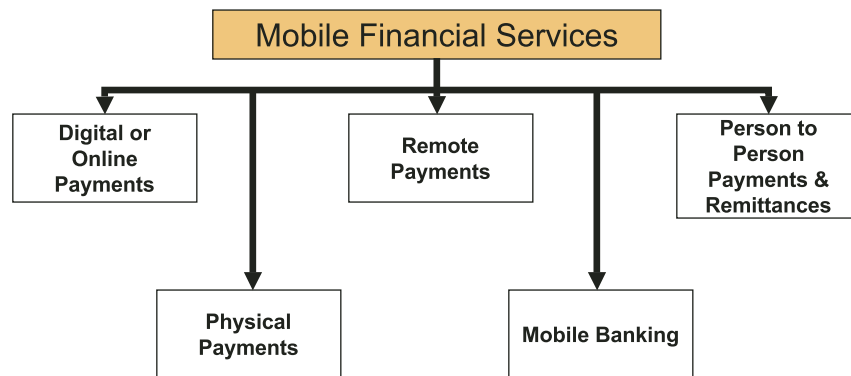
prising companies like PayPal and Obopay launched person-to-person (P2P) payment services, and several municipal transportation systems – such as those in New York City and Paris - launched mobile payments trials. Mobile payments for digital goods that are downloaded directly on to the phone – such as ringtones and games – continue to earn billions of dollars for mobile operators and service providers. Many more trials and launches are planned for 2007. Projections of the potential revenues from mobile offerings show that it will be a substantial market: \$37 billion in 2008 (Arthur D. Little), growing to \$88 billion in 2010 (Juniper Research.)

Not surprisingly, all of the activity associated with Mobile Financial Services has generated a confusing jumble of services referred to by a variety of often overlapping terms; sifting through this jargon to identify the different types of services available can prove a challenge. In this first installment of a planned series of newsletters exploring various aspects of Mobile Financial Services, we will endeavor to begin to de-mystify Mobile Financial Services and present EDC's perspectives on what is required to succeed in this growing marketplace.

### **Mobile Financial Services – Overview**

Mobile Financial Services is a broad term encompassing a variety of different types of services enabled via a mobile device. As the industry is developing and new products and services are emerging, there is not always a clear delineation between the various umbrella terms and categories that are used to describe these offerings. For instance, there is much debate about whether Mobile Banking just covers alerts, or whether it should also include bill payment and account-to-account transfers, as these are a natural extension of activities already provided via online banking services. But account-to-account transfers are similar in definition to person-to-person (P2P) transfers, so should those ALSO be classified as Mobile Banking, or are they Mobile Payments? What are the other types of Mobile Financial Services, and how do they differ from each other?

In an attempt to bring some clarification to the issue, EDC has developed a classification system in which Mobile Financial Services are broken down into 5 key categories:



While this classification is by no means definitive – the market continues to evolve and change, as will EDC's classification – it provides a useful structure for organizing and evaluating the many different types of Mobile Financial Services being developed and becoming available in the marketplace.

*EDC classifies Mobile Financial Services into 5 key categories: Digital or Online Payments, Physical Payments, Remote Payments, Mobile Banking and Person to Person Payments & Remittances*

*While this classification system is by no means definitive, it provides a useful structure for organizing and evaluating the many different types of Mobile Financial Services being developed and becoming available in the marketplace*

Category / Type	Service	Sample Provider(s)
A. Digital or Online Payments	<i>Online Payments:</i> Purchases of digital goods & services (e.g., ringtones, games, tickets), in which the purchased item is downloaded to phone; tickets will likely include a bar code which users may scan at the entry point in lieu of a paper ticket	<ul style="list-style-type: none"> <li>• Mobile Operators</li> <li>• Fandango (US)</li> <li>• Deutsche Bahn (Germany)</li> </ul>
	<i>Coupons:</i> Download (and potentially redemption) of coupons, either via a couponing application or via SMS text message	<ul style="list-style-type: none"> <li>• Visa campus trial</li> <li>• Cellfire</li> </ul>
B. Remote Payments	<i>Wallet-Based:</i> Consumer has access to stores that have partnered with the service provider	<ul style="list-style-type: none"> <li>• Mobile Lime (US)</li> <li>• Reporo (UK)</li> <li>• SmartPay (China)</li> </ul>
	<i>Text-Based:</i> Consumer sees an advertisement and texts the number shown to purchase item	<ul style="list-style-type: none"> <li>• PayPal Mobile (US, Canada, UK)</li> </ul>
	<i>Regular Mobile:</i> Mobile Internet browser – browse and pay for goods and services over specially enabled websites	<ul style="list-style-type: none"> <li>• M-commerce-enabled websites</li> </ul>
	<i>Special Mobile:</i> Payments made over the Internet using phone ID and PIN	<ul style="list-style-type: none"> <li>• Obopay (planned)</li> <li>• iPIN (discontinued)</li> </ul>
C. Person-to-Person Payments	<i>Restricted:</i> Received funds usable at selected merchants. Fee applied if converted to cash or transferred to bank account	<ul style="list-style-type: none"> <li>• Globe Telecom (Philippines)</li> <li>• NW FastPay (discontinued)</li> </ul>
	<i>Flexible:</i> No restrictions. Funds received can be converted to cash at ATM or used at POS with debit / prepaid card	<ul style="list-style-type: none"> <li>• Obopay</li> <li>• TextPayMe</li> <li>• Wizzit (South Africa)</li> <li>• LUUP</li> </ul>
D. Physical Payments (Customer & Mobile Device Present)	<i>Point &amp; Buy:</i> Payments using infrared technology in mobile devices at (primarily) unattended vending terminals	<ul style="list-style-type: none"> <li>• South Korean experience (not successful)</li> </ul>
	<i>Text &amp; PIN:</i> Text-based message communication between the purchaser / provider and provider / merchant	<ul style="list-style-type: none"> <li>• Pay Box Europe</li> <li>• PayMate (India)</li> <li>• Pago Móvil (Mexico)</li> </ul>
	<i>Contactless:</i> Consumer waves phone with embedded NFC chip over contactless reader to enable payment via registered payment method	<ul style="list-style-type: none"> <li>• NTT DoCoMo</li> <li>• MasterCard PayPass mobile trials</li> <li>• Payzy (Thailand)</li> <li>• Transportation trials in Europe, US and Asia</li> </ul>
E. Mobile Banking	<i>Account Management &amp; Customer Service:</i> Consumer obtains account summary information, views unbilled transactions and statement transactions, and makes payments	<ul style="list-style-type: none"> <li>• Citibank (US)</li> <li>• First Direct (UK)</li> <li>• MPower (India)</li> <li>• La Caixa (Spain)</li> </ul>
	<i>SMS Alerts:</i> Bank notifies customers of account activity (e.g., balance, new transactions, etc.) via SMS	
	<i>Funds Transfer:</i> Transfer of funds – subject to a ceiling – to another bank account	
	<i>Bill Payment / Presentment:</i> Made to selected bill payers set-up by consumer	

### **Key Success Factors**

Amid the excitement and hype surrounding the emergence of Mobile Financial Services, questions remain as to how these offerings will achieve critical mass, especially in light of the fact that most consumers and merchants find that their current payment options are quite satisfactory. So what do the industry players need to do to encourage adoption of Mobile Financial Services and to facilitate its ultimate success? EDC believes there are seven key success factors for unlocking the potential of Mobile Financial Services.

#### **1. There must be a positive consumer experience.**

Overall, existing payment methods (e.g., cash, cards) already meet consumer needs. In order to persuade consumers to change their behavior – always a difficult proposition – and embrace Mobile Financial Services, the offerings will need to have some essential benefits over currently available alternatives:

- More convenient
- Cheaper to use
- Quick and efficient – no long waits
- Sufficiently unique or value-added offerings and incentives

#### **2. Consumers must have a choice of payment instrument.**

Consumers today are accustomed to having the option of selecting the payment instrument best suited to their immediate needs, be it cash, check, debit or credit card, or another preferred method. Mobile Financial Services offerings should allow consumers to continue to select the payment product / form factor, payment method and payment provider which they prefer for each payment interaction. Facilitating continued choice will provide greater utility to customers and a suitable competitive environment for the various payment instruments and providers.

#### **3. Initial incentives will be required to attract consumers and merchants to begin using Mobile Financial Services.**

Targeted initial incentives will need to be designed for:

- Consumers - Early adopters will need incentives to test the new mobile service and then promote its use among others
- Merchants - Key merchants whose support is critical to the success of payments using mobile devices

#### **4. Competitive pricing considerations have to be kept in perspective.**

The right pricing levels are crucial, to consumers as well as to merchants. Prices for Mobile Financial Service offerings need to be in line with or more competitive than those currently available in order for consumers and merchants to consider changing their current behavior. If pricing is higher, it must be supported by a compelling and unique value proposition.

#### **5. Widespread rollouts of solutions are essential to counter the “chicken and egg” effect.**

Pilot initiatives are important to test and refine the value propositions of Mobile Financial Services solutions, but half-hearted implementations are doomed to fail due to the classic “chicken and egg” problem. To counter this effect, solutions must be widely available to both consumers and merchants. To take Physical (Mobile) Payments as an example, if only a few merchants accept mobile payments, consumers will not bother to acquire the payment functionality. Similarly, if only a handful of consumers carry mobile payment devices, merchants will have little incentive to accept this form of payment. It is critical to note that the more widespread the rollout, the greater the probability of success.

#### **6. There must be a viable business case for all stakeholders.**

A positive business case is required to ensure sustainable participation of all stakeholders. The viability of this business case is dependent on:

- (a) Getting the pricing right
- (b) A “balance” of costs and revenues between stakeholders
- (c) Quantifying the benefits to stakeholders, including reduced transaction times, savings in cash handling, additional transactions, increased sales, reduced customer service costs, etc.

**7. The technology and operations must be standardized, highly secure and reliable.**

Technology and operational processes must function smoothly and with a high level of reliability so that there are no glitches that could adversely impact initial consumer perceptions. Security is critical, as any incidents of fraud will erode consumer and merchant interest very quickly. Common standards are essential to ensure compatibility of offerings across the various providers and devices.

**Conclusions**

There is strong interest by key stakeholders in making Mobile Financial Services successful. They are learning from mistakes made in the past and beginning to leverage new technologies within an evolving global consumer and merchant marketplace. Significant barriers remain, but if stakeholders cooperate to ensure the delivery of a successful service offering based on common standards, clear value and a positive experience for consumer and merchant constituents – we see that widespread adoption of Mobile Financial Services is not only within reach but achievable.

This is to be the first in a series of EDC newsletters covering topics related to Mobile Financial Services. Subsequent newsletters will discuss each of the five Mobile Financial Services categories in greater depth, examining key players and initiatives, opportunities and potential barriers to success. We will also explore additional relevant areas including:

- The perspective of industry participants as to the future of Mobile Financial Services (based on results from the Mobile Payments World / Edgar, Dunn & Company Mobile Financial Services Survey)
- Mobile Financial Services for the Unbanked/Underbanked
- Security Concerns
- Value Proposition for Key Constituents: Consumers and Merchants

**EDC and Mobile Financial Services**

EDC has been working in the Mobile Financial Services space on a range of assignments at both the industry and individual participant level, including market research and assessment, new product development, strategy reviews and development, and market segmentation. We have also conducted several recent surveys of industry participants, gathering the insights of key players into the future of Mobile Financial Services. If you would like more information about how we could help assess the market opportunities in Mobile Financial Services for your business, please contact Ginger Schmeltzer at [ginger.schmeltzer@edgardunn.com](mailto:ginger.schmeltzer@edgardunn.com) or Samee Zafar at [samee.zafar@edgardunn.com](mailto:samee.zafar@edgardunn.com).

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**About Edgar, Dunn & Company**

*Edgar, Dunn & Company (EDC) is a global strategy consulting firm specializing in financial services. Founded in 1978, the firm is widely regarded as trusted advisors in the payments industry providing a full range of strategy consulting services, expertise and market insight through in-depth industry and consumer benchmarking including its proprietary data intelligence platform, PaymentDynamics<sup>SM</sup>. Additional areas of expertise include new financial services channels, technologies and retail financial services.*

*EDC's offices are located in San Francisco, New York, Atlanta, London, Frankfurt and Sydney, serve clients in over 30 countries on six continents. More information can be found at [www.edgardunn.com](http://www.edgardunn.com).*

*There is strong interest by key stakeholders in making Mobile Financial Services successful, learning from mistakes made in the past and leveraging new technologies and evolving consumer/merchant attitudes toward payments*

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