



Meeting the Needs of Non-Traditional Consumers and Achieving Scale with Mobile Contactless Payments in the U.S.

Summary Report of November 13-14, 2013 Mobile Payments Industry Workgroup Meeting

Susan Pandy Director, Payment Strategies Federal Reserve Bank of Boston

Elisa Tavilla Industry Specialist, Payment Strategies Federal Reserve Bank of Boston

January 30, 2014

Susan Pandy is a Director and Elisa Tavilla is a payments industry specialist in the Payment Strategies Group at the Federal Reserve Bank of Boston.

The authors would like to thank members of the MPIW and panelists for their thoughtful comments and review of the report.

The views expressed in this paper are solely those of the authors and do not reflect official positions of the Federal Reserve Bank of Atlanta, the Federal Reserve Bank of Boston, or the Federal Reserve System.

Mention or display of a trademark, proprietary product or firm in this report does not constitute an endorsement or criticism by the Federal Reserve Bank of Atlanta, the Federal Reserve Bank of Boston, or the Federal Reserve System and does not imply approval to the exclusion of other suitable products or firms.

Introduction

In November 2013, the Federal Reserve Banks of Boston and Atlanta convened a meeting in Boston with the Mobile Payments Industry Workgroup (MPIW) and invited guests¹ to discuss the challenges underlying broad mobile payment adoption in the United States. The primary objective of the meeting was to gain a better understanding of fundamental consumer adoption issues by (a) exploring how mobile financial services and payments can meet the needs of nontraditional consumers, (b) and what is needed to achieve scale in the mobile payments market. Remarks focused particularly on how prepaid mobile products can address the needs of nontraditional consumers such as the underbanked and unbanked² (hereinafter referred to as "the underserved") and younger consumers (also known as Generation Y or millennials, born between the early 1980s to the early 2000s). Panelists also explored their different perspectives on how to achieve meaningful scale.

This report will summarize the discussions on (a) mobile technology and financial access considerations for the underserved consumer; (b) broader consumer market adoption for mobile retail payments; and (c) the transformational role of mobile technology for financial services.

I. Mobile Technology and Financial Access Considerations for the Underserved Consumer

Many underserved consumers experience pain points when transacting financial business (e.g., sending money, paying bills, accepting payments, and depositing/cashing checks). These might be addressed through the use of mobile technology solutions, namely mobile financial services and mobile wallets available through mobile phones and associated apps. Panelists characterized the underserved as the new middle class³ rather than as low income consumers or those consumers likely to spend all or most of their income each month. Mobile phones present a great opportunity to provide the underserved with enhanced convenience and access to applications and tools to better manage their financial lives, encourage savings, and make real-time money decisions.

1

¹ Panelists represented academia, government, non-profits, card networks, mobile wallet providers, transit authorities, issuing banks, and retailers. For more information about the meeting panelists, see Appendix I.

² According to 2012 FDIC study, 2011 FDIC National Survey of Unbanked and Underbanked Households, 8.2 percent or about 10 million U.S. households are "unbanked," meaning they do not have accounts with financial institutions. Another 20.1 percent have an account but are "underbanked," these are consumers who choose to use alternative financial services (e.g., money orders, check cashing services, payday loans, prepaid cards, and other financial services offered through outlets other than a traditional bank or credit union) at least once per year. Retrieved from http://www.fdic.gov/householdsurvey/2012 unbankedreport.pdf.

³ Panelists characterized the underserved as the new middle class because they tend to rely on alternative financial services either because they no longer wish to have an account with a financial institution or other reasons such as budget and credit challenges. The U.S. Census Bureau does not have an official definition of the "middle class," and the term often means different things to different people. The Census splits the U.S. household population into five different groups based on income, each comprising 20 percent of the population. If the middle 20 percent is truly the "middle class," then middle class households make between \$38,500 and \$62,400 per year. However, in the 2012 U.S. Presidential election, the candidates defined the middle class as those making less than \$250,000 per year. This number is different from the median – or middle – household income in America, reported by the Census to be about \$50,000 in 2011. The top 5 percent of American households had incomes of \$186,000 or more, meaning that many of them would still qualify as "middle class" under the candidates' definitions.

Dan Schulman, from American Express, explained how the less money that someone has, the more it costs that person to manage and move his money (e.g., time spent driving to a bank or business to pay bills or cash checks, paying check cashing fees, waiting in line, purchasing a money order, paying late fees for bills, etc.). In other words, "it's expensive to be poor." To the underserved, time spent managing one's money can be equivalent to a part-time job; therefore, time truly equates to money. By leveraging mobile technology, consumers can open and improve their regular access to financial accounts, freeing up valuable time and, hopefully, reducing fees.

Lew Goodwin, from Green Dot Bank, explained how his business is designed for the underserved consumer segment, including the digital natives—consumers who have grown up with mobile phones. Green Dot Bank offers both a prepaid card product as well as a mobile bank with a fully functioning Demand Deposit Account (DDA) (minus the paper checks) called GoBank.⁴ GoBank offers several attractive features to customers such as allowing them to set their own monthly account fees based on what they believe to be the value of the account and not allowing overdrafts, thus avoiding overdraft fees. To minimize the possibility of a customer overdrawing his account, GoBank only supports online⁵ transactions and requires a customer to replenish his GoBank account before using it. GoBank recognizes that the underserved consumer tends to live paycheck to paycheck and offers these features to help him better manage his funds and encourage savings.

Prepaid and the Underserved

The role of prepaid products in meeting the financial needs of the underserved was a prominent component of the morning panel discussion. One barrier raised was that prepaid cards/accounts are associated with disposability or the tendency for consumers to use a prepaid product one time or for one specific purpose and then discard it. Developing prepaid products for a mobile phone may enhance the value proposition and counteract the connection to disposability. While some prepaid products may offer the equivalent of a bank account with the broad range of functionalities, better consumer education is needed to show consumers the value beyond the one-time purpose.

_

⁴ GoBank is a brand of Green Dot Bank, Member FDIC, which also operates under the brands Green Dot Bank and Bonneville Bank. Deposits under any of these trade names are deposits with a single FDIC-insured bank, Green Dot Bank, and are aggregated for deposit insurance coverage. For more information, see https://www.gobank.com/.
⁵ While consumers may physically load money to their GoBank accounts at participating local retailers, GoBank is designed to

⁵ While consumers may physically load money to their GoBank accounts at participating local retailers, GoBank is designed to support fully electronic/online payments. For example, a consumer who needs to pay a business that does not accept e-payments or that needs to give someone a check, can send those payments through GoBank by entering the necessary information and then GoBank sends a check free of charge.

The panel agreed that generally the value of using prepaid products for financial services is not well understood in the U.S. because they are complicated and have a reputation for charging high fees and offering few consumer protections.

II. Consumer Adoption Considerations for Mobile Retail Payments

The morning panel also discussed consumer adoption issues for mobile payments. According to Ed Ponte of Monitise, "Adoption can be understood based on consumer awareness and how that interest is translated into enrollment" for new mobile products and services. The business strategy for consumer adoption starts with a framework for enrollment and consumer engagement, followed by continual adjustment of the product. The product must be appealing to generate consumer awareness. It needs to have compelling features that drive both inbound and outbound consumer engagement (i.e., apps that create consumer interest and build sustainability), but consumers and merchants need to be comfortable with it. Once the product is available, it needs to be continually adjusted-features and functionality needs to be reassessed, particularly given the level and speed of innovation in the market. Adjustments are necessary to maintain competitive advantage and identify the compelling features/functionality that support continued investment. From a behavioral economics perspective, consumer marketing and decision-making related to mobile financial services are also critical considerations for generating and sustaining consumer awareness and adoption of mobile payments. Marketing strategies need to consider the specific needs and financial pain points of the consumer segments being targeted because low income and more affluent consumers have distinct financial needs, which result in very different financial decisions and spending behaviors.

Consumer Awareness and Adjustment

Lew Goodwin explained Green Dot's approach to building consumer awareness for its prepaid product. Because Green Dot did not start out as a bank, the company formed extensive partnerships with the retail community to have its prepaid cards displayed on J-hooks⁶ in over 80,000 retail locations. Consumers could then load and reload the cards at the retail point of sale—the first touch-point with the consumer and a critical component to driving consumer awareness. Word of mouth has also factored strongly into building consumer awareness for its prepaid product.

_

⁶ According to Management Ventures, Inc., *Retail Standards & Terms*, a J-hook is so-called because of its J shape. Usually it is placed on a shelf used for merchandising impulse products. Retrieved from www.kantarretailiq.com.

Once a customer activates their prepaid card online, Green Dot performs the Know Your Customer⁷ verification which helps the company to understand how the consumer prefers to be contacted. The prepaid card is useable only upon a consumer passing the verification process and it then becomes a fully functional card.⁸ Green Dot's prepaid also has a mobile account management component (e.g., balance alerts, transaction history, etc.). Customers can begin using the mobile and online features immediately upon registering their card. Green Dot sees this as an alternative option to having a consumer wait for a debit card to arrive in the mail from a branch bank and to begin using their card immediately and preferably from their phone.

Green Dot continually reevaluates the best ways to reach the customer and make the product features and fees fully transparent and easy to use, while GoBank continues to explore the most effective ways, to reach its target customer base (i.e., digital natives), including social media channels.

Jennifer Tescher, from the Center for Financial Services Innovation (CFSI), explained how TIO Networks⁹ builds consumer awareness in the bill payment space. TIO works with a community of billers to spread the word about its kiosk-based network of bill payment machines for consumers who use cash to pay their bills. TIO recently transitioned to mobile bill pay and leveraged the biller community to generate awareness.

Dan Schulman, from American Express, emphasized the importance of packaging for consumer awareness, noting that if the product looks like a gift card, then it looks disposable. For Bluebird,[®] an alternative to checking and debit accounts, American Express created a box that resembles software packaging in order to position the product as an application rather than a plastic card.

Consumer Marketing and Decision-making

The panel moved on to discuss how mobile products are marketed to consumers and how the above factors may influence consumer decision-making.

Michael Norton, professor of business administration at Harvard University, noted that most consumer marketing efforts, particularly for financial services and/or products, differ between low income and more

⁷ **Know Your Customer** (**KYC**) refers to due diligence activities that financial institutions and other regulated companies must perform to ascertain relevant information from their clients for the purpose of doing business with them. KYC rules are derived from the USA PATRIOT Act Customer Identification Program for financial institutions, which sets out rules and regulations requiring financial institutions to thoroughly and properly identify, verify, and authenticate new customers opening accounts, in order to better keep tabs on the money flowing in and out of America's banks and financial institutions.

⁸ If the consumer does not pass the verification process or supply their Social Security Number, then the card becomes a spend down card with no reload ability or cash access.

⁹ For more information, see http://www.tionetworks.com/.

affluent consumers. Marketing to low income consumers is often aimed at helping them avoid or manage bad events (e.g., debt, foreclosure, debt collection activities, and bankruptcy). Advertisements to more affluent consumers tend to encourage positive events, such as future planning for retirement and travel, replete with pleasant images of retirement homes, exotic locations, and time spent with grandchildren. In effect, advertisements that target low income consumers lack inspirational messaging and long-term opportunities. Norton recommended that advertising and marketing strategies directed at low income consumers shift their direction from fear-based messages to messages that balance the fear aspects with aspirational opportunities, including a longer-term vision beyond the immediate future.

The panelists also discussed how lower income consumers and the more affluent population, tend to make different decisions relative to payment choice (i.e., cash vs. credit vs. debit card). Without a good understanding of the consequences, a switch in behavior from cash to credit can cause more problems and make it more difficult to recover (i.e., debt). According to Norton, "We need to encourage consumers to make better decisions when we introduce new mediums/interventions, such as mobile, because the medium in which you make decisions impacts your decision-making process." If used appropriately, the mobile medium ultimately can help consumers maximize their preferences over time.

Tescher noted the importance of marketing products to the underserved for a specific purpose rather than general use. Consumers may be less likely to adopt a product that does not clearly address a particular pain point or solve real problems for them. Once consumers realize the value of a product for a specific purpose, or that it solves a particular problem, there are opportunities to expand its functionality, solve more problems, and deepen engagement.

Consumer awareness is essential in fostering adoption of new mobile products and services. Therefore, marketing messages, product packaging, and product positioning are critical elements to help consumers recognize the utility and relevance of the product features. However, to meet consumers' changing needs and remain relevant, products should be continually adjusted. While awareness can motivate consumers to try new mobile products once, creating long-term changes in behavior and building sustainability must be fostered through everyday use (habituation) and experiences associated with such products.

III. Achieving Scale in Mobile Payments Through Consumer Habituation and Experience

In the afternoon session, panelists shared their respective views on the importance of consumer spending habits and experiential contexts in achieving broad scale adoption of mobile payments. The panelists represented a mobile platform provider, a retailer, a mobile wallet provider, academia, and a transit authority.

Achieving scale for a new product is contingent on a number of factors, such as the intended consumer (e.g., coffee drinkers, transit riders, low income, Gen Y, etc.), the product value proposition, product positioning, ease of implementation, interoperability, and the level of scale desired by the stakeholder (e.g., micro vs. macro). Other critical factors that help increase adoption and achieve scale include consumer habituation and experience. The panelists referenced the Starbucks mobile payments app as an example of a mobile product that has successfully achieved scale, with mobile payments now representing approximately 10 percent of Starbucks' in-store payment transaction volume in the U.S. ¹⁰ Panelists cited Uber, ¹¹ a mobile car service app, as an example of consumer habituation driven by consistent, positive experiences. Uber has leveraged habituation to drive scale and adoption by masking the payment aspect of the transaction for the consumer, as the service is prepaid automatically through the mobile app, and creates a convenient method to request the car service.

Andrew Boch, from LevelUp, explained how his company, a QR code-based mobile payments platform provider, views scale from a micro-level. The LevelUp business model is based on tying rewards to purchases made at small, local businesses. LevelUp customizes its platform for each business implementation. This customization underlies how it evaluates merchant success and scale. For each merchant, LevelUp measures how its mobile payment platform performs relative to other payment methods (e.g., Visa, MasterCard, and AmEx). Boch explained that for one of its customers, SweetGreen, LevelUp represents 30 percent of total transaction volume, which is its measurement for gauging progress towards scale.

Each mobile payments stakeholder defines how it creates consumer spending habits differently. For example, Spencer White, from Isis, ¹³ an NFC-based mobile wallet provider, discussed the importance of driving habituation without ubiquity, or driving everyday habitual spends (e.g., public transit riders/fares). Once mobile payment adopters realize greater everyday habitual spends, they will be more likely to begin to use the payment method in other commerce venues, such as merchants.

_

¹⁰ See http://www.finextra.com/blogs/fullblog.aspx?blogid=8245.

¹¹ Uber is a mobile taxi-hailing app (and mobile website) that connects passengers with vehicles for hire. Launched in 2010 in San Francisco, Uber enables smartphone users to locate and request taxis with GPS. Customers enroll in the service and link credit/debit cards to their Uber accounts. For more information, see https://www.uber.com/.

credit/debit cards to their Uber accounts. For more information, see https://www.uber.com/.

12 SweetGreen is a restaurant that offers healthy, organic and locally grown food. For more information, see http://sweetgreen.com/.

¹³ Isis is a joint-venture between AT&T, T-Mobile, Verizon with participation by Discover, Wells Fargo, Barclaycard, AmEx, and MasterCard that uses a SIM-based secure element in the mobile device for NFC contactless mobile payments. Isis allows consumers to pay for purchases or transit (in UT) by tapping their NFC-enabled phones at the POS terminal. The wallet holds credit and loyalty cards, organizes offers, deals, and promotions, and shows card balances and recent purchases. For more information, see https://www.paywithisis.com/.

Kate Jaspon, from Dunkin' Brands, added that for Dunkin' Donuts, "nothing is more habitual than coffee," and emphasized three factors that will drive consumers to use a mobile wallet: "convenience, the delivery of value (i.e., rewards), and speed." The Dunkin' Brands business model is based on loyalty and measures success in achieving scale in terms of how its mobile app drives increased sales and efficiencies in its franchises. Dunkin' tracks the number of downloads of its mobile app, which when used by its customers, also allows Dunkin' to gather valuable information about frequent users, such as the millennial segment. By better understanding its customers, Dunkin' can deliver better value and create goals for generating more growth.

David Leininger, from Dallas Area Rapid Transit (DART) Authority, explained how the DART mobile ticketing app provides consumers with a better experience for a habitual spend–paying for transit fare. Consumers seek easy access and minimization of pain points. DART's app responds to these needs by enabling customers to purchase tickets in advance for multiple modes of transportation, thereby avoiding lines at ticketing kiosks. For ease of access, the mobile app provides fare collection across all three regional transit agencies, creating interoperability efficiencies and convenience to both transit operators and consumers. The early success of the DART mobile app 14 can be partly attributed to awareness generated through print media (e.g., brochures, posters) and marketing events (e.g., state fairs, museums, and games) for consumers and transit operators. DART's long-term success hinges on its successful collaboration efforts, not only in working with other transit authorities, but also in partnering with businesses such as museums, zoos, and other local attractions to provide consumers with greater opportunities to use their mobile app and expand the mobile experience.

Meera Venkatraman, professor of marketing at Suffolk University, emphasized the importance of product positioning when considering scale. She explained the need for marketers to consider how consumers will react to change with the introduction of new products. Venkatraman underscored earlier comments about the need to "start small and start specific" because adoption can be hindered by complicated messaging and excessive marketing of benefits and lead to consumer confusion. Consumers are more likely to adopt new and radical products when they recognize a clear value proposition and purpose that is an improvement over the current product. Hence, marketers tend to be overly optimistic when launching a new product; whereas, consumers tend to overvalue existing products.

Several panelists agreed that it is critical for a new mobile product to make a positive first impression, and therefore, a product should be launched only after it has been fully developed. Jaspon explained, "If you

⁻

¹⁴ DART's mobile ticketing app was launched in October 2013 and exceeded 50,000 downloads within the first two months of the launch and total sales of \$235,000 in the first month. For more information, see http://www.dart.org/.

do something wrong, customers are not likely to forgive you." Leininger reiterated the importance of continually adjusting and improving a mobile payment app to ensure continued use by consumers. Once consumers realize the benefits and value of using mobile payments for everyday spends and enjoy a better commerce experience, they will be motivated to become more frequent users and expand their use to additional venues, according to the panelists.

IV. The Transformational Role of Mobile Technology for Financial Services

The next discussion underscored the opportunities that mobile technology presents for transforming financial services, beginning with the potential that digital wallets have for helping to solve larger societal problems such as financial inclusion, encouraging more saving among consumers, and providing enhanced security.

Initially conceived as a way to facilitate commerce and attract consumers to retail locations with customized offers and tailored marketing, the digital wallet has evolved to encompass a broad range of financial services based on multiple underlying technology platforms—NFC, cloud, or QR code-based. The general consensus is that this diverse set of digital wallet technology offerings will continue to coexist until consumers and retailers decide which business model will dominate the market.

Schulman explained that the future of digital wallets will depend on the ability to solve real consumer pain points, not on the underlying technology. But industry stakeholders will need to work collaboratively to identify the pain points that digital wallets can solve. Schulman added that merchants need an agnostic POS platform to enable broad acceptance, and that a mobile app can offer a flexible solution because it requires minimal change to the POS infrastructure.

The customization and personalization that mobile technology affords has also led to the transformation of digital wallets into mobile money management tools that can enhance the range of financial services to consumers and influence better financial decisions and savings. For example, consumers can use their mobile phones to check their account balances multiple times per day to determine if they have sufficient funds to make a purchase. Mobile phone solutions can help improve access to bank accounts and other financial services products, as traditional bank accounts may not be suitable for every consumer. Mobile solutions can also help small businesses manage their finances and increase engagement with their customers through data analytics and two-way communications.

Mobile solutions are often discussed in the context of mobile payments without consideration for the opportunities they present for consumers to save, a capacity largely underutilized by the U.S. consumer

population and a huge priority for the U.S. Treasury. Schulman explained how the notion of software in the mobile phone offers the capability for consumers to automatically save money. For example, the Bluebird® product from American Express offers a Reserve account designed to encourage savings. Thirty-six percent of consumers who have created a Reserve account are putting money into it on a recurring basis. Green Dot's GoBank offers a similar aspirational savings tool that enables customers to set aside funds from their normal spending plan. Melissa Koide, from the U.S. Department of the Treasury, emphasized the need to show that U.S. consumers have an appetite for these types of services—prepaid accounts that have savings functionality—because from a regulatory perspective, it is difficult to recognize these savings functionalities in the context of traditional banking.

Norton added that "research shows that getting people to save is really difficult." However, on a local level small interventions can have a huge difference. Providing tools to consumers can show them how to spend less and/or divert some money for future benefits (e.g., tools that show consumers how much they typically spend on daily coffee and their annual spend and how that money could be better used). This is another area where software can be introduced to help consumers automatically assess spending habits and potentially influence their spending decisions and divert funds to savings.

Finally, mobile technology has a significant opportunity to increase trust and security in mobile financial services. Confidence in the security and fraud/risk management controls is crucial for the right consumer experience. Mobile offers a number of safeguards over the traditional payment card, such as location-based services, device ID, and other functionalities inherent in the phone that can enhance security. Panelists noted how banks and leading non-bank providers continue to be at the top of the consumer trust chain in various industry studies, yet in many surveys consumers continue to rank security as their top concern for using mobile for financial services.

V. Conclusions

Although mobile payments adoption in the U.S. remains slow, panelists were optimistic about the potential for growth among retailers and transit—where consumers regularly spend money. Incremental growth in mobile payment use, through mobile apps or mobile wallets, will eventually lead to greater use.

Stakeholders must recognize from the outset what makes mobile different for the consumer, such as the potential for customization and personalization. This approach has been relatively successful in beginning to address financial pain points of the underserved through various mobile offerings, including mobile prepaid products. However, prepaid products require further consumer education and understanding in the U.S., as they are currently associated with high fees, weak consumer protections, and

disposability (i.e., one-time use). Better consumer education could help to convey the broad range of prepaid purposes and benefits. How to provide education is also a challenge, since there is often little direct human interaction between the solution provider and the consumer when provisioning the financial services application.

Identifying financial pain points for the general population has been an even greater challenge, explaining why many in the industry believe mobile payments adoption has been slow. Realizing greater scale in mobile payment adoption in the U.S. will require a change in consumer behavior that will have to solve specific consumer pain points and offer enhanced convenience and speed over existing payment methods. Mobile stakeholders recognize that achieving scale is an incremental process, so they are focused on encouraging consumers to use their mobile phones to make every day, habitual spends to pay for typical daily, low value purchases like coffee, transit, or food. To enhance the consumer value proposition, mobile payments should aim to improve the experience connected to the purchase, whether that involves ordering ahead, confirming product availability, offering rewards and coupons, or personalizing the purchase event. The future of mobile payments adoption should also focus on building adoption with the digital native, or those consumers who have grown up with mobile (i.e., millennials).

Appendix I

Moderators and Panelists

MODERATORS

Cynthia Merritt Jenkins, Senior Director, National Automated Clearing House Association (NACHA)

NACHA manages the development, administration, and governance of the ACH Network. The ACH Network provides a safe, secure, and reliable network for direct account-to-account consumer, business, and government payments. Annually, it facilitates billions of Direct Deposit via ACH and Direct Payment via ACH transactions. Used by all types of financial institutions, the ACH Network is governed by the fair and equitable *NACHA Operating Rules*, which guide risk management and create payment certainty for all participants. As a not-for-profit association, NACHA represents more than 10,000 financial institutions via 17 regional payments associations and direct membership. Through its industry councils and forums, NACHA brings together payments system stakeholders to foster dialogue and innovation to strengthen the ACH Network. http://www.nacha.org.

Ed Ponte, Senior Vice President, Strategic Services & Technical Sales, Monitise

Monitise is a world leader in Mobile Money–banking, paying and buying with a mobile device. Leading banks, payments companies, retailers and mobile networks utilize Monitise's technology platforms and services to securely connect people with their money. Already over 24 million consumers benefit from our patented technology to 'bank anywhere', 'pay anyone' and 'buy anything' accounting for over \$50 billion of payments, purchases and transfers annually. www.monitise.com.

PANELISTS

Melissa Koide, Deputy Assistant Secretary, Office of Consumer Policy, U.S. Department of the Treasury

Treasury's mission highlights its role as the steward of U.S. economic and financial systems, and as an influential participant in the world economy. The Treasury Department is the executive agency responsible for promoting economic prosperity and ensuring the financial security of the U.S. The Department is responsible for a wide range of activities such as advising the President on economic and financial issues, encouraging sustainable economic growth, and fostering improved governance in financial institutions. The Treasury Department operates and maintains systems that are critical to the nation's financial infrastructure, such as the production of coin and currency, the disbursement of payments to the American public, revenue collection, and the borrowing of funds necessary to run the federal government. http://www.treasury.gov.

Michael Norton, Associate Professor of Business Administration, Harvard University

Michael Norton is an associate professor of business administration in the Marketing Unit and Marvin Bower Fellow at the Harvard Business School. He holds a B.A. in Psychology and English from Williams College and a Ph.D. in Psychology from Princeton University. Prior to joining HBS, Professor Norton was a Fellow at the MIT Media Lab and MIT's Sloan School of Management. He is the co-author—with Elizabeth Dunn—of the new book, <u>Happy Money: The Science of Smarter Spending</u> (Simon & Schuster).

Jennifer Tescher, President and Chief Executive Officer, Center for Financial Service Innovation

The Center for Financial Services Innovation (CFSI) is the nation's leading authority on financial services for underserved consumers. Through insights gained by producing original research; promoting cross-sector collaboration; advising organizations and companies by offering specialized consulting services; shaping public policy; and investing in nonprofit organizations and start-ups, CFSI delivers a deeply interconnected suite of services benefiting underserved consumers. Since 2004, CFSI has worked with leaders and innovators in the business, government and nonprofit sectors to transform the financial services landscape. http://www.cfsinnovation.com/.

Dan Schulman, Group President, Enterprise Growth, American Express

American Express is a global services company, providing customers with access to products, insights and experiences that enrich lives and build business success, www.americanexpress.com.

Lewis Goodwin, Chief Executive Officer, Green Dot Bank

Green Dot Corporation is a technology-centric, pro-consumer bank holding company with a mission to reinvent personal banking for the masses. The company is the largest provider of prepaid debit card products and prepaid card reloading services in the United States, as well as a leader in mobile banking with its GoBank mobile bank account offering. Green Dot Corporation products are available to consumers at more than 80,000 retailers nationwide, online and via the leading app stores. The company is headquartered in Pasadena, California with its bank subsidiary, Green Dot Bank, located in Provo, Utah. https://www.greendot.com/greendot.

Spencer White, General Manager, Isis

Isis is a joint venture between AT&T Mobility LLC, T-Mobile USA, Inc. and Verizon Wireless and is based in New York City. The venture is chartered with building Isis, a national mobile commerce venture that will fundamentally transform how people shop, pay and save. The Isis Mobile Commerce PlatformTM is available to all merchants, banks, payment networks and mobile carriers. www.paywithisis.com.

David Leininger, Chief Financial Officer, Dallas Area Rapid Transit Authority

Dallas Area Rapid Transit (DART) transports passengers around Dallas and 12 surrounding cities with modern public transit services and customer facilities tailored to make their trip fast, comfortable and economical. Its extensive network of DART Rail, Trinity Railway Express and bus services moves more than 220,000 passengers per day across our 700-square-mile service area. http://www.dart.org.

Dr. Meera Venkatraman, Professor of Marketing, Sawyer Business School, Suffolk University

The Sawyer Business School at Suffolk University is located in the heart of Boston's financial, healthcare, government and business centers. Founded in 1937, it has a mission of preparing successful leaders of global business and public service. The following degrees are offered: Bachelors of Science in Business Administration, MBA, Global MBA, Executive MBA, Online MBA, MS in Finance, MS in Accounting, MS in Taxation, Master of Public Administration, Master of Health Administration are offered. With more than 27,000 alumni, the Sawyer Business School is a global network of industry leaders. Our alumni can be found working all over the world. http://www.suffolk.edu/business/.

Kate Jaspon, Vice President, Corporate Controller & Treasurer, Dunkin' Brands

With more than 17,000 points of distribution in nearly 60 countries worldwide, Dunkin' Brands Group, Inc. is one of the world's leading franchisers of quick service restaurants serving hot and cold coffee and baked goods, as well as hard-serve ice cream. At the end of 2011, Dunkin' Brands' nearly 100 percent franchised business model included more than 10,500 Dunkin' Donuts restaurants and more than 7,000 Baskin-Robbins restaurants. For the full-year 2012, the company had franchisee-reported sales of approximately \$8.8 billion. Dunkin' Brands Group, Inc. is headquartered in Canton, Mass. http://news.dunkinbrands.com/.

Andrew Boch, Vice President, Operations, LevelUp

LevelUp is an American mobile payments platform created by Cambridge, Massachusetts-based start-up SCVNGR. The LevelUp mobile application uses QR code technology to allow for mobile transactions to be made at local businesses via iPhone and Android phone. LevelUp was initially launched in March 2011 and operated for its first 3 months as a daily deals platform. In July 2011, LevelUp shifted away from the daily deal space to focus exclusively on their mobile payments solution. https://www.thelevelup.com/.