Monetizing Payments
Exploiting Mobile Wallets and Big Data

A White Paper
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Executive Summary

The biggest challenge presented by the new reality of mobile payments is monetization; how to generate meaningful and sustainable revenue from a customer channel. This is something that very few banks fully comprehend. Of course, mobile banking is not a new phenomenon as many banks have already put a toe in the water as evidenced by the widespread availability of bank-apps that offer PC banking on a phone. But offering traditional banking capabilities is not enough, the mobile payment paradigm offers banks the chance to drive mobile commerce from the inside. By really knowing their customers and then facilitating consumer/merchant transactions to the customers’ specific needs, banks can place themselves back at the core of all payments.

Getting Up-Close and Personal

For decades, banks have been evolving from a personalized branch-centric model to more efficient and convenient online payment services. One downfall of that evolution is that they have lost touch with their customer base. And in parallel, there have been seismic shifts in customer expectations. In recent years consumers have turned to their mobile devices to deliver turnkey services that enable them to receive personal service without compromising their daily schedules. They can keep in touch with an ever-widening social network through the power of social tools – Facebook, Twitter, LinkedIn, etc., – that link them to a steady flow of information and context. Consumers expect their network to devour each update that they make, understanding their lives in new ways and keeping up with every event through a steady stream of feedback. But how does this impact their financial relationships?

The Rise of the Disintermediator

What role can banks play in this? Many have accused traditional banks for being ‘out of touch’ and ‘delivering little or no value to the consumer’ because they have lost the personal touch they were once known for. As a result, banks are now beginning to better understand the realities associated with real-time customer service – and are scrambling to deliver services that match this reality. The questions raised in this survey indicate how positive they will be in tackling them. New competitors are appearing that offer more attractive payment alternatives to customers, which raises concerns about comprehensive bank disintermediation. The rise of PayPal, Google, Square and many others across the globe is credited to their ability to simplify the commerce process and mesh customers’ social networks with the merchant experience – making it faster and more personalized for the consumer.

Intimacy Issues

Banks have struggled with customer intimacy issues, mostly brought on by business streamlining. Having slowly migrated away from an autonomous local branch presence where decisions were based on branch staff intelligence, to a centralized model with decision-making based on now limited customer
interactions, there has been a separation from the customer. While the transactional environment was put in place to support e-banking and smarter ATMs, the engagement component was neglected to expedite transaction efficiency, thus losing invaluable intelligence information and customer context. The problem is evident – how do banks regain the trust of their customers without returning to a manpower-heavy infrastructure that they no longer have resources for and the customer no longer has time for?

**Mobility — Context — Big Data — Value**

Moving beyond merely processing payments, banks must realign themselves to the core of transactions as the facilitators of commerce. It is time to understand the customer in order to offer the appropriate service at the right time in the right context. Customers are worth more than their cash balance and not all transactions use bank account transfers; the new currency is ‘value’. The value is in the Virtual Account. This holds multiple customer value elements and is seen as a ‘super-wallet’, consolidating customers’ cash balances, merchant vouchers, loyalty and coupons, with multiple mobile wallets, alongside PayPal, Google Wallet and many others - and all fully bank branded.

**Loyalty Recommended**

By taking a customer-centric approach to payments using the appropriate tools to offer extended services, banks can leverage their extensive customer base to reclaim the central role in all aspects of commerce. Banks are in a unique position to truly understand their customers’ needs beyond the mechanics of simply reconciling incoming payment transactions – because they own so much data on their customer base. Only when armed with deep customer insight can banks truly flex their commercial muscle by bringing customers directly to merchants through exquisitely targeted recommendations - for a cut of the action (with the acting bank as an intelligent type of Groupon Plus). These new revenue streams can be realized when banks close the loop by enabling flexible and open payment fulfilment with multiple value currencies. Banks are also well positioned to operate loyalty schemes as a managed service on behalf of small and medium sized merchants without their own capability.

**Branch Manager 2.0**

Central to this vision of reinvigorated banking services is a need to understand the customer. Banks are poised for success here as no other competitive intermediary or wallet provider has as much high-quality customer data as the bank. The only question is whether banks can organize and act on this knowledge, as well as aggregate and make effective use of customer data from multiple sources.

Using Big Data to analyse and better understand customers allows banks to capitalize on rule-
based real-time data processing. Through partnerships with dedicated, specialist companies with the proper tools and interfaces, banks can make the most of exabytes of data flowing into servers with intelligence on all their customers. This becomes the digital version of a branch manager, a type of Branch Manager 2.0, learning what goes on in the life of a customer and allowing the bank to make value-added decisions and recommendations for every unique person in their database.

**Keeping the Customer Satisfied**

By further embracing a mobile payments strategy, banks can add significant value through innovative product offerings. Customer acquisition rates rise in parallel with service level increases. But exploiting the diverse customer intelligence readily available to banks takes them to the next level as commerce facilitators. Providing evidence-based advice and recommendations on merchant offerings based on product, demographic, location and lifestyle results in more sales, more loyalty and more repeat customers.

In addition to generating new revenue streams for banks through potential click-fees and hosting loyalty programs, the adoption of virtual bank accounts offers additional revenue on top of the traditional credit/debit card interchange fees, or their replacement if the regulators persist in pressuring the traditional card revenue model. Merchants are incentivized to encourage customers to pay in the most efficient manner, or combine virtual value with cash to reduce fees.

Most banks have been slow to realize the potential of mobile payment services and the necessity of managing customer value. The brave new world of banking is about understanding the customer and producing the right offer at right time to right customer. A bank that thrives in the new reality, (re)engages with its customers by becoming the key custodian of all value transactions, and empowers customers with payment mechanisms appropriate to their role, location and context as digital and virtual payments converge will be the real winners in the customer acquisition and retention battle.
Background

The survey ran earlier in 2013 and was completed by a diverse mix of 183 bankers in all regions of the world. Over half of the respondents work for independent country organizations within major multinational banks, and three-quarters of respondents coming from large banks with more than 2,500 employees. Nearly 70% are employed in a commercial function.

Those who responded ranged from C-level executives to business development, IT and marketing strategy management – with a nearly even split between national and international banks.
Section 1: Mobile Wallet Technology and Bank Understanding

Banks today believe that they fully understand where and how wallets fit in the total mobile banking landscape

The term ‘mobile wallet’ is both a precise tool definition and an enigma wrapped up in a mystery representing a pipe to deliver Near Field Communications (NFC) card payments, or a unique interface for financial services delivery and a myriad of other couponing and daily deal offers; or even a secure space to store banking credentials, yet banks around the world seem to think that they have a good handle on them and what they do. Over 80% of respondents gave a positive answer when asked if they knew and understood the mobile wallet. But what precisely do they understand? Since the 2001 publication of their Guidelines for Mobile Payments, MasterCard have been adamant that the mobile wallet is a home for the next evolution of card payments. PayPal vehemently disagrees – surely the mobile wallet is a place where deported, non-bank accounts can be accessed and used to pay merchants and receive payments from businesses and friends alike. But these are exactly what they are called: wallets, a store for value. Apple is yet another dissenter to the MasterCard mantra, for them the mobile wallet is the Passbook, a unique holder for countless consumer credentials and a unique channel for the delivery of coupons and lifestyle offers. Regardless of your viewpoint – and there are many – what is positive to see in the banking world is that there is an appreciation at the broadest level that the mobile world is more than a channel, but how will this manifest itself in future financial offers?

A decent majority of banks, 62%, feel that the market of mobile wallets holds a unique opportunity for them to offer a bank-centric solution – despite the current rush for VC organizations and payment schemes to buy into non-bank proposals on a near-weekly basis. However, this has become an exciting time for mobile wallets – with a constant flow of significant launches such as Kaching, Isis, Pingit and QuickTap – reflected directly by the increased understanding of the underlying wallet concept in both the Americas and Europe.
Banks believe that even with so many mobile wallet initiatives, space remains for bank centric wallets

However, despite all of these live pilots, Banks, on the whole, believe that there is still space in the market for bank centric wallets. Indeed, on a global basis, only a third believe that the market is already over-crowded.

However, within the Asia-Pacific region there is clear belief that the market is already reaching a point where Banks may have missed the boat for their own wallets. This could be due to the greater maturity in mobile payment technology within this region, with initiatives such as FeliCa in Japan and South Korea’s Cashbee, but also a reflection of the differing payment environments where Issuer-Acquirers are in the majority and many transactions ‘on-us’.
Rather than a scheme based wallet that resides on the mobile phone device, banks would prefer a bank centric wallet that resides in the secure infrastructure of the bank and is accessible through any channel.

Banking wisdom traditionally runs thus – if the bank has control over the infrastructure, it has control over the risk. If the bank has control over the risk, it can price that risk and deliver good ROI – although recent events in the banking world have shown this no longer to be 100% true, even if 60% of respondents believe it so. Additionally, the way that the e- and m- channels function is at odds with this model. Take Facebook as an example, now over 1 billion users and a founder that was catapulted high into the rich list when he sold part of his stake. Facebook is now a heavily monetized platform generating considerable returns, but it was not the founder that began this process, it was third party service providers such as Zynga that used the platform as a basis for financial return. However, Facebook has been dogged by security and privacy issues since its inception, which are generally areas where banks fear to tread and which also make the new media model not fit for banking. So which will change? Will banks use new media in the new media way, or bend it to meet their own needs? At the moment it looks like the latter; the banking industry has survived centuries of change and with capital investments in start-ups rising again, particularly mobile money, it seems they will influence the new media using old money.
Many banks are looking to capture and be the custodian of all of their customers’ value: real (money) and virtual (coupons, miles, etc.)

As a bank, we would like to capture and be the custodian of all of our customers' value: real (money) and virtual (coupons, miles, etc.)

With Bitcoin currently trading at $331 and their iPhone app the hottest download in both Spain and Cyprus, it is easy to picture a world where traditional Government currencies are not the only storage medium for consumer value. Indeed with tax bodies around the world ensuring that frequent business fliers do not get benefit in kind from miles without taxation, there could be strong advantage gained by banks that see themselves as stores of value rather than currency for consumers. They have been filling this role for centuries as holders of gold, gems, securities, bonds and an array of private papers. While over half of banks worldwide are keen to be a digital custodian, why are they not yet carrying their history into the new digital world? The only rational reason is that they have not yet found the tools to facilitate this, or perhaps are waiting for the shakedown once the current innovation blitz is over – the danger of course, is that the blitz does not come to an end any time soon and while they are waiting, new media demons are stealing their prized position as trusted custodians. With many of these competitors originating in the US, it seems that banks in that market are feeling the pressure more than in other regions.

1. Price at time of publication as listed on MT.Gox
Banks believe that they can add value beyond the transaction by making relevant commercial offers (bank and other) through a mobile wallet at the point of sale.

The cards payment world has long sought to solve the problem of delivering vouchers and offers through the payment medium directly at the point of sale. The much-maligned Mondex program was one of the first major commercial attempts to solve this problem by using additional space on the chip to load electronic vouchers. However, where the chip-based solutions failed to gain traction was in the area of customer visibility – there was no ready means, at the point of purchase, for a customer to view and value the offers. Mobile brings a new dimension to this, solving the visibility issue and coupled with geo-location and data connectivity, creating an ecosystem ideal for added value delivery. Again non-Bank solutions are taking the lead in this space, particularly Apple’s Passbook, which is now available on Android devices as well, ensuring strong market penetration, with many leading merchants supporting the open standard and acceptance appearing through services such as Square.
Section 2: The Mobile Wallet Business Case

A bank-friendly wallet, in a trusted environment that people know already, will be preferred by our clients over another industry solution

Over 80% of survey respondents believe that the natural home for mobile wallet is within the trusted banking environment. Indeed recent surveys\(^2\) suggest that the public are beginning to feel this way too. While hailed as a technological success and proof of the wallet concept, Google Wallet was not met with huge enthusiasm by consumers and prompted a rethink of the product, and a refocus on highlighting the payment brands behind the wallet – alongside the launch of a Google card to supplement the wallet at points of sale where the mobile cannot interact. And this indicates the primary issue with wallets designed around non-banking environments, it is hard to break the chicken-and-egg cycle of acceptance over issuance – payments is not a field of dreams, it is not necessarily because you build it that they will come. What is important to note is that ‘bank-friendly’ does not equate to ‘bank-owned’, just merely the fact that strong links into the banking system have been shown to add trust to a payment system and allow wallet owners access to the important current account balances.

\(^2\) Finextra, 13 March 2013 ‘Telco’s losing mind-share in mobile wallet race’
Banks would also like to target SME and Corporate customers with a wallet scheme

While the consumer market brings the headlines, the majority of electronic payment transactions are actually in the corporate space. In Europe, where 80% of transaction volume remains in cash, nearly 80% of transaction value is transferred using credit transfer mechanisms including SEPA credit transfers, RTGS systems and payments through the SWIFT network. Yet few attempts in the mobile space so far look to capitalize on this traffic, aiding Corporate Treasurers to have a global view on Company accounts or to authorize payments while away from their desk. In the always-on world of global trade, it can be mission critical to make financial movements at specific times – and clearly the banking world is beginning to recognize the importance of this. Even in SMEs where a single executive will typically control all of the financial transactions, mobile access to services and fingertip control can bring real value. It is clear that banks across all regions are pondering about value add schemes for corporate and SME customers.

3 Figures extrapolated from ECB Statistical Data warehouse (www.ecb.europa.eu)
Co-opetition is not for everyone with only 2 in 5 of banks committing to co-operate with open industry wallet initiatives

While 80% of banks generally agree that they will co-operate with open industry wallet initiatives, only 40% seem to be committed to this route. It is not hard to see why this large pool of tacit agreement appears with as yet few open industry initiatives reaching the stage where they can be easily implemented. Initiatives such as ISIS require new SIM cards to be deployed, Barclays Pingit avoids the secure element but bring a complex registration process, and the much-adorned M-PESA fits only into certain niche markets due to technical and security limitations. So while banks seem to be looking for open initiatives, it seems that as yet industry is unable to deliver.

2013 will see two-thirds of banks deploying a bank centric wallet

While the wait continues for open industry standards, it seems that Banks will seek to combat incoming players by launching independent bank-centric wallets. Already since this survey closed there have been numerous high profile launches. With solutions ranging from SMS messaging through QR codes
and RFID wristbands linked to a mobile app\textsuperscript{4} the diversity of delivery is both exciting and confusing for the consumer. But truly all of this experimentation may help to speed up development of bank centric mobile projects.

Three-quarters of banks are interested in becoming a ‘Super Groupon’ of sorts and facilitating commerce between merchants and clients

Opening a more personal channel with your client such as a bank-centric wallet will also present new opportunities for banks to get more involved in the end-to-end process of commerce. Given the high percentage looking at deploying wallets independently in the coming 12 months, the business case for each will need to be justified, and bringing offers that stimulate increased payments could be the value needed to get these projects going. With existing players in this market, such as getpointpal.com and Starbucks, there is plenty of scope for collaboration, but the real value in these types of offers comes from getting to know more about your customer – and for that banks will need to re-engage with them and leverage their Big Data.

\textsuperscript{4} Disney launches MyMagic+ payments for resorts in Florida.
Section 3: Getting to Grips with Big Data

One-to-one targeting and personalized product offers is (or will be) an important business driver for bank’s Big Data initiatives

On 7th March 2013 there was a watershed in Big Data thinking for banks. Barclays CEO, Antony Jenkins, predicted the on-going demise of his Bank’s branch network going forward, and that before the decade was over they would have shed as many as 40,000 of their 140,000 staff – primarily from the branches. With face-to-face interactivity today the major way of understanding client behavior and financial personality, it is clear that Jenkins was also signalling the intent of Barclays to understand its clients through different methods – invariably through their continued use of Big Data and social channels. Clearly Jenkins is not alone, a convincing 90% of survey respondents see Big Data initiatives being driven by the need to create targeted and personalized offers for their clients.

However, deriving benefit from Big Data is more than just an IT problem, it requires a major cultural shift within an organization and undoing of decades of siloed departmental growth. In short, to achieve the expectations of Jenkins, Banks like Barclays will have to rethink themselves from the customer up.
Nearly three-quarters of banks do not have the right resources in place to gain value from Big Data

Of course intention to rebuild and leverage Big Data is all well and good, but what is clear from the survey respondents is that today they lack resources. The reason for this is simple – managing Big Data and getting the most from it is a new science and specialists are still few and far between. Even more rare are those with specific experience in the banking world. Many banks already active in this area are working with the latest breed of service providers – Big Data specialists – organizations with the tools of the trade allowing them to process the exabytes in real-time and apply the creative mechanisms that generate insights.

There is strong realization that blending banking data with social media data will bring business value
In order to deliver the intended personalized offers on a one-to-one basis, banks realize that they need to better understand their customers, like branch managers of old used to understand their customers. In a world where community is no longer about proximity, but affinity, this knowledge cannot come from a face-to-face relationship. It needs to be hunted from its hiding places in transactional data, related accounts, and social activity. In our social data we reveal more about ourselves than we could ever realize – from buying habits and hobbies to charitable and political leanings. This post-modern digital history supplies perhaps the best tool that a Bank could wish for – the ability to ‘see’ your past as well as potential future life, and assess your risk profile from more than just a repayment history perspective. The aim is also to generate greater customer stickiness and loyalty leading to reduced churn rates and increased deposits and transactions. Are there new services that you will need in the near future – a savings account for the child you are expecting in 5 months’ time, or finance for that vintage Mercedes you have been hunting on eBay?

Big Data will drive transactional banking from batch processing to real-time

In order to gain value from Big Data, we need real time analysis of the data instead of batch mode*

Bankers already feel the pressure for immediacy, with real-time payments systems moving down the value chain from high value to high volume in a number of markets, such as the UK’s Faster Payments and Australia’s RTP initiative, but quicker settlement is not the only driver. No one doubts that large volumes of customer data are managed within banking operations, but the information is dissipated across different departmental silos, often duplicated and of inconsistent quality. The first crucial step toward real-time Big Data is to fix the data itself to fully understand the customer. Only then can banks rethink how offers and propositions are made in order to better satisfy customers and increase business.

With their Big Data in order, engaging customers on a one-to-one basis through technology will enable banks to act and react with improved customer service, encourage loyalty and increase the bottom line.
Banks fear the potential privacy issues associated with Big Data — more so in Europe than any other region

After five years of intense regulatory scrutiny following the global financial crisis, it is clear that banks do not feel inclined to get on the bad side of privacy regulators as well. The battle over SWIFT data between the EU and US in 2010 showed how sensitive the issue can be, and also demonstrated how business pressure can sometimes cloud the issue of how banks treat privacy.

However, as trusted custodians, banks can opt to turn the privacy argument on its head. EU law states that a consumer can demand to see any data about them held by a private company – with similar laws in force around the world. A bank with a pro-active Big Data program could potentially make gathered data visible to its customers and provide them with tools and tips on how to close down potentially damaging streams. Taking this approach, similar to the current trend for assessing risky drivers with telematics to give them better premiums, a bank could offer better rates on credit cards to customers that clean up their online presence and reduce risk of identity fraud – or similarly give them access to their credit profile and provide them with products that will improve their credit score. By tackling the privacy issue head on, pro-active banks could delight the regulators rather than challenge them and in doing so deliver valuable Big Data-driven services to their customers.
Section 4: Understanding the Big Data Investment

Banks overwhelmingly agree that Big Data will drive marketing campaigns and lead to an increase in revenues

It is clear that banks ‘get’ the main reason for investing in Big Data – to drive revenue growth through the delivery of personalized services. Indeed, well over 90% of respondents believe that Big Data will help them increase their revenues, despite their admissions that they are ill-equipped to leverage it and have few of the resources needed to capitalise on it. So where will they get this revenue increase from? Some will simply buy in services from third party providers – leveraging the knowledge already existing in skilled companies to enable them to capitalize without capital. However, many banks will begin the transformation of their organizations to allow Big Data to be harmoniously integrated into existing and new systems.

With the help of Big Data we will be able to implement better one-to-one marketing campaigns to increase our top line revenues*

As you can see, these approaches will capture some of the revenue growth expectations; use of third party providers delivers in the short term and a transformation approach drives long-term gains in Big Data and greater efficiency rewards.

Ninety percent of banks believe that a bank-friendly portal will be the meeting point for commercial offers and financial information

The concept of Personal Financial Management (PFM) tools or portals has been in the market since the beginning of the commercial Internet. Yahoo! launched a first mass-market attempt to capture this business back in 2001, but their foray into account aggregation was soon killed off as banks realised the risk that was created as customers handed over their banking credentials to the search provider. Even Microsoft’s successful Money product line was eventually sunset as banking security increased and banks withdrew support from the initiative. All of which means that there is a new wave of PFM coming, not from third party vendors, but driven by the banking community. And why? Because the original rational for PFM tools – to allow consumers to have a single viewpoint on their consolidated
financial position alongside relevant information tools – still has not been fulfilled. For banks to achieve this, they will need to move towards a joined-up customer approach, looking at how they provide tools, and bringing in partnerships that add value to the traditional e-banking space. From a risk perspective it has become more important that banks retain control of the customer interface, but also from a cost and revenue perspective that they develop customer intelligence by coupling transactional information with customer purchase behavior, social behaviour and search behavior. Working with merchants, the more complete picture of consumers can then be used to feed the PFM portal with rich product and commercial offers that are relevant at the time of viewing.

And why do this? An overwhelming 96% of respondents understand that the major business driver for getting a handle on Big Data is to enhance customer engagement, retention and loyalty. With major government initiatives in India, Australia, the EU and USA pushing interbank account portability for consumers and forcing banks to make it easy for customers to change providers, there is increased focus on how to stop them wanting to do just this. Some regulations have already prevented banks from using punitive (fee-based) measures to prevent account portability and so the only tool really left in the box is added value to encourage the consumer to stay. Lifestyle marketing and a wider product mix have long been the mainstays of these efforts, but by leveraging Big Data, banks can begin to move towards life event marketing, personalized products and a commercial mix that includes lifestyle aspects with daily banking interactions through third party partnerships and associations with the social world. In short, the key to customer retention is by proving that you know and understand your customer, and provide services to enhance their lives. This used to be the role of the branch, but in the future will be the role of smart systems, designed to imitate human instincts for cross-selling and built with rules and boundaries that deliver a unique offer to every customer – moving away from one-size-fits-all to core products configured in many ways.
Mobile banking solutions, based on Big Data, are the key to banks’ futures

Two-thirds of Banks will move into the mobile channel during 2013, while more than half will dip their toes into the Big Data pool during the same period. What this shows is the relative maturity of understanding and readiness of infrastructure for these two technology components. Mobile has been on the agenda of many banks since soon after the millennium, and Big Data as a concept has traditionally been seen as the playground of major merchants and web service companies with proponents such as Amazon and Google leading the way. Typically the investment cycles and sizes are also vastly different. A mobile banking application can typically cost a few hundred thousand dollars to develop and deploy, and more importantly involve small teams within a bank creating something to sit on top of existing infrastructure. It is becoming more and more clear that leveraging Big Data, is the key to future mobile apps and generally with the way in which the bank can gain a better handle on the needs and wants of their customers. It will require a shift away from the internal siloed structure of an organically grown bank. As Big Data aficionado Chris Skinner suggested in his Financial Services Club blog⁵, “If Amazon and Apple were run like a bank … they would separate customer data. They would organize themselves so that they have a book division, a music division, a film division and more, all competing against each other for share of customer wallet.” And indeed, for Banks to compete with companies already leveraging Big Data they need to begin to think more like them – put the ‘retail’ back into retail banking.

It is only a matter of time before Google and Apple move into core retail banking – either directly or through further joint ventures. After all, they both own a strong channel to the consumer; offer a number of comparative services; and Google has been the proud owner of an as-yet-to-be-exploited banking license from the Dutch regulator since 2007. If it were to apply its ‘ten things we know to be true⁶ or core business principles to the banking sector, how few banks could quickly follow? Google may have retracted a little from its Wallet product in the US, but it has a history of throwing new ideas into business spaces even if first forays fail – and frequently succeeds at the second or third attempt. Will your Bank be ready for the challenge?

5. http://www.thefinanser.co.uk
This report is the result of a survey executed by Finextra in co-operation with Clear2Pay and NGDATA.

For more information, please contact mbgaletto@ngdata.com or conny.dorrestijn@clear2pay.com.