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Executive Summary

For over ten years now, the financial services industry has been buzzing about how payments will be transformed by mobile phones. With all major research firms laying out multi-billion dollar market forecasts and predicting double digit annual growth, payments have attracted considerable attention from not only banks and financial services technology companies, but also non-financial consumer brands like Google, Apple and Amazon, to name a few. Each of them took a slightly different approach from one another, but all were focused on one thing: the payment mechanism. Consumers, however, want more than just a new payment mechanism and have been slow to adopt any of these mobile payment services.

Despite lackluster adoption of mobile payments, the future of payments and commerce will certainly be transformed by mobile. The question is whether it will transform the actual payment or the elements surrounding the payment. This paper will explore that transformation and offer a perspective on how it will evolve. By examining what consumers actually want out of the payment experience and what today's mobile payment services provide, this paper will highlight a disconnect that has hampered innovation in the mobile payments space. It will make the case for de-emphasizing the actual payment portion of the purchase experience and making it as invisible as possible to consumers. Finally, this paper will discuss the opportunities likely to arise from "invisible payments" and suggest areas ripe for future commerce innovation.

Mobile Payments Today

Consumer adoption of mobile payments has lagged analysts projections in the United States. A survey conducted by the Board of Governors of the Federal Reserve System in March 2013, found that only 15% of respondents had used mobile payments. A 2013 survey by Bain & Company put that number at only 3%.

The only significant success story is Starbucks' mobile payment program. In 2013, Starbucks announced that 11% of its US and Canadian annual sales volume was transacted via mobile. Because this is a closed-loop scheme used for products that many consumers purchase frequently, it is problematic to compare the Starbucks model to open-loop mobile payment models. Nevertheless, the success of Starbucks illustrates that when there is ubiquitous acceptance, a consistent experience, integrated loyalty and features that make usage convenient, a critical mass of consumers will adopt. The open-loop mobile payment schemes in market today lack these elements.

There are a number of technologies being used by the major mobile payment schemes, such as Near Field Communication (NFC), Host Card Emulation (HCE) and Quick Response (QR) Codes. None of these technologies are ubiquitous at the point-of-sale and this is a major factor contributing to low consumer adoption rates. Merchants have been reluctant to adopt a specific acceptance technology for mobile payments until it becomes clear which one will prevail. Widespread acceptance is only part of the challenge, however. As the next section of this paper will explain, consumers also need convenience, security and additional value to change their payment behavior. Consumers have not perceived mobile payments to meet these basic needs, and this has served to further slow adoption.



What Consumers Want From Payments

We are all consumers when it comes to payments so it's easy for us to ask ourselves, "What do I want out of my payment experience?" Some common answers to this question may be:

Acceptance - I want to be sure that my method of payment will always be accepted.

Simplicity – Payments should be convenient, frictionless and not overly complex.

Security - I want to protect my personal information so I need my payments to be secure.

Speed – The process for making a payment shouldn't hold me up.

Predictability - Payments should work the same everywhere I go, including online.

Control - I want to be able to choose how I pay and determine what communications, if any, I receive in connection with each payment.

Indeed, research into consumers' perceptions and payment needs have confirmed that many of these factors strongly influence why people choose to pay using certain methods and why they are not making mobile payments. Take security, for example. A study by Accenture from July 2014 found that 45% of survey respondents said that they do not use mobile payments because of security concerns.

Beyond the basic needs discussed above, consumers also expect any new payment method to add value over current payment methods. The same Accenture study referenced above found that 37% of those who had never made a mobile payment felt their current payment methods were just as convenient as mobile payments. Of those that had used mobile payments before, the study found that 60% of these respondents would use mobile payments more often if they could get discounts and coupons from retailers. These numbers suggest that the act of using a mobile phone to make a payment does not, on its own, provide enough value in consumers' eyes to induce them to adopt mobile payments. In other words, they don't care about how the payment happens; they care about getting added value, either in the form of increased convenience, speed or economic benefit.



Roadmap for Innovation in Mobile Payments

Because they are pre-funded, prepaid cards by their very nature offer much of the necessary functionality that is sought by those wishing to create budgets. In addition, new features of the cards, such as real-time account alerts and spending purses, provide additional benefits which both make adoption of budgeting easier and make the prepaid products more effective for those trying to budget.

Most mobile payment services launched to date have focused primarily on the payment mechanism. With research suggesting that consumers need more than just a new way to pay, there is a clear disconnect between what consumers want and what today's mobile payment services provide. Whether this is due to actual short-comings in mobile payment service offerings or consumers' perceptions of those service offerings is up for debate. What is clear is that this disconnect has yielded underwhelming usage statistics. The challenge for the industry now is to change this dynamic by focusing on how to bring convenience, simplicity and value to the mobile payment experience.

MAKING PAYMENTS INVISIBLE

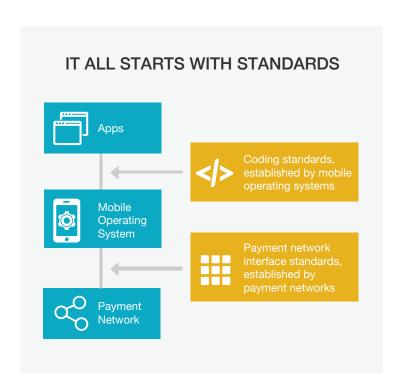
The ideal environment for driving consumer adoption and advancing other aspects of commerce starts with creating industry standards for mobile payments at a platform level. This approach involves separating the payment from the overall purchase experience by making payment a simple service that can be called according to open, defined standards. In other words, a platform level approach helps payments fade into the background and become practically invisible. An "invisible payment" would address many of the needs consumers identify as

critical for them to adopt mobile payments. It would make acceptance more wide spread and the experience predictable, while adding noticeable speed and simplicity. As this paper will discuss in the next section, it will also unlock a host of opportunities to bring true innovation to mobile payments and commerce.

What will it take to make invisible payments the new reality?

First, a technology standard must be established at the point-of-sale. Major payment networks will play the leading role in making this happen. Their position in the middle of the existing payments ecosystem coupled with a high level of trust among consumers make them the natural fit for this role. Similar to how they formed a consortium to establish standards for EMV on a global basis, they will need to coordinate once again to bring about mobile payment standards at the point-of-sale.

Second, there will need to be coordination between Apple and Google, whose operating systems power 96.5%* of all smart phones. The announcement of Apple Pay in September 2014 is a step towards platform-level payments. However, since only 42.1%** of smart phone handsets in the United States use



Apple's operating system (11.9%* globally), Apple Pay only addresses part of the market. The Android operating system, which is used by 51.9%** of handsets in the United States and 84.9%* worldwide, will need to team with Apple in order to bring consistent coding standards and payment services for app developers.

Third, investment in back end infrastructure will be required. Below, we highlight a number of opportunities surrounding the payment to improve the overall purchase experience. Many of these opportunities will require deep capabilities on the back end to mash up a variety of different data points,

such as purchase history, location, consumer-defined preferences, and information from 3rd party systems and apply this intelligence in real-time in ways that create value for consumers. This innovation can only happen if there is back end cloud infrastructure to support it.

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Finally, additional education to consumers about the security of mobile payments will be necessary. Consumers are concerned about security and their perception will not be changed by moving payments to a platform-level. However, a platform shift would present an opportunity to position payment security in a way that will ease consumer concerns. Delivering simple and consistent messages about the benefits of tokenization and stressing that payment credentials are not stored on the mobile device can help to change consumers' views.

DERIVING VALUE FROM THE PURCHASE JOURNEY

Shifting focus away from the payment itself will be a catalyst for innovation to the surrounding commerce experience. This is where the real value of mobile payments will be unlocked for consumers. When payments are invisible, innovation will be focused on the areas both preceding and following the actual execution of the payment. Payments do not occur in a vacuum with no context. Each payment is part of a purchase journey undertaken by the consumer, and it is along this journey that players in the mobile payments space, as well as app developers and other stakeholders in the commerce ecosystem, can deliver the most value to consumers.

What are the points along the purchase journey that present opportunities for delivering this value? A good place to start is, again, putting yourself in the consumers' shoes. At a high level, there are basic needs that may be on consumers' minds, both before and after a payment is transacted. These needs provide a framework for companies to identify commerce innovation opportunities.

CONSUMERS' PRE-PAYMENT NEEDS

VALUE

When making a purchase, consumers want to know that they are getting a good value. Price is a key consideration for many purchases, particularly planned purchases, and is the typical measure used to gauge value. Yet, it is not always quick and easy for consumers to find pricing information, make price comparisons and identify special offers. Making this information available and accessible in an integrated manner presents an opportunity to improve the consumer experience while potentially opening new avenues for merchants to increase basket size.

EXPERIENCE

Some consumers, depending on when and where they are shopping or what they are buying, may respond more positively to certain shopping experiences. For example, a consumer that is a frequent shopper and promoter of a particular merchant may appreciate getting VIP treatment when shopping at or near that merchant. Experience is not just about loyalty and offers, however. Fundamentally, it is also about understanding consumers' intent and providing a richer experience that anticipates their needs.

ASSURANCE OF DECISION

Helping consumers feel assured that they are making the right purchase decision is another opportunity to add value. Allowing consumers to instantly access product features, benefits, reviews and recommendations in store or online can assist them in moving to the next stage of the purchase journey. In addition, identifying related products and making product comparisons can be a tedious process for consumers. Automating these tasks would help consumers arrive at a decision more quickly while giving them confidence that they've made the best choice.

CONSUMERS' POST-PAYMENT NEEDS

COMPLEMENTARY PRODUCTS & SERVICES

After a purchase has been completed, a consumer may still have unmet needs related to their purchase. For example, they may want a service and repair plan, have the need to make additional related purchases or want updates on product availability and shipping. Identifying related products and services and presenting them at the ideal moment aids consumers while creating new revenue opportunities for companies involved in the transaction.

TRANSACTION MANAGEMENT

There are a variety of tasks related to management of a transaction that consumers may need to address. Looking for opportunities to automate or simplify these tasks is an area ripe for innovation. Some common post-payment management tasks may involve receipt management, warranty registrations, returns and exchanges, budget management and expense reporting, to name a few.

SOCIAL SHARING

Many consumers today take to social media or websites to share new product discoveries, recommend products to others, see what others are buying or comment on service experiences. Giving them an easy method to connect to their existing network and locate people with similar interests is a natural next-step in the purchase journey.

Conclusion

By putting less emphasis on the payment mechanism and more effort into making payments as invisible as possible, new opportunities for improving other aspects of consumers' commerce experiences will come into focus. These improvements will bring about the added value, convenience and speed that has been missing from current mobile payment schemes. Getting there will require collaboration among stakeholders to establish core standards for initiating mobile payments, as well as creativity to address consumers' unmet needs and pain points along the purchase journey. A number of opportunities for innovation exist both before and after a payment is initiated, and this is where the most value will be unlocked for consumers. It is only after this value is delivered and understood by consumers that widespread adoption of mobile payments and commerce can take hold.







About i2c Inc.

i2c is a global provider of highly-configurable digital banking and payments solutions. Using i2c's proprietary "building block" technology, clients can easily create and manage a comprehensive set of solutions quickly and cost-effectively. i2c delivers unparalleled flexibility, agility, security and reliability from a single global SaaS platform. Founded in 2001, and headquartered in Silicon Valley, i2c's next-generation technology supports millions of users across 216 countries and all time zones.

i2c Inc.

100 Redwood Shores Parkway, Suite 100 Redwood City, CA 94065 USA

Tel: +1 650.593.5400

Email: sales@i2cinc.com

Web: i2cinc.com