



THE RISE OF  
*SOCIAL M-PAYMENTS*



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## Executive Summary

It is difficult to dispute that mobile payments is the hottest topic in the payment card industry. Card brands, banks, merchants, and vendors are all competing to obtain market share in the increasingly competitive industry. While mobile technology is exciting it is not without some drawbacks. In the race for differentiation many vendors have pursued a strategy that largely ignores security. In addition, many of the solutions focus upon convenience for the cardholder and ignore the needs of the merchant. With smartphones nearing ubiquity and social media permeating nearly every aspect of our lives, it is inevitable that mobile technology and social media will converge. It is this convergence that ProPay has termed Social M-Payments and which represents a new way of offering mobile payments that provides value to both parties while provide confidence in the security of the data.

## The Social M-Payments Opportunity

Mobile payments represent arguably the most exciting opportunity for payment acceptance since the ecommerce boom of the late 1990's and into the early 2000's. Few would dispute that mobile payments are increasing in adoption and relevance. It is estimated that global mobile users will exceed 1.05 billion by 2014 and the gross value of mobile transactions will \$1.13 trillion by 2014 with \$288.4 billion being spent in North America alone.<sup>1</sup>

## Smart Phone Demographics

While not all mobile payment technologies require the use of a smartphone, the more advanced technologies leverage the technology inherent in the devices. Smartphones are increasing in popularity and it is estimated that by the end of 2011 Smartphones will overtake feature phones within the US. From a marketing perspective, Smartphone users represent a well defined and ideal demographic for many types of businesses. Smartphone users are young, generally more educated, and more affluent than the overall population of the US. Estimates are that 65% of Smartphone users are between the ages of 25 and 34 and that 60% of Smartphone users make over \$50,000 per year. Further, 60% of Apple iPhone users make over \$75,000 per year<sup>2</sup>. By choosing Smartphones as a platform for Social M-Payments, companies inherently have valuable marketing information on a known demographic.

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<sup>1</sup> Ie Market Research; 2010 Global and Regional Mobile Payments Market Forecast

<sup>2</sup> Nielsonwire August 2, 2010: Android Market Soars, but iPhone still most desired as Smartphones grab 25% of U.S. Mobile Market

## Social Media Usage

Leveraging social media as a component of the payment solution also provides valuable information regarding the demographic of those who are comfortable with such a solution. For example, it is estimated that roughly 65% of Facebook users make over \$50,000 per year. Looking at Facebook alone we know that the breakdown is 60% female and 40% male, 66% are at least high school graduates, 26% are college graduates and 25% of users are between the ages of 25 and 34<sup>3</sup>. This information, when used correctly, allows companies to focus their messaging and marketing efforts to the greatest effect.

## Defining Social M-Payments

While describing Zumogo for analysts and other industry professionals it became obvious that the platform's unique characteristics did not allow for an easy fit within the existing taxonomy of payment technologies. Although one of Zumogo's primary functions is to provide simple and secure payment capabilities the addition of interaction between the consumer and the business added a new twist. For this reason it was necessary to coin a new phrase to accurately describe the characteristics of solutions such as Zumogo. The concept of Social M-Payments was born of the need to accurately capture the defining characteristics of the new way of communicating and paying.

Social M-Payments can be described most easily as the convergence of the best components of social media, security, and mobile payment technology. Wikipedia has the following definition:

*"Social media are media for social interaction, using highly accessible and scalable communication techniques. Social media is the use of web-based and mobile technologies to turn communication into interactive dialogue."... "A common thread running through all definitions of social media is a blending of technology and social interaction for the co-creation of value."*

For a payment technology to be considered 'social' it must include the characteristics of social media that create value for both sets of participants (the merchant and consumer) and allow for interactive dialogue between the parties.

With the social aspect of Social M-Payments defined it is now important to understand the mobile aspect. Mobile payments are alternative methods of payments which utilize mobile

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<sup>3</sup> <http://www.flowtown.com/blog/social-media-demographics-whos-using-which-sites>

technologies such as Smartphones. In general there are four distinct types of mobile technologies:

- SMS based transactional payments
- Direct Mobile Billing
- Mobile web payments (WAP)
- Contactless NFC (Near Field Communication)

Each of the methods described above have advantages and disadvantages to both the consumer and merchant. One of the major disadvantages to each of the listed technologies is the protection of sensitive data. ProPay, through its ProtectPay tokenization service, adds another method of payment which addresses the security issue.

## The Benefits of Social M-Payments

Historically, new payment technologies or approaches have been forced upon merchants under the pretext that they will increase the number of transactions or provide greater security thereby reducing the incidence of fraud. Aside from choosing not to adopt new technologies such as NFC or EMV, merchants have had little input into the payment technologies. Unfortunately, many of the new or alternative payment technologies are created to provide some measure of value to the consumer, card brand, or bank and typically provide a limited value to the merchant. Social M-Payments, such as Zumogo, are intended to provide value to all parties. Specifically, merchants can benefit from the targeted marketing, interactive dialogue, and security provided by the solution.

## Targeted Marketing

As any business owner can attest, it costs significantly more to attract a customer than it does to retain a customer. In fact a report from Bain and Company estimates that the cost of acquiring customers can be from 6 to 7 times as much as it costs to retain a customer<sup>4</sup>. For this reason companies are always looking for new ways to market their services to the appropriate audience. Social M-Payment platforms are designed to enable companies to craft targeted marketing messages. As importantly, the marketing will be read by customers and potential customers that are in close proximity to the merchant, increasing the likelihood of conversion. The potential customer will be carrying their Smartphone, which keeps the merchant and their offers top of mind. Finally, because the marketing is delivered on a Smartphone, the retailers have some knowledge of the demographic of the market they are reaching, as was discussed

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<sup>4</sup> <http://www.businessfast4ward.com/small-business-marketing-strategies-customer-retention-vs-customer-acquisition/>

earlier. Collectively, this approach is a much more focused, targeted approach to marketing than the traditional website or direct mailing campaign.

### Interactive Dialogue

Another component that differentiates Social M-Payments from traditional mobile payments is the ability for the merchant and customer to interact in real time. Customers can not only view information about the merchant, but can also interact through chat and other technologies to make reservations, order, inquire as to the availability of a product, check wait times, and ask questions. This interactive dialogue not only benefits the consumer but provides additional marketing and sales value to the merchants who now have a direct channel to their customers and prospective customers.

### Convenience

Convenience is arguably the primary catalyst for the movement toward mobile payments. Mobile payments are more convenient for the consumer, as well as the merchant in most cases. While mobile technologies employed in retail environments (NFC, for example) offer greater convenience in terms of the speed of the transaction (tap vs. swipe), they still require that the customer be in close proximity to the NFC reader to complete the transaction. This technology does not significantly increase the convenience for the consumer or the merchant. Social M-Payment platforms, such as Zumogo, do not require the close proximity necessary to complete an NFC transaction. A customer could order their food, receive their check, pay for their meal and add a tip all from their table. This type of convenience is beneficial for both the consumer and the merchant. Merchants can benefit from increased operational efficiencies as customers can order outside of traditional channels thereby reducing lines and bottlenecks for servers, and cashiers.

### Security

The start of 2011 has ushered in yet another year of increasing data breaches, compromises and fraud. In the past three years the industry has seen increasingly sophisticated data thieves continue to wreak havoc on the payment card industry, as well as other industries. Already, 2011 has seen a major security vendor breached, as well as a major marketing vendor. Mobile payment technologies are now a focus of data thieves that had historically targeted more traditional payment methods like websites and retail point of sale systems. As stated in the Verizon Data Breach Investigations Report<sup>5</sup>:

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<sup>5</sup> Verizon Business 2009 Data Breach Investigations Report; [www.verizonbusiness.com/resources/.../2009\\_databreach\\_rp.pdf](http://www.verizonbusiness.com/resources/.../2009_databreach_rp.pdf)



*“Unfortunately, the criminals are not sitting around sulking about lost opportunities and dead-end business models; they are adapting.” “As organizations move to meet regulatory requirements, we have observed a manifest increase in attacks designed to circumvent certain controls as part of that compliance process. Newer, more elaborate varieties of malware...”*

In February 2011, Google removed over 20 applications from their app market due to malicious software infection. The nascent nature of the mobile payments market, coupled with the lack of available mobile data security technologies, makes mobile payment technologies particularly vulnerable to data theft. A properly built Social M-Payment solution will provide a high level of assurance that customer data is sufficiently protected. ProPay’s Zumogo leverages leading edge tokenization technology to completely remove the sensitive data from both the consumer’s Smartphone and the merchant’s point of sale system. Because there is no data present on the Smartphone or POS there is no data to be stolen by the data thieves.

## **Zumogo Overview**

Zumogo is a new mobile payment technology that allows Smartphones to be used, not only as a payment device, but also as a social technology allowing merchants and consumers to communicate with each other in real time. Additionally, the social m-payment platform allows the consumer to find merchants, contact them for information, interact and communicate with them, and pay for the product all from the same device. Zumogo eliminates sensitive information from the transaction process, meaning no payment data is passed through the merchant’s system or stored on the consumer’s device. Zumogo consists of three primary components; a consumer application, a web-based merchant console, and the ProPay ProtectPay tokenization service.

## **Zumogo Application**

The consumer application is available for Apple’s iPhone, Android and Windows 7. The user downloads the application, and inputs a payment method which is securely transmitted to ProPay for storage in the ProtectPay system. From the Zumogo application the user can view nearby merchants, view notices, specials, and other information. The user can also engage in dialogue with the merchant through an integrated chat function, can order, and make payment through the application.



## Zumogo Merchant Console

The Zumogo merchant console is a web-based console that allows the merchant to publish specials, events, and general information that will be viewable by consumers with the Zumogo application. The Zumogo merchant console also has an integrated chat functionality which allows the merchant to respond to inquiries from consumers. The merchants can respond manually or configure the console to provide pre-defined messages. Merchants are also able to send a payment request to the Zumogo application.

## ProtectPay®

The core component of Zumogo is ProtectPay, ProPay's data protection and tokenization service. By leveraging ProtectPay, neither consumers nor merchants store, or transmit payment card data. This not only provides a significant improvement in security over other methods of mobile payment but also dramatically reduces the PCI compliance burden for merchants. For more information read ProPay's whitepaper: *The Data Dilemma; 2010*.

## Summary

Few would likely dispute that mobile technology is here to stay. Fewer still would likely debate that social media is increasingly relevant to most Americans. The convergence of these technologies to support payment processing represents the pinnacle of mobile payment technology and is what ProPay has termed Social M-Payments. ProPay's Zumogo, which debuted during the 2011 Sundance Film Festival is the first Social M-Payment platform that incorporates mobile payment technology, interactive dialogue and security to provide value to both consumers and merchant.



## About The Author

Chris Mark is the Executive Vice President; Data Security and Compliance for ProPay and is a recognized payment card industry security expert. He is the former founder and CEO of the Aegenis Group, Inc. and the Society of Payment Security Professionals. From 2007 through 2009 Chris was the worldwide QSA trainer and was contracted with Visa to conduct PCI related training worldwide. He has trained over 10,000 people on the PCI DSS and related topics. Prior to founding The Aegenis Group, Chris was the founder and owner of a QSA firm and performed over 100 onsite PCI DSS assessments for some of the largest and most complex banks, merchants and service providers in the US and Canada. Chris has also worked at MasterCard Worldwide and was a founding member of the PCI SSC Technical Working Group. He has also contracted with Visa International and worked with the major card brands on development of their security standards. Chris is a frequent public speaker and has published numerous articles on PCI DSS and data security within the payment card industry. He is also responsible for the founding of the Society of Payment Security Professionals (SPSP) and led the development of the Certified Payment-Card Industry Security Manager (CPISM) and Certified Payment Card-Industry Security Auditor (CPISA) certifications. Chris holds a CISSP, CIPP, CPISA, and numerous technical certifications. He also holds MBA and BA degrees.

## About ProPay

ProPay leads the market in providing simple, safe and affordable credit card processing and electronic payment services for businesses ranging from the small, home-based entrepreneur to multi-billion-dollar corporations and enterprises. Whether you're a small business or a large corporation, ProPay provides simple, safe and affordable merchant services and can help secure your payment data through robust encryption and tokenization. Call us today at (888) 227-9856 or email us at [sales@propay.com](mailto:sales@propay.com).

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