PayPal and the Battle for Mobile Payments

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Introduction and Summary:

This paper will answer the question: **What should PayPal's strategy be to remain the dominant player in the mobile payment space in the US?**

Our approach is to shortly touch upon the latest general developments in the mobile payment space and then proceed by discussing specific recommendations for PayPal based on these trends. For the purposes of our analysis, we have broken the mobile payments arena into the following areas: 1) eCommerce, 2) Retail Payments, and 3) Person-to-Person and provided recommendations for each subsector. After addressing these areas, we provide additional recommendations which span across the mobile payments universe in the areas of 4) Ecosystems and 5) Loyalty.

A Little Background on PayPal:

The largest, most widely adopted, and oldest online payments platform in the world is PayPal, which was founded in 1998 and is owned by EBay since 2002. It is on track for 2014 to process 7.7 million USD a day, or 2.8 trillion USD this year in total[1]. Many companies are trying to attack this dominance, while PayPal is working to innovate internally and through acquisition to stay ahead of the curve. While founded purely as a way to complete online purchases on EBay, PayPal now is trying to also gain a foothold in the offline world by launching a mobile payments app that connects to a physical beacon[2].

PayPal is being challenged on two dimensions, namely the number of users and more specifically the number of credit card numbers stored.[3]

- Amazon: 215 million active customer accounts versus Paypal: 137 million registered accounts

Surprisingly less threatening so far:

- Facebook (1 billion users, but very limited amount of credit cards as gift shopping was not a success[4])
- Apple (600 million iTunes accounts - but so far only sells its own products, plus apps and media)
- Google (collects significant numbers of credit cards through their Google Play Appstore) - Still Google Wallet is not used beyond their apps and Nexus Phone and Chromecast TV hardware.

Notable Acquisitions

In September 2013 Ebay acquired Braintree[5], and thereby took out a competitor from the market and strengthened its capabilities in the mobile payments space. Braintree was an earlier mover (founded in 2007) and provides the payment infrastructure for well known brands like Uber and Airbnb. In the acquisition Ebay also acquired Venmo, a direct competitor of PayPal for sending money and paying online for free.

Around the same time, in December 2013, PayPal acquired StackMob[6], a company that will help PayPal integrate it's payment offering into mobile apps. This will bolster its efforts to accelerate adoption of its payment system within apps.

Mobile Payments Industry Recommendations by Subsector:

I. eCommerce Payments – Introducing the New Drivers of Differentiation

eCommerce payments have grown enormously in value. CapGemini in their 2013 report[7] estimate worldwide volume to reach 1.8 trillion USD by 2014, growing with 18% per year since 2010. Likewise mobile

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[1] http://www.fool.com/investing/general/2013/10/27/amazon-and-paypal-face-off-for-your-money.aspx
[2] https://www.paypal.com/webapps/mpp/beacon
[3] http://news.cnet.com/8301-1023_3-57607847-93/watch-out-paypal-amazons-following-the-money/
[4] http://news.cnet.com/8301-1023_3-57599947-93/facebook-stops-peddling-physical-gifts-no-one-wants/
[5] http://techcrunch.com/2013/09/26/paypal-acquires-payments-gateway-braintree-for-800m-in-cash/
[6] http://www.businessinsider.com/paypal-and-amazon-are-battling-for-the-payments-industry-2013-12
[7] http://www.capgemini.com/resource-file-access/resource/pdf/wpr_2013.pdf

payments or M-Payments are expected to grow to 800 billion USD by 2014, up from 250 billion USD in 2012. By 2016 Forrester estimates in the US alone 327 billion USD will be spent on web purchases.

A large number of players has entered this enormous market, with a very differentiated offering, but in the past few years, dominant designs have emerged, and the offerings of payment solutions have steadily commoditized, to a point where the set of differentiating factors is minimal. Most innovation has been incremental, except for the Square dongle which could be categorized as horizon two radical.

The two largest technological players in the field (after the credit card companies), PayPal and Amazon Payments, charge the same transaction fees and offer very similar service levels. All work by having customer credit or debit card information stored on their systems, and matching these with with their merchant accounts in a desktop environment. While Google started to offer a similar service through Google Checkout, it decided to cut this service mid-2013 and shift to Google Wallet.

With the basics of online payments processing established across the board, the large incumbents and new entrants look for ways to differentiate themselves. We see three current trends for this differentiation: 1) getting the mobile experience right, 2) bundling payments with a strong eCommerce platform offering, and 3) integrating online with offline POS systems.

Because in this phase all players are fighting for market share, their ecosystems are setup as walled gardens, from which it is virtually impossible to transfer money from one environment to the other. Online fora advise to to transfer funds through traditional bank accounts, thereby somewhat ironically relying on very old standards for interoperability.[8]

See Exhibit 1 for a direct comparison of PayPal, Google, and Amazon along the traditional dimensions of competition.

Exhibit 1 - Comparison of PayPal, Google Checkout & Amazon (by PayPal)[9]

	PayPal	Google Checkout	Amazon Payments
What are their standard fees?	2.9% + $0.30 per transaction	2.9% + $0.30 per transaction	2.9% + $0.30 per transaction
Who can pay me?	Anyone with a credit card	Buyers must have an account	Buyers must have an account
What forms of payment are accepted?	All major credit cards, plus bank accounts, eChecks, & PayPal	Major credit cards only	Major credit and debit cards only
How many currencies are supported?	24 currencies	8 currencies	11 currencies
How many shopping carts do they support?	300+	55	1
How about customer support?	• Live phone support • Virtual assistant • Dedicated account managers	Webform only	Webform only

[8] https://www.paypal-community.com/t5/About-Payments/Transfer-Paypal-money-to-Amazon-account/td-p/658550

[9] https://cms.paypal.com/us/cgi-bin/?cmd=_render-content&content_ID=merchant%2Fgoogle_checkout_vs_paypal_vs_amazon_payments

Differentiator 1 – The Mobile Experience

- Increasingly, as eCommerce purchases shift from desktop to mobile, eCommerce payments companies are starting to compete on the ease of their mobile experiences
- With incredibly high mobile shopping cart abandonment rates (82-97%; source: Monetate[10]/ Google[11]), a frictionless mobile payment experience can easily mean the difference between a sale and no sale.
- Google created a payment processing service called Google Checkout. It ceased operations however in December 2013 and moved customers that were using the service to Braintree, Shopify or Freshbooks[12]. It has since focussed on building Google Wallet into a viable PayPal competitor with specific focus on mobile.
- Credit card companies are currently not involved in this space, offering no special process for mobile checkout and creating an opportunity for companies like Amazon, Google, PayPal to steal market share.
- As the gap becomes larger, online merchants will seek to use one payment solution that handles both desktop and mobile payments smoothly, eating away at CC company market share.

Differentiator 2 – eCommerce Platforms & Online Storefronts

- Separately, out-of-the-box, turnkey eCommerce platforms to create digital storefronts have steadily increased in popularity with companies like Shopify and BigCommerce
- A recent strategy of vertical integration by payments companies into eCommerce Platforms has been pursued by companies like Amazon (WebStore), Google (dropping its checkout service and offers switching to c), and PayPal (eBay storefront)
- Of these, eBay's offering is arguably the weakest as it is too closely tied to the eBay marketplace and retains an unsophisticated storefront design reminiscent of an auction page
- Currently, the top 3 eCommerce platforms are Shopify, BigCommerce, and Volusion.

Differentiator 3 - Offline POS (Point of Sales) Integration

- POS vendor market is very fragmented - lots of big players
- Integration with existing POS systems is a huge pain due to larger number of providers and need to maintain compatibility in the face of constant upgrades
- Unfortunately, integration may be necessary in the short/medium term thanks to the ubiquity of legacy POS providers and long-term nature of contracts
- Long term, strategy is likely for payments players to introduce their own POS systems (potentially iPad-based), or push for the success of a select few vendors and stay tightly integrated with them

Recommendation 1: eCommerce -- If It Ain't Credit Card, Make Sure It's PayPal.

- **Mobile Experience:** Given the above, PayPal should continue to build on its mobile eCommerce payment dominance by reducing friction in its mobile process and interface and expanding the offering into a broader mobile wallet while finding new ways to grow its user base

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[10] http://blog.clicktale.com/2013/03/24/shopping-cart-abandonment-rate-reduction-strategies/

[11] https://plus.google.com/+chrome/posts/T53aDoDy49H

[12] http://googlecommerce.blogspot.tw/2013/05/an-update-to-google-checkout-for.html

- **eCommerce Platforms:** Given the weakness in eBay's digital storefront offering and the increasing importance of eCommerce platforms as a differentiator, PayPal should also investigate purchasing one of the major eCommerce platforms such as Shopify and tightly integrating and/or bundling PayPal Payments Processing into it.

- **POS Integration:** POS integration is both difficult and costly and for this reason many players are skipping straight to developing their own POS systems, which usually run on tablets. But brick-and-mortar retailers will be slow to switch from these systems. We recommend integrating with the major POS vendors in the short/medium term in order to capture market share. In the long term, however, we recommend creating a replacement POS system ready to catch retailers as they eschew legacy infrastructure in favor of vertically integrated POS/payment solutions. This recommendation is closely tied to our conclusions on the Retail Mobile Payments subsector.

II. Retail Mobile Payments – The Technology Battle Heats Up

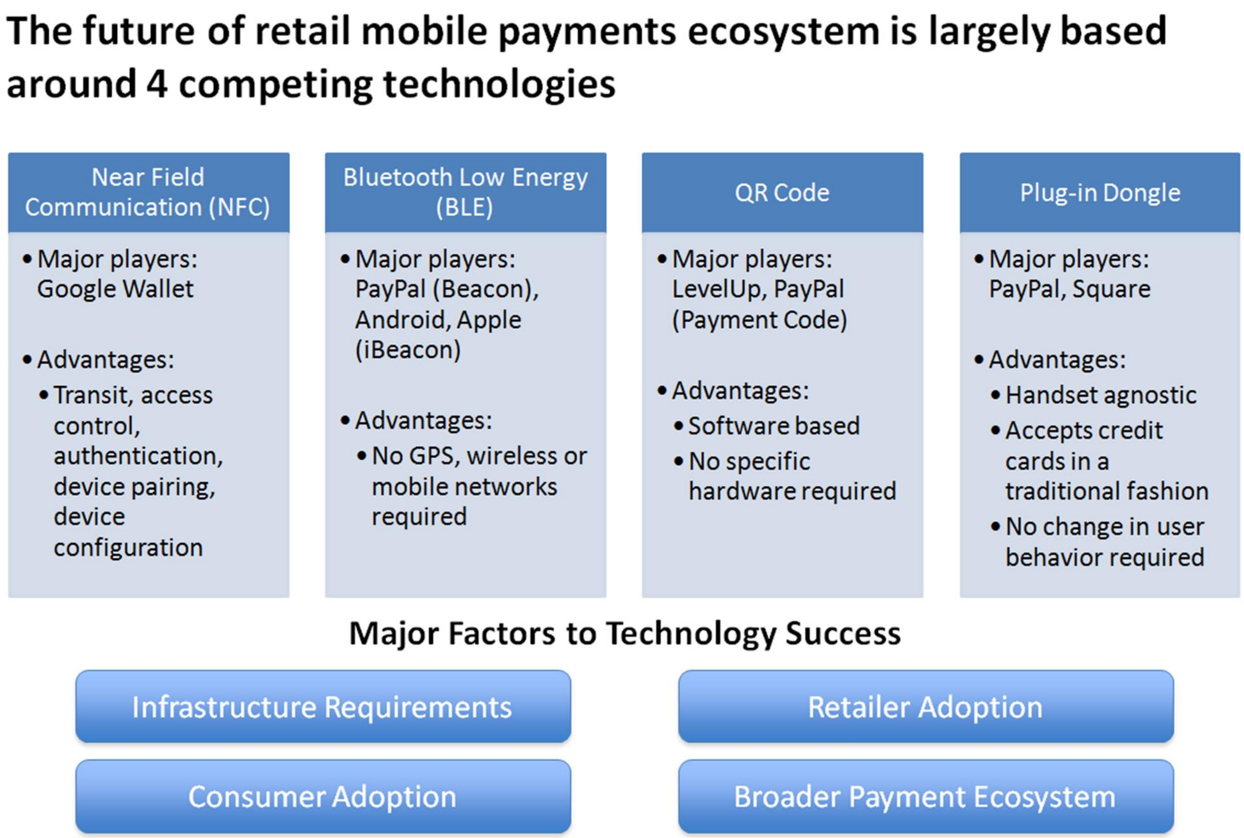
More recently, competition has begun for dollars spent in brick-and-mortar retailers. In 2010 Square began offering a plug-in dongle which accepted credit cards for smaller merchants, enabling these merchants to accept credit card and charging quite competitive (~2.75%) transaction fees. The offering of Square has many of the characteristics of disruptive technology. Recognizing the power of the idea, other companies including PayPal have copied this dongle technology in an attempt to capture some of this shift in market share away from Credit Card companies who have historically dominated non-cash retail payments. None, however, have been as popular as Square.

That said, new technologies look poised to replace the plug-in dongle and change the face of brick-and-mortar retail payments. They are outlined in Exhibit 2.

Notably, PayPal has created offerings using almost every single one of these technologies, following a "shotgun" "wait-and-see" approach to their retail payments technology portfolio. Most promising is their Beacon technology which leverages Bluetooth Low Energy (BLE) and aims to make retail shopping even more frictionless. Recently, PayPal abandoned NFC in favor of this technology, leading many to believe that, despite heavy investment by Google, NFC won't make the final cut.

Despite both these technological advances and significant corporate investment in marketing them, a number of factors is preventing any one standard from taking off. They are also delineated in Exhibit 2.

Exhibit 2: Retail Mobile Payment Technology Landscape



Recommendation 2: Retail Mobile Payments -- Play the Field but Don't Try to Pick Winners… Yet.

- **Prepare to identify and exploit the dominant design:** PayPal should continue its multi-technology portfolio approach to retail payments (QR, Barcode, and Beacon [Bluetooth LE]), and integrate this technology seamlessly with its overall mobile wallet. When a dominant design finally emerges, which also means that the adoption rate has reached the inflection point on the S curve, it should invest heavily into this technology and leverage its merchant network and scale to gain leadership FAST to ride on the accelerated growth curve..

- **Expand merchant coverage:** To bolster PayPal's position as a new and relatively small entrant to the retail payment market, it should aggressively seek partnership agreements with consumer credit (e.g. Discover), money transfer (e.g. MoneyGram) and POS hardware and software providers (e.g. NCR, MICROS) in order to rapidly expand their merchant coverage. The POS integration will also help its eCommerce penetration as mentioned in the previous section.

III. Person-to-Person (P2P) Payments – Money (now) Talks!

Sending money to family and friends both domestically and in the context of remittance is a very general need. Understanding the social component of payments is a logical extension of the the fact that online activity has become more and more interconnected. P2P payments can nowadays have more sophisticated implementations than simply sending money from one person to the next. Uber is a good example of a rather seamless implementation of bill sharing. Will driving in the back of an Uber taxi, the user can add his fellow passengers to the ride, after which the fare is automatically split.[13]

PayPal started out as a P2P payment system, specifically set up to securely transferring money between two parties that did not know each other by having them exchange only their email addresses. This offering has evolved little. But with the recent acquisition of Braintree and it's subsidiary Venmo, PayPal will learn about real integration with social networks, which Venmo has done successfully.

The new entrant, Square, took the route of simplification and launched a P2P product in October 2013 called Cash[14] with which it allows users to transfer cash by simply sending an email to the intended recipient with a Square email address in CC and the amount in the subject line.

Recommendation 3: P2P Payments -- This Isn't Your Strong Suit; Make Smart Acquisitions

- PayPal should aggressively pursue the P2P payment market via smart acquisitions like Venmo, tightly integrating these offerings with its core product.

- PayPal should create ecosystem advantages by allowing users to split payments to online and offline retailers between friends.

Additional Recommendations:

In addition to the strategic moves in each of the major subsectors of payments above, we also recommend two additional strategic efforts across PayPal's entire payments offering.

Recommendation 4: Tying it all Together -- Products Don't Kill Industries... Ecosystems Do.

As the technology industry has matured the focus has moved away from individual "killer apps" or "killer products" towards "killer ecosystems". This is especially true if you look at industry margins/revenues for the major consumer tech companies most consumers have heard about.

Apple no longer competes in the marketplace with just its iPod or iPhone products, but the entire Apple ecosystem that started in music with iTunes/iPod and has now expanded into wireless routers (Airport Extreme), cloud storage (iCloud), phones (iPhone), digital content (expanded offerings in movies, TV shows, etc), education (iTunes U), Apple TV (which makes any apple device stream effortlessly to televisions), and more. In other words, consumers are increasingly buying into an entire ecosystem that works together fluidly, rather than an individual product. This moves firms like Apple from solely an integrator of technologies *within a device* (the iPhone incorporated many existing technologies) to being an integrator of various finished technology products *within an ecosystem*. This has large implications in consumer switching costs and brand stickiness since the more products you own that are part of that ecosystem, the more value you get from the overall ecosystem. Similarly, buying outside of the chosen ecosystem introduces frictions, incompatibilities, and costs which discourage switching without the monetary switching costs employed traditionally by industries like telecoms.

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[13] http://blog.uber.com/2013/07/15/faresplit/

[14] http://gigaom.com/2013/10/15/square-launches-cash-a-peer-to-peer-payments-service-thats-incredibly-simply-to-use/

PayPal should therefore think very hard about its integrator role in technology and how to create a fluid ecosystem which imparts advantages for users who use it heavily and, most importantly, through multiple channels. These advantages can be technological (compatibility), financial (no fees if money is transferred between two PayPal accounts; owning two devices in the ecosystem obviates the need for additional devices or imparts additional advantages), or convenience-related (consolidation of information; overall ease of use; single sign-on for multiple services). By providing additional benefits for customers who consume multiple services through PayPal (already standard practice in financial services such as lower rates on loans for those who bank with the same bank) PayPal can exploit it's brand, scale, and ubiquity to encourage consumers to consolidate their online payments activity onto one platform that they trust, is able to handle everything, and confers special, tangible benefits to the consumer. Examples include:

- Ability to split retail (PayPal Beacon) or eCommerce (PayPal) purchases among multiple parties using P2P service (PayPal/Venmo)
- Detailed, uniform receipts from all transactions paid for using any PayPal channel (a la Uber)
- Reduced fees for some services (e.g. eCommerce storefronts) when consumers are multichannel PayPal users
- Financing and potentially reduced financing rates for multichannel PayPal users
- Increased fraud protection for multichannel PayPal users
- Consolidated & cross-channel spending analytics and expense report tools (a la Mint, American Express)

Recommendation 5: Loyalty -- The Best Defense Against a Commoditizing Industry

Loyalty programs, introduced in the early 1990's, have been one of the most successful marketing inventions in recent history. Harvard Business Review noted, "Customer loyalty is the single most important driver of growth and profitability"[15] and, according to Deloitte, "Retailers with loyalty programs, on average, are 88% more profitable than competitors without."[16]

Most importantly, for PayPal:

1. Loyalty drives not just the retail purchasing behavior (which retailer consumers shop at) but also payment behavior ("I'll use my American Express card because I get points")
2. Loyalty is therefore one of the most critical weapons used by credit card companies to retain customers now and, more importantly, into a future where payment services are commoditizing
3. Loyalty programs drive consumers to consolidate spending (and point redemption) behavior, conferring additional data benefits to the firm for consumer analytics and insights

Therefore PayPal should seek to create a solid loyalty program to increase stickiness and encourage consumers to consolidate their payments activity onto the PayPal platform. Tactically, given PayPal's lower fees, PayPal should seek to give away less in the traditional form of cashback and rewards, and more in the form of intangible perks and partnerships with merchants who can offer rewards at a discount to their value to customers (e.g. flyer miles have a higher value to customers than to airlines since airlines pay cost and more flights increase overall loyalty).

[15] Harvard Business Review

[16] Deloitte Research Survey