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Industry Segment: Consulting

General

1. Are you in general agreement with the payment system gaps and opportunities identified in the "Payment System Improvement Public Consultation Paper"? Please explain, if desired.

no. Industry control of CORE payment services is driven COMPLETELY by the top 5 banks. Top 5 Banks created and hold veto power over: Visa, MA, TCH, NACHA, etc. and most industry infrastructure. Quantitatively, NYU's Thomas Philippon published jaw dropping research detailing how Payments and Banking are one of the few network businesses in the HISTORY OF MAN to grow less efficient (rail, telecom, energy, etc.). Obviously Regulatory Capture is an issue as regulators work to protect Bank margins and discourage rate competition. The American Banker article How Big Banks Killed a Plan to Speed Up Money Transfers speaks to the uneven playing field faced by small banks, MSBs and other service providers. Why are they blocking this real time effort? Because the top 4 are formulating plans to restrict use of bank owned settlement infrastructure and create new semi-open REAL TIME settlement networks (ie ClearxChange) which will only work for the largest institutions. Future detail in my blog <http://blog.starpointllp.com/blog/?p=3484> There will be no change unless capture and Big bank control over common utilities is broken

1i. What other gaps or opportunities not mentioned in the paper could be addressed to make improvements to the U.S. payment system?

The FED should be very mindful that the direction does not just impact Innovation at the top end of the consumer pyramid: over 40% of US consumers are unprofitable to US Banks (see Prepaid "Future of Banking?"). The Amex/WMT Bluebird product is proving to be an attractive alternative banking lite product with ability to direct deposit. The story of MPESA in Kenya may be useful here, as a non-bank was granted an exception which enabled the service to grow from 0 to 10% of the GDP in 3 yrs. Regulators and the Central bank do NOT look favorably on this development, as 10% of the GDP flows out of M1 into a single non-interest bearing settlement account which cannot be leveraged by banks to offset loans (ie liquidity ratio). But consumers love the service. Allow new parties to assume risk. Today, ODFIs are responsible for all risk (in ACH and Card Present). The Regulatory burden they face is substantial (Fed, OCC, CPFB, etc.). There are very big plans by the banks to gain tighter control over the payment network (see Tokens and Consumer Authentication). Fundamentally, if we want change, we must improve transparency and allow risk to be assumed by non banks (and consumers). Consumers should have the choice to take the slow railroad (with guaranteed delivery) or an instant transfer that cannot be reversed. Issuance and Value Storage. We need to look no further than BitCoin to see the need for new regulations surrounding issuance. Transfer of funds between entities is covered above, and my view is that non-bank participants should be licensed and agree to abide by current money transfer regs (ie. Fincen/AML, ..). Issuance of credentials and storage of funds is

another matter. Long term storage of funds is a banking function, and should be regulated, settlement funds face state escheatment issues (but largely unregulated unless interest is paid), while storage of Value is completely unregulated (ie Coupons “ a form of legal tender, Pre paid offers, bitcoins)? From above, if we allow non-banks to participate in real time funds transfer, third parties (ie Sofort) would act as agents (on behalf of consumer, merchant or bank) to direct the funds and assume risk on behalf of consumer. If a good/service is purchased immediately (commerce) then there is no regulation, however if the value is held for future use it is generally regulated (hence MSB, eGold, bitcoin issues). Thus the rules under which third party senders operate (as agents), are different from the entities at the end of the transactions (banks, merchants, consumers). See ACH Origination Risk.

2. Are you in general agreement with the desired outcomes for payment system improvements over the next 10 years? Please explain, if desired.

No. From your Paper: The challenge for the industry is to provide a payment system for the future that combines the valued attributes of legacy payment methods “ convenience, safety, and universal reach at low cost to the end user “ with new technology that enables faster processing, enhanced convenience, and the extraction and use of valuable information that accompanies payments. This defines the opportunity for change within the existing system, yet the existing system has proven an INABILITY to change. The EU’s ELMI model is perhaps the best developed regulatory standard. Perhaps the US pursues something similar which would serve as a federally chartered MSB. Or provide for existing MSBs to operate (and assume risk) on a settlement network (like Fed wire). This is my core recommendation, rather than taking a 5 year approach, the Fed should create an open settlement service, in which private utilities (ACH, Visa, etc.) must compete with. Australia (EFTPOS) and Canada (Interac) have both successfully consolidated debit infrastructure as a result of regulatory mandates (and these remain bank owned networks). Today Fedwire competes with TCH in settling payments, but garners much less than 1% of settlement. In other words don't mandate change in with existing players, provide an alternative where existing players must compete and certain volumes will migrate. A NEW network based upon FedWire vs change to legacy networks.

2i. What other outcomes should be pursued?

The Fed should consider consumer requirements and preferences, after all it is the consumer’s money. Similar to the MCI telecom case, regulators should consider the minimum consumer servicing requirements. If a consumer wants to pay through an intermediary (like PayPal, Amazon, Google, MCX, etc.), or have money stored with an intermediary, or want to remain anonymous to the merchant in a transaction, they should be able to do so. As the Visa model evolves, Consumers should be able to INITIATE the payment request with the Bank (as opposed to the Visa/MA model of merchant requesting payment based upon consumer credentials).

3. In what ways should the Federal Reserve Banks help improve the payment system as an operator, leader, and/or catalyst?

Catalyst. Provide an alternative that competes with bank owned payment networks. Enhance competition. Also formulate policy that provides for transparency in rule making to decrease leverage of large institutions.

Ubiquitous near-real-time payments

4. In discussions with industry participants, some have stated that implementing a system for near-real-time payments with the features described in the second desired outcome (ubiquitous participation; sender doesn't need to know the bank account number of the recipient; confirmation of good funds is made at the initiation of the payment; sender and receiver receive timely notification that the payment has been made; funds debited from the payer and made available in near real time to the payee) will require coordinated action by a public authority or industry group. Others have stated that current payment services are evolving toward this outcome and no special action by a public authority or industry group is required.

4i. Which of these perspectives is more accurate, and why?

Both models can work. But the directory owner exhibits SUBSTANTIAL control over the structure and pricing of the network. See my blog on topic <http://blog.starpointllp.com/blog/?p=1874> The Fed should not restrict tokens, or directories to Banks, as other entities have better mechanisms to support KYC (ex Apple biometrics), Fraud, or ease of use. There must be an Open ness to participation, which means there must be an ability for non-banks to assume part of the transaction risk. Square, Visa, Google, PayPal, Apple, Banks, etc. have recognized the absurdity of storing your payment instruments in multiple locations. All of us understand the online implications, Amazon's One Click makes everything so easy for us when you don't have to enter your payment and ship to information. (V.me is centered around this online experience). Paypal does the same thing on eBay, Apple on iTunes, Rakutan, etc. But what few understand is the implication for the physical payment world. This is what I was attempting to highlight with PayPal's new plastic rolled out last week (see PayPal blog, and Target RedCard). If all of your payment information is stored in the cloud, then all that is needed at the POS is authentication of identity (see blog). Remember US online commerce is \$170B/yr, physical commerce is \$2.37T (not including FS, Travel/Entertainment). The implications for cloud based payment at the POS are significant because the entity which leads THE DIRECTORY will have a significant consumer advantage, and will therefore also lead the breakdown of existing networks and subsequent growth of new specialized entities. For example, I firmly believe new entities will develop that shift payment revenue from merchant borne interchange to incentives (new digital coupons). Another example is Paypal's ability to selectively assume settlement risk on some transactions as they route through low cost ACH, or even allow customers to use BillMeLater to selectively convert certain purchase to loans AFTER THE FACT. In these 2 examples, traditional payments revenue will be significantly disrupted by: lower cost transactions, competitive credit terms (each purchase), and incentives tied to payment type.

4ii. What other perspective(s) should be considered?

From my blog Business Implications of Tokens US mobile payments will have a new network, a system to use tokens which are neither V or MA card numbers. Thus Banks need not route these transactions through either V or MA, but will be able to leverage same acceptance infrastructure. Tokens will be bank numbers that banks resolve. JPM's is first to align w/ plastic, leveraging common authorization authentication and other services. Banks are putting in place controls around ACH debit and card rules which will encourage token adoption. Watch out payment start ups.. rough seas ahead. As I stated: Banks will WIN in payments. In the US, merchants own liability for Card Not Present (CNP) fraud which aligns online merchants to the risk of using a payment instrument for a consumer they cannot physically verify (see VBV exception). However well an individual online merchant manages their own payment risk, their remains extraneous indirect risk to banks, as card data loss could result in: counterfeit plastic, identity theft, other first party fraud, etc. Thus the fallibility of the current card token which relates Bank to Consumer relationship. Through this NEW token initiative, Banks are seeking to expand the account identifier by making it unique to: consumer, bank AND merchant.token Today merchants receive an authorization for use of the card and behind the scenes Banks use very large sophisticated risk models (ex software HNC's Falcon) to make authorization decisions. As eCommerce merchants are responsible for fraud, they perform their own risk management either directly or through payment specialists (Cybersource, PayPal, Amazon, Digital River, etc). Banks have few problems approving online transactions.. as they bear none of the loss and hence a game is played. Banks have little incentive to share their fraud data and merchants have little incentive to share theirs. Remember that within banking, margins are driven by the ability to manage risk and banks therefore incented to differentiate capability (not harmonize it). Which leads to other interesting dynamics (perhaps a topic for a later time). At the Physical POS, the situation is different. Merchants bear little fraud and with EMV (Chip and PIN) the US will further reduce fraud where plastic is presented (if EMV in the US does happen). As I described in EMV Battle Impacts Mobile Payments, Retailers love EMV and are biased toward PIN and Debit. Retailers are continually looking for a way to reduce payment costs and influence consumers AWAY from Bank reward schemes.Payment-Gateways-growth Mobile payments remain green field and may be significantly disruptive at the POS. One of my favorite quotes around payments "if you solve authentication.. everything else is just accounting" (Ross Anderson @ KC Fed). The mobile device can provide a much richer set of information which to authenticate (vs a piece of plastic). Banks have invested billions in their card risk and authentication infrastructure. Mobile could render most of this investment moot, thus Banks are working to control and influence mobile payments at POS, particularly given NFC's complete failure. Additionally, new payment providers like LevelUp, Google Wallet, MCX, Passbook, etc all present large challenges to banks efforts to own the consumer relationship and payment choice at the POS (See MCX Blog). Banks have some latitude to create incentives around mobile. For example is an MCX QR code backed by a Visa Debit card a CNP Visa transaction? Card Present? Or will MCX try to encourage consumers to back with DDA like the Target RedCard model? Mobile payments are a key battle ground for many parties.. it is imperative to recognize that mobile payments are not just about payments.. but also about loyalty, relationship, data, influence, banking etc. In architecting incentives, banks have diminished ability to force V/MA to change acceptance rules. The same is true for retailers. Thus both are looking to create networks based on direct consumer accounts with account numbers (tokens) they can control. This is a very big statement.. if the banks can create a token

which represents a credit account or a debit account.. they have wrapped Visa and MA (see blog Don't Wrap Me). If successful, they could subsequently change networks anytime they wanted or create their own. Why on earth would they want to route any debit transaction through V or MA if the token represented a debit card that represented a DDA? Or similarly doubtful: a token that represents a credit card which represents a credit account? (see PayPal at the POS). Taking card number out of merchant (and consumer) possession, and replacing it with a token, enables banks enormous flexibility. Yes my head is spinning too. I am implying that banks could leverage their entire acceptance and authorization infrastructure without routing anything through V or MA. No direct consumer involvement would be necessary in this token scheme since something like an MCX QR code could be mapped to multiple tokens in a single back end process. Banks are looking to make ACH changes as a defensive play to ensure that ACH rails are protected against funding a Retailer/3rd Party wallet directly (as PayPal, Target RedCard, Safeway Fastforward do today). This was my point in yesterday's blog on ACH Debit. Business Drivers As I outlined this week in New ACH System in US, my view of Bank business drivers for Tokenization are: Stop the dissemination and storage of Card numbers, DDA RTN and Account Numbers Control the bank clearing network. Particularly third party senders and stopping the next paypal where consumer funds are directed to unknown destinations through aggregators. Own New Mobile POS Schemes to protect their risk investment Improve ACH clearing speed (new rules, new capabilities to manage risk). In a token model the differences between an ACH debit and a debit card will blend as banks leverage common infrastructure. Create new ACH based pricing scheme somewhere between debit (\$0.21) and credit cards Regulatory, Financial Pandemic, AML controls (per blog on HSBC) Take Visa and MA out of the debit game (yes this is a major story) Maintain risk models (see both sides of transaction) Control Retailer's efforts to form a new payment network

5. The second desired outcome articulates features that are desirable for a near-real time payments system. They include:

- a) Ubiquitous participation
- b) Sender doesn't need to know the bank account number of the recipient
- c) Confirmation of good funds is made at the initiation of the payment
- d) Sender and receiver receive timely notification that the payment has been made
- e) Funds debited from the payer and made available in near real time to the payee

5i. Do you agree that these are important features of a U.S. near real-time system? Please explain, if desired.

No.

5ii. What other characteristics or features are important for a U.S. near real-time system?

The US payments system today works for 95% of transactions. There is not a need for ubiquitous participation, or a wholesale change in ALL ACH payments. Thus there is no need for Ubiquitous participation, but rather there is a need for new parties to have access to such a service when there is a NEED which can bare the costs (associated with new infrastructure to support real time). Capability

is not a business case. If business case (and associated controls) are based upon specific knowledge of sender or beneficiary (as in today's FedWire) then the system should support. If the business case is based upon another form of identity, than the OVERALL SYSTEM should support providers that can assume risk in the transaction and fulfill that need. This central service must provide the core settlement, and allow for other parties to add value.

6. Near-real-time payments with the features described in the second desired outcome could be provided several different ways, including but not limited to:

- a) Creating a separate wire transfer-like system for near-real-time payments that leverages the relevant processes, features, and infrastructure already established for existing wire transfer systems. This option may require a new front-end mechanism or new rules that would provide near-real-time confirmation of good funds and timely notification of payments to end users and their financial institutions.
- b) Linking together existing limited-participation networks so that a sender in one network could make a payment to a receiver in another network seamlessly. This option may require common standards and rules and a centralized directory for routing payments across networks.
- c) Modifying the ACH to speed up settlement. This option may require a new front-end mechanism or new network rules that would provide near-real-time confirmation of good funds and timely notification of payments to end users and their financial institutions. Payments would be settled periodically during the day.
- d) Enhancing the debit card networks to enable ubiquitous near-real-time payments.
- e) Implementing an entirely new payment system with the features described in the second desired outcome above.

6i. What would be the most effective way for the U.S. payment system to deliver ubiquitous near-real-time payments, including options that are not listed above?

Existing networks were formed around a given value proposition. They are resilient to change. The value of a new real time system must exceed its costs to operate, and will thus attract new members that find value in this new service. Implementing a new system (option E) would provide this flexibility.

6ii. What are the likely pros and cons or costs and benefits of each option? What rule or regulation changes are needed to implement faster payments within existing payment processing channels?

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6iii. Is it sufficient for a solution to be limited to near-real-time authorization and confirmation that good funds are on their way, or must end user funds availability and/or interbank settlement take place in near-real time as well?

It depends on the business case of the specific use.

6iv. Which payment scenarios are most and least suitable for near real-time payments? (B2B, P2P, P2B, POS, etc.)

B2B today, with a new POS system competing against a repriced debit (\$0.21 to ?? \$0.05?)

7. Some industry participants have said that efforts to make check payments easier to use, such as by enabling fully electronic payment orders and/or by speeding up electronic check return information, will incrementally benefit the payment system. Others argue the resources needed to implement these efforts will delay a shift to near-real-time payments, which will ultimately be more beneficial to the payment system. Which of these perspectives do you agree with, and why?

It would be insane to force all payments to real time (as was done in UK Faster Payments 2008). The payment system works today. Allowing bank, and non-bank participants to assume risk in a new system will allow NEW services which leverage RT payments to develop. These new services must bear the cost required to make these services profitable. Top 5 banks are working to stymie industry efforts. The American Banker article How Big Banks Killed a Plan to Speed Up Money Transfers speaks to the uneven playing field faced by small banks, MSBs and other service providers. Why are they blocking this real time effort? Because the top 4 are formulating plans to restrict use of bank owned settlement infrastructure and create new semi-open REAL TIME settlement networks (ie ClearxChange) which will only work for the largest institutions (see New ACH Payment System for background on this initiative). Industry control of CORE payment services is driven COMPLETELY by the top 5 banks. Top 5 Banks created and hold veto power over: Visa, MA, TCH, NACHA, and most industry infrastructure. Quantitatively, NYU's Thomas Philippon published jaw dropping research detailing how Payments and Banking are one of the few network businesses in the HISTORY OF MAN to grow less efficient (rail, telecom, energy, etc.). Obviously Regulatory Capture is an issue as regulators are protect Bank margins and discourage rate competition. There will be no change unless capture and Big bank control over common utilities is broken. Perhaps the US pursues something similar which would serve as a federally chartered MSB. Or provide for existing MSBs to operate (and assume risk) on a settlement network (like Fed wire). This is my core recommendation, rather than taking a 5 year approach, the Fed should create an open settlement service, in which private utilities (ACH, Visa, etc.) must compete with. Australia (EFTPOS) and Canada (Interac) have both successfully consolidated debit infrastructure as a result of regulatory mandates (and these remain bank owned networks). Today Fedwire competes with TCH in settling payments, but garners much less than 1% of settlement (see FedWire Volumes).

8. How will near-real-time payments affect fraud issues that exist with today's payment systems, if at all?

It will exacerbate them unless 3rd parties are motivated to participate in the process. More detail here <http://finventures.wordpress.com/2010/03/11/5b-mno-opportunity-kyc/>

8i. Will near-real-time payments create new fraud risks? If yes, please elaborate on those risks.

Yes. UK Faster Payments is best example here.

9. To what extent would a ubiquitous near-real-time system bring about pivotal change to mobile payments?

It would not at all. The issues surrounding mobile payments are centered on consumer value, merchant value, data. Payment has very little impact here. None of us EVER leave a merchant without our merchandise because our form of payment was not accepted. More detail in my blog <http://blog.starpointllp.com/blog/?p=2599> There are FEW payment PROBLEMS. Payment is only the last phase of a long Commerce process that involves marketing, influencing, shopping, selection, purchase, support. Payments should be evolving toward a DUMB PIPE.. More value will not center around payment but rather the retailer and consumer.. the costs of payments will begin to decrease SUBSTANTIALLY as supporting services improve DRAMATICALLY (Authentication, Fraud/Risk, Credit, Transparency Reputation, etc.). Can you imagine if you had to pay a 3% transaction fee everytime you bought a stock? Such a market would be highly INEFFICIENT.. yet that is the case in retail today. Mobile is not a payment solution.. it is primarily an Access and Authentication Solution My behavior rule of thumb says that there must be a >20% value improvement for behavior change Cloud, Cloud, Cloud.. Our money, friends, digital creation, etc. are NOT locked up in the phone.. they exist in the cloud. It makes no sense to have a solution that ONLY works with the phone. (See Cloud Wallet). The mobile device can serve as a key authentication tool.. but so can your iris, voice, or facial geometry.. (See Apple NFC and Stage 4 Value Shift). This is the context of Ross Anderson's quote at KC Fed If you solve the authentication problem [in payments].. everything else is just accounting .. Retailers are not supportive Supply Chain is complex To be clear, there are many viable payment businesses today. However, MOST exist because of the INEFFICIENCIES within current networks (banking, 4 party models, regulation, etc.). My top examples surround P2P and international remittance (see my note on Xoom). Banks have the ability to completely defeat any of these 3rd party services, yet they choose not to. Why? They are locked into existing services, products, branch distribution channels, payment partners.. most are mired in a sticky muck.. (see blog on VMT, and my Big Blog on Battle of the Cloud Part 4 " Clusters Form).

10. What would be the implication if the industry and/or the Federal Reserve Banks do not take any action to implement faster payments?

Big banks will continue to dominate in rule setting and creation of semi open networks to throttle alternative approaches.

10i. What is the cost, including the opportunity cost, of not implementing faster payments in the United States?

Minimal in 1-5 yr view. Macro opportunity cost in infrastructure investment.

11. To what extent will the industry need to modernize core processing and other backend systems to support near-real-time payments?

Substantial. \$2-\$5B investment

11i. What is the likely timeframe for any such modernization?

4-6 yrs

12. Some industry participants suggest that a new, centralized directory containing account numbers and routing information for businesses and/or consumers, to which every bank and other service providers are linked, will enable more electronic payments. A sender using this directory would not need to know the account or routing information of the receiver.

12i. What are the merits and drawbacks of this suggestion?

This is the token initiative. Detailed analysis here <http://blog.starpointllp.com/blog/?p=2320> and <http://blog.starpointllp.com/blog/?p=2869> Payments MUST EVOLVE toward dumb pipes with least cost routing. Tokens and a centralized directory only serve to cement the position of existing players. Any directory initiative must follow the path of the Internet and DNS framework where multiple entities can hold the mapping, and routing is accomplished through the most efficient path (to encourage market forces). Tokens and Directories are meaningless without integration of authentication. Banks are not well positioned to execute on advanced user authentication, thus are not well suited to act as a directory service. The CONSUMER should be able to CHOOSE their directory (and authentication provider) and this entity may be a non-bank. Plastic Token providers like MerchantLink are successful because they deliver value to the merchant. There are mobile token successes, most notably Starbucks soon to be Square (see Interpreting the Square-Starbucks Deal) but all deliver VALUE. Most of us use the Starbucks mobile app to pay for our coffee.. it is a token for the payment instrument behind it. Why is Starbucks successful? Value to Starbucks: Loyalty, customer insight, etc. Value to consumer: improved commerce experience. Notice that I did not talk about banks or mobile operators.. all other intermediaries need to be in the background (ie white label).. they have no business injecting themselves in Starbucks customer experience. People don't go to Starbucks because of their debit card brands.. they go there for coffee. Wallet providers want to enable a generic platform for 1000s of Starbucks like experiences.. card companies want to stop them. Banks don't orchestrate commerce they are a dumb pipe payment service that cost far more than the value they provide. The greater they work to control the existing pipes, the greater the business case is for going around them, or regulating them into submission. Retailers are fine with allowing them to offer open loop credit, but not forcing them to accept fees for credit acceptance. If Credit cards add value then drop the accept all cards rule. From a network perspective the proprietary linkages are obvious indicators that a massive change will occur toward standardization, least cost routing and dumb pipes. My bet is that a new AUTHENTICATION provider (like ?Apple?) will be the tipping point where we begin to see substantial change. Payments work today.. but the costs of payments are primarily borne by merchants (particularly small ones). The bank that can construct a merchant friendly value proposition will win and have a significant lead on peers. Environment today In the US, merchants own liability for Card Not Present (CNP) fraud which aligns online merchants to the risk of using a payment instrument for a consumer they cannot physically verify (see VBV exception).

However well an individual online merchant manages their own payment risk, their remains extraneous indirect risk to banks, as card data loss could result in: counterfeit plastic, identity theft, other first party fraud, etc. Thus the fallibility of the current card token² which relates Bank to Consumer relationship. Through this NEW token initiative, Banks are seeking to expand the account identifier by making it unique to: consumer, bank AND merchant.token Today merchants receive an authorization for use of the card and behind the scenes Banks use very large sophisticated risk models (ex software HNC's Falcon) to make authorization decisions. As eCommerce merchants are responsible for fraud, they perform their own risk management either directly or through payment specialists (Cybersource, PayPal, Amazon, Digital River, etc). Banks have few problems approving online transactions.. as they bear none of the loss and hence a game is played. Banks have little incentive to share their fraud data and merchants have little incentive to share theirs. Remember that within banking, margins are driven by the ability to manage risk and banks therefore incented to differentiate capability (not harmonize it). Which leads to other interesting dynamics (perhaps a topic for a later time). At the Physical POS, the situation is different. Merchants bear little fraud and with EMV (Chip and PIN) the US will further reduce fraud where plastic is presented (if EMV in the US does happen). As I described in EMV Battle Impacts Mobile Payments, Retailers love EMV and are biased toward PIN and Debit. Retailers are continually looking for a way to reduce payment costs and influence consumers AWAY from Bank reward schemes.Payment-Gateways-growth Mobile payments remain green field² and may be significantly disruptive at the POS. One of my favorite quotes around payments ² if you solve authentication.. everything else is just accounting² (Ross Anderson @ KC Fed). The mobile device can provide a much richer set of information which to authenticate (vs a piece of plastic). Banks have invested billions in their card risk and authentication infrastructure. Mobile could render most of this investment moot, thus Banks are working to control and influence mobile payments at POS, particularly given NFC's complete failure. Additionally, new payment providers like LevelUp, Google Wallet, MCX, Passbook, etc all present large challenges to banks efforts to own the consumer relationship and payment choice at the POS (See MCX Blog). Banks have some latitude to create incentives around mobile. For example is an MCX QR code backed by a Visa Debit card a CNP Visa transaction? Card Present? Or will MCX try to encourage consumers to back with DDA like the Target RedCard model? Mobile payments are a key battle ground for many parties.. it is imperative to recognize that mobile payments are not just about payments.. but also about loyalty, relationship, data, influence, banking etc. In architecting incentives, banks have diminished ability to force V/MA to change acceptance rules. The same is true for retailers. Thus both are looking to create networks based on direct consumer accounts with account numbers (tokens) they can control. This is a very big statement.. if the banks can create a token² which represents a credit account or a debit account.. they have wrapped² Visa and MA (see blog Don't Wrap Me). If successful, they could subsequently change networks anytime they wanted or create their own. Why on earth would they want to route any debit transaction through V or MA if the token represented a debit card that represented a DDA? Or similarly doubtful: a token that represents a credit card which represents a credit account? (see PayPal at the POS). Taking card number out of merchant (and consumer) possession, and replacing it with a token, enables banks enormous flexibility. Business Drivers As I outlined this week in New ACH System in US, my view of Bank business drivers for Tokenization are: Stop the dissemination and storage of Card numbers, DDA RTN and Account Numbers Control the bank clearing network.

Particularly third party senders and stopping the next paypal where consumer funds are directed to unknown destinations through aggregators. Own New Mobile POS Schemes to protect their risk investment Improve ACH clearing speed (new rules, new capabilities to manage risk). In a token model the differences between an ACH debit and a debit card will blend as banks leverage common infrastructure. Create new ACH based pricing scheme somewhere between debit (\$0.21) and credit cards Regulatory, Financial Pandemic, AML controls (per blog on HSBC) Take Visa and MA out of the debit game (yes this is a major story) Maintain risk models (see both sides of transaction) Control Retailer's efforts to form a new payment network What banks seem to be missing is that mobile payment is not just about payment (see Directory Battle Part 1). Payments SUPPORT commerce, Banks therefore do not operate from a position of control but rather of enablement. Most retailers recognize that Consumer access to credit has resulted in improved retail spending, however most would also say consumer addition to bank rewards has been detrimental to their margin. Tokens for Mobile POS? Why would any merchant or wallet provider choose to exchange consumer payment instrument(s) for token(s)? Reduction in CNP rates, liability shift are significant. But the mobile device has many additional identifiers that far exceed what is available on a piece of plastic (IMEI, location, history, password, interaction for challenge). IMHO the bank business case for tokens must be built on CNP rates and Customer Choice. If Banks directly assist consumers provision their account into a mobile wallet, every wallet provider should support it. In other words the bank has done the work to integrate and push the customer's choice into a given wallet from their online banking site (ex yesterday V.me and SavetoAPI). But this bank led provisioning does nothing for the millions of accounts that consumers have already provisioned themselves in: PayPal, Apple, Amazon, Google, Target, Safewayetc. All of these companies have worked to deliver consumer value and obtained a direct consumer relationship, which subsequently resulted in the consumer choosing to store payment information directly. I can't imagine a scenario (or business case) for them to part with that asset, particularly prior to 100% acceptance of tokens by all merchants (online and offline). Token Acceptance The value of a bank issued token is completely dependent on: ACCEPTANCE, cost and Risk Mitigation. At the physical POS Retailers are firmly in control of acceptance, unless the tokens perfectly mimic existing card schemes. Banks will likely work to ensure that any non-tokenized payment (QR Code) will be treated as a CNP transaction with merchants bearing fraud responsibility. If tokens are in the format of a 16 digit account number than there will be very little change necessary to the payment terminal. However, the downside of using 16 digit account numbers is that it would not enable banks to firmly separate from V/MA bin routing (and network fees). It will certainly be interesting to see the plan here. Retailers, Banks, Networks, Consortiums are all at odds all trying to own the consumer relationship and control a directory which they can resolve. Payment Value In general I see the token initiative as a distraction for banks. They are far too focused on control and throwing sand in the gears of commerce. Commerce will find the path of least resistance in an open market.

12ii. What is the feasibility of this suggestion?

Google TXVia, Visa's V.me, Paypal's Braintree, Amazon, Mastercard's Orabiscom, The Clearing House, Amex Serve all operate token directories today.

13. Some industry participants say that check use is an enduring part of the U.S. payment system and that moving away from checks more aggressively would be too disruptive for certain end users.

13i. Is accelerated migration from checks to electronic payment methods a high-priority desired outcome for the U.S. payment system? (Accelerated means faster than the current trend of gradual migration.) Please explain, if desired.

No. Checks serve a purpose and have strong consumer behavior context. We should continue to support

13ii. Should the Federal Reserve Banks establish a target for the percent of noncash payments to be initiated via electronic means, by a specific date? For example: "By the year 2018, 95% of all noncash payments will be made via electronic means." If Yes, what is the appropriate target lever and date?

No.

14. Business-to-business payments have remained largely paper-based due to difficulties with handling remittance information. Consumer bill payments also are heavily paper-based due to the lack of comfort some consumers have with electronic alternatives. In addition, many small businesses have not adopted ACH for recurring payments due to technical challenges and/or cost constraints. The payment industry has multiple efforts underway to address these issues.

14i. To what extent are these efforts resulting in migration from checks to other payment types?

Consumer bill payment in the US is NOT largely paper based. Over two thirds of bills are paid electronically as a result of free electronic bill payment. See First Data paper http://www.firstdata.com/downloads/thought-leadership/fd_billpaymenttrends_whitepaper.pdf

14ii. What other barriers need to be addressed to accelerate migration of these payments?

Why does this need to be accelerated? Why should we force this?

14iii. What other tactics, including incentives, will effectively persuade businesses and consumers to migrate to electronic payments?

Integration of back office systems, standardized flow of payment data and status.

14iv. Which industry bodies should be responsible for developing and/or implementing these tactics?

NACHA

Cross-border Payments

15. To what extent would the broader adoption of the XML-based ISO 20022 payment message standards in the United States facilitate electrification of business payments and/or cross-border payments?

Great idea.

16. What strategies and tactics do you think will help move the industry toward desired outcome four - consumers and businesses have greater choice in making convenient, cost-effective, and timely cross-border payments?

This area is a complete mess. I have a youtube presentation outlining current state <http://www.youtube.com/watch?v=4QcjESNPII4> Transparency is key here. Originators should provide transaction routing details and costs (FX, fees and time). If the federal reserve published standard costs (as the world bank does today) and consumer guidelines it would go a long way. The speed issue is almost impossible for any bank to address. The best in class service providers are Citibank, HSBC and Barclays.

Safety

17. Payment security encompasses a broad range of issues including authentication of the parties involved in the transaction, the security of payment databases, the security of software and devices used by end users to access payment systems, and security of the infrastructure carrying payment messages.

17i. Among the issues listed above, or others, what are the key threats to payment system security today and in the future?

Complex issue. Billions of investment is made by entities which own the risk. Amazon and Paypal in Card not present, issuers in card present. A key to any change in the payment system is to facilitate investment in risk and authentication. If Apple can provide for better authentication (through biometrics for example) then they must be able to be compensated for this. Allowing consumers the ability to authenticate differently also means allowing them to ability to assume risk and choose who they want to manage their credentials, data and risk. The job of the central bank should be to create an environment where risk can be owned and investment can be made. A threat is to do otherwise. I believe a key central task is to allow the coordinated response to systematic and pandemic events (ex attack by Iran). We must be able to share data on attacks as network operations centers do. The Fed should develop a battle plan and require participation by entities responsible for risk management. The threat evolves constantly, and there is no one way to construct controls..

17ii. Which of these threats are not adequately being addressed?

Coordination of industry participants in coordinated attacks

17iii. What operational or technology changes could be implemented to further mitigate cyber threats?

18. What type of information on threat awareness and incident response activities would be useful for the industry?

18i. How should this information be made available?

19. What future payment standards would materially improve payment security?

19i. What are the obstacles to the adoption of security-related payment standards?

20. What collaborative actions should the Federal Reserve Banks take with the industry to promote the security of the payment system from end to end?

21. Please share any additional perspectives on U.S. payment system improvements.