Mobile Payments and the Global Remittance of Funds

T. Jack Williams
28 July 2011
The Titanic’s “wireless” equipment was state of the art.

Ship left Southampton on April 10, 2012.
Wrong MSG Prefix used for ice report

April 14, 1912 at 7:50 pm a message was sent to Captain Smith with wrong MSG prefix, he never received alert from another ship that dangerous icebergs are ahead! One of the worst peacetime maritime disasters will happen within a few hours...
In a letter to Secretary Geithner...

"We write to urge you to immediately propose and finalize a rule to make prepaid access, including stored value cards, subject to cross-border reporting requirements. Without this rule in place, our laws will continue to lag behind drug trafficking organizations as they develop new ways to transport illegal proceeds from the United States to Mexico."

Senate Caucus on International Narcotics Control
14 March 2011
Why all the noise about Mobile?

- “We (Gartner Consulting) predict that in 2011, merchandise purchases via mobile devices will account for 90% of all transactions in North America.” (speech in 2009)
- *Isis*, NFC (AT&T/Verizon with Apple) misjudged the market and selected the wrong process, and is behind Android. It will be difficult to catch up.
- *Google’s Android OS*, NFC and partnering with MasterCard, FirstData and Citi have launched the first test. Will begin to add other issuers and processors in 2012. More android based handsets will be offer NFC chips.
- More are on the horizon!
Google’s Android

Google Wallet mobile payment service, Google Offers announced

By Donald Melanson on posted May 24th 2011 12:00 AM

It may not be as big a surprise as Google hoped it would be at this point, but the company has now officially announced its NFC-based Google Wallet mobile payment service, complete with backing from some of the biggest names in the financial world. It will even work with the new NFC-equipped Nexus S.

FEATURED

Mac mini review (mid 2011)
29 hours ago

ASUS Eee Pad SL101 stakes through the FCC, still misses promised May release
69 hours ago

MacBook Air review (mid 2011)
29 hours ago

Mac OS X Lion 10.7.2 beta
The Mobile Ecosystem

- **Mobile Banking**, the ability to perform real time balance inquiries and portfolio value.
- **Mobile Commerce**, the ability to buy or sell goods or services using a mobile phone as the access device to the virtual account.
- **Mobile Remittance**, is the movement of funds from anywhere to anywhere using a mobile device tied to a virtual prepaid debit account. These accounts use the branded networks or ATM networks to provide access to funds.
M-Pesa in Kenya
NFC, (Near Field Communications) is in use today for tap and go NFC cards. NFC chips in mobile devices is similar. Uses the MC/V payments payment rails for authorization, clearing and settlement traffic.

Mag stripe in a phone.
What is the big deal about NFC?

- NFC is the embedding of the magnetic stripe information of a payment card, into the NFC chip in the phone. The carrier has little to do with a NFC phone other than initial embedding of magnetic stripe information.
- NFC uses the merchants existing terminal, settlement and general ledger system in place for credit card transactions. No real changes by the merchant.
- NFC chips allow for purchase transaction, they do not empower bank to bank, or other transactions.
Where is the real threat?

- **Virtual accounts**, processed from anywhere in the world that support access from a mobile phone can and do, move large sums of funds globally.

- Together, the virtual account and mobile handset with the right application or even Short Message Service (SMS) or text messaging can provide instructions to move money anywhere in seconds. Using a “short code”, time to send instructions is even faster.
“In the past year, said John Tobon, a senior U.S. Immigration and Customs Enforcement agent, the cards have become the preferred means of paying couriers who transport illicit drugs across the U.S.”
Easy entry to processing:

- For the most part, it is not the US based processors for prepaid cards that drive high value prepaid debit cards, it is the off-shore processors that operate outside the US borders.
- An mobile application for the iPhone or Android, embedded behind a game or other application can be custom built for $30–40k. Combined with a short code, instructions are sent in seconds, and impossible to scan for during an arrest.
- The mobile device can instruct the processor to complete a card–2–card transaction, using the same account, only a different card number and all is done. By moving card account balances from one card to another, in essence there is no access to funds by LE.
Mobile with Carrier

mFunds
Your money, anytime, anywhere.

Join the mobile revolution
Experience mFunds

Our Mission
Empower lives globally by opening the doors of commerce.

Mobile Solutions
mFunds understands the importance of delivering a global solution for personal financial services including moving money from person to person and from country to country. Our mobile solutions allow consumers to manage their money anytime, anywhere. With 260 million mobile consumers in the U.S. (3 billion globally), the mobile payment market is forecasted to grow to $500 billion by 2011.

Our mobile solutions provide the banked consumer with easy access to their money through their mobile device. Our mobile technology also reaches out to the millions of unbanked consumers by providing them with a secure and convenient way to manage their money. Imagine a world where anyone can send money to a friend or family member, pay a bill, or make a donation, all from their mobile phone.
Mobile access to virtual accounts
Gaming and Social Network
Over 180m payments, to 37 countries

EMIDA
GLOBAL PREPAID SOLUTIONS

Our relationships with providers around the world means more prepaid products to help grow your distribution portfolio and lock in customer loyalty.

NEWS

Emida Customer Licensed in Nigeria

FOOTHILL RANCH, California, January 17, 2011 (Business Wire)– Emida Technologies, a global leader in prepaid solutions, announces that its partner company in Nigeria has received a Preliminary License from the Central Bank of Nigeria (CBN) to operate Emida’s Cash and Transact™ (CAT™) Mobile Wallet platform. Phase one of the service will launch shortly across the country, establishing mobile money transfer services for the largest market in Africa.

CAT™ Mobile Wallet is a simple-to-use application for loading cash, or e-value, to any phone. Customers can then send money to any other phone, pay bills, buy content like ringtones and games, play the lottery, and even shop on the internet using the cash on the phone.

Another important benefit of CAT™ Mobile Wallet is the ability for customers to get cash from the phone, from their local shop, supermarket, or other local retailers.

Dennis Andrews, Emida’s CEO, in announcing this new CAT™ deployment, said "Our local partners plan a roll out of over 20,000 agents and anticipate more than 2 million users in 24 months of commercial service. They are utilizing existing distribution channels to gain economies of scale at the lowest cost. CAT™ Mobile Wallet is the ideal platform to provide financial services to the unbanked. Nigeria is the largest country on the African continent, and one of Africa’s most important economic engines."

CAT™ Mobile Wallet is an enterprise grade software platform suitable for large mobile operator networks, micro finance institutions, banks and other financial services providers. CAT™ uses some of the highest levels of encryption available, and allows service providers to comply with Know Your Customer (KYC) and Anti Money Laundering (AML) requirements of the regulators. The reporting features of CAT™ enable service providers and regulators to monitor activity in real time, and ensure compliance and liquidity issues can be addressed early.

About Emida
Card to Xoom in seconds
Moving money via virtual accounts:

- The mobile handset is only an access device that can transmit an instruction to a virtual account processor.
- It is the virtual account that accesses the payments infrastructure and actually completes the transaction. Phones to not hold funds...
- Cards are still required and will be for ATM transactions. The ATM industry will not spend the money to upgrade their units until a dominate platform emerges as the winner.
The future…

- New methodologies to move illicit funds are not being developed, they are being implemented and expanded.
- Using a virtual prepaid debit card account, processed overseas, with the access a mobile device or internet provides, the Cartels have significant capabilities to move large values of funds in seconds.
Thank you.

- T. Jack Williams
- Paymentcard Services, Inc.
  - Mobile: 502.609.0109  Office: 817.576.3655
  - Skype: tjackwilliams
  - Email: tjackwilliams@gmail.com

• CAGE-5Z4X9