

## Near Field Communications (NFC) Mobile Payments & Promotions

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President & Founder



# Give Me Free Stuff...



# Agenda

## Reviewing new revenue opportunities that NFC will create for mobile network operators

- Status on contactless roll out – essential to make NFC payments real
- New revenue streams enabling NFC services for:
  - Mobile payments: branded, alternative, and transit
  - Mobile marketing, promotions, and electronic redemptions
  - Loyalty & Rewards Generation 2.0.
- What to expect in 2009?

# What is Contactless & Near Field Communication (NFC)?

## Contactless Payments



## NFC Mobile Payments



- **Common Thread is the same RF technology to make it compatible**

# Three Generations of Electronic Payments Culminate on the Mobile

## Third Generation

Contactless Cards and NFC Phones



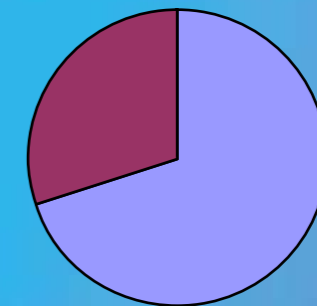
## Second Generation

Magnetic Stripe  
/ Chip card

1981 / 1995



US: Cash &  
Checks 30%



**Interactive Mobile Marketing  
Platform**

- Dynamic
- Personalized



## First Generation

First plastic  
credit card

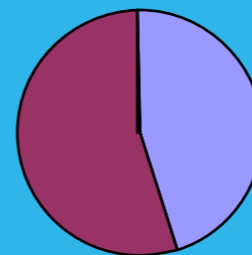
1959



US: Cash &  
Checks (95%)



US: Cash &  
Checks 55%



# Contactless Card Issuance in United States

More Than 60 Million Contactless Cards Have Been Issued in United States



Expects to Cross 100 Million Mark in 2009

# 400,000+ Contactless Readers are Installed at 130,000+ Merchant Locations in United States

All Locations in United States Enabled or Are in Process :



Regionally Enabled or in Pilot:



# Contactless is a Global Phenomena – Providing the Building Block for Mobile Payments

75+ M Cards Issued Globally

170,000+ Merchant Locations Enabled



**Americas:**  
United States  
Canada  
Mexico  
Guatemala  
Brazil

**Europe Middle East Africa**  
United Kingdom  
France  
Italy  
Austria  
Turkey  
UAE  
Switzerland  
South Africa  
Poland  
Spain  
Lebanon  
Netherland  
Iceland  
Sweden

**Asia Pacific**  
Taiwan  
Malaysia,  
Singapore  
Philippine  
Indonesia  
Hong Kong  
Thailand  
China  
India  
Australia  
Korea  
Japan



# Contactless is Paving the Road for NFC – Enabling Mobile to Serve Merchants & Issuers Markets



## Phase 1: Contactless Payments

Enable POS with Contactless  
Credit, Debit, Prepaid/Gift  
Cards

## Phase 2: NFC Mobile Payments & Promotions

Enable Mobile  
Card Programs, Opt-in Promotions & Service  
Discovery, One-on-One Mobile Marketing

### Initial Value Propositions:

1. Replaces Cash Faster
2. Moves Lines Faster
3. Increased Customer Loyalty
4. Added Security

### Additional Value Propositions:

1. Higher Usage of Cards
2. Low Cost Payment Options
3. New Customer Acquisitions
4. Highly Efficient Promotion Programs
5. Targeted Coupon Issuance & Redemption
6. Tailored product & services information dissemination

# One Example: NFC Solution Enables Consumer Initiated Location Based & Personalized Mobile Marketing Programs

2. Consumer and Tag ID info sent to Back-End

1. Opt-in: Customer Taps NFC Smart Poster in a Shopping Center

Generic Promotion Poster

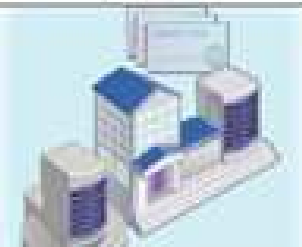


Tag I.D.

Consumer I.D.



Mobile Marketing, eCoupon, Offers



VIVO platform Issuing Server

3. Marketing server issues **personalized promotions** to phone based on **location, interest and personal profile.**

4. Customer Walks into Store. & Redeem



Customer #1



Customer #2



# NFC Mobile to Enable Multiple Services for Both Merchants & Card Issuers

## Services Delivered:

1. **Card & Ticket Provisioning**
2. **Higher Usage of Cards**
3. **Low Cost Payment Options**
4. **New Customer Acquisitions**
5. **Personalized Promotions**
6. **Coupon Issuance & Redemption**
7. **Tailored Product Information**
8. **Product Sales thru Smart Posters**

## Can It Be Monetized?

- Yes – Per OTA provisioning
- Yes – Transaction Upside Fee Once Proven
- Yes – Sharing Transaction Fee
- Yes – Fee per Acquisition
- Yes – Fee per Occurrence
- Yes – Fee on Issuance & Redemptions
- Yes – Fee on Delivery
- Yes – Commission on Sales

**This is not an exhaustive list. Many more Revenue opportunities**



# NFC Revenue Opportunity per NFC User

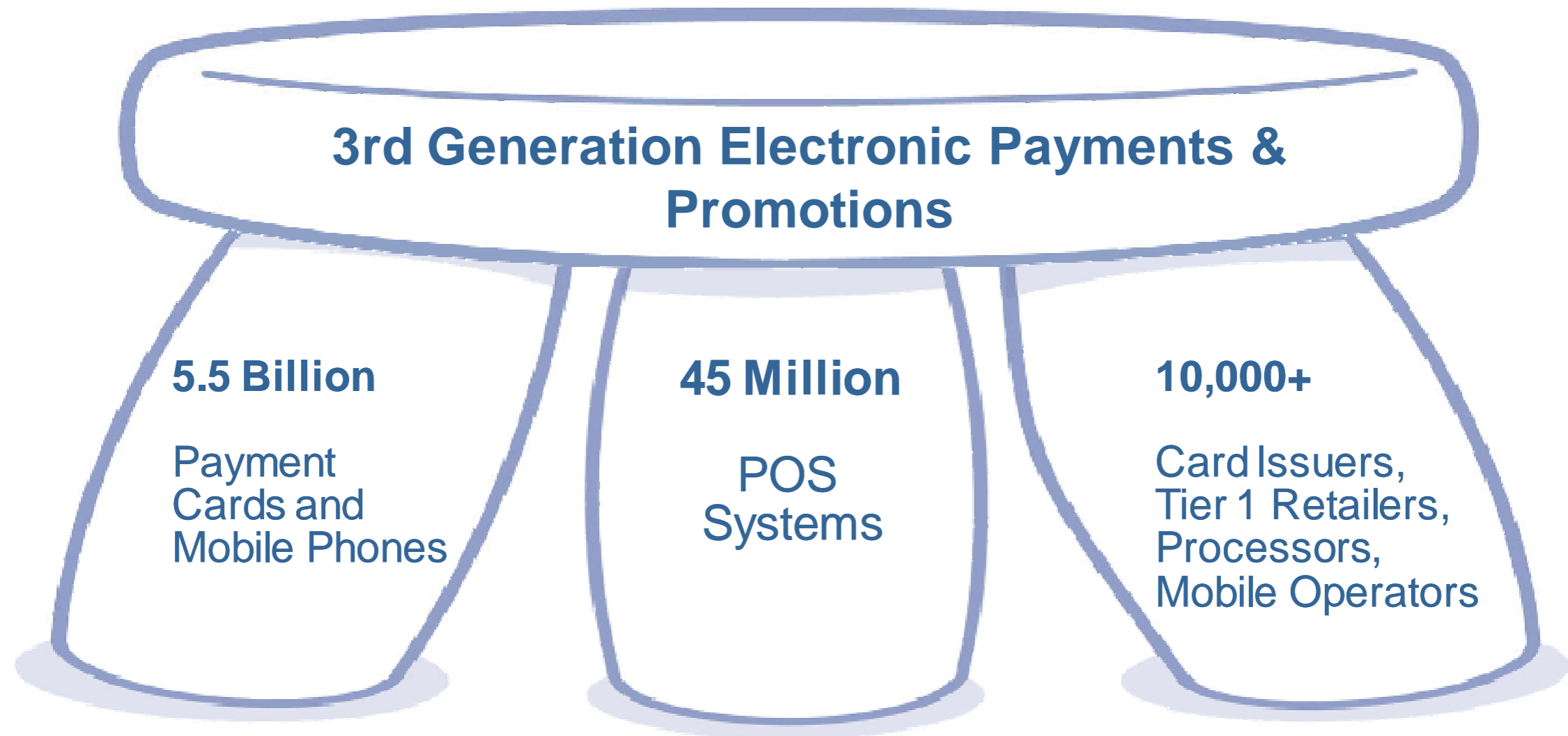
- **Provisioning Fees** **\$28**
  - 4 Cards Per Year @ \$3.00 Per Card
  - 6 Single Event And 1 Recurring Tickets Per Year @ \$2.00
  - 2 Merchant Cards Per Year @ \$2.00
- **Transaction fees** **\$7**
  - 10 Additional Transactions Per Year @ \$0.10
  - 30 New payment card transactions Per Year @ \$0.20
- **Targeted Promotions, Coupons, & Product Info** **\$22**
  - 8 Rewards/Promos @ \$0.25
  - 50 Coupon Issuance Per Year @ \$0.10
  - 10 Coupons Redemption Per Year @ \$0.30
  - 40 Prod info thru Smart Posters per Year @ \$0.05
  - 5 Prod sales thru Smart Posters per Year @ \$2
- **New Customer Acquisition/New Card Distribution Fee** **\$45**
  - 1 New Credit Card Sign Up per Year @ \$20.00
  - 1 New Prepaid Card Sign Up per Year @ \$5.00
  - 4 New Gift Card Distribution per Year @ \$5.00

**TOTAL ARPU: \$102**

**YEARLY REVENUE per 1M NFC USERS: \$110M**



# This is a Multi Billion Dollar Opportunity



**Billions of cards can be enabled on billions of phones, for use at millions of POS systems, offered by thousands of payment providers.**

# Good News: Consumer Feedback is Consistently Positive



- 80% of trial participants found the mobile wallet application was easy to use
- 9000 transit rides were taken on BART using NFC phone, and 800 times BART card was topped up using OTA service during the four month of trial



- 87% of users want mobile payments as standard feature of their phones.
- Payment was easy and convenient



- 75% of the trial participants preferred phone payments vs. cards.
- e-coupons very well received - personalization is the key



- Users want to make purchases at multiple locations
- Users want multiple cards and applications




# There Have Been Dozens of NFC Pilots over Last 3 Years

## Bell Mobility – MasterCard PayPass NFC Trial in Canada May, 2008


**VIVOtech<sup>®</sup> NFC Pilots**

**First Integrated Over-The-Air (OTA) NFC Coupon Issuance & Electronic Redemption at POS - July, 2008**



NFC Payment and Coupon pilot in Singapore

**First Australian NFC Mobile Phone Payment Pilot - December, 2008**



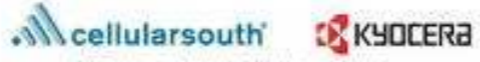
NFC payment pilot in Australia

**First-in-the-Nation NFC Mobile Payment Trial for Transit & Food - January, 2008**




NFC payment pilot in Singapore

**First NFC Wallet Solution with Biometric Control - June, 2007**



NFC payment pilot in the United States

**First e-Purse NFC Mobile Phone Solution with Top-Up using Branded Cards - Sept, 2007**




NFC payment pilot in Singapore

**First OTA Solution to Support Both Credit and Debit - January, 2007**




NFC payment pilot in the United States

**First OTA Solution to Support Both Coupons and Payments - February, 2007**



NFC payment pilot in Taiwan

**Only Supplier in Both Visa Wave and MSD NFC Pilots**



Flyby NFC phone payment pilot in Atlanta



Visa<sup>®</sup> Wave pilot in Malaysia

**Participating in Most NFC Payment Trials to Date**



Launched in the United States, Dec., 2008



Launched in Amsterdam, Oct., 2008

\*Pilots announced using ViVOtech NFC Software

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# 2009 Outlook

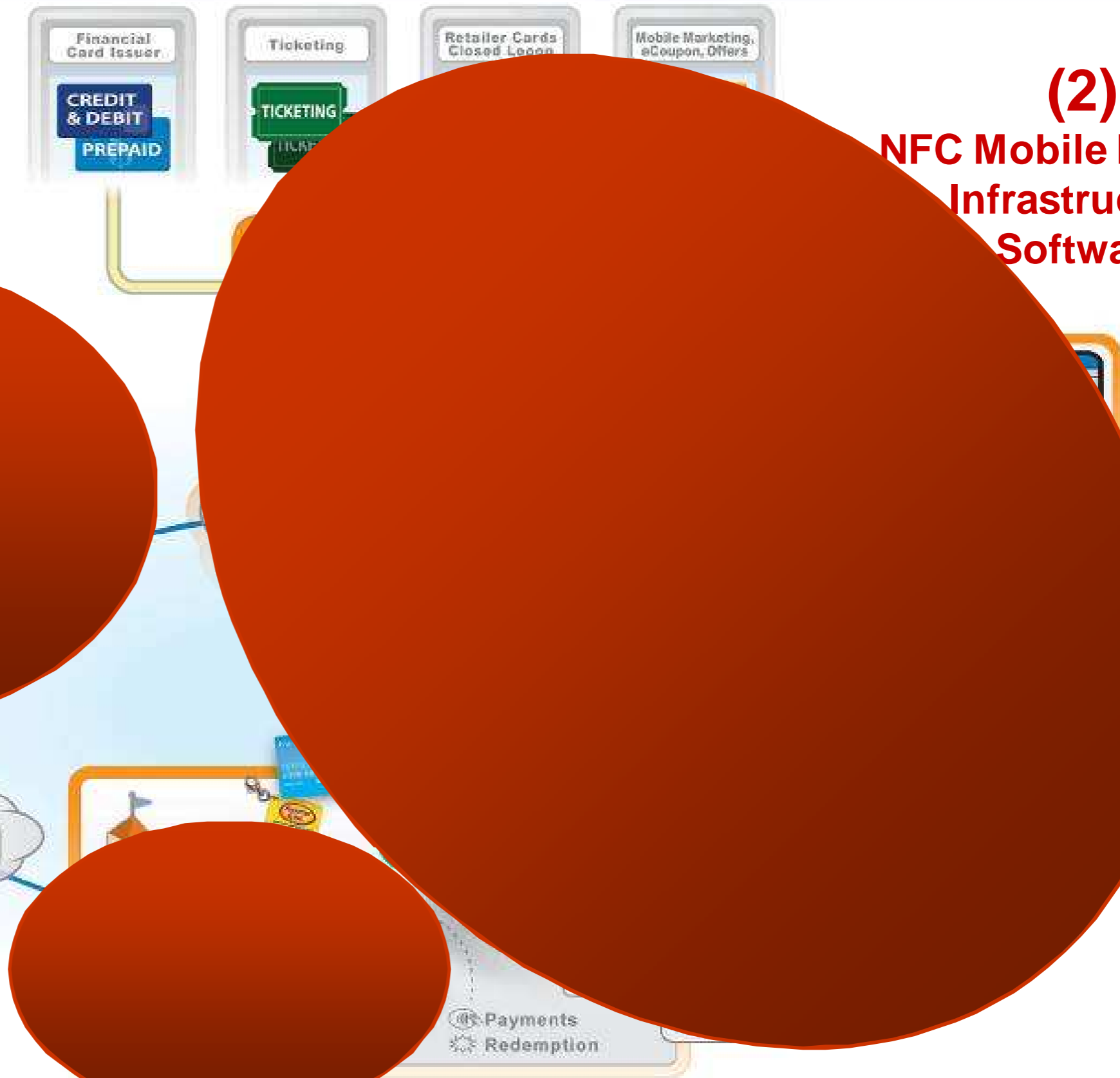
- 2009 will be an year of NFC infrastructure building!
- Multiple “limited commercial” roll outs expected to start in North America, Asia Pacific, and Europe
  - 10’s – 100’s of thousands NFC phones
- Paving the road for large commercial roll outs in 2010!

# ViVOtech Provides Essential Infrastructure Software & Hardware for Contactless & NFC Mobile Ecosystem

**(3)**  
**Mobile Marketing  
Applications  
Software**

**(2)**  
**NFC Mobile Payment  
Infrastructure  
Software**

**(1)**  
**POS Infrastructure  
Hardware &  
Software**



# A Little About ViVOtech

- **ViVOtech is the leading provider of**
  - **Contactless and NFC mobile payment systems**
  - **Over-the-Air (OTA) provisioning infrastructure software**
  - **Applications software to enable mobile prepaid, loyalty and promotion programs**
- **ViVOtech has a commanding market lead and first mover advantage**
  - **75% market share of contactless readers**
  - **Over 450,000 contactless readers shipped to 33 countries**
  - **Provided software for more than 25 NFC mobile payments & promotions trials**
- **ViVOtech has a seasoned management team with deep payments and mobile experience**
- **Over \$60m Funded from Prominent financial investors and market leading strategic investors and partners**
  - **Citi, FDC, NCR, Miven, Motorola, Nokia**
  - **Alloy Ventures, Draper Fisher Jurvetson (DFJ)**



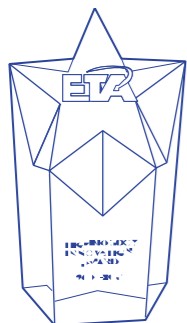


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Thank You



2005  
MOVERS & SHAKERS  
AWARDS



**ETA**  
TECHNOLOGY  
INNOVATION  
AWARD  
2005



Best Vendor  
Partner Award



#1 Contactless Reader Vendor  
2007 & 2008

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