Best Practices: Contactless and Mobile Payments Implementation

Welcome – Rori Ferensic
Director of Education and Professional Development, ETA

The Smart Card Payments Application Series
January 13, 2009

Introductions

Randy Vanderhoof
Executive Director
Smart Card Alliance

Webinar Topics

Contactless Payments: Merchant Acceptance

➤ Mohammad Khan, President & Founder, ViVOtech

Contactless Acceptance: What Is the ROI?

➤ Brent Bowen, Vice President, Business Development, Inside Contactless

Implementation: What Are the Best Practices?

➤ Dan Loomis, Global Product Manager, VeriFone

Conclusions and Q&A

➤ Randy Vanderhoof, Executive Director, Smart Card Alliance

Smart Card Alliance

Smart Card Alliance mission

To stimulate the understanding, adoption, use and widespread application of smart card technology through educational programs, market analysis, advocacy, and industry relations . . . .

Over 170 members, including participants from financial, retail, government, corporate, and transit industries and technology providers to those users

Major activities

➤ **Industry and Technology Councils**
- **Contactless and Mobile Payments Council**
- **Healthcare Council**
- **Identity Council**
- **Physical Access Council**
- **Transportation Council**

➤ **Conferences, symposia, web seminars and educational workshops**

➤ **Web-based resources and email newsletters**

Contactless and Mobile Payments Council

Mission: *Facilitate the adoption of contactless and mobile payments in the U.S. through education programs for consumers, merchants and issuers*

Over 48 active member organizations, including financial industry representatives and technology suppliers

Resources

- **Merchant and Issuer Advisory Groups**
- **Merchant Discussion Forum**
- **Educational publications on contactless and mobile payments**
  - *Proximity Mobile Payments Business Scenarios: Research Report on Stakeholder Perspectives*
  - *Merchant ROI Model & Implementation Guide*
  - *Proximity Mobile Payments: Leveraging NFC and the Contactless Financial Payments Infrastructure*
  - *Contactless Payments: Frequently Asked Questions*
  - *The What, Who and Why of Contactless Payments*
- **Contactless and mobile payments resources and news**
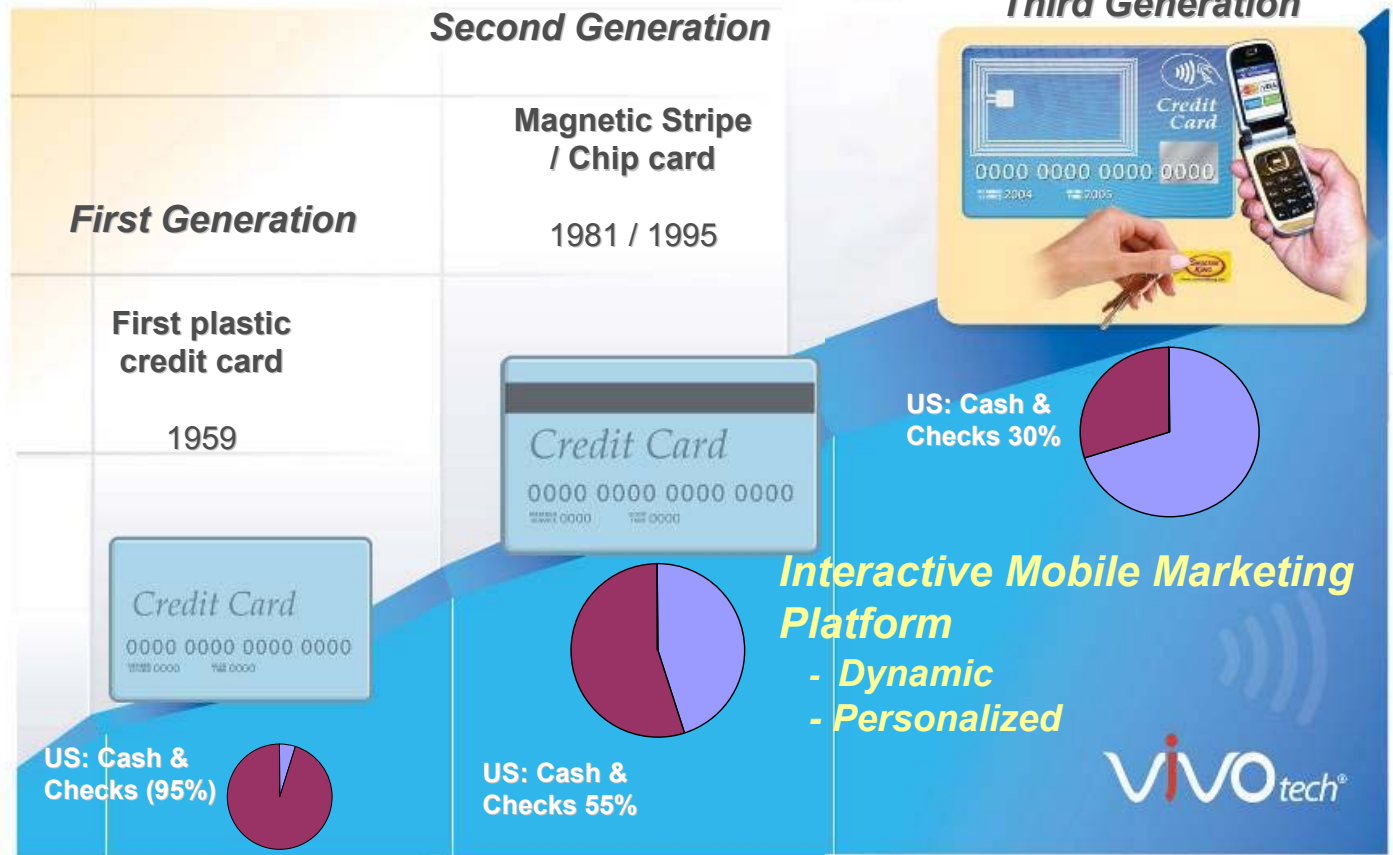- **Payments industry web seminars**

Contactless Payments: Merchant Acceptance

Mohammad Khan
President & Founder
ViVOtech

Technology Evolution in Electronic Payments

Smart Card Alliance

Contactless Cards and Phones

Third Generation

Second Generation

Magnetic Stripe / Chip card

1981 / 1995

First Generation

First plastic credit card

1959

Credit Card

0000 0000 0000 0000

Credit Card

0000 0000 0000 0000

US: Cash & Checks 30%

Interactive Mobile Marketing Platform
- *Dynamic*
- *Personalized*

US: Cash & Checks (95%)

US: Cash & Checks 55%

vivotech®

ETA

Over 60 Million Branded Contactless Cards Have Been Issued in United States

450,000+ Contactless Readers Are Installed at 130,000 Merchant Locations in United States
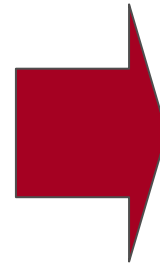
All Locations in United States Enabled

Locations Regionally Enabled or in Pilot

What's Driving the Merchant Contactless Acceptance

Increased Convenience
Faster Transaction
More Spend
Increased Frequency
Chargeback Protection
Enables Mobile

→

More Customers
Increased Revenue
Better Loyalty
Cost Savings
Enhanced Marketing

Contactless is getting accepted as the next generation payment technology after magnetic stripe!

Contactless has become a worldwide phenomena:
- Being installed in 30+ countries

Contactless Is Paving the Road for Mobile – Enabling New Services for Merchants

Mobile Sticker Solution

Phase 1: Contactless Payments

Enable POS with Contactless Credit, Debit, Prepaid/Gift/Loyalty & Private Label Cards

Initial Value Propositions:

1. **Replaces Cash Faster**
2. **Moves Lines Faster**
3. **Multiple Payment Options**
4. **Increased Customer Loyalty**
5. **Added Security**

Phase 2: NFC Mobile Payments & Promotions

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

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**

2009 Outlook

Branded contactless card issuance is expected to cross 100 million mark during 2H, 2009 in United States

  ➢ i.e., Approx. 25% of active branded cards

Merchant-driven contactless programs should see early deployment in 2009

"Limited" commercial roll outs of NFC mobile phones are expected in 2009, with bigger roll out in 2010-2011

At the same time, macroeconomic conditions can not be ignored in 2009
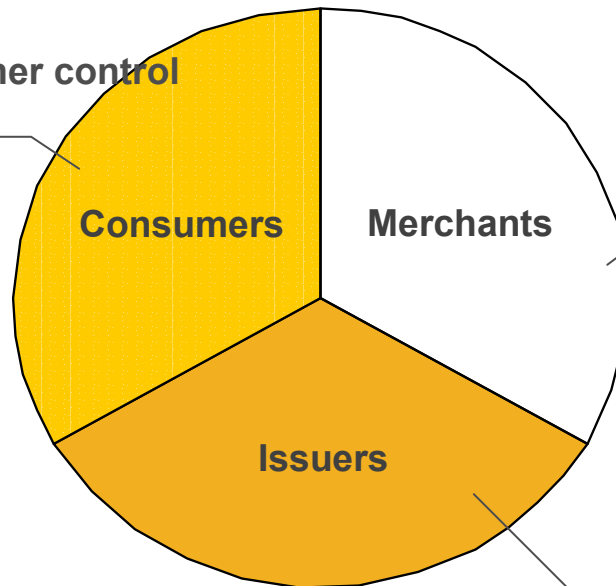
Why Contactless Payment?

Proven benefits for consumers, merchants and issuers

Faster checkout
Convenience
Easy to use
Secure - consumer control

Faster throughput
Increased spend per transaction
Customer satisfaction
Operational efficiency
Differentiation
Customer loyalty

Consumers

Merchants

Issuers

Increase activation (>3%)
Transaction volume (>.5%)
Customer retention & loyalty
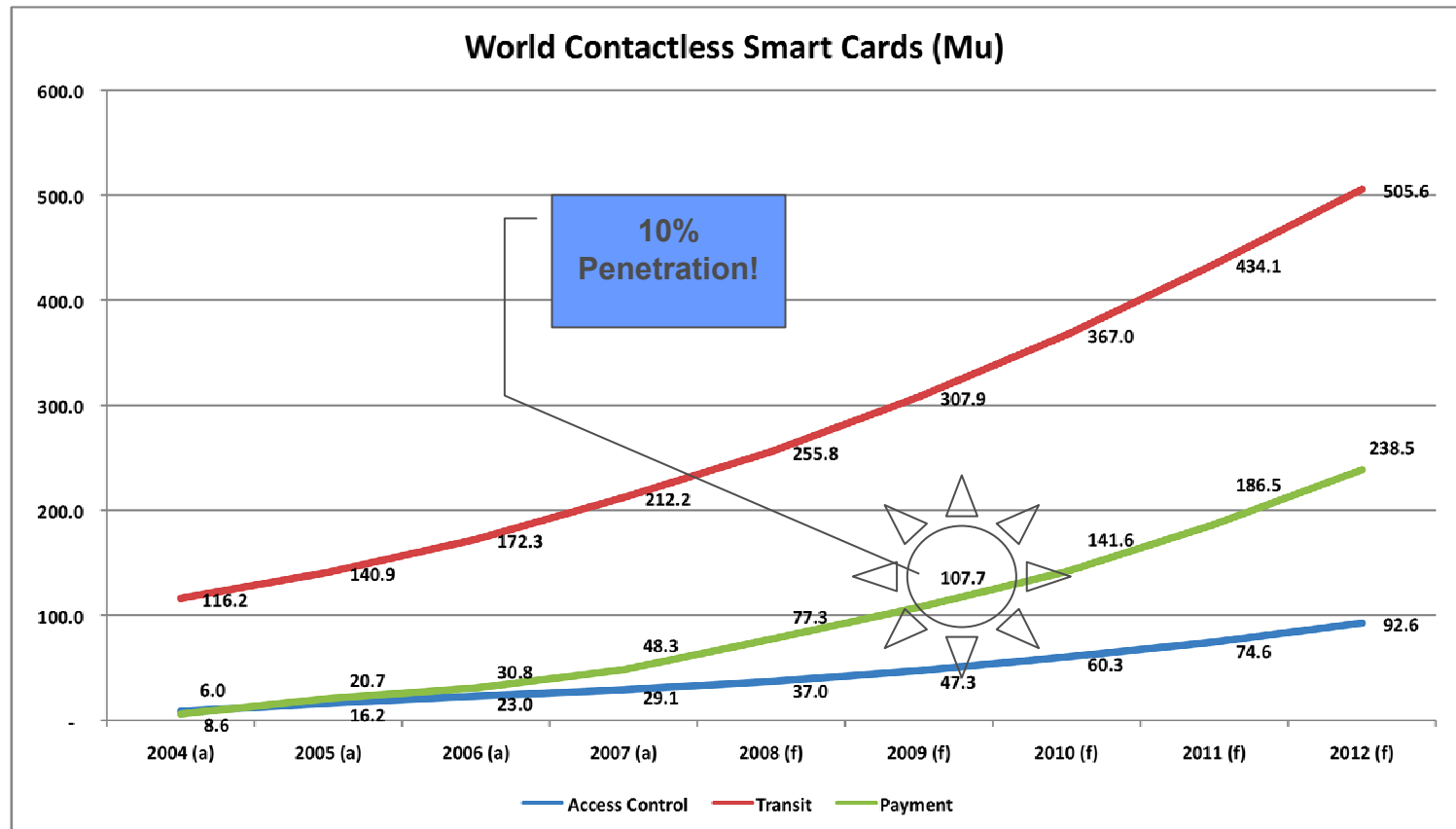**Co-branding**
Differentiation

According to a major
PayPass issuer's performance data,
PayPass provides:

• 36% increase in usage per account
• 45% increase in total transactions per account
• 230% increase in usage at *PayPass* merchants
• Transactions increased 270% at *PayPass* merchants

Market Forecast

"World Contactless Smart Card Markets" – Frost & Sullivan, 2008

World Contactless Smart Cards (Mu)

10% Penetration!

Transit values: 116.2, 140.9, 172.3, 212.2, 255.8, 307.9, 367.0, 434.1, 505.6

Payment values: 8.6, 16.2, 30.8, 48.3, 77.3, 107.7, 141.6, 186.5, 238.5

Access Control values: 6.0, 20.7, 23.0, 29.1, 37.0, 47.3, 60.3, 74.6, 92.6

X-axis: 2004 (a), 2005 (a), 2006 (a), 2007 (a), 2008 (f), 2009 (f), 2010 (f), 2011 (f), 2012 (f)

Legend: Access Control, Transit, Payment

Summary …So, Why Contactless?

- **Actual cash replacement has resulted**

- **Contactless is a 'cool' experience for consumers**

- **Speed & convenience are true benefits**

- **Driver to top-of-wallet usage**

- **Increased everyday spend (in non-contactless venues)**

- **Real demonstrated benefits to all stakeholders**

- **Acceleration of EMV deployment internationally**

- **Issuer penetration continuing into 2009**

How the ROI Model Works

Merchant provides inputs by asking series of questions

➤ Revenue/sales information

➤ Store information

➤ Transaction information

➤ Contactless projections

➤ Transaction processing summary

➤ Costs to outfit store with contactless hardware

➤ Summary information on chargebacks, cash handling, etc..

Review ROI summary information

➤ Shows 3 year review of sales, transactions, card lift, etc…

➤ Monthly benefits due to contactless acceptance

➤ One-time cost estimates

➤ Operational impact to revenue

Refine data to review different scenarios

Typical Scenario

Based on sample models

Even .5% penetration of contactless provides reasonable ROI

Typical ROI for contactless acceptance is 7-18 months

Additional benefits of contactless technology not even considered

> Loyalty, rewards, and value-added servicing

Still looking for merchant feedback and industry comments

> Want to continually improve the tool
> Looking for realistic data

http://www.smartcardalliance.org/

Implementation:
What Are the Best Practices?

Dan Loomis

Global Product Manager

VeriFone

Implementation Best Practices

- **Physical Considerations**

- **Development and Certifications**

- **Payment Processing**

- **Training and Support**

- **Marketing**

Physical Considerations

Which Contactless Acceptance Device Is Appropriate

➤ Integrated or Peripheral?

- Does the customer currently use a PIN or signature capture device
- Countertop space requirements
- Mounting and consumer experience

Connectivity Logistics

- Power requirements, wall warts
- Communication to host devices
- High speed data connection available

Location

- Ensure visibility at the point of sale

Development and Certifications

Infrastructure Investigation

- Contactless Upgrade or New Implementation
  - Either case requires that the host POS device is fully enabled to interface with the contactless reader

Certified Equipment

- Hardware and software must be certified with the acquirer/processor for each type of transaction (credit, debit)
- Payment applications on the contactless reader must be certified by each card brand

Modifications

- As with all new payment devices, infrastructure changes are to be expected
  - Example: Receipt printing - no signature line required with contactless.
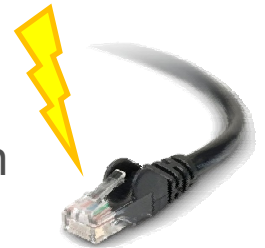
Payment Processing

Which Transaction Types Will Be Accepted?

- Credit
- Debit (PIN, PIN signature)
- Stored Value/Gift Card
  - Work with the acquirer/processor to understand various card transaction floor limits

Online or Offline Transaction

- "Live" connection required for online authorization
- Assume increased risk with offline processing

Data Elements

- Work with the acquirer/processor to understand various card and third party data elements to be supported

Training and Support

Train Staff

- Ensure all staff is thoroughly trained on contactless payment devices
  - Enable customers' ability to benefit
    - » Increase transaction speed, ease
  - Capitalize on infrastructure investment
    - » Increase transaction speed and ticket size
    - » Decrease cash handling
- Identify support personnel and testing practices
  - Deployment procedures, random testing, and reader software updates

Train Customers

- Help identify and teach customers about their payment device feature
  - Increase transaction speed, ease
- Reliant on staff training

Marketing

Drive Customer Awareness

- Educate customers on the technology
- Display contactless window decals and POS marketing materials
  - Branded test cards
- Consider contactless prepaid and gift card schemes

Build Customer Loyalty, Retention

- Customers enjoy the contactless experience
- Customers tend to shop more often

Conclusions

Randy Vanderhoof
Executive Director
Smart Card Alliance

Wrap Up and Conclusions

- ➤ Contactless/mobile payments – the third generation of payments technology
  - 60 million cards, 450K readers, 130K merchants
  - A cash substitute, not replacing other card payment
- ➤ Consumer/merchant awareness and uncertain ROI are obstacles to overcome
  - ROI model helps merchants build business case
- ➤ Choices of equipment, processing, training, and marketing will impact success for merchant experience
  - ETA, Smart Card Alliance resources available

Q&A

Randy Vanderhoof (moderating)
Executive Director
Smart Card Alliance

Electronic Transactions Association
http://www.electran.org

Smart Card Alliance
http://www.smartcardalliance.org

Rori Ferensic, Electronic Transactions Association
rferensic@electran.org

Randy Vanderhoof, Smart Card Alliance
rvanderhoof@smartcardalliance.org

Mohammad Khan, ViVOtech
khanm@vivotech.com

Brent Bowen, INSIDE Contactless
bbowen@insidefr.com

Dan Loomis, VeriFone
dan_L5@verifone.com

Data

Bounce from data to results to fine tune

Enter the per transaction processing fee (typically $0.10 - $0.20)

Return To Main | ROI Results

English Description of Info Required

Company Name	
Northwest Fast Food	

Revenue/Sales Information	
Year 1 Annual Revenue	$ 50,000,000
Sales Growth Percentage - Year 2	3.0%
Sales Growth Percentage - Year 3	5.0%

Store Information	
Number of Stores - Year 1	500
Number of Stores - Year 2	600
Number of Stores - Year 3	650
Average POS devices per store	3

Transaction Information	
Total Payment Transactions - Year 1	5,000,000
Transaction Growth Rate - Year 2	2.5%
Transaction Growth Rate - Year 3	3.0%

Simple percentage-based data

Transaction Information - BASIC	
Percent of Total Transactions Using Card - Year 1	30.0%
Percent of Total Transactions Using Card - Year 2	32.5%
Percent of Total Transactions Using Card - Year 3	35.0%
Average Amount of a Cash Transaction - Year 1	$6.72
Projected Cash Transaction Growth Rate - Year 2	1.5%
Projected Cash Transaction Growth Rate - Year 3	2.0%

ROI Analysis

	Return To Data	View Montly Details

Contactless ROI Analysis	Contactless ROI Analysis
Northwest Fast Food	**Northwest Fast Food**
BASIC	**BASIC**

Uses straight line average to calculate the monthly increased revenue of converted cash transactions (Cash to Contactless Sales Lift Divided by 12)

Based on the data provided your return on investment will be realized in 10 Months	Based on the data provided your return on investment will be realized in 10 Months

ROI Data Summary	First Year	Second Year	Third Year
Total Sales	$50,000,000	$51,500,000	$54,075,000
Number of Stores	500	600	650
Cash Sales	$23,520,000	$23,247,000	$23,711,940
Card-based Sales	$26,480,000	$28,253,000	$30,363,060
Total Transactions	5,000,000	5,125,000	5,278,750
Average Transaction	$ 10.00	$ 10.05	$ 10.24
Total Number of Cash Transactions	3,467,500	3,423,625	3,489,238
Contactless Transactions	50,000	55,000	60,500
Cash Transactions to Contactless	32,500	35,750	39,325
Average Card Transaction	$ 17.86	$ 17.16	$ 17.56
Cash to Contactless Sales Lift	$362,106	$369,653	$421,034
Monthly Benefits	**$ 37,657**	**$ 40,342**	**$ 45,422**
Card Lift (Cash to Contactless)	$ 16,395	$ 16,871	$ 19,163
Chargeback Savings	$ 867	$ 893	$ 937
Reduction in Cash Handling	$ 3,101	$ 3,463	$ 3,885
Operational Efficiency	$ 17,294	$ 19,116	$21,436
One-Time Costs	**$ 330,000**	**$ -**	**$ -**
Hardware	$ 187,500		
Installation	$ 37,500		
Marketing & Training	$ 30,000		
Software Development	$ 75,000		
Ongoing Operations	**$ 2,516**	**$ 2,854**	**$ 3,014**
Terminal Support	$ 1,250	$ 1,500	$ 1,500
Conversion cost (Cash to Contactless)	$ 1,266	$ 1,354	$ 1,514

Contactless - Return On Investment

Legend:
- Cumulative Revenue
- Cumulative Cost