



Divided We Fall: Fighting Payments Fraud Together

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5 June 2008

- Do we want to fight fraud or move it around?
- Does failure to prevent fraud have even deeper consequences?
- Are industry fraud prevention initiatives enough, or is public sector intervention needed?

Defining the Issue

How Collaboration Wins

New Technology

Forward Thoughts

Defining Terms: First Party Abuse



- Civilly Prosecutable

1st Party Abuse

- TYPES
 - Real person submits fraudulent information to obtain facilities
 - Real person sells their account knowingly
 - Real person fabricates a fictitious identity
- TACTICS
 - Leverage / modify personal data to prevent bureau pull
 - Falsify / manipulate application data and build credit history
 - Sell / purchase identity for account takeover
- EFFECTS
 - Alleged victimless crime, opportunist and organised
 - Can represent between 10-35 % of debt book.
 - Worst case seen 65%



- Criminally Prosecutable

3rd Party Fraud

- TYPES
 - Identity takeover – Uses information to apply for new accounts
 - Account takeover – Uses information to take over specific existing accounts
- TACTICS
 - Dumpster Diving
 - Phishing
 - Lost / Stolen / Intercepted
 - Hacking
- EFFECTS
 - There is a legitimate victim
 - Significant customer concern backed by Regulator and Governments

Fraud On the Rise – But Not Across Board

- +50% New phone account fraud**
- +33% Online purchase fraud**
- +10% Checking, savings acct fraud**
- 21% New card account fraud**
- 22% Credit card fraud**



“Card Not Present” Fraud on the rise



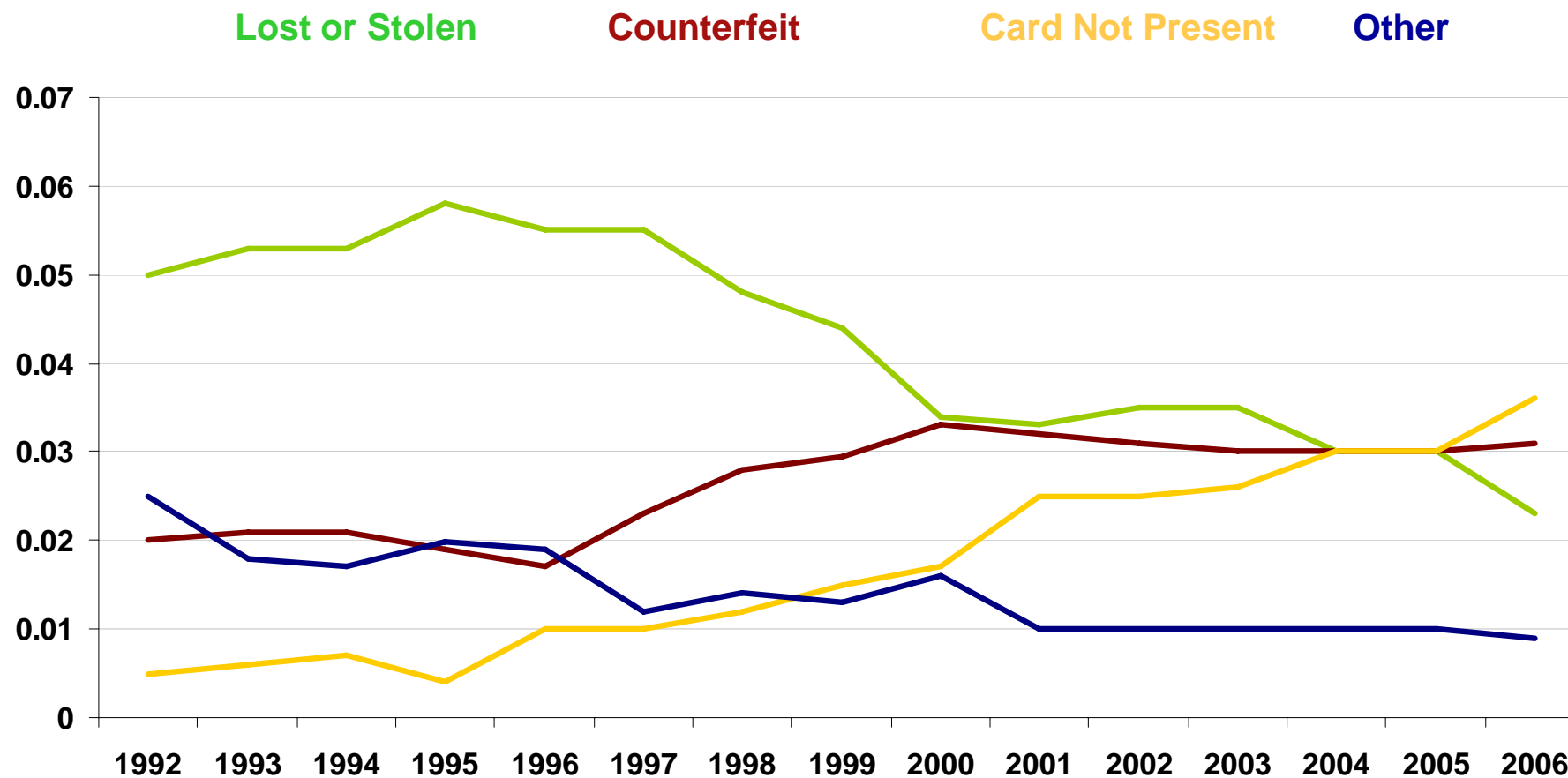
**49% of transactional fraud =
CNP Fraud**



Global Card Fraud



GLOBAL CARD FRAUD PER \$100 IN TOTAL SALES



Source: Based on The Nilson Report data, July 2007

What Are the Costs of Fraud?

Actual money stolen

Chargeback costs

Labor and administration costs

**Loss of reputation,
customer confidence**

**Non-economic / social
consequences**

Funding other crime



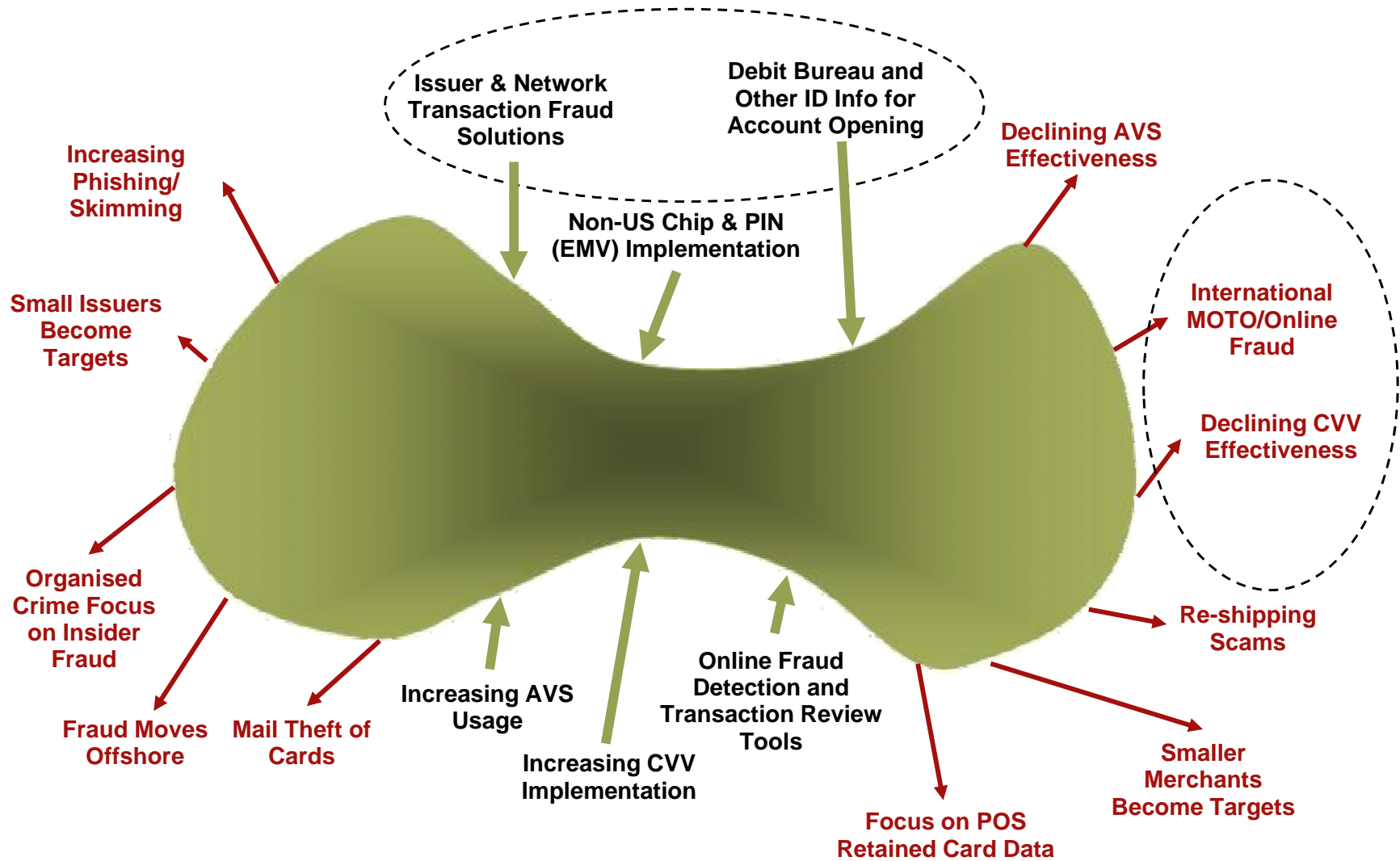
‘...Madrid bombers financed attacks through ATM fraud...’

‘...9/11 hijackers tried to buy gas station...’

‘...IRA financed arms purchases with card fraud...’

‘...Russian organized criminals funded CD counterfeit business, prostitution and drug smuggling with card fraud...’

The Balloon Effect in Fraud



Source: Credit Card Fraud Update: Silos vs. The Balloon Effect, Mercator Advisory Group, December 2006

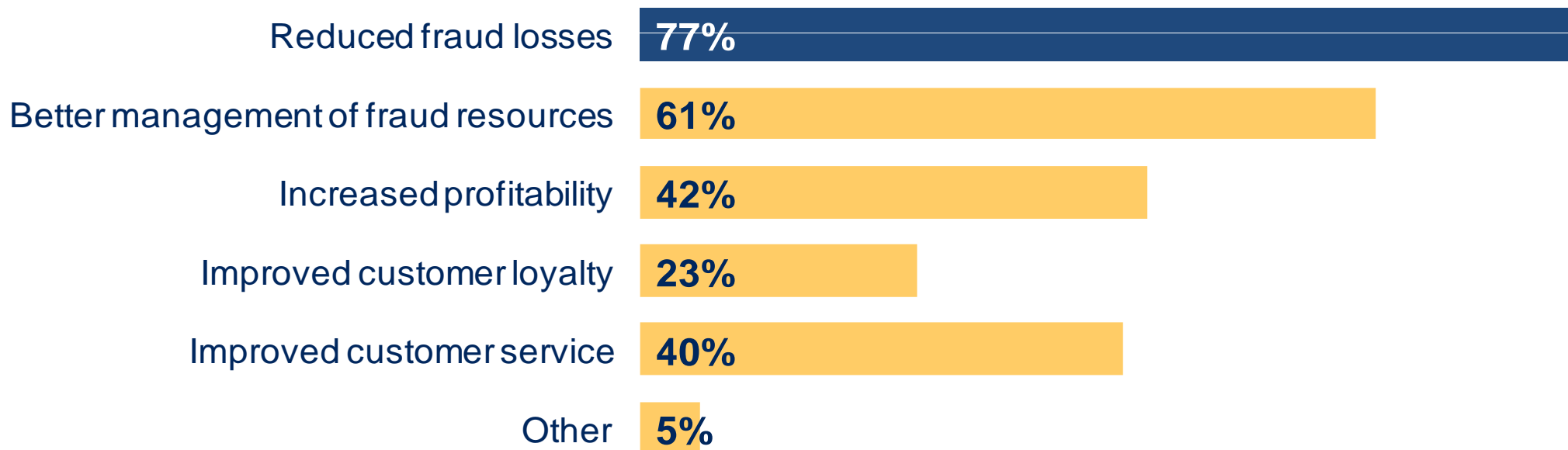
Growing Complexity, Changing Risks



- More Channels**
- More Lines of Business**
- More Regulations**
- More Technology**
- More Change**



Reduced fraud losses are seen as the chief benefit of an enterprise fraud solution



Source: TowerGroup, 2008

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Successful Collaboration: Cards Fraud



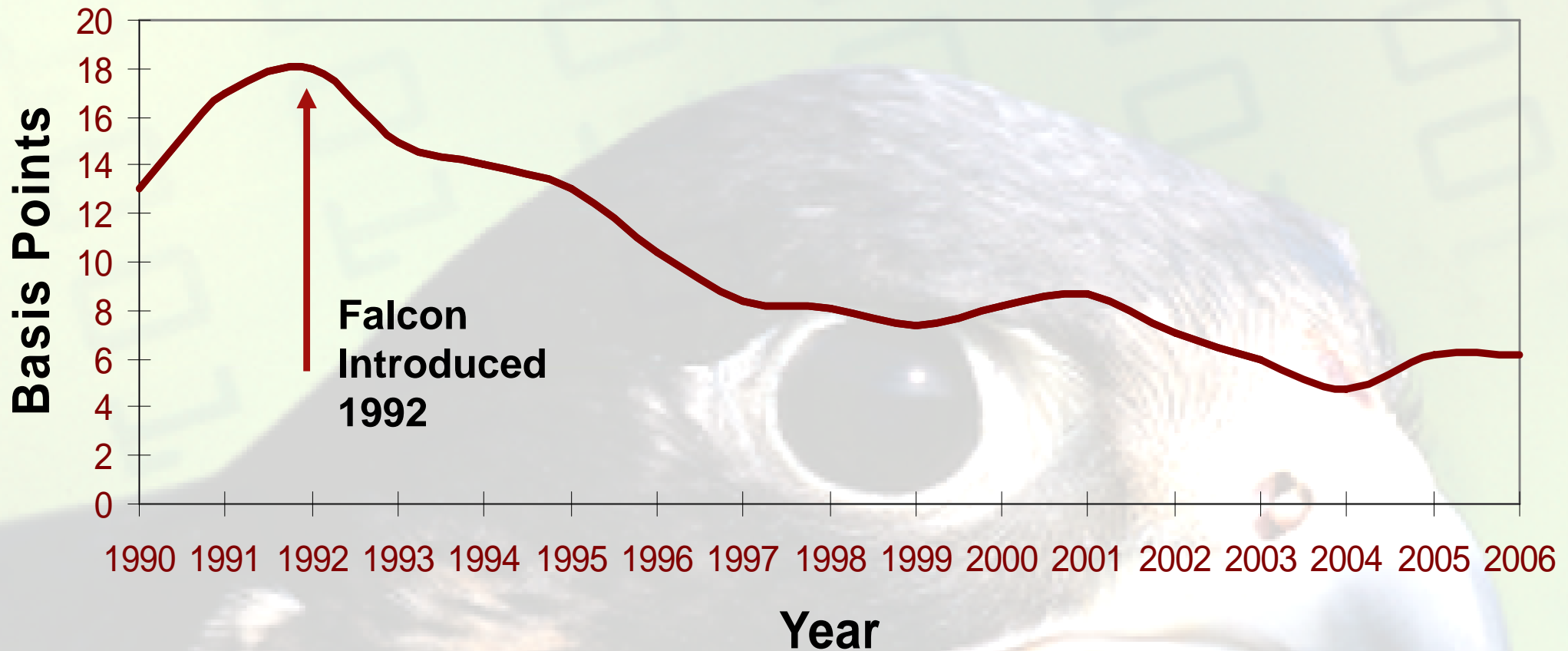
Fair Isaac Falcon Fraud Manager

Models trained on consortium data

1.5 billion card accounts



Successful Collaboration: Cards Fraud



Source: Nilson data

Successful Collaboration: ATM Fraud Detection



11,000 banks

Nationwide ATM networks

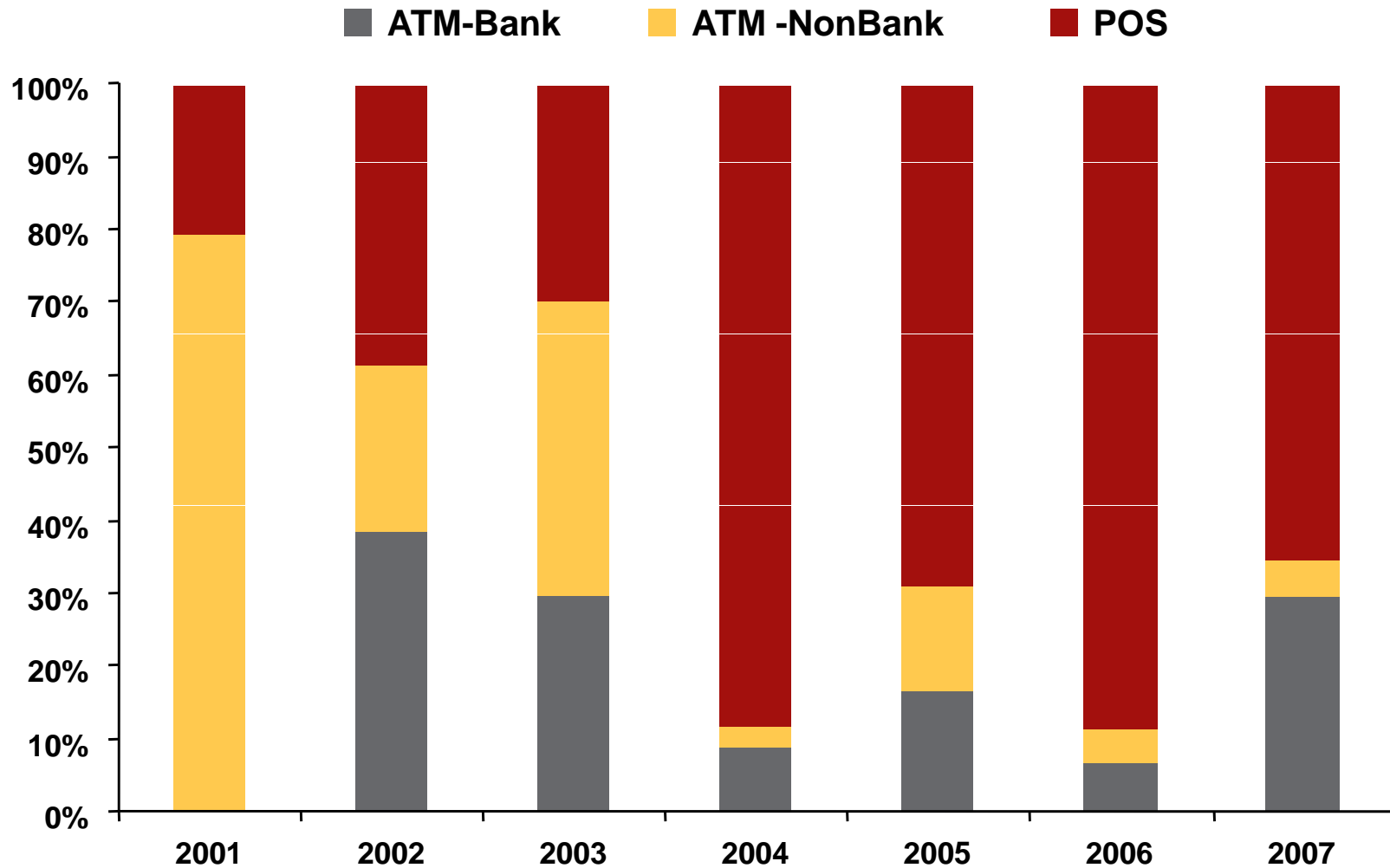
**Identifying points of compromise
to alert other card issuers**



Learning from Collaboration: PIN Points of Compromise



PIN Points of Compromise 2001-2007



Successful Collaboration: Chip & PIN Rollout — UK



99.8% PIN-verified

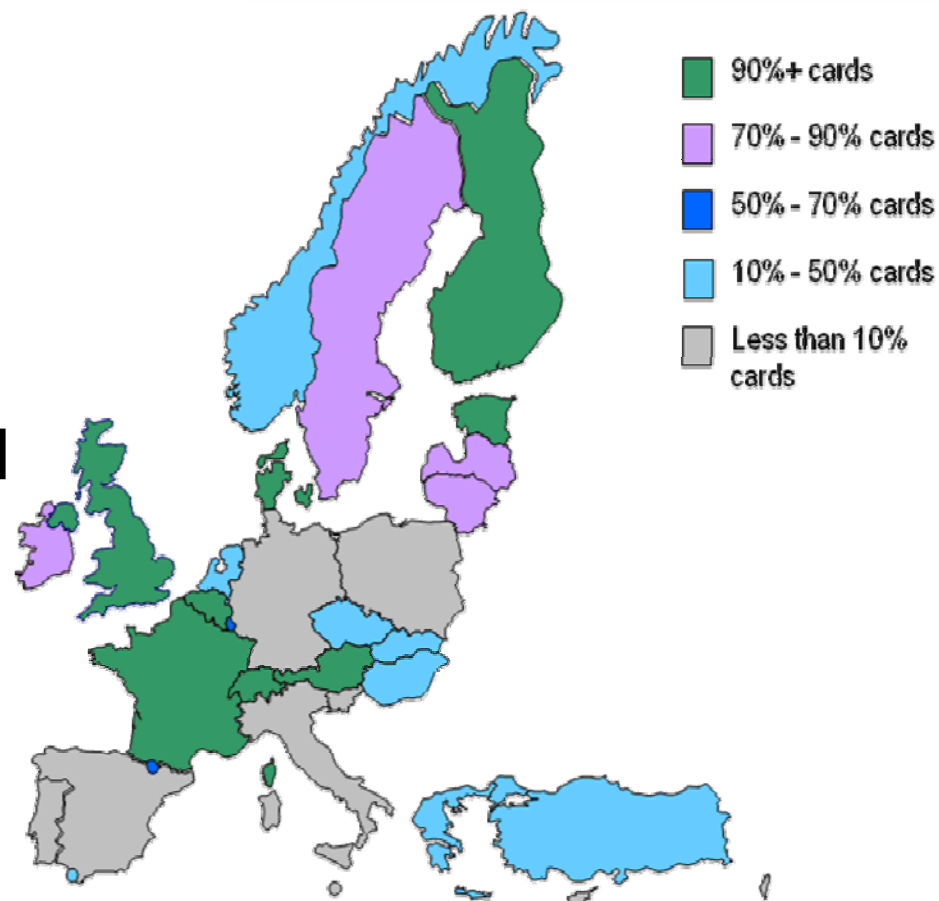
150 transactions per second

130 M Chip & PIN cards, 92%

850,000 tills upgraded, 87%

24% reduction in counterfeit and fraud on lost and stolen cards

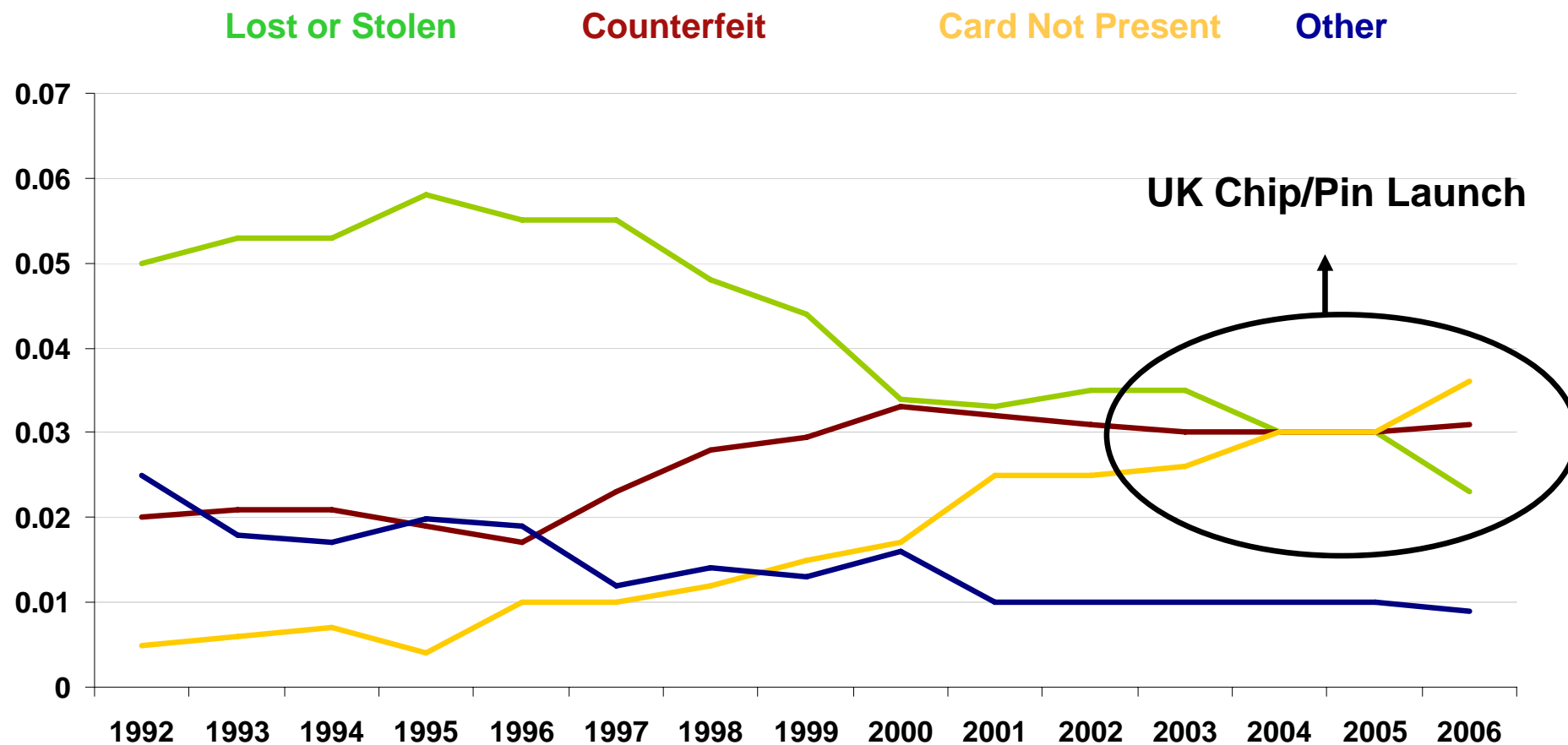
EUROPEAN CHIP AND PIN CARD CONVERSION MAP



Card issuance as at end 2006

... but We See the Balloon Effect

GLOBAL CARD FRAUD PER \$100 IN TOTAL SALES



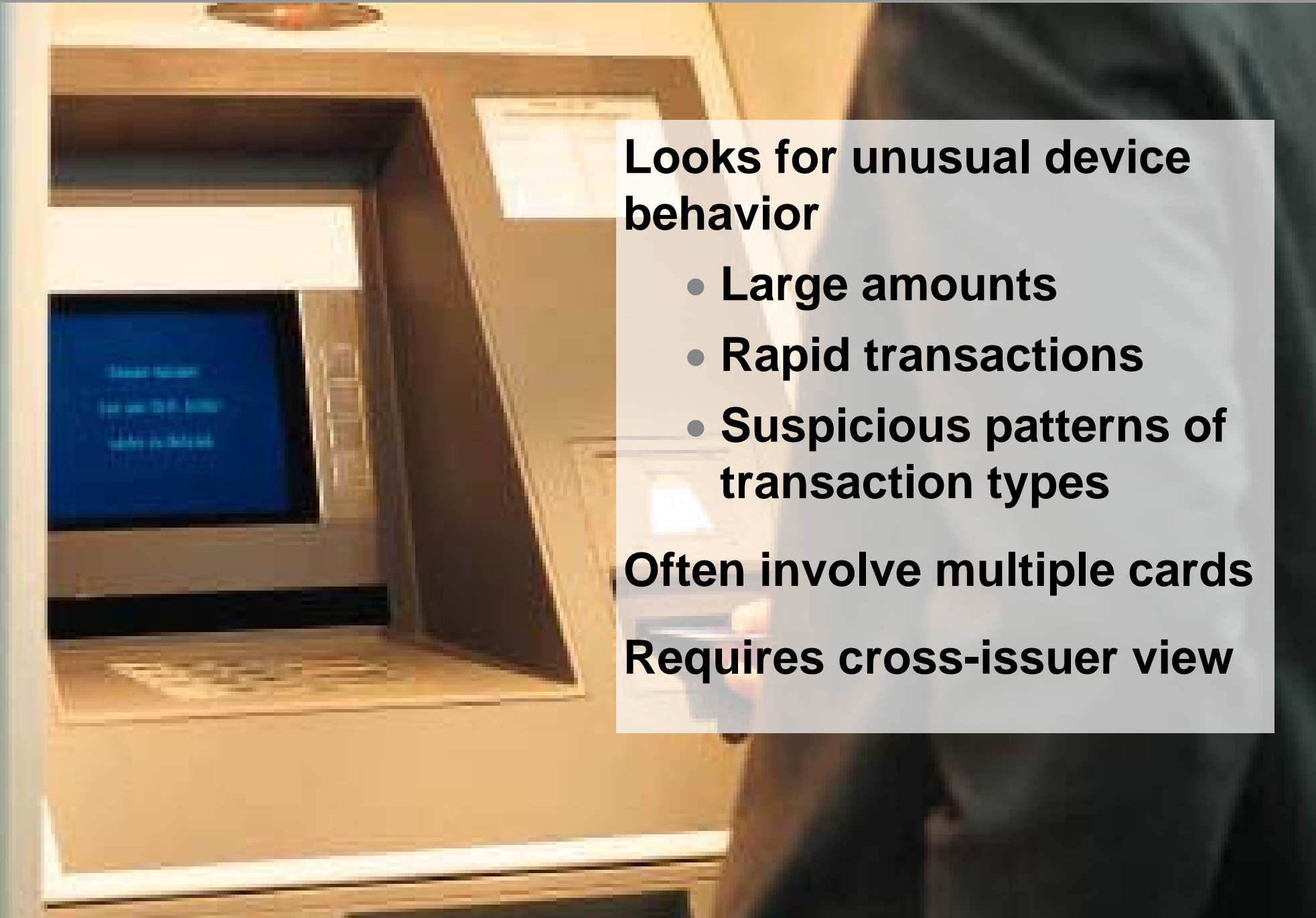
Source: Based on The Nilson Report data, July 2007

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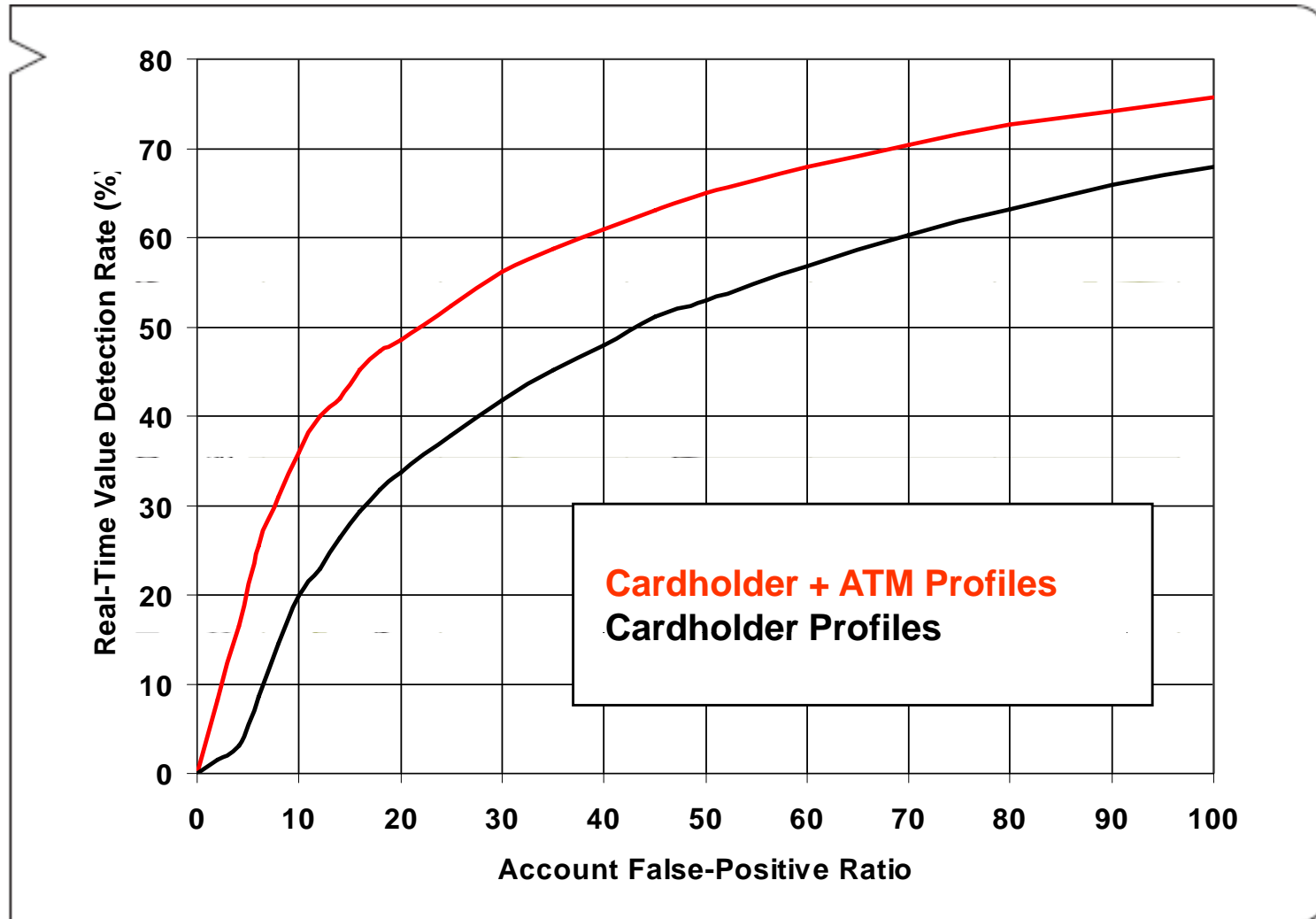
Looks for unusual device behavior

- **Large amounts**
- **Rapid transactions**
- **Suspicious patterns of transaction types**

Often involve multiple cards

Requires cross-issuer view

Predictive Lift from Adding Cross-Issuer Device Profiling



80% relative performance lift
in real-time value detection at a 10-to-1 false positive rate

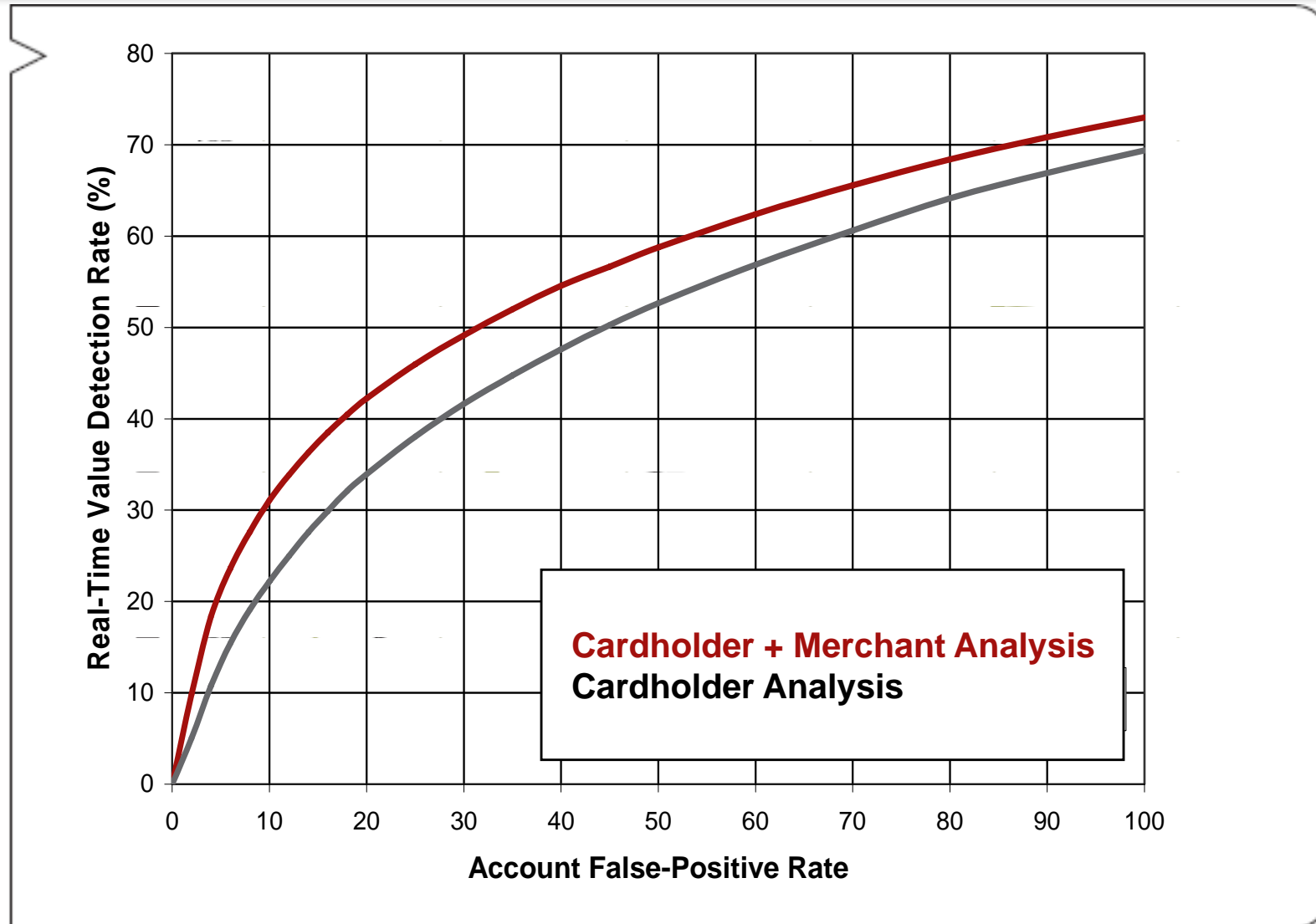
Merchant Profiling



CARDHOLDER PROFILE



Predictive Lift from Adding Merchant Analysis



40% relative performance lift
in real-time value detection at a 10-to-1 false positive rate

Adaptive Models

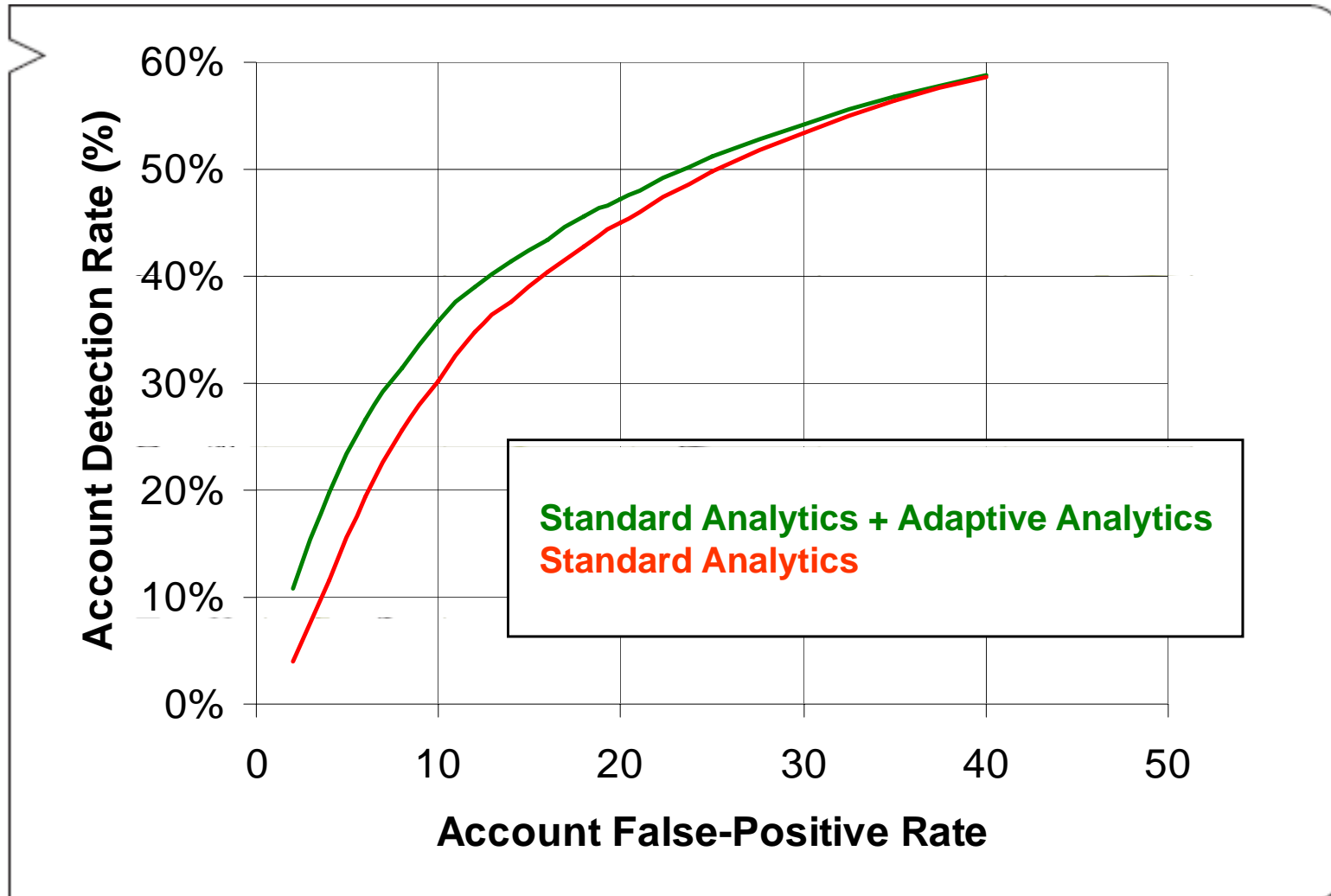
Keep up with dynamic nature of fraud

Dynamically adjust model weights

Based on experience of each individual issuer



Predictive Lift from Adaptive Analytics



18% relative performance lift
in real-time value detection at a 10-to-1 false positive rate

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Technology is Powered by Collaboration



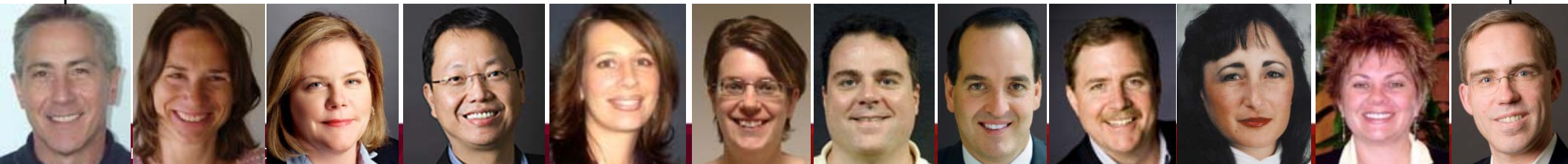
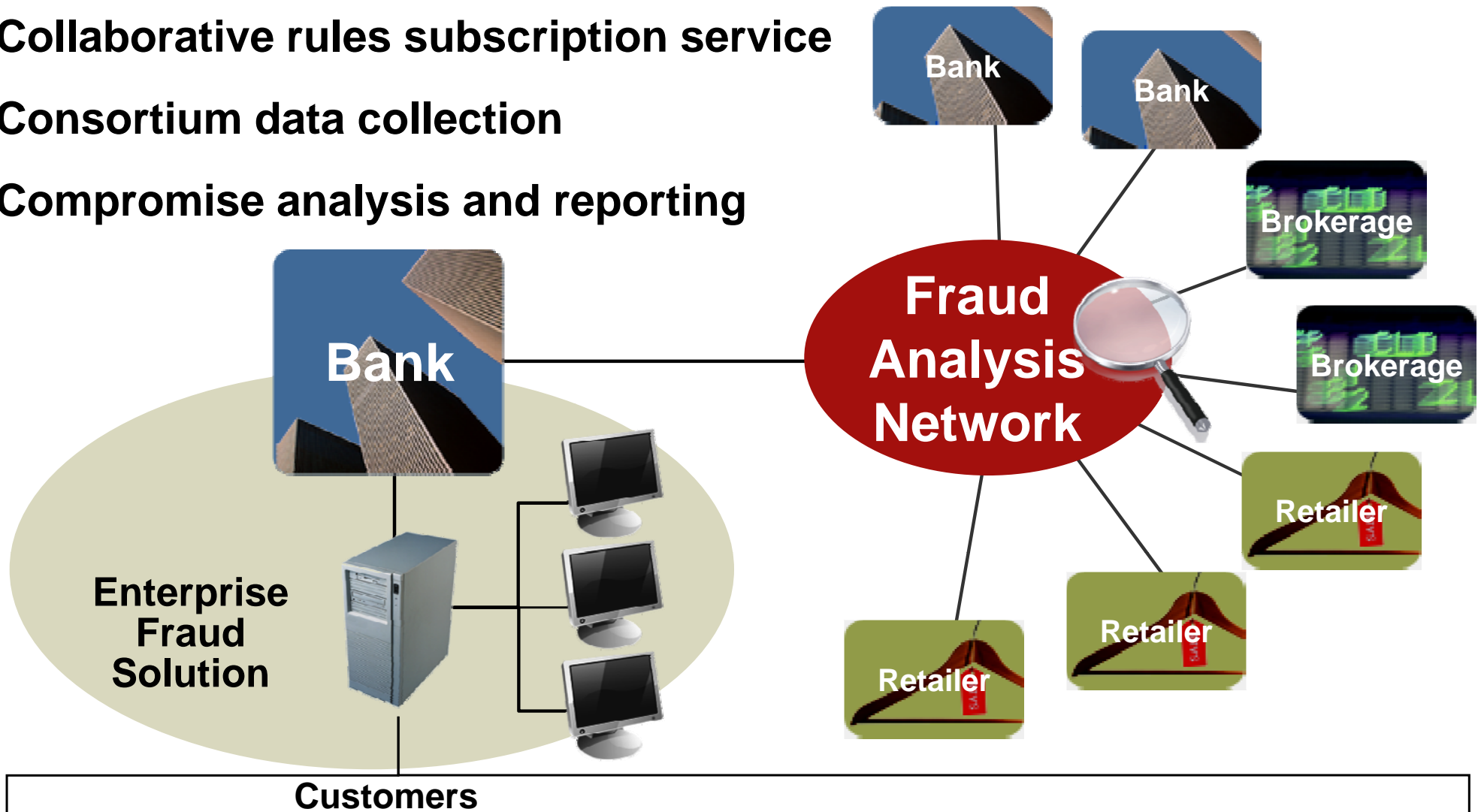
The Next Big Thing: Fraud Alert Network



Collaborative rules subscription service

Consortium data collection

Compromise analysis and reporting



- Payments fraud remains front-burner issue
- Fraud evolves with new payment products technologies
- Too big an issue to fight separately
- Private sector collaboration is essential
- Public sector involvement can help re: best practices, information sharing



Thank You!

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