

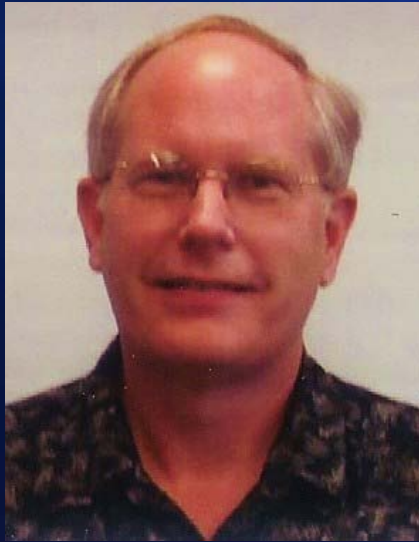
A nighttime photograph of a city skyline, likely New York City, featuring a suspension bridge with green lights and a cityscape with various skyscrapers illuminated against a dark blue sky. The lights are reflected in the water in the foreground.

# ETA

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# Thomas A. Layman, Ph.D.



President

Global Vision Group

**The Shifting Sands of Payments  
(aka, How to Avoid Quicksand)**

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# Global Vision Group

Provides expertise in payments innovation

Areas of practice include benchmarking, risk management, marketing, merchant and acquirer processing, and product development



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# Shifts in Payment Types

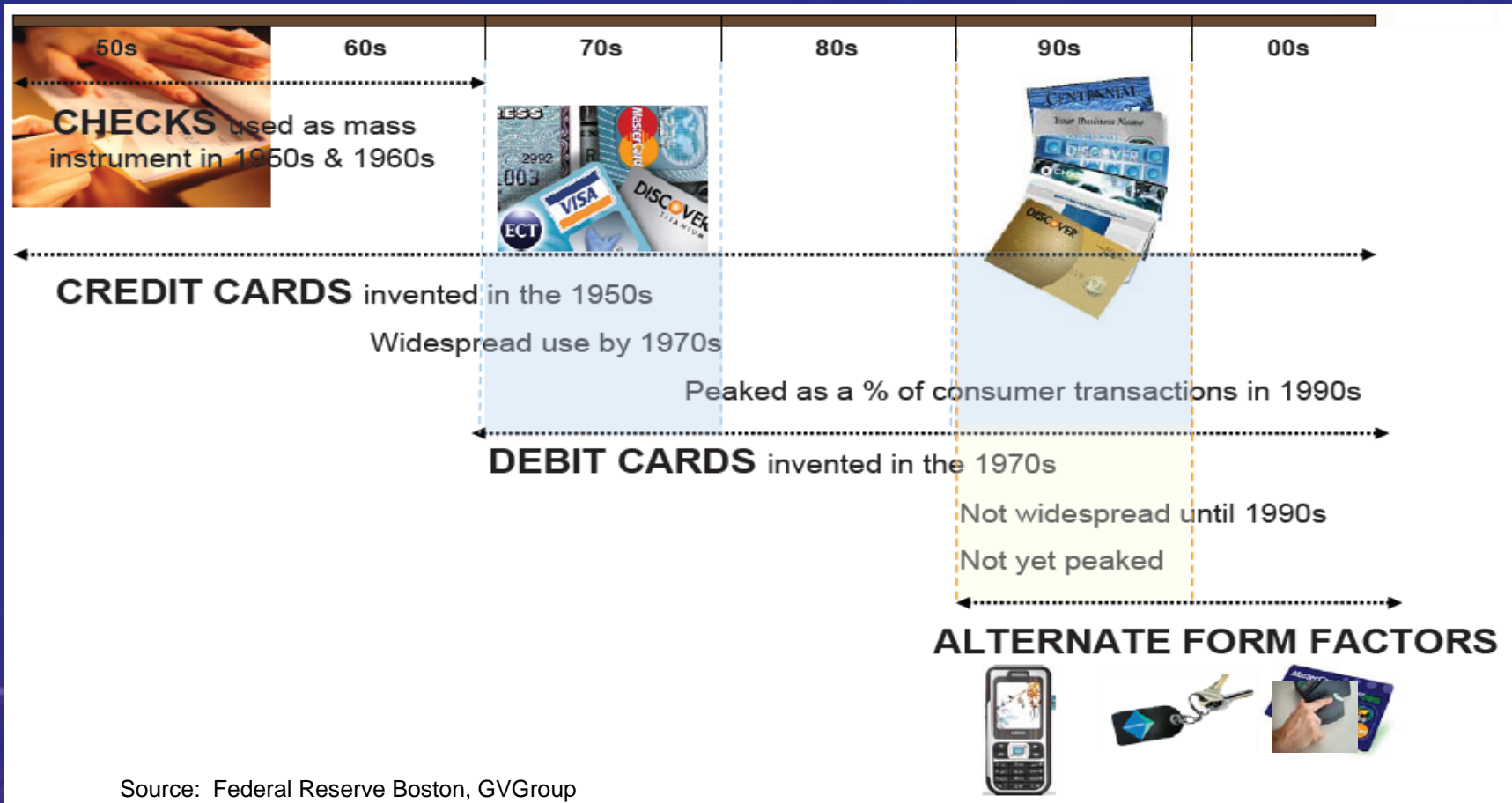
## Questions for discussion

- What types of alternative payments are emerging in today's marketplace?
- What characteristics do successful payment products have in common?
- How will traditional payment types (i.e., checks, cash, cards) compete with the emerging payment alternatives?
- How can Acquirers/Processors/Networks profit from emerging payment types?

# Evolution of Payments

## Checks, cards and emerging payment types

The shift toward emerging payments focuses on convenience, price of acceptance and security, while leveraging existing infrastructure

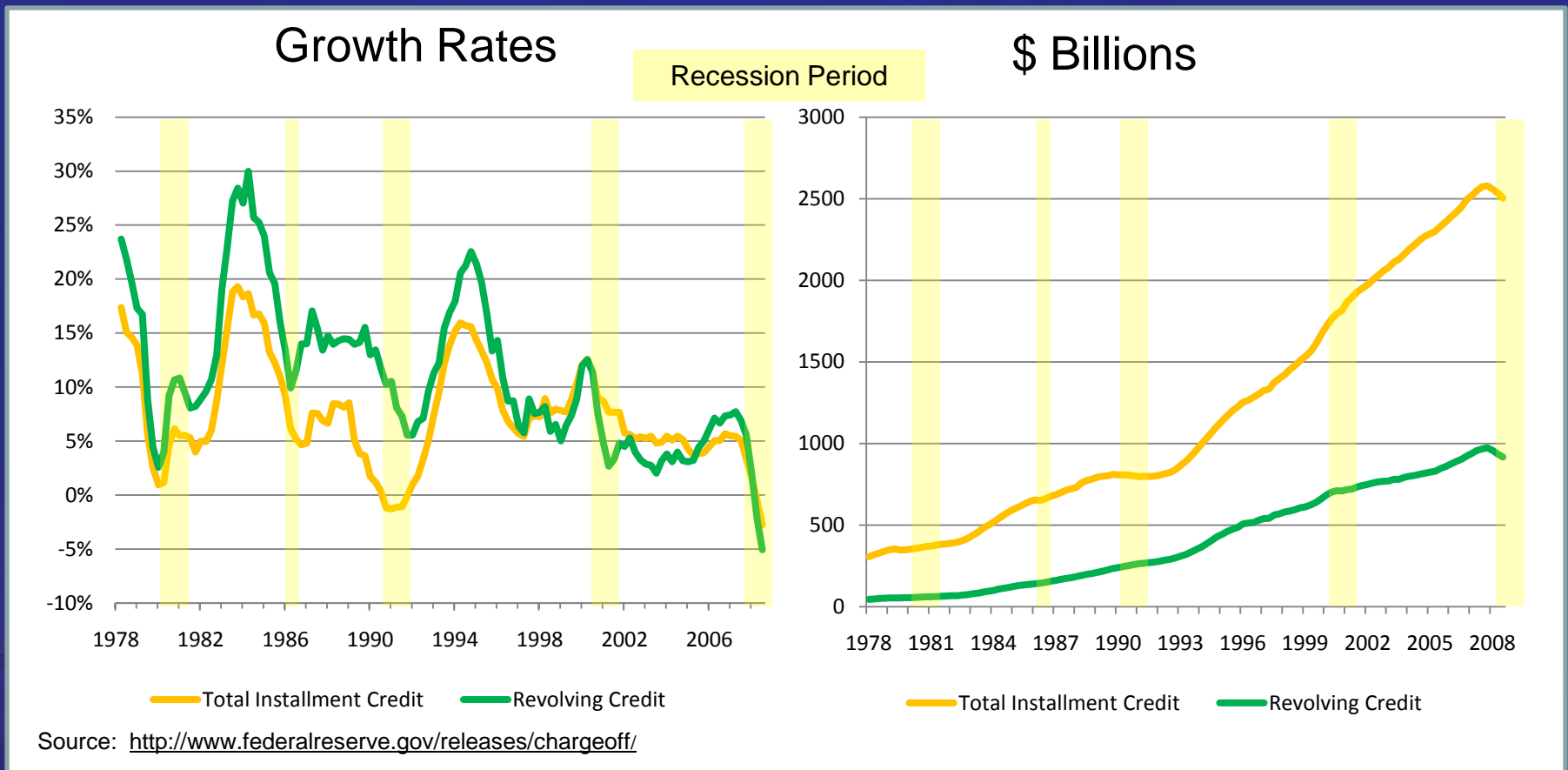


Source: Federal Reserve Boston, GVGroup

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# Trends in Consumer Credit

The Great Recession of 2008-09 saw a record drop in consumer credit due to both decreased demand and supply

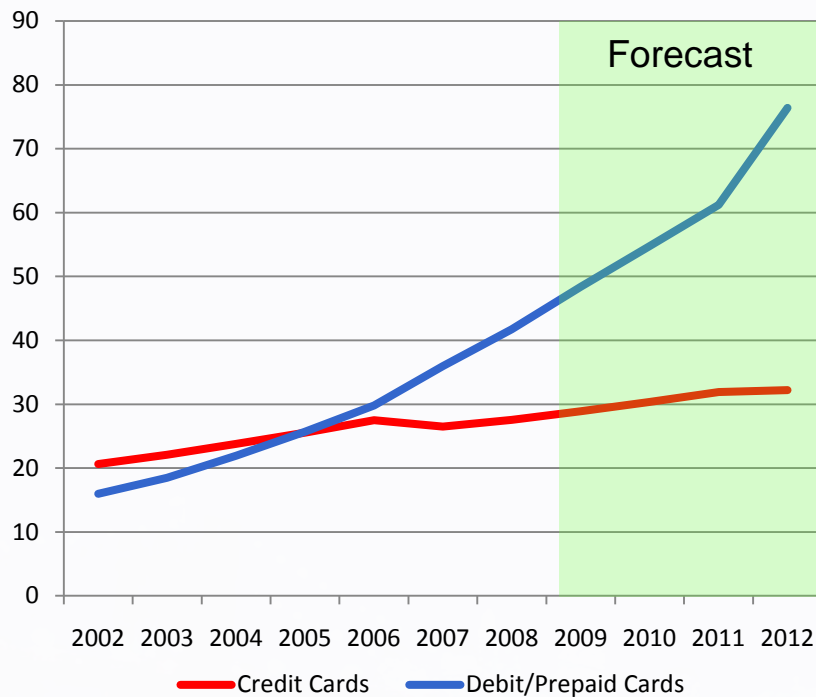


Source: <http://www.federalreserve.gov/releases/chargeoff/>

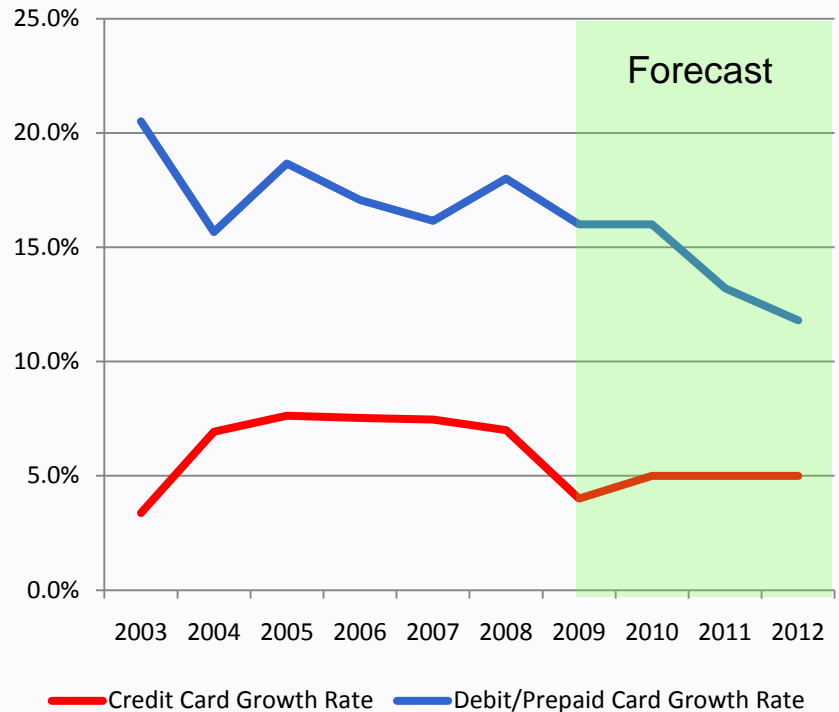
# Trends in Credit and Debit Card Transactions

Debit/Prepaid transactions surpassed credit transactions in 2005 and will continue to grow much more rapidly than credit cards

### Number of Transactions (billions)



### Growth Rates

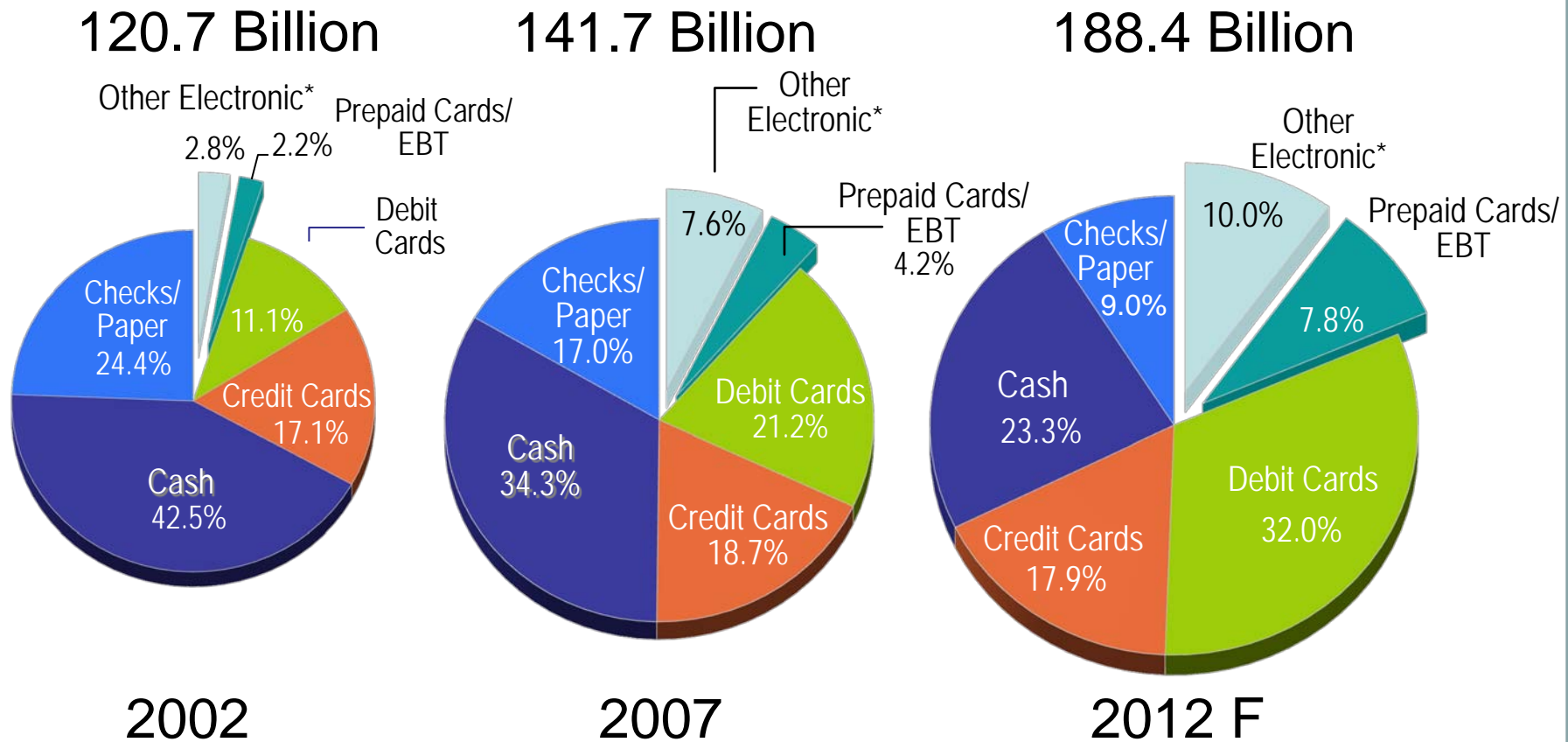


Source: Nilson Reports, various issues, GVGroup forecast

# Trends in Consumer Payments

Migration from cash and checks is accelerating

## U.S. Personal Consumption Transactions

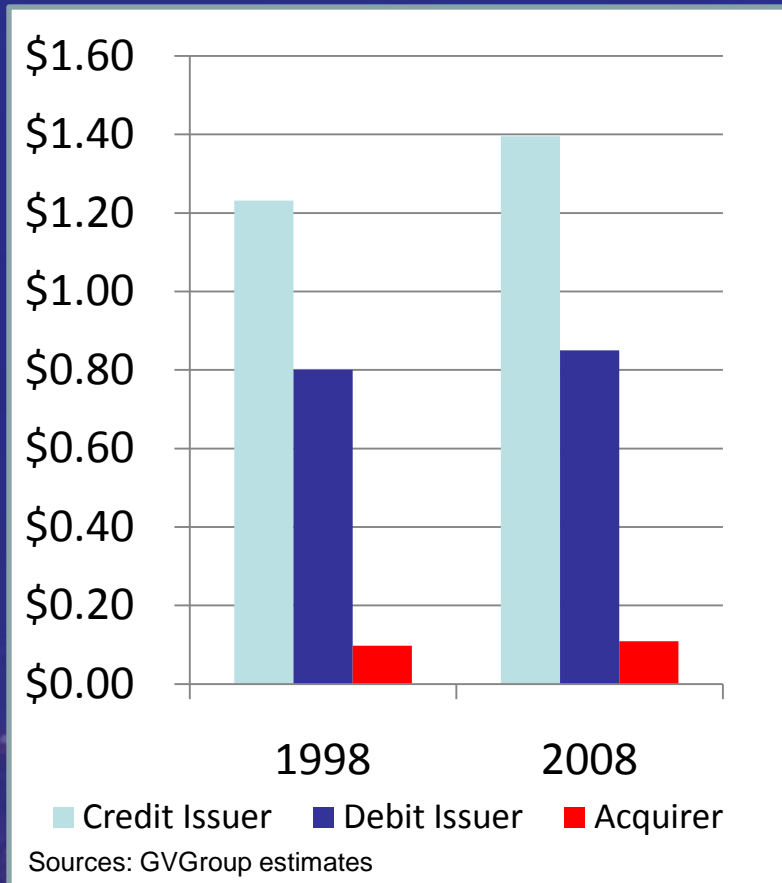


Source: Personal Consumption Expenditures by Transaction Type, U.S. Department of Commerce, Nilson Reports, GVGroup forecast.

# Card Industry Economics

## Net income per transaction

Industry profitability is under significant pressure due to regulatory changes and consumer and merchant demands



### Drivers of Acquirer Processor Profitability

- Volume and average ticket size
- Competitive pricing and retention strategies
- Interchange plus pricing or bundled
- Terminal deployment--lease, sales, rent
- Add-on fees for reporting, exception processing
- Enhanced services
- Factoring receivables

# Types of Emerging Payments

- Online payment types
- PIN and PIN-less Debit
- Prepaid products
- POS payment alternatives
- Check Truncation and eCheck
- Contactless
- Mobile
- Other Innovations

# Emerging Payments Landscape

Today's payment channels are much more complex

Person to Person



Mobile



Micro Payments/Digital Content



New Technologies/Contactless



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# The Potential for Emerging Payments is Huge!

“Today roughly 1-2% of our total transaction processing volume is emerging payment types. Over the next 3-5 years, we expect that such payments will represent 10-15% of our total transaction volume.” (September 2009, Top 5 US Acquirer Processor)

“Users of mobile payments will double by 2012.” Gartner Research

“10% of US payments will be contactless by 2010,” Federal Reserve Bank of Boston, 2008.

“Prepaid and other emerging payment types are expected to grow in excess of 18-20% per year between 2008 and 2012, reaching 33.6 billion transactions.” (September 2009, GVGroup forecast)

# Emerging Payment Types and Networks

How many do you recognize and how many are still around today?



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# Alternative Payment Types and Networks

Many did not survive. Why?



# Case Study

## PayPal and Pay-By-Touch

Characteristics	Pay-By-Touch	PayPal
Years in Operation	2001-2008 (filed bankruptcy)	1999 – Current
Capital Funding	\$300 million	\$200 million (eBay 2002, \$1.5 billion)
Business Model	<ul style="list-style-type: none"><li>• POS</li><li>• Sustaining Innovation</li><li>• Focus on existing customers</li><li>• Used existing railroads</li></ul>	<ul style="list-style-type: none"><li>• Virtual POS/online</li><li>• Disruptive Innovation</li><li>• Focus on non-customers</li><li>• Used existing railroads</li></ul>
Customer Value Proposition	<p><b>Merchant</b></p> <ul style="list-style-type: none"><li>• Cheaper payment type (ACH) for interchange sensitive merchants</li></ul> <p><b>Consumer</b></p> <ul style="list-style-type: none"><li>• Convenience (wallet-less)</li><li>• Perceived security through biometric authentication</li></ul>	<p><b>Merchant</b></p> <ul style="list-style-type: none"><li>• Enables sellers to accept cards and non-cards</li><li>• Targets new buyers and sellers</li><li>• Better fraud management</li></ul> <p><b>Consumer</b></p> <ul style="list-style-type: none"><li>• Online purchases without cards</li><li>• Peer to peer transactions</li><li>• Enhanced security for on-line transactions</li></ul>

# Case Study

## PayPal and Pay-By-Touch lessons learned

Characteristics	Pay-By-Touch	PayPal
Key Limitations / Differentiators	<ul style="list-style-type: none"><li>• Lack of payment network sponsorship and alliance with issuers</li><li>• All non-ACH transactions downgraded to card not present</li><li>• Technology looking for a purpose</li><li>• Targeted only POS</li><li>• Limited consumer adoption due to privacy concerns</li><li>• Management issues</li></ul>	<ul style="list-style-type: none"><li>• Found eBay as a sponsor at critical stage</li><li>• Strong fraud management and detection technology</li><li>• Meets unmet needs for specific merchant segments</li><li>• Brings significant PayPal customer base to merchants</li><li>• Payment type used for both buying and selling</li></ul>

# GVGroup's Top 10 Requirements

## Successful payment types

All payment types must be Safe, Stable, and Trusted:

10. Provide clear set of rules
9. Leverage infrastructure sharing
8. Manage risk
7. Value proposition for all stakeholders-faster, better, cheaper
6. Convenient and easy to use
5. Recognizable brand
4. Offer disruptive solutions that target unmet needs
3. Entrepreneurial and competent management team
2. Address evolving regulatory environment, and
- 1. A lot of capital and luck!**

# Trends & Forecasts

## What role will mobile play in payments?

### Considerations:

- Mobile applications provide balance inquiry, bill payment, transfers, alerts, and enable payments
- Phones as form factors (e.g., chipset, stickers with RFID)
- Mobile payments currently utilize payment networks for back end
- Convergence of ubiquitous prepaid and mobile payments
- Lack of consensus on the “right” business model
- Additional stakeholders put pressure on margins (hand sets, telcos, payment networks, hardware manufacturers—AND PROCESSORS!)

### Burning Questions:

- Who owns the customer and who owns the transaction?
- Who sets the standards?
- How can the revenue and expense streams accommodate more players/complexity and remain profitable?
- Will mobile follow a similar path as ATMs and on-line banking?

# Trends & Forecasts

## What emerging payment types will penetrate POS and on-line?

### Considerations:

- On-line PIN debit is likely to have significant impacts on stakeholders
- PIN-less debit at the POS and on-line could bolster PIN-based networks
- ACH and direct debit payment solutions require enhanced transaction exception processing and risk management
- Consumer demands for emerging payments will accelerate
- Merchant demand for lower payment acceptance cost can be offset by options that increase sales, e.g., PayWave at McDonalds, Bill Me Later

### Burning Questions:

- Will alternative on-line payments become ubiquitous at brick and mortar POS, i.e., PayPal, Google Checkout?
- Will PIN debit be adopted for online payments by consumers and issuers?
- Will more merchants move away from accepting credit cards and checks
- How will surcharging promote PIN based debit transaction, e.g., selected gas stations?
- Will ACH rules be modified to support per transaction processing?

# Outlook for Emerging Payments

## Other factors influencing the shift in payments

*With all of the developments in emerging payments, new technology, the regulatory environment and an uncertain economy, we expect that over the coming 5 years, use of emerging payment types will significantly outpace the changes observed during the past 2 decades!*

- Education in Payment Matters
- Financial Inclusion
- Integrity and Contingency
- Fraud & Security
- Standards
- Payment Costs
- Regulatory Intervention

# Conclusions

Acquirer Processors will have to address the following to profit from the changing landscape of payments:

- When is the right time to invest in support for an emerging payment type and how long should it take to achieve an acceptable ROI?
- Who will be the first to offer a simple/low cost rewards program across multiple merchants within specific geographic communities?
- Can unbundled merchant acquirer pricing better support the profitability of emerging payments?
- How can international investments be leveraged to satisfy local demands?
- How should you prepare for cross border acquiring becoming more wide-spread?
- How do you compete with new players using “cloud processing” for merchant transaction and acquiring functions?
- Is PCI compliance sufficient for managing all customer data and the impacts of data breaches?
- What is the future role of “niche” players compared to large scale players?

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Thank You!

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