



# Mobile Payments

How near is the cashless future?



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Tirtho Deb, T'14

Center of Digital Strategies at Tuck School of Business



# Agenda

## Mobile payments

- What are mobile payments?
- Value chain
- Payment models

## Key Players

- Key Players
  - IT giants, service providers, financial institutes
  - Start ups

## Challenges

- Security
- Standardization
- Scalability

## Future trends

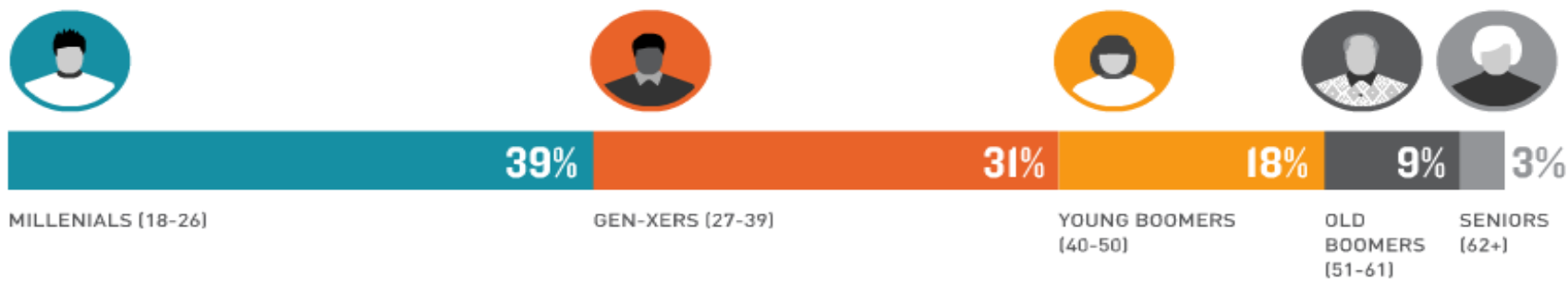
- Predictions for 2015 and beyond



# Why is it important?



## Who's using mobile payments?





# Value chain

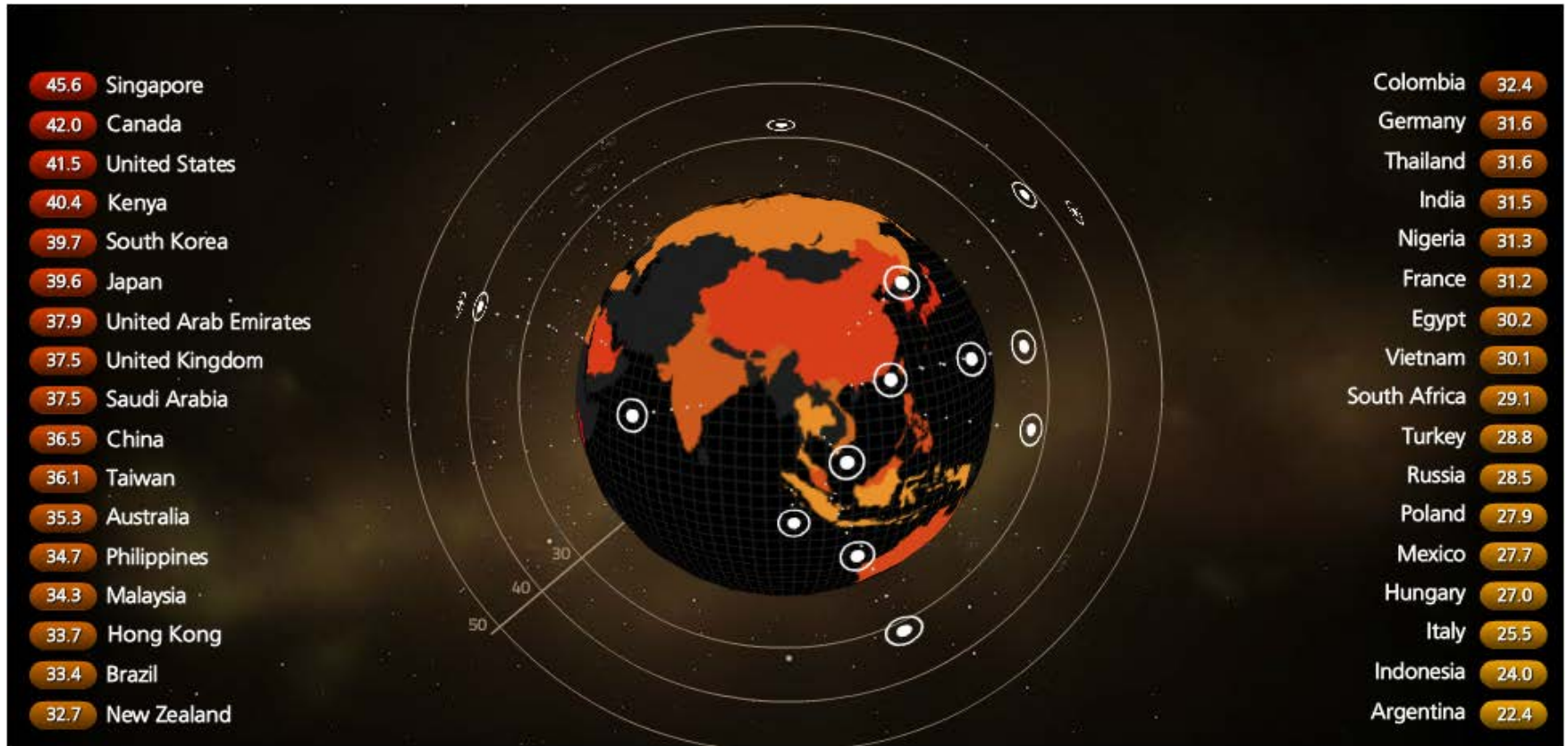


Retail Purchase	Fast Food	Mass Transit	Parking	Remittances	Digital Downloads	Online Purchase	Vending Machine
53%	66%	70%	45%	34%	47%	43%	38%
27%	20%	22%	39%	34%	35%	37%	38%
18%	12%	8%	16%	30%	18%	16%	24%





# Mobile Payments readiness index



Consumer Readiness

Financial Services

Mobile Commerce Clusters

Environment

Infrastructure

Regulation

Source: Mastercard Insights



# Category leaders worldwide

## Consumer Readiness

COMPONENT LEADER:

Kenya

89%

of Kenyans are familiar with mobile payments

68%

of Kenyans are making mobile P2P payments frequently



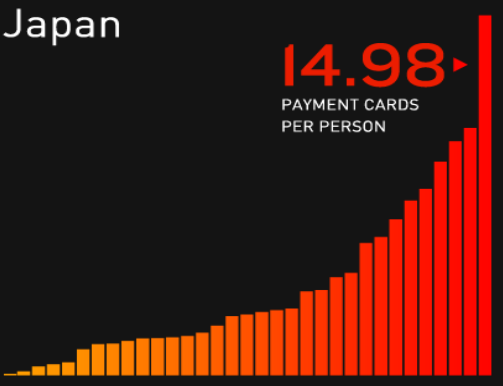
## Financial Services

COMPONENT LEADER

Japan

14.98

PAYMENT CARDS PER PERSON



## Mobile Commerce Clusters

COMPONENT LEADER

Canada



## Environment

HOUSEHOLD CONSUMPTION EXPENDITURES  
(ANNUAL, IN USD)

United States

\$33,000

Index Average

\$11,000

Kenya

\$609

0 10 20 30 40

## Infrastructure

COMPONENT LEADER

Singapore



100%  
mobile coverage

## Regulation

COMPONENT LEADER

Singapore

score

84

effectiveness of information and communication laws

score

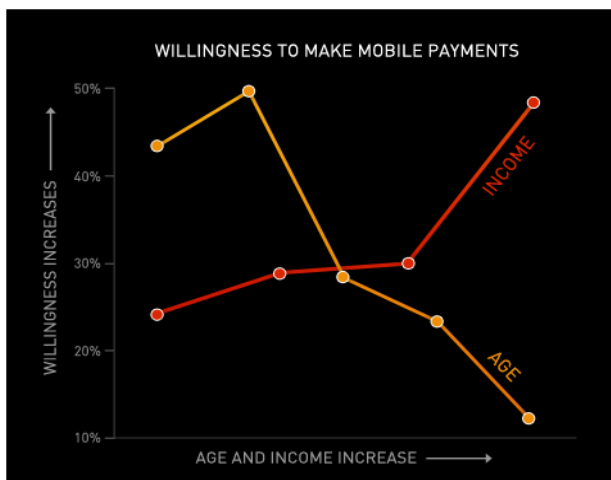
90

efficiency of legal framework





# How does U.S. score?



- Willingness to pay increases with income but decreases with age
- Usage, familiarity and willingness skew to young affluent males
- M-commerce lead the three payment types (POS, P2P) in early adoption
- 50% of consumers with income above \$100k show willingness to use m-commerce



# Payment services performed from mobile devices



Mobile wallets

Point of sale (POS) payment

Mobile money transfer (P2P)





# Mobile wallets

## Value Chain



## Value proposition

- \$6.7 trillion in 2011 credit card payments
- Magnetic strip credit cards are not safe
- Wallet becomes bulkier with more cards
- Enables merchants to provide real time customized and targeted marketing

## Key players

Mobile  
Platform  
Providers



Network  
Service  
Providers



Financial  
Institutes





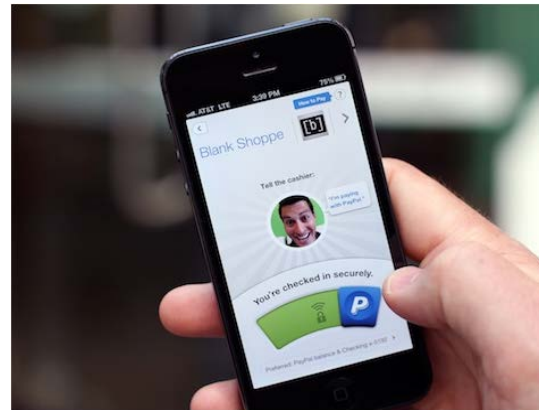
# Mobile Platform providers

## Google wallet



- Only worked on few NFC enabled Android phones
- Low merchant adoption rate
- Shut out by network carriers
- Now works on non-NFC Android 2.3 , iOS 6 or higher (HEC)
- Money transfer option via gmail

## PayPal Wallet



- Order ahead, pay at the table
- \$20 billion spent on mobile devices with PayPal in 2013
- Growing through acquisitions – Duff Research, Card.io, Braintree
- Device agnostic, 100 million active users

## Others





## Network service providers



### Isis Wallet

- Backed by AT&T, Verizon, T-mobile
- Pilot tested in Salt Lake City and Austin. Launched nationwide in Nov, 2013
- Comes with own cash card – preloaded with \$10
- Manages coupons, loyalty cards and redeem merchant offers
- Stronger security
  - PIN-protected
  - Remote Freeze
  - Secure Element
  - Protective ID
  - Personal Privacy
- Works only with NFC enabled Android smartphone
- Works only with a handful banks



# Financial institutes

## Visa



- Just V.me email and password to complete transaction
- NFC technology enabled
- Shift of security enablement from retailers to Visa
- Open solution - Works with American Express, Discover, Mastercard
- Increasing partnerships with merchants

## MasterCard

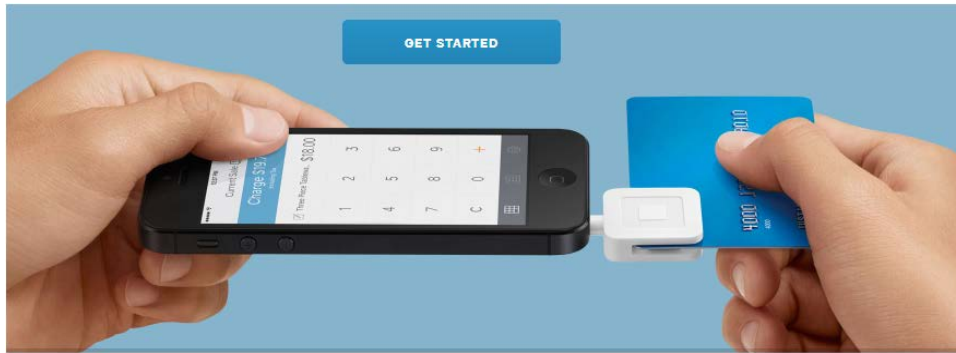


- Extension of Mastercard's PayPass brand
- Currently available in 441,000 locations worldwide
- Tap-and-go NFC enabled payment
- Open solution – works with other credit cards
- Increasing partnerships with merchants





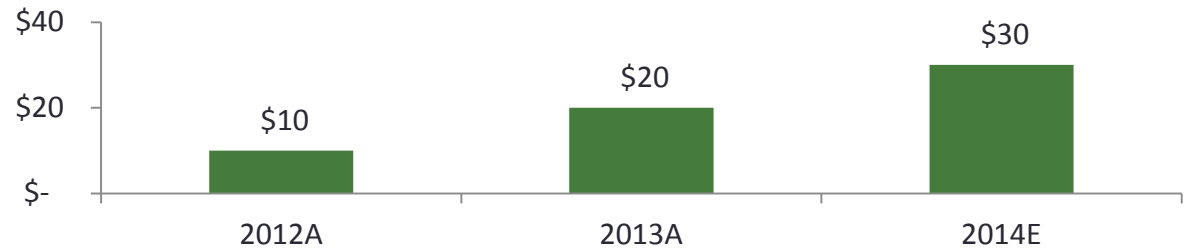
# Point-of-sale payment solutions



## Square

- Merchant app – Square Register
- Consumer app – Square Wallet
- Person-to-person payment service – Square Cash
- \$275 or 2.75% transaction fee
- No activation, monthly, early termination or hidden fees
- Payment deposits in 1-2 business days

Processing Volume (\$billion)



## Value proposition

- Attractive to small businesses – even babysitters using it!
- Partnership with Starbucks, Burberry
- In U.S, Canada, Japan

## Challenges

- How willing are we to hand over our credit card to be swiped into a phone?
- No live customer service

Source: Techcrunch



# Competition

## PayPal - Here



- 2.70% transaction fee, 1.7% if PayPal debit card is used
- Money deposited to PayPal account immediately
- Live customer service
- Accepts Paypals, cash, check

## Intuit - GoPayment



- Transaction fees:
  - 2.75%
  - \$13 per month + 1.75%
- Live customer support

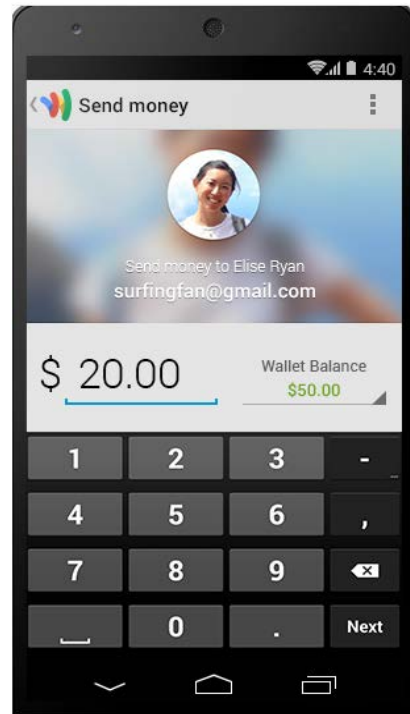
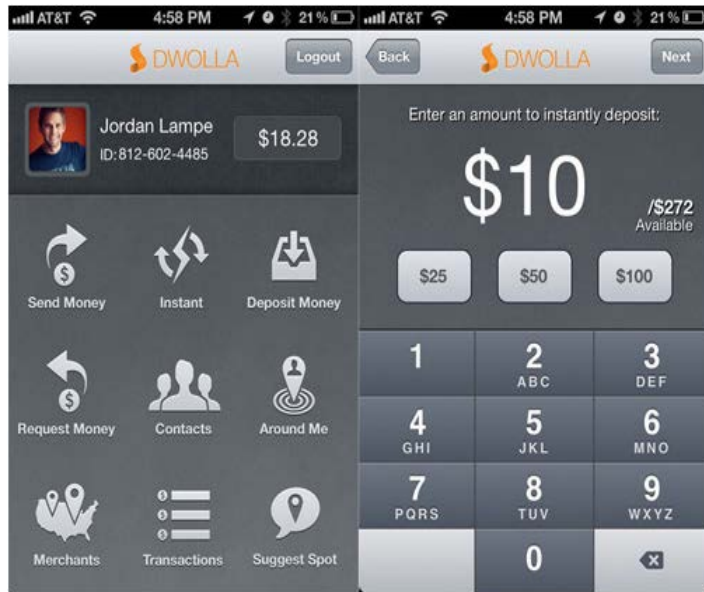
## Others



- Cloud based solution
- Also includes ERP , inventory management, loyalty programs
- Targets small businesses



# Money transfer platforms

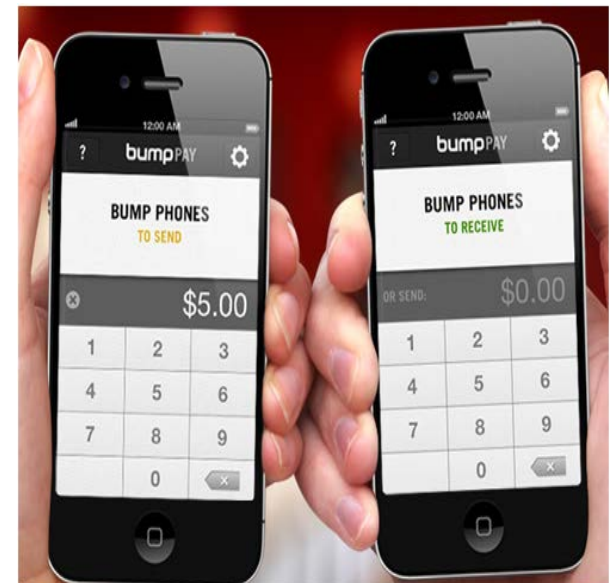


Square Cash



venmo

PayPal™



## Key trends

- Global mobile money transfer reached \$10 billion in 2013
- Leverage social media platforms - Facebook, Twitter, LinkedIn and gmail
- Bump only works on iPhone
- Transaction fees may apply



# Challenges

Standardization



Security



Social media



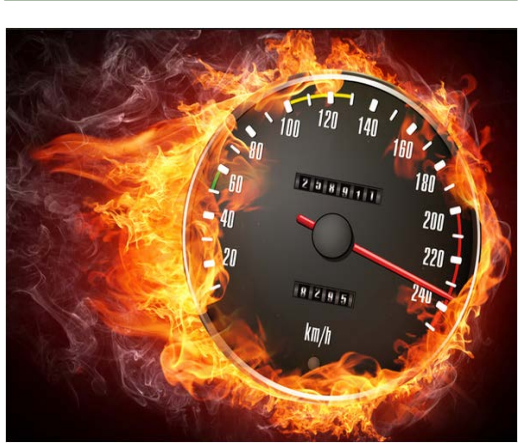
Scalability



Sharing



Speed







# Future

## Wearable Tech



## Amazon

- Developing a kindle based POS payment solution
- Holds credit card info from more than 230 million users

## PayPal – Cash for register

- Free replacement of cash register with new POS system
- Partnerships with ShopKeep POS, Vend, ERPLY

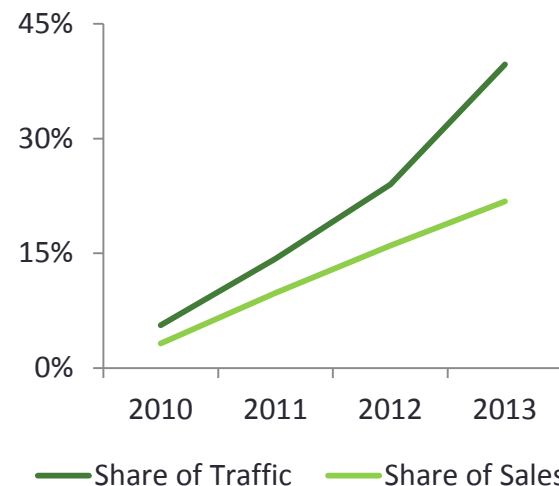
## NFC vs HEC vs BLE

- NFC has too many stakeholders and high transaction costs
- Google moving to HEC
- Paypal, Apple moving to Bluetooth Low Energy

## Consolidations

- PayPal and Google acquiring apps and payment processing firms
- Square contemplating an IPO

## Mobile payments on the rise





# References

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# Thank you



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