



# The changing face of payments

## BCS Oxfordshire Branch

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# Agenda

- Payments basics
- Current UK retail payments landscape
- How things are evolving
- Future developments
- Questions and discussion



# UK retail payments landscape

The UK has some of the most advanced payment systems in the world:

- Bacs Direct Credit – salaries, pensions, dividends and trade payments
- Direct Debit – utility and bill payments, insurance
- Faster Payments – single immediate payments and standing orders
- CHAPS – high-value payments and house purchases
- SEPA – EURO currency credit transfers and direct debits
- Cards – credit, debit, prepay and ATM
- Cheques
- Cash



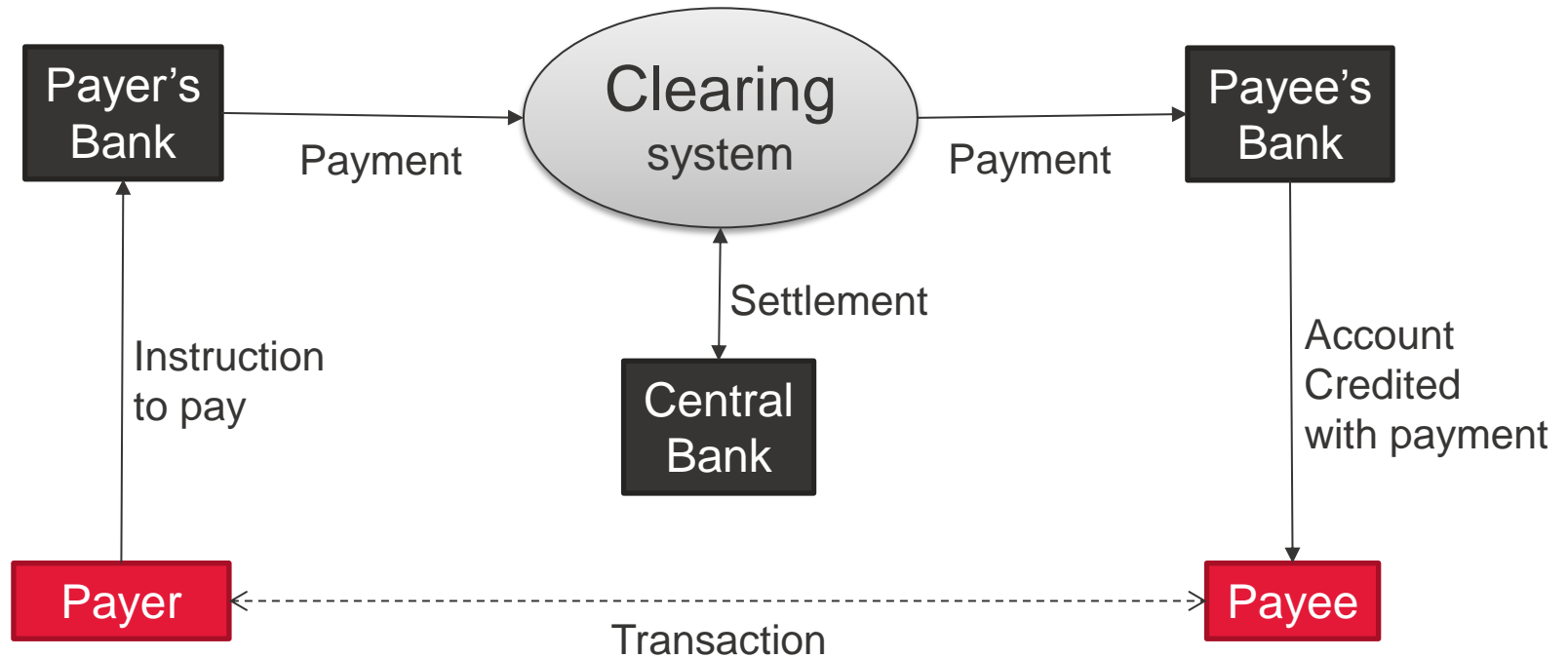
# Cash

- Still main payment method in UK
  - 20 billion cash payments a year
  - 52% of all payments by volume
  - About 60% for £5 or less
  - And 90% for £20 or less
- But expensive to process and difficult to trace
- Thus a business and political imperative to reduce the use of cash



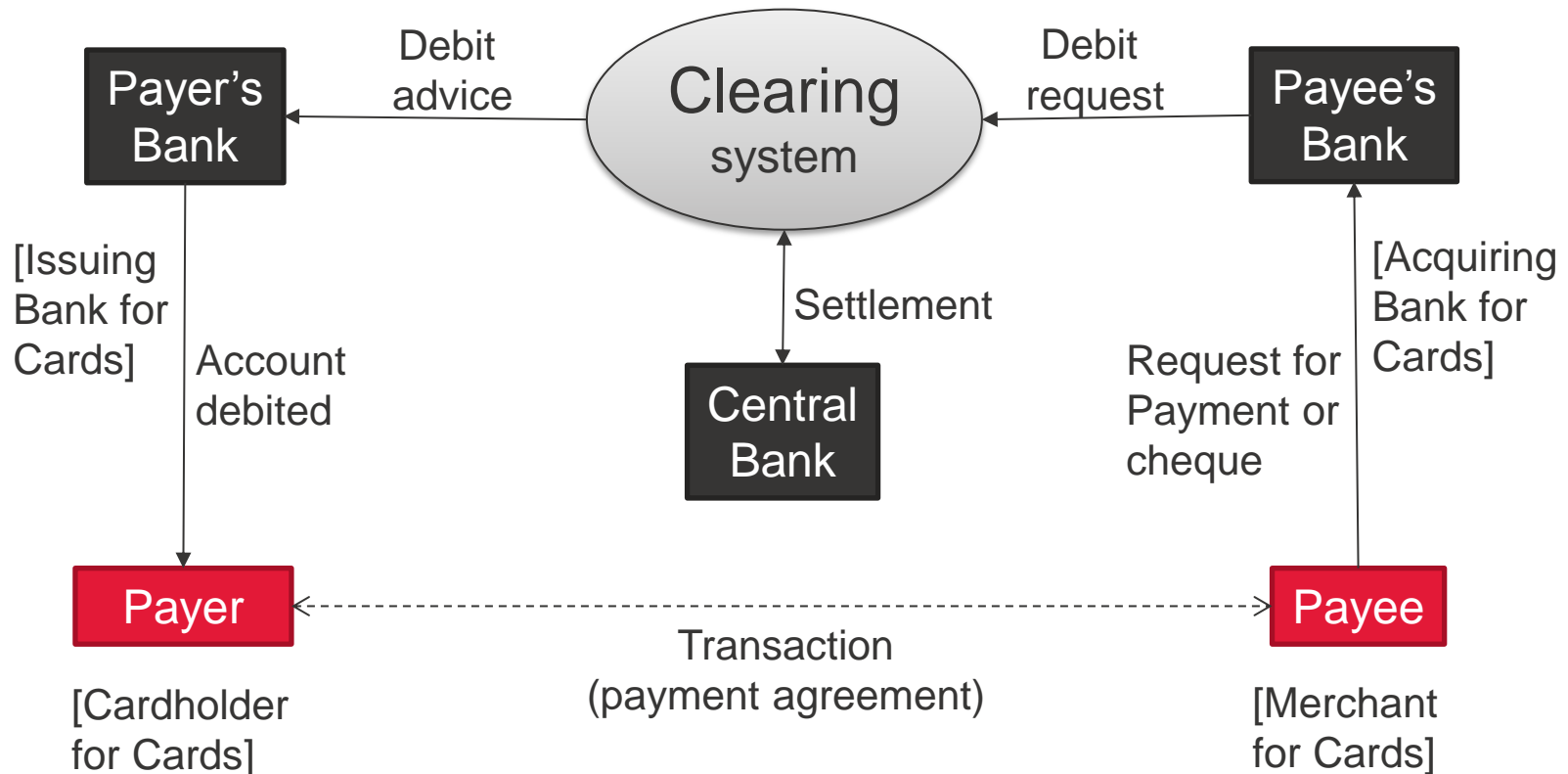
# Payment basics

## Push payment (credit transfer)



# Payment basics

## Pull payment (cheque, direct debit, card payment)



# Cheques

- Cheques in decline globally, even in the US, having already disappeared from some economies (Scandinavia, Belgium)
- Cheque processing expensive with high risk of fraud
- Most cheques used by older people - many people under 30 have never written a cheque!
- UK Cheque volumes falling by about 15% per year
- Cheque Guarantee Scheme closed in 2011 but attempts to phase out cheques from 2018 met with strong political resistance
- Current project looking at cheque image clearing
- Cheques will continue to wither and die - they will become less accepted and banks could charge for them.





# UK Electronic payments

## Bacs

- Direct credit and direct debit
- 3-day processing cycle
- Generally, the cheapest payment method
- Strong resistance to change from most businesses

## Faster payments

- Used for all Standing Orders and eBanking payments
- Most processed in < 15 seconds but can take up to two hours
- Increasingly popular with consumers
- Not much used by business but this could change
- Basis for mobile payment schemes





# SEPA

- Single EURO Payments Area, now fully implemented
- Idea is that all EURO payments will operate under the same rules and cost no more than domestic payments
- Credit transfer and Direct Debit schemes cater for lowest common denominator with a basic service
- Optional and additional services can also be made available by providers or used in particular Member States
- Banks have a choice of SEPA Clearing and Settlement Mechanisms with which to contract



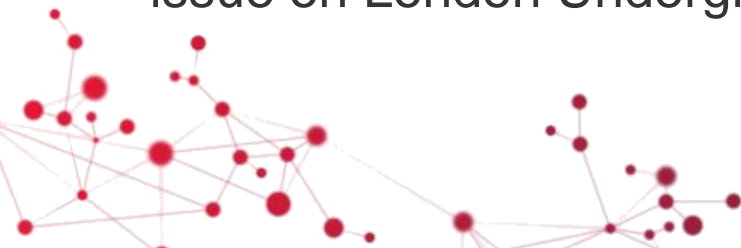
# Cards

- Most cards now issued under one of the two International Card Schemes (ICS) – Visa and MasterCard
- They have detailed scheme rules, standards and compliance requirements e.g. EMV, 3D Secure, PCI DSS
- American Express and Diners Club are smaller schemes and less widely accepted
- In the UK, ATM cards and most debit cards also co-branded with LINK (which is cheaper for ATM providers)
- Convenient but relatively expensive for merchants to accept



# Contactless

- Uses a Contactless chip in the card (or phone) at enabled POS terminals
- Rapidly growing take-up, particularly in London
- Alternative to Oyster on London buses and trains
- Currently limited to £20 per transaction and occasionally need to go online for authorisation depending on card chip settings
- Generally popular with consumers but some consumers have security concerns and 'card clash' has been an issue on London Underground



# Mobile



- Barclays PingIT and Paym allow you to send money using just the mobile number of the recipient
  - Customers have to register to send and receive
  - Uses Proxy database to find bank details
  - Payments made by Faster Payments
- Two alternative sets of 'rails' for UK mobile payments: cards and Faster Payments
- Low cost mobile point-of-sale (MPOS) terminals that plug into an iPhone or iPad for low-volume merchants:
  - Square – new Chip and PIN version announced today @ \$29 in US
  - iZettle Chip and PIN - 2.75% of transaction value.



# New payments market entrants

- New market entrants will operate differently:
  - Think in pan-regional and global terms rather than domestic
  - Achieve high-levels of personalisation (e.g. PayPal, Apple, Google)
  - Appeal to the younger, convenience-oriented customers
- Some will bypass banks completely
- The revenue model will be different (e.g. PayPal and ApplePay)
- Some will not access traditional payment systems
- Traditional banks struggling to catch up but investing heavily in digital as customers desert branches

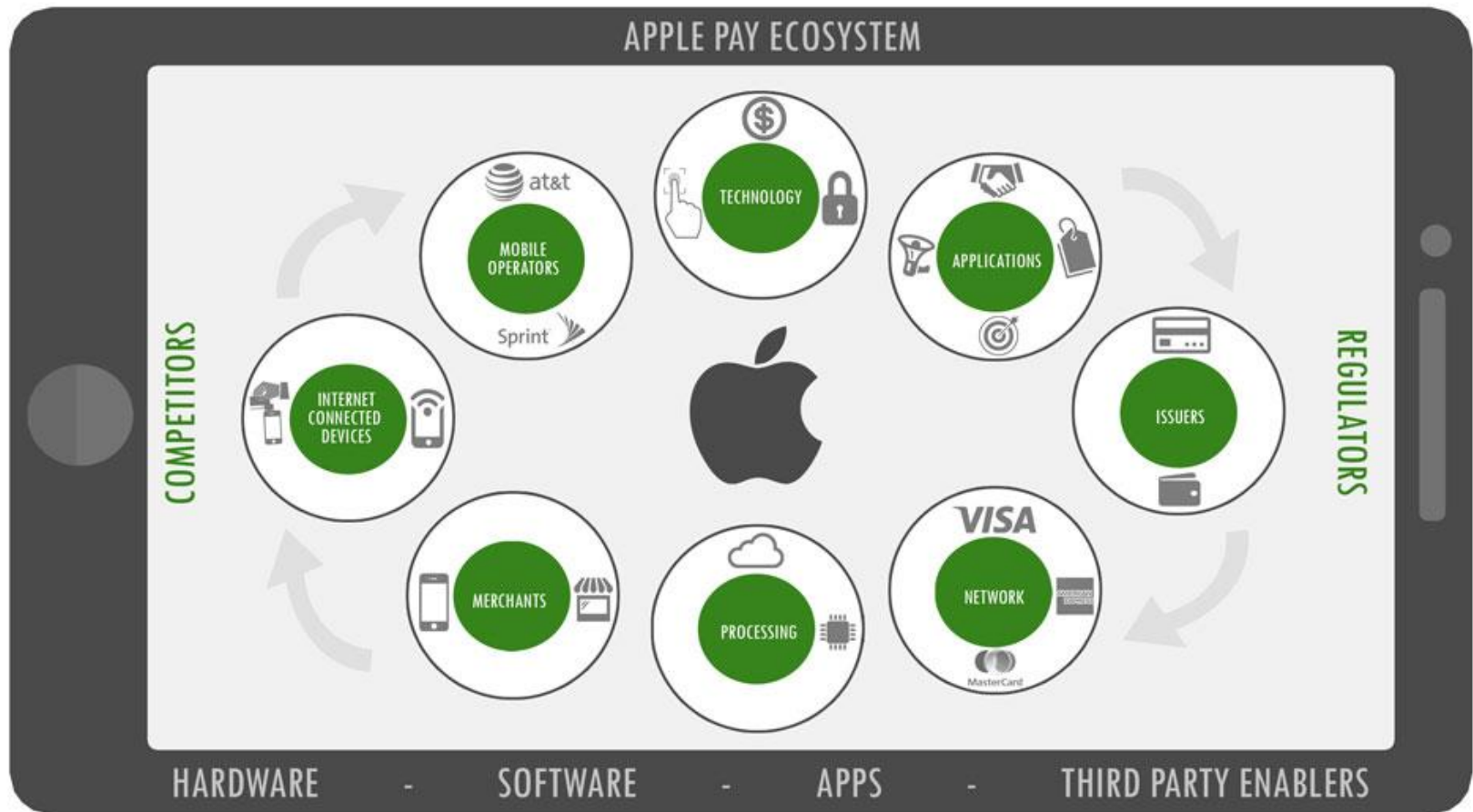


# Apple Pay – the model for mobile payments?

- Live from 20 October 2014 in US only
- One-million payment cards activated within 72 hours of launch
- Needs iPhone 6
- Uses NFC chip, Secure Element and TouchID
- Card details held as encrypted token
- Works with any NFC-enabled (contactless) PoS terminal
- Independent of Operators
- Over 50 card Issuers
- Europe in 2015?



# Apple Pay ecosystem







- Alternative 'crypto-currency'
- Mainly used online
- Has been seen as native to dark web and illegal transactions
- But now coming more into mainstream
- Main issue is volatility
- Becoming more acceptable
- Blockchain technology has other applications in FS



# The future...

- Use of cash and cheques will continue to fall
- Contactless and mobile will continue to grow
- Mobile is key to the replacement of cash and cheques
- PayPal and cards largely have the online space but this could change
- Mobile is still a turf war (banks, operators and new entrants) but Apple Pay may have created the new ecosystem
- Mobile operators have lost the battle to control this space
- Merchant acceptance will be key to mobile growth
- Trust and security are still big concerns for mobile!



# Questions and discussion

