

# Biometrics in Banking

International Biometric Congress 2018



# Digital banking



70s

Interbank electronic exchange



80s

1981 - Banks offered 'online' services using videotex system

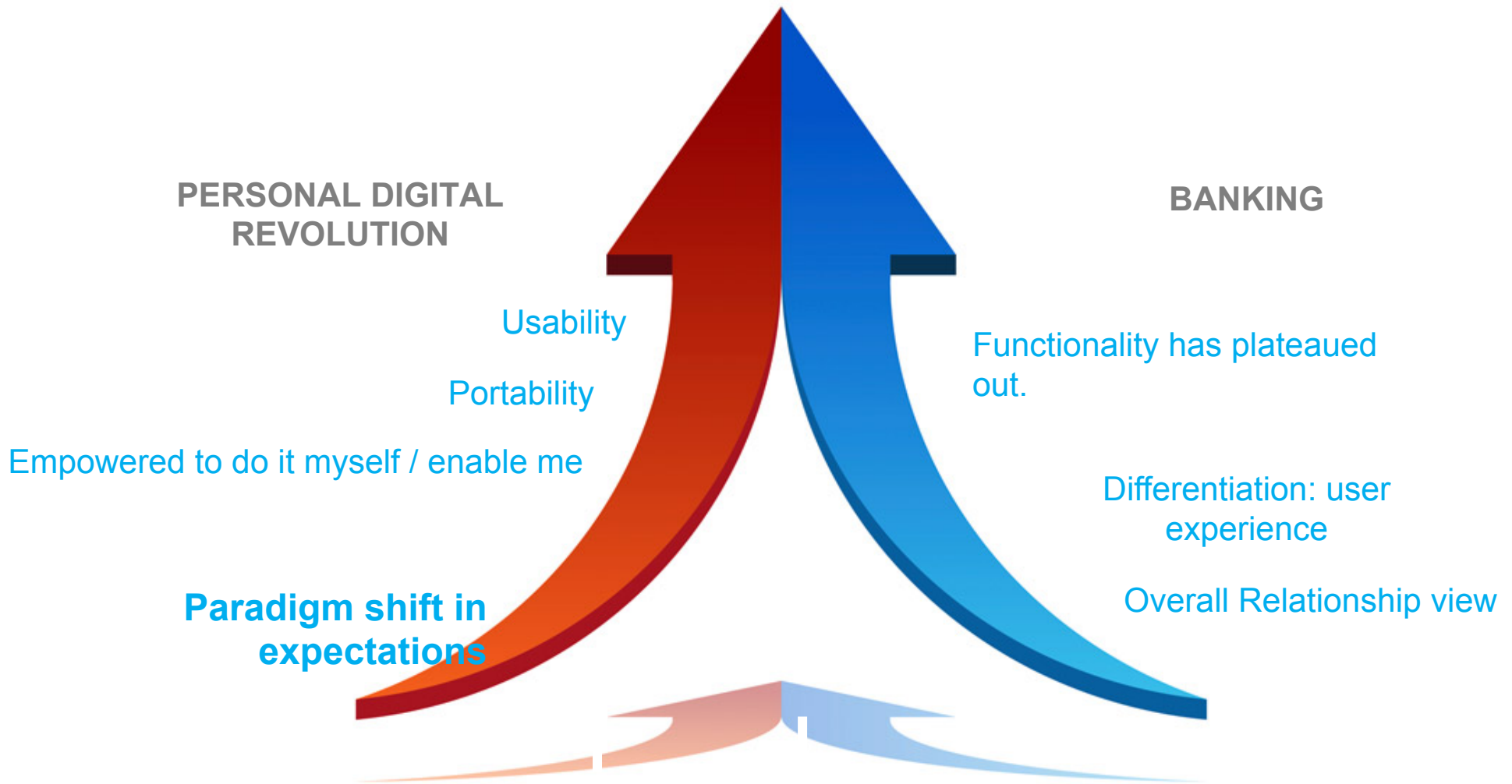
Client access using installed solutions - modem



90s

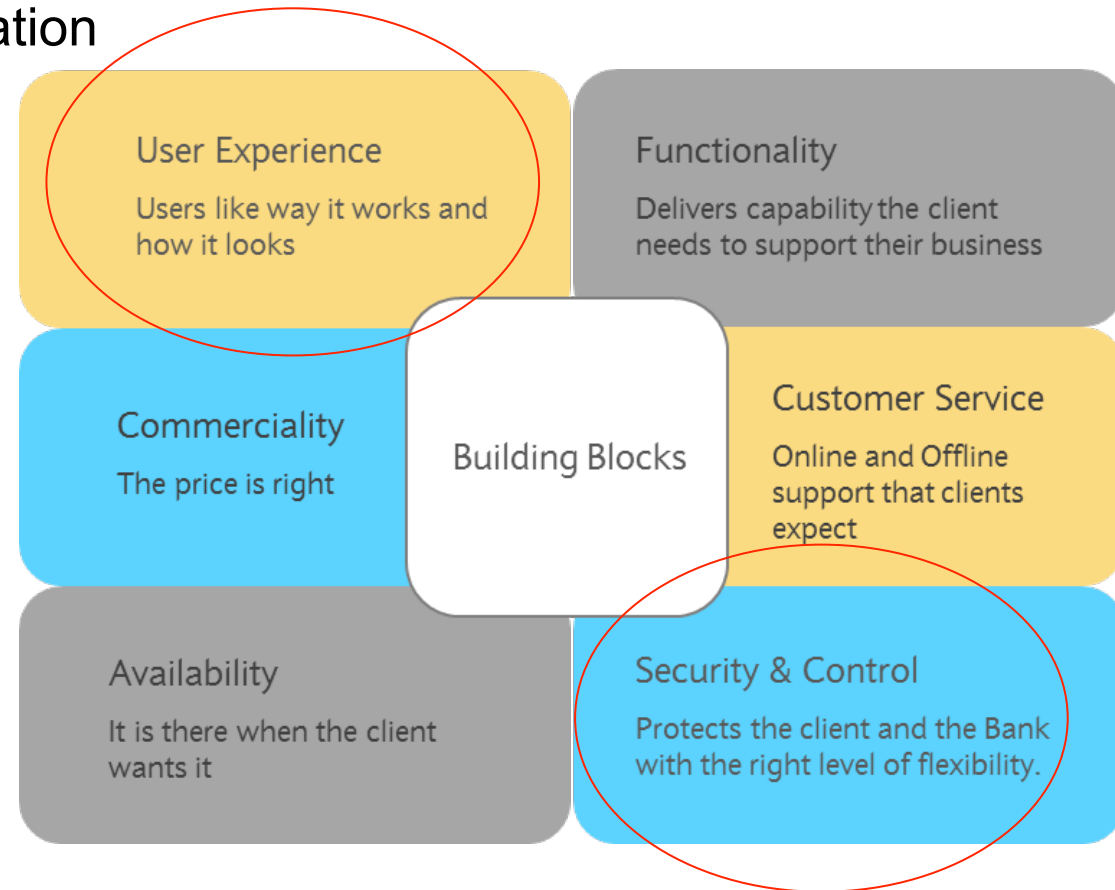
Browser based solutions – 1995 in UK (RBS) and US (Wells Fargo)

# What's changed? Why do banks need to act?



# Security and usability

Security is not the sole consideration



Biometrics gives ideal opportunity to increase both security and usability

# Barclays Experience

## Barclays Biometric Reader

- Combining fingervein biometrics with digital signing ... a new standard for the industry
- Strong Customer Authentication – no credentials to remember or steal
- Eliminate issue of sharing
- Adherence to Payment Services Directive (PSD2)

## Voice recognition solution

- Conversation format, not predefined text
- AI learning

## Behavioural Biometrics

- 500 different behavioural patterns during a session, Identify human/non-human imposter
- Cognitive factors, usage and device interaction patterns, Contextual factors (transaction type, navigation, device and network patterns)

## Fingerprint login for smartphones

Barclays Voice  
Recognition



Barclays Biometric  
Reader

# What next

## Barclays Biometric Reader V2

- Enhanced with 'Sign What You See' activity screen for extra '4-eyes' verification
- Portable and pocket-size
- Bluetooth & USB connections



## Combining Multiple biometrics



# Challenges and vision

- Move away from hardware and software distribution – a key pain point
- Keeping up with changing Biometric information: Using AI in Biometrics – Focus on continuous learning
- Improved CX – Biometrics, AI and Beacons
  - Barclays Branch example
- Shared Identity Voice recognition solution