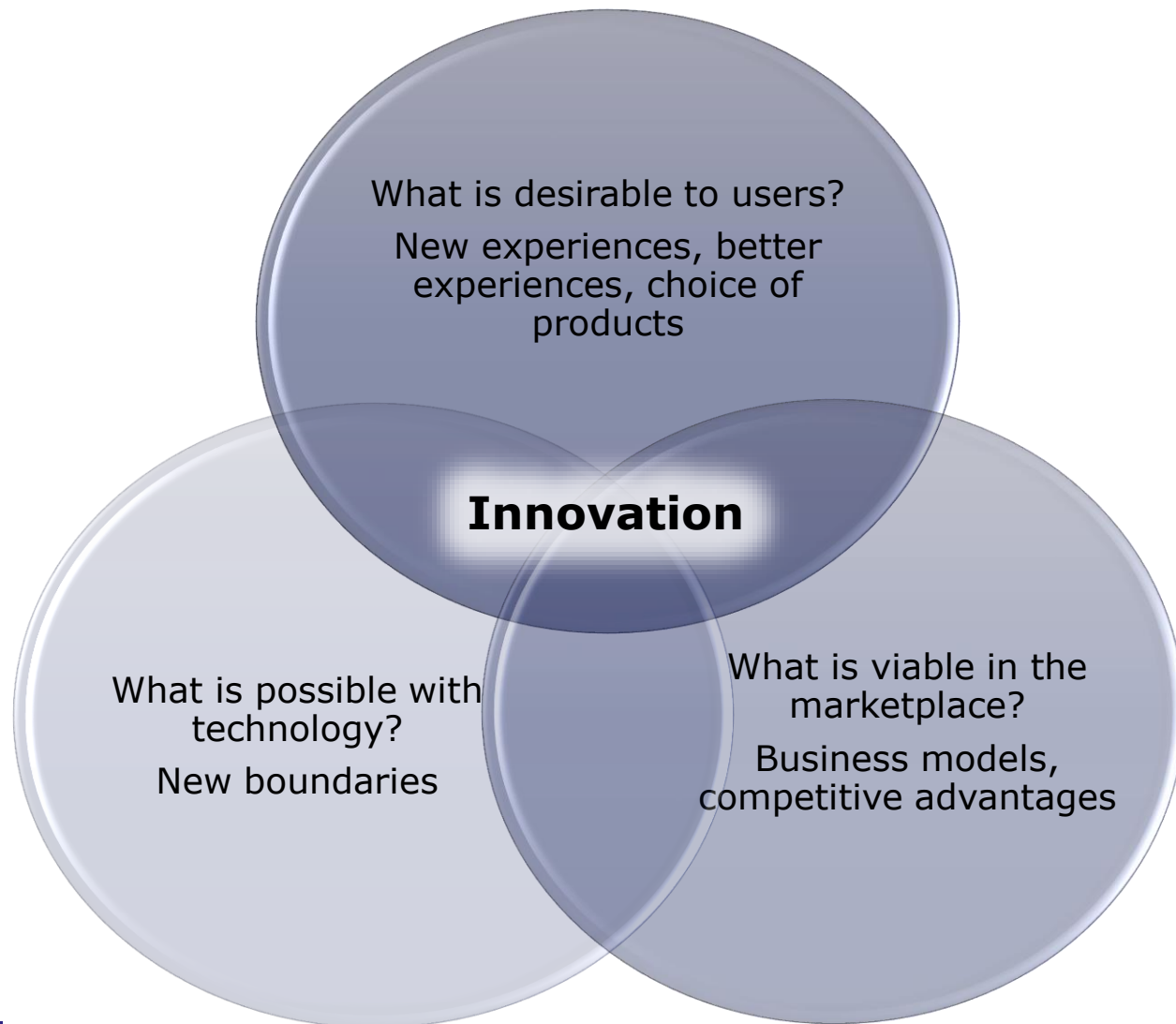


4. Business case



Economies of scale!

Drivers of innovation

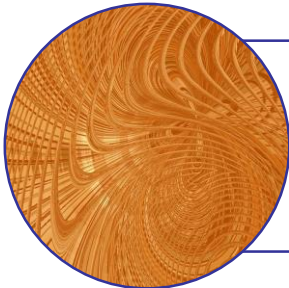


Barriers to overcome

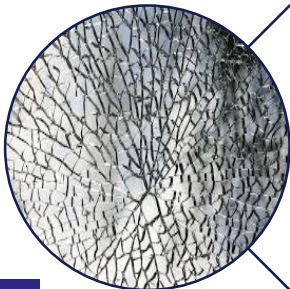


Market features

- Network industry
- Two-sided market



Complexity of infrastructures and decision-making process



Market fragmentation

Trends in the payments landscape



Further digitalisation

- Increase in e-commerce, social networks, online activity
- Demand for suitable payment solutions, e-identification



Mobile solutions

- Increase in ownership of mobile devices
- Mobile banking, mobile contactless, mPOS terminals, P2P



Focus on speed and user-friendliness, new trends

- Speed at the POS (contactless), instant, (possibly) blockchain
- Aliases, one-click-buy, biometrics



New market participants

- Fintech & big tech
- Impact of PSD2/access to the account by third parties

What do we see in NL and PT (1)?



Contactless cards

Issuance of contactless cards predominant in retail banks

Advantages: mainly speed for low value payments

Massive communication is a key factor



Contactless mobile

Difficult cooperation, different ecosystem

Complexity: banks, telcos, manufacturers

Advantages: wallets, mainly user convenience?

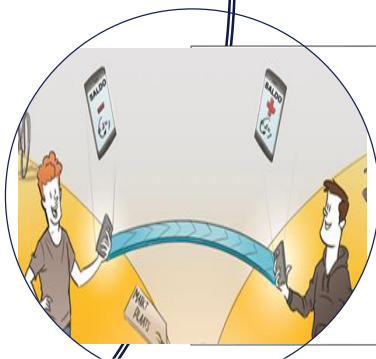
Some banks are betting on contactless mobile payments. But only few on a large scale

What do we see in NL and PT (2)?



Mobile P2P

There is one bank that recently launched an app with which you can make P2P payments using the telephone numbers of your contacts.



Instant payments

In May 2015 the Dutch banking community announced in the National Forum on the Payment System its ambition to realise an Instant Payments Infrastructure in the Netherlands.

What do we see in NL and PT (3)?



New product developed by the Portuguese banking community: MB Way

Supported mainly by retail banks issuers of the MB brand

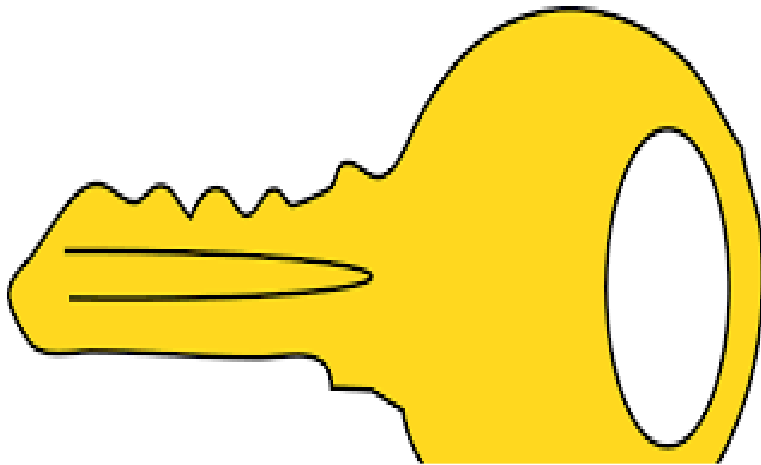
Mobile P2P



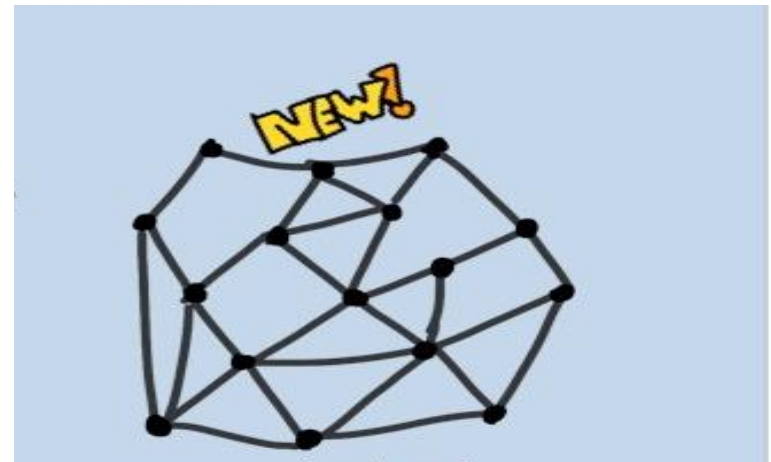
Card-based solution for instant payments
Still needs to gain traction and positioning in the context of pan-European initiatives

Instant payments

Potential game changers (for the medium term)

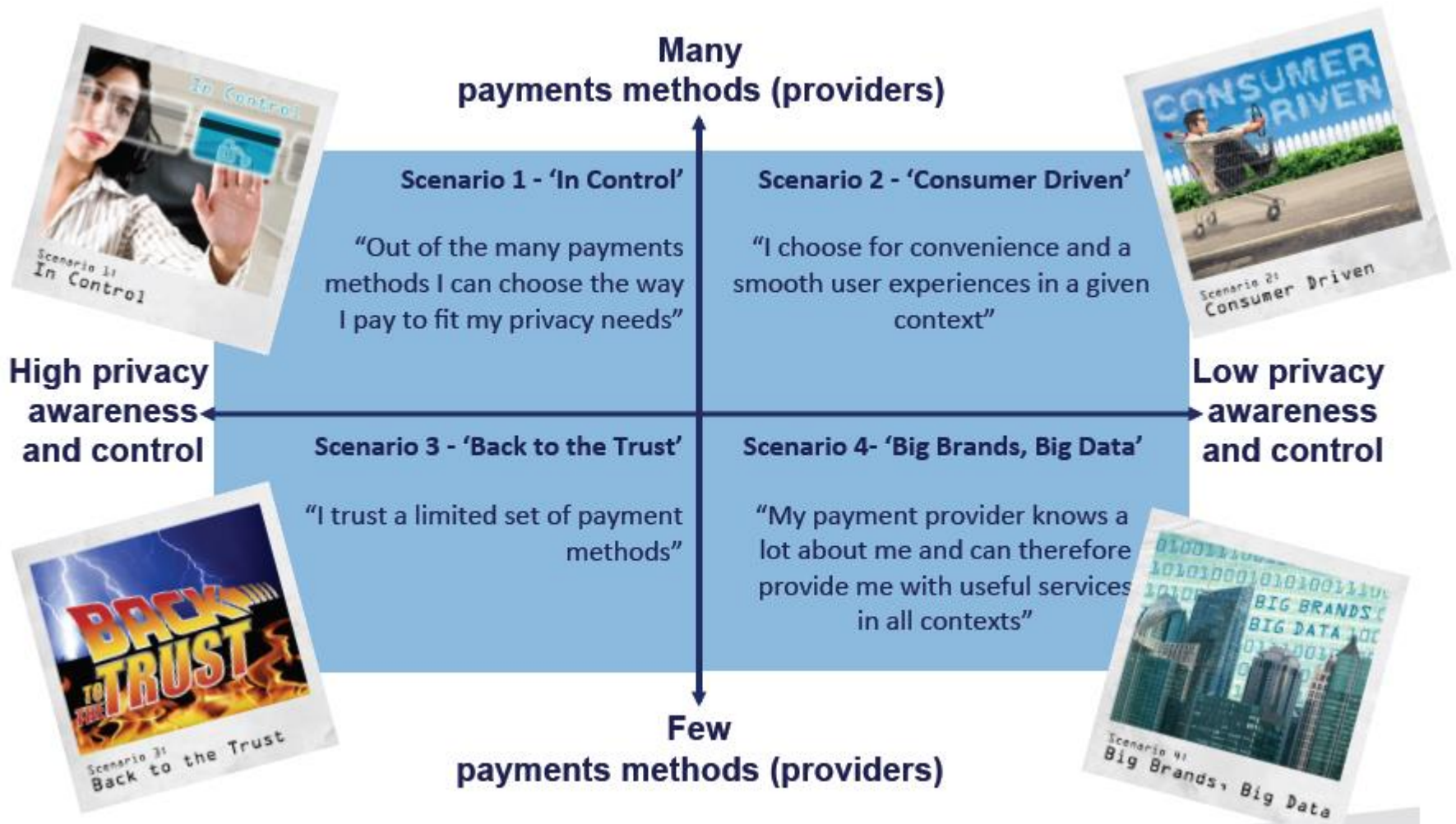


Access to the
account

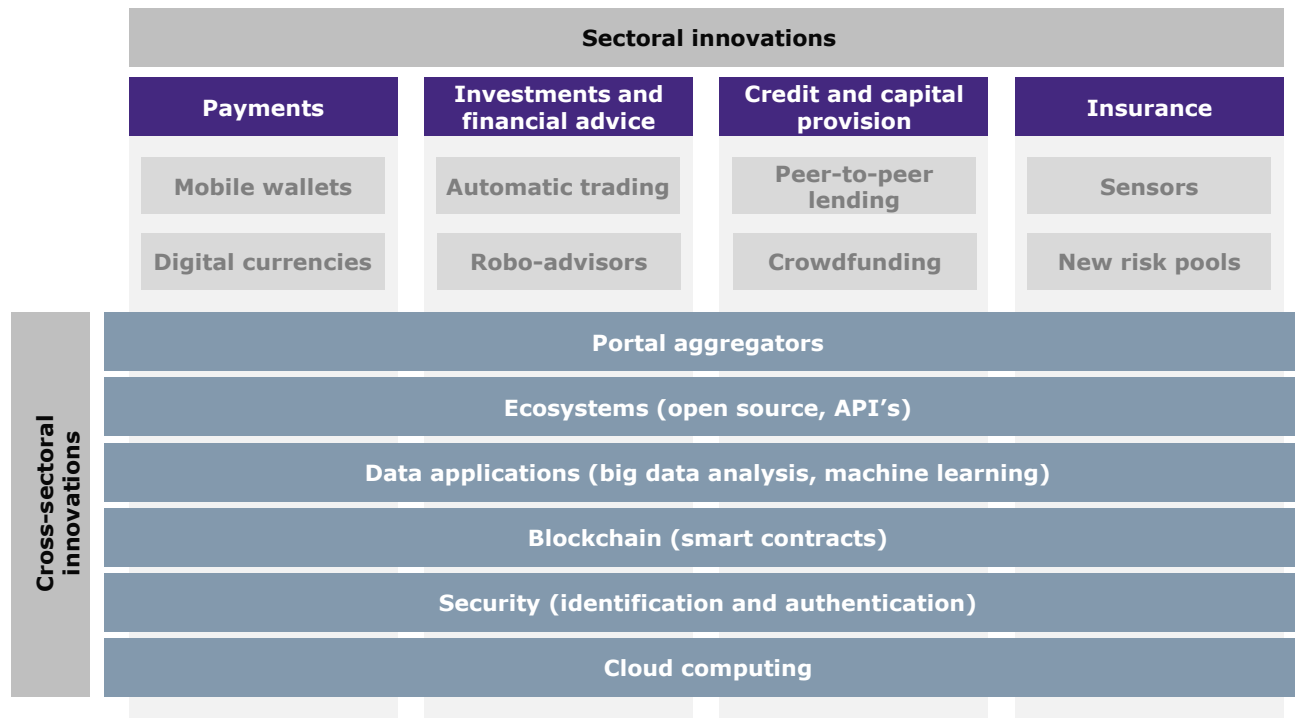


Distributed ledger
technology

"Shopping2020": four future scenarios



Innovations are applied within and across financial market segments



A scenario analysis based on four parameters

Innovation speed

The speed by which technological innovations are developed and adopted by financial institutions and their customers

Value chain disintegration

The extent to which existing value chains are being disintegrated (different firms for different activities)

Presence of new entrants and/or substitute products

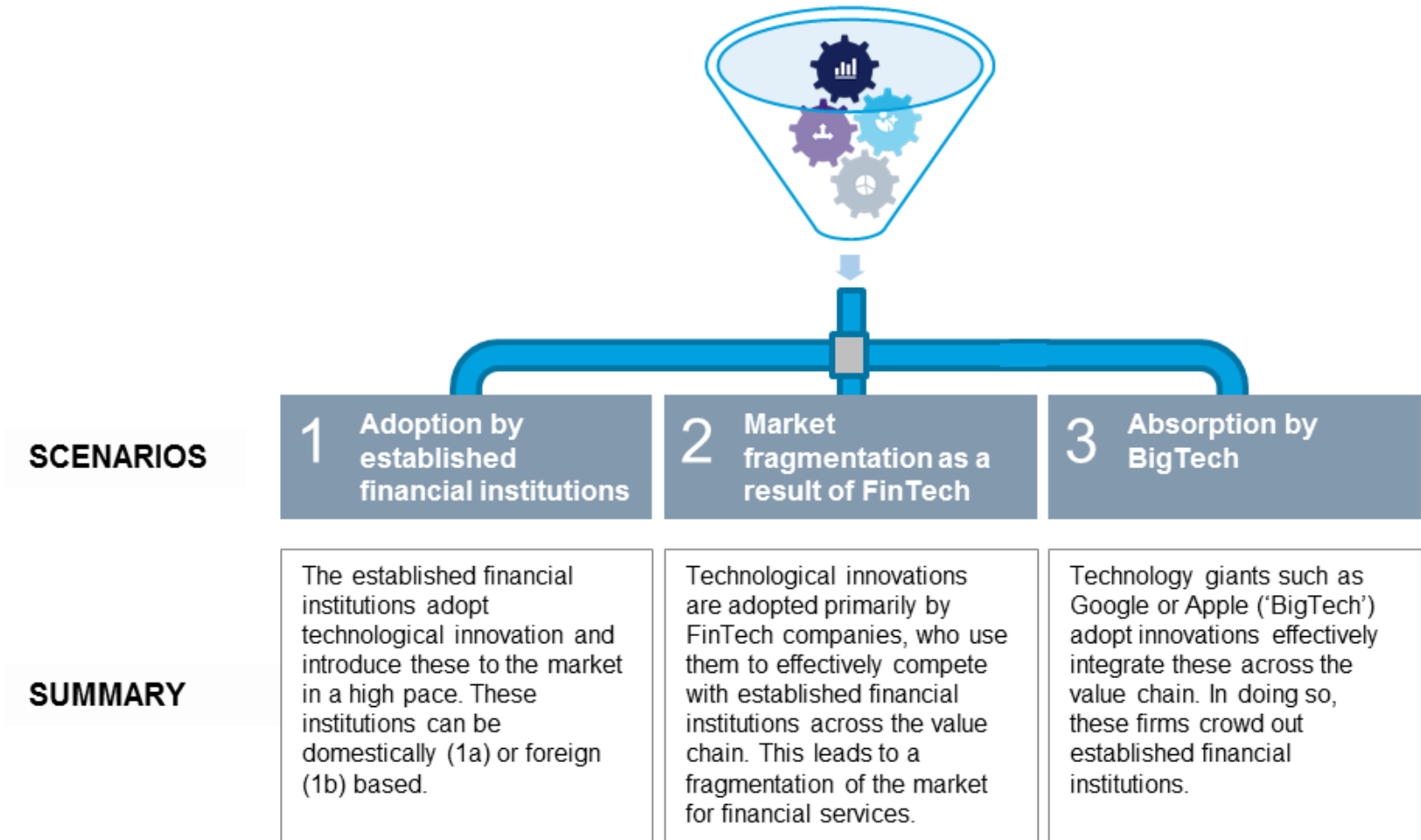
The extent to which (new) innovative competitors enter the market (as opposed to adoption by incumbents)

Market concentration

The extent to which the financial market is moving towards a monopoly/oligopoly



Scenario analysis: overview



Technological innovation has positive and negative implications

