

A review of the international landscape of innovation in payments systems and insights for UK payments



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Agenda

- Introduction & definition of Innovation
 - Payments innovation methodology
 - Payments innovation value chain heat map
 - Five types of payments innovation worldwide
 - Who innovates?
 - What are the incentives for innovation?
 - Who benefits from innovation?
 - What are the common barriers to innovation?
 - What policy tools are used by regulators to manage innovation in other countries?
 - Key lessons from worldwide innovations
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- Overview of breakout sessions

Introduction

A review of the international landscape of innovation in payments systems and insights for UK payments

Summary Findings

An Accenture report commissioned by the Payment Systems Regulator



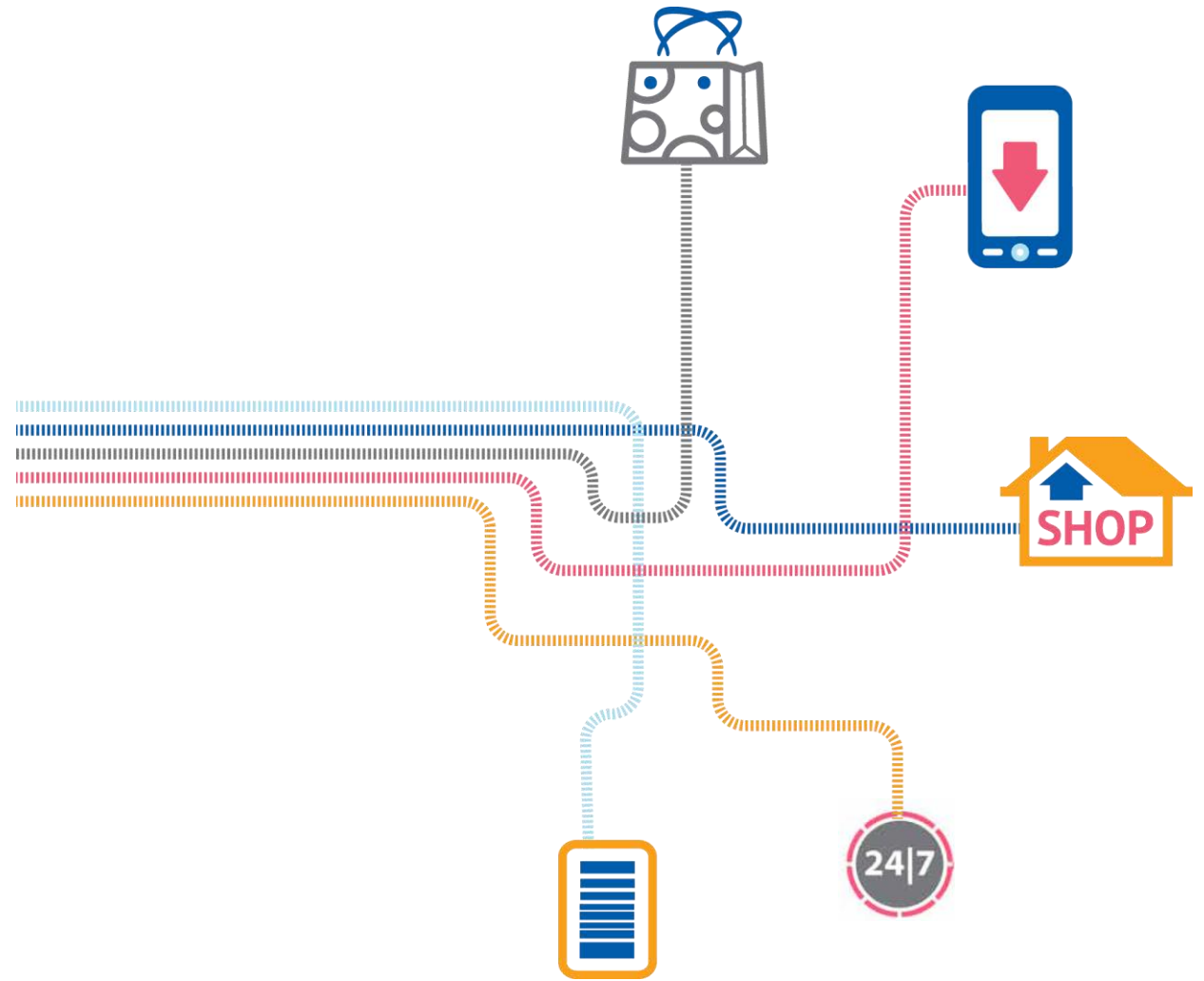
Introduction

Countries and top 40 case studies reviewed



Payments innovation – a definition

We define payments innovation that is something new – it need not be radical – but something that is new, different and which delivers on an incentive for the innovator and a benefit for users.



Payments innovation methodology

How we evaluated 100+ worldwide innovations

- **Value chain** – a framework defining users, payment services providers, devices, channels and processes in the payments and cards ecosystems
- **Taxonomy** – a list of categories which inform the classification of features of innovation including by lead actor, incentives, benefits, and barriers
- **Prioritisation** – a method to benchmark, rank and prioritise examples of payments innovation

An example case study

Trustly pan-European online banking e-payments



Trustly makes online payments convenient, simple and safe for both the merchant, the consumer and the bank.

Overview

Innovation Case Overview

Stockholm-based Trustly provides its online and mobile payment service through bank account in six European countries: Denmark, Estonia, Finland, Poland, Spain, and Sweden. The company plans to add Italy and Norway in the near future, and will be rolling out to France, Germany, the Netherlands, Portugal and the United Kingdom within 2015.

Policy reference: Payment Services Directive (PSD, 2007/64/EG)

Country Overview (Sweden vs UK)

Cash penetration: 27% (UK: 60%)
Banked population: 99% (UK: 87%)
E-trxn per inhabitant: 351 (UK: 273) transactions per year
Internet penetration: 94% (UK: 73%) of population
Mobile penetration: 88% (UK: 87%) of population

Payments / cards country trends:
Swedish payments market is extremely mature: only 27% of purchases nationally, not including e-commerce, are made with cash. Many institutions in the country simply don't accept cash anymore (bus systems) and bills and coins are just 3% of the total economy of Sweden

Characteristics

Business Characteristics

Market: Bank payments
Innovation area: End user innovation (not wholesale-enabled)
Product group: internet payments
Funding type: Bank account
Main usage: C2B

Technology Characteristics

Access channel: internet
Access device: Computer/mobile/smartphone
Access technique: Remote

Initiating factors:

Lead actors: payment institution - third party providers
Partnerships: None
Catalyst: Customer change
Facilitator: e-commerce growth
Incentives: increased revenues through new services

Impact factors:

Customer benefit: new payment option
Merchant benefit: higher sales from higher conversion

Lessons for PSR

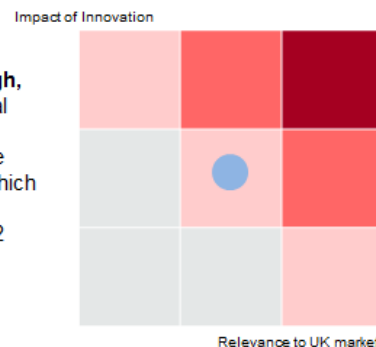
Summary

- **Policy toolkit:** Setting new legal framework
- **Driving factor:** Competition
- **Value chain step impacted:** payments initiation

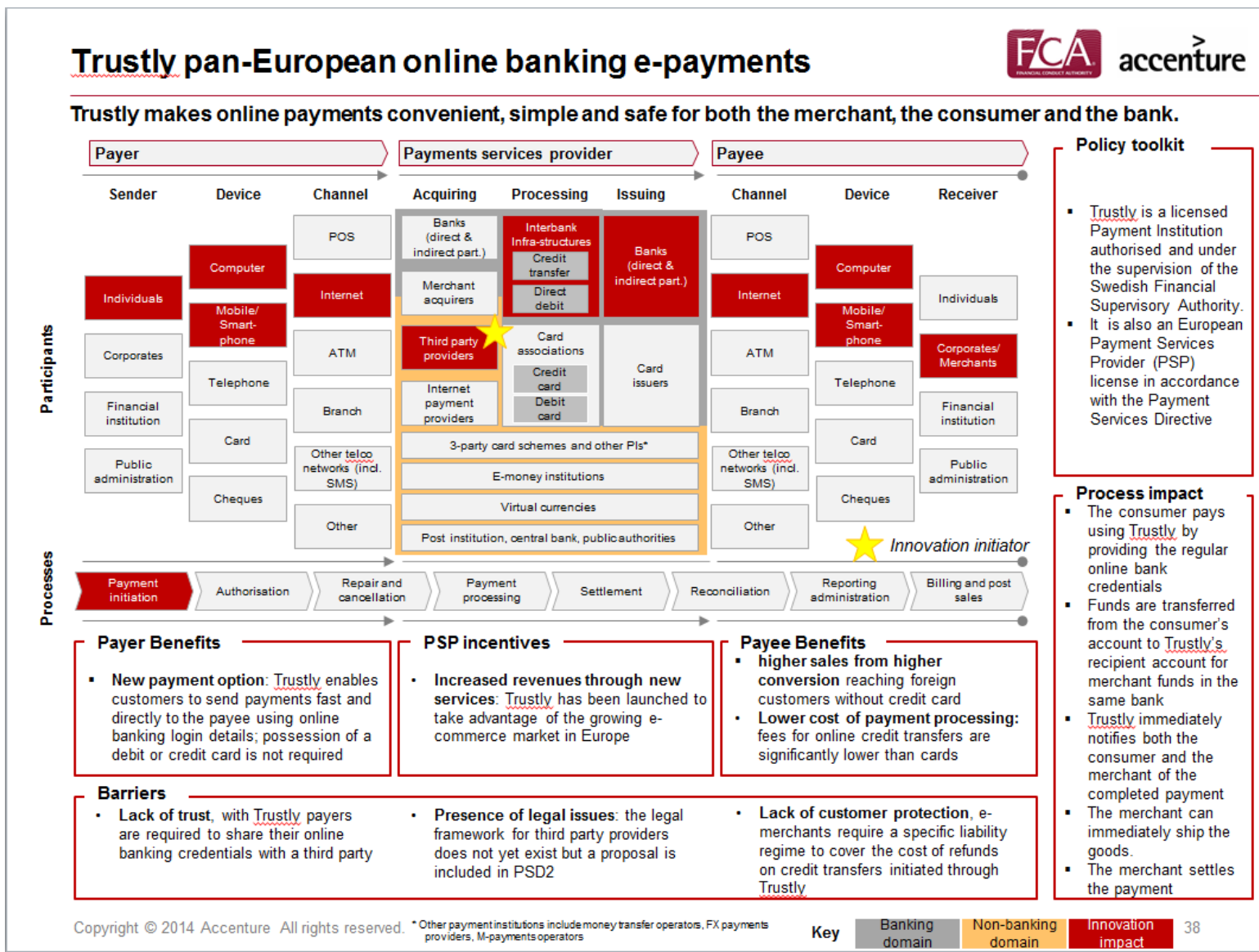
Prioritisation

- **Impact rationale:** high, Trustly is a successful scheme, with over 43 banks across 7 countries in Europe although customer adoption is still marginal but growing: it processed 8 million payments in 2013, up from 4 million at the end of 2012,

- **Relevance rationale:** high, a specific legal framework is required in the UK market, which is expected through PSD2

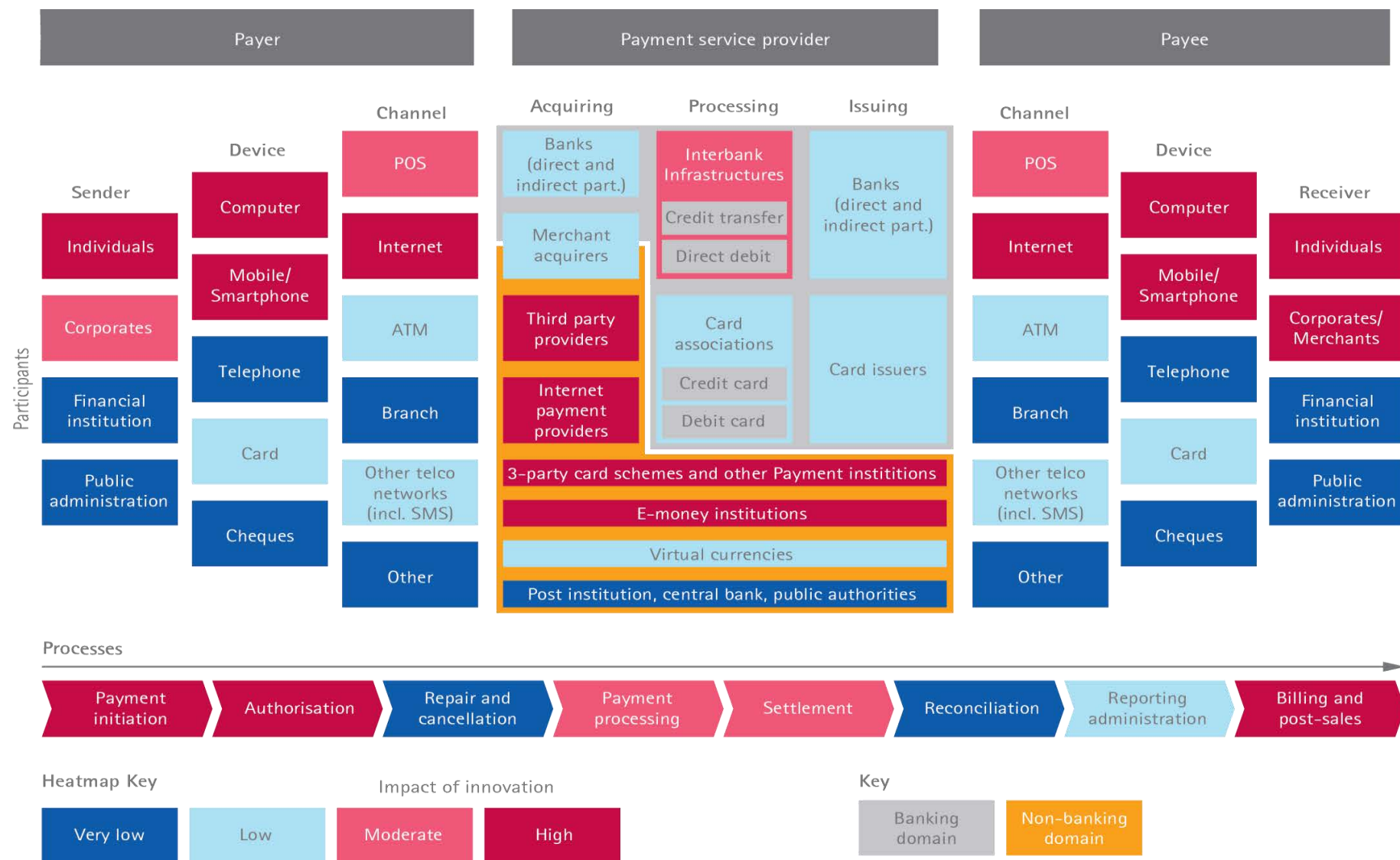


An example case study



Analysis

A view of the payments value chain – heat map



Five main types of innovations observed

End User Innovation



1. Card payments

innovations that present a new way to use or accept cards from users (e.g. contactless cards, M-POS solutions e.g. Square)

Five main types of innovations observed

End User Innovation



2. Internet payments

this covers four areas:

- Online banking e-payments (e.g. iDEAL, MyBank, and POLi)
- Overlay services: (e.g. SOFORT Banking)
- E-money: (e.g. Paypal, Click&Buy, Skrill)
- Internet payment gateways: (Adyen, Ogone, Skrill Global Collect)

Five main types of innovations observed

End User Innovation



3. Mobile payments

this covers three areas:

- Mobile payments using traditional bank accounts (e.g. SWISH, IKO)
- Mobile payments using mobile phone bill collection process (e.g. BOKU, GCASH)
- Mobile payments using prepaid accounts (e.g. PayPal, Belgacom-BNPP, MCX)

Five main types of innovations observed

End User Innovation



4. Electronic invoicing and billing payment

innovations that improve the billing experience (e.g. Klarna)

Five main types of innovations observed

Infrastructure innovation



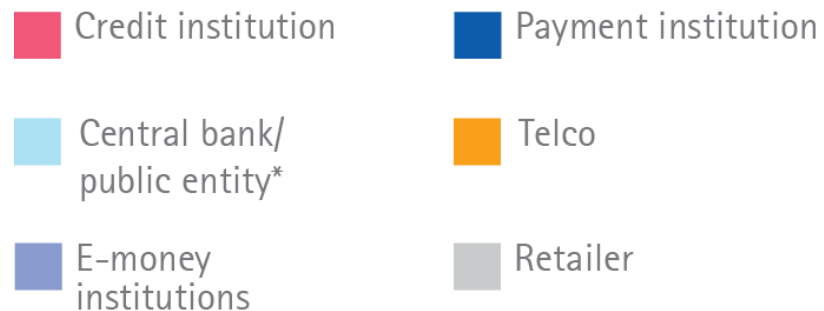
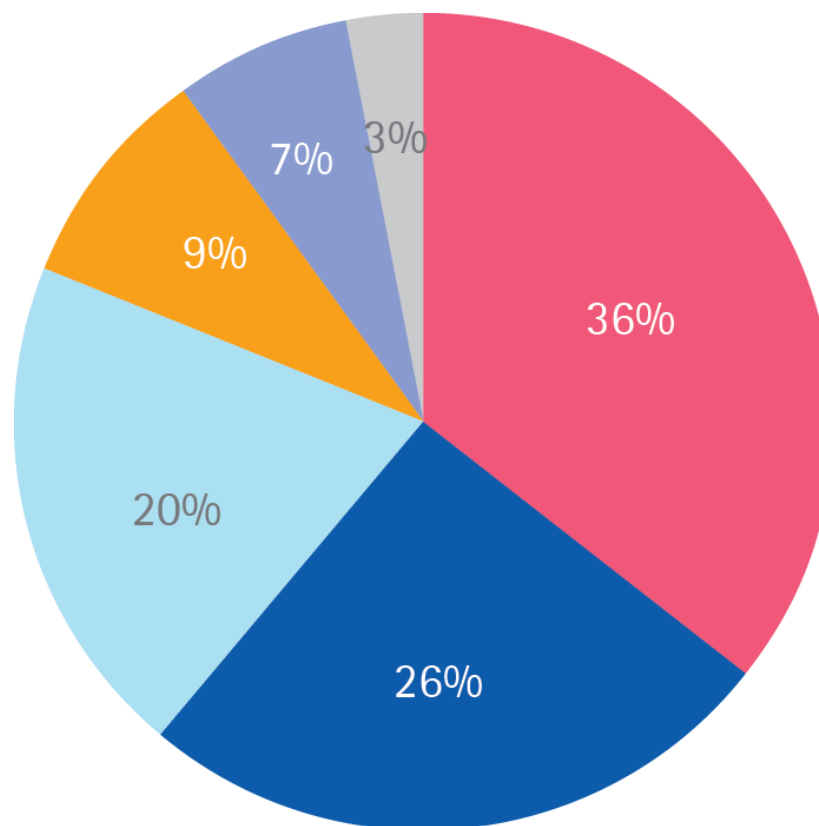
5. Improvements in infrastructure

this covers three areas:

- Real-time payments processing (e.g. Bankgirot)
- Vision for a cashless system (e.g. Nigeria cashlite, Sweden)
- Adoption of international standards (e.g. adoption of ISO20022 with SIC4, SEPA, Japan)

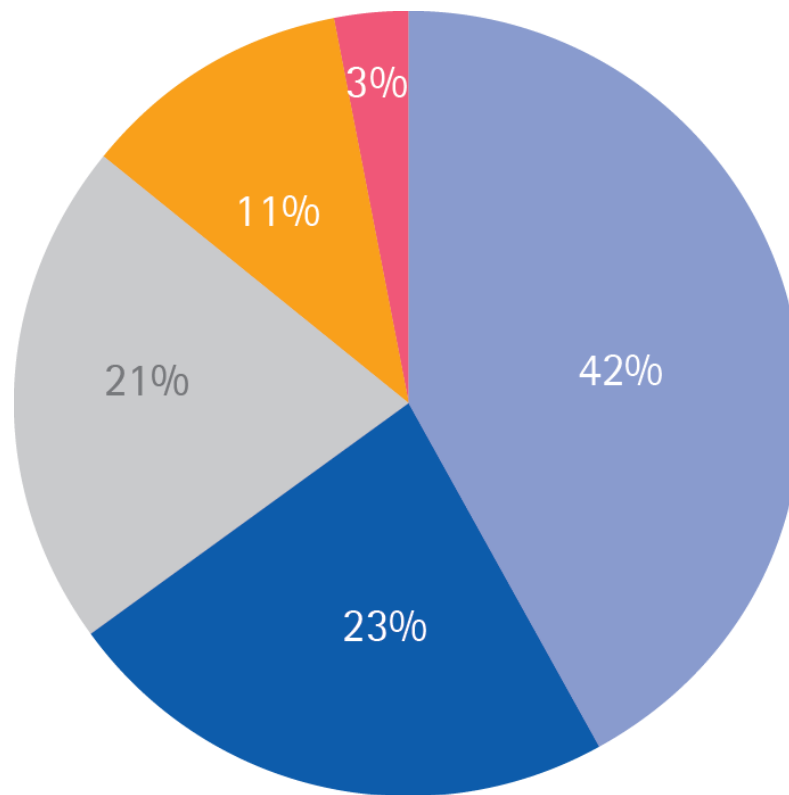
Who innovates

Actors leading payments innovation;
top innovations outside the UK



Incentives for innovation

Incentives for payments
innovation; top innovations outside
the UK

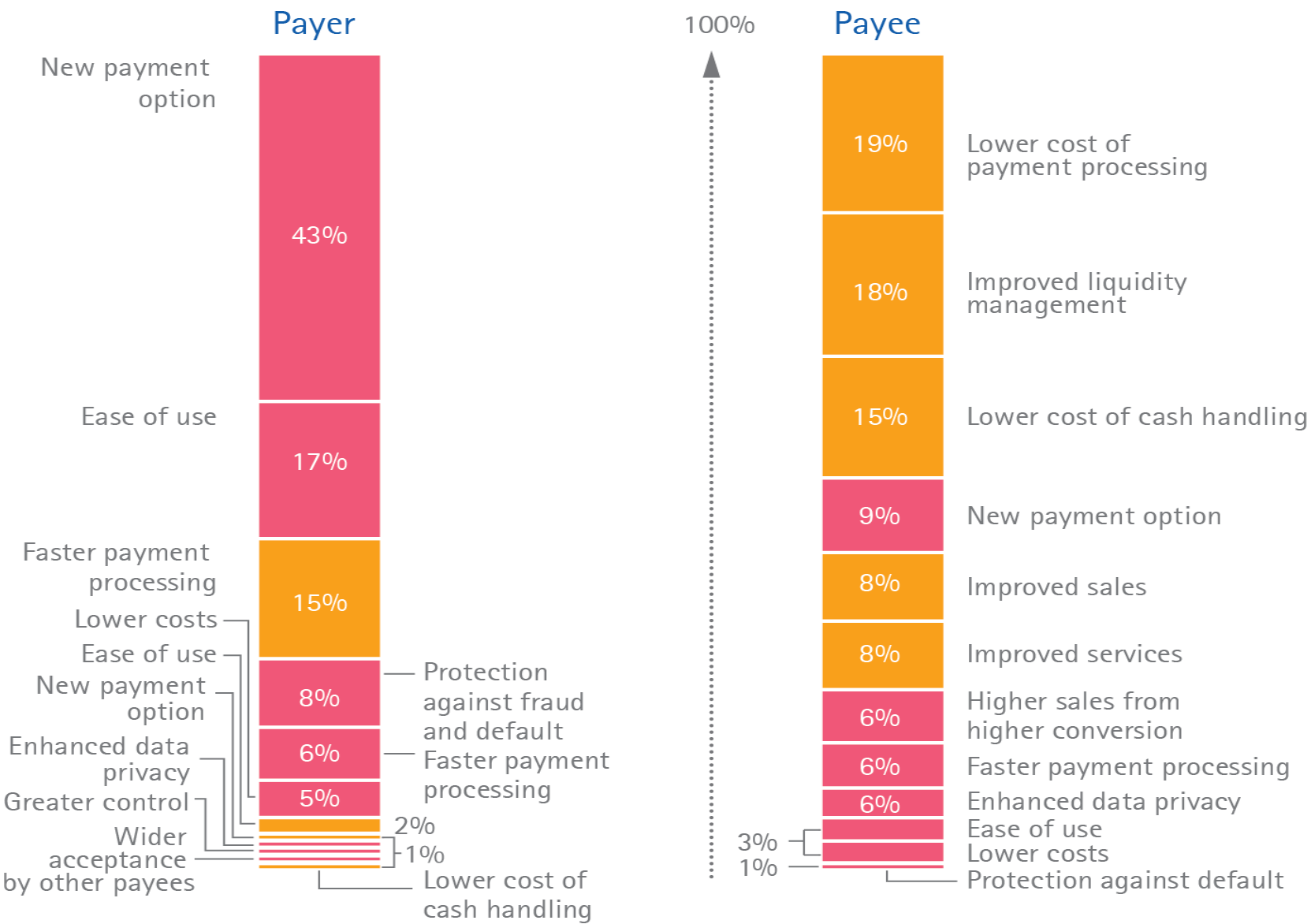


- Increased revenues through new services
- Increased revenues through service differentiation
- Achieving governmental goals
- Lower cost of payment processing
- Lower cost of cash handling

Who benefits from innovation

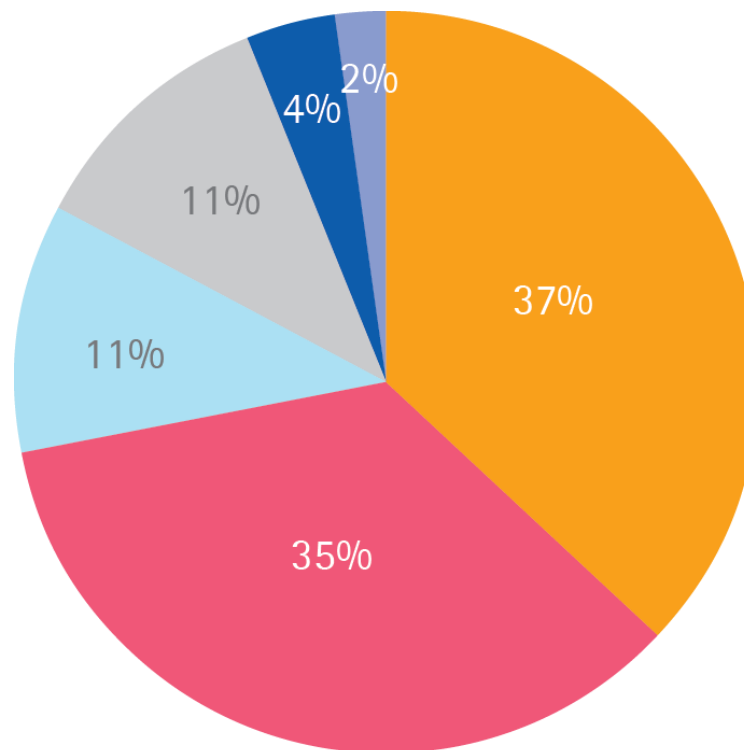
Benefits faced by
payer/payee; top
innovations outside the
UK

Where payer/payee is individual
Where payer/payee is corporate/merchant



What are the common barriers to innovation?

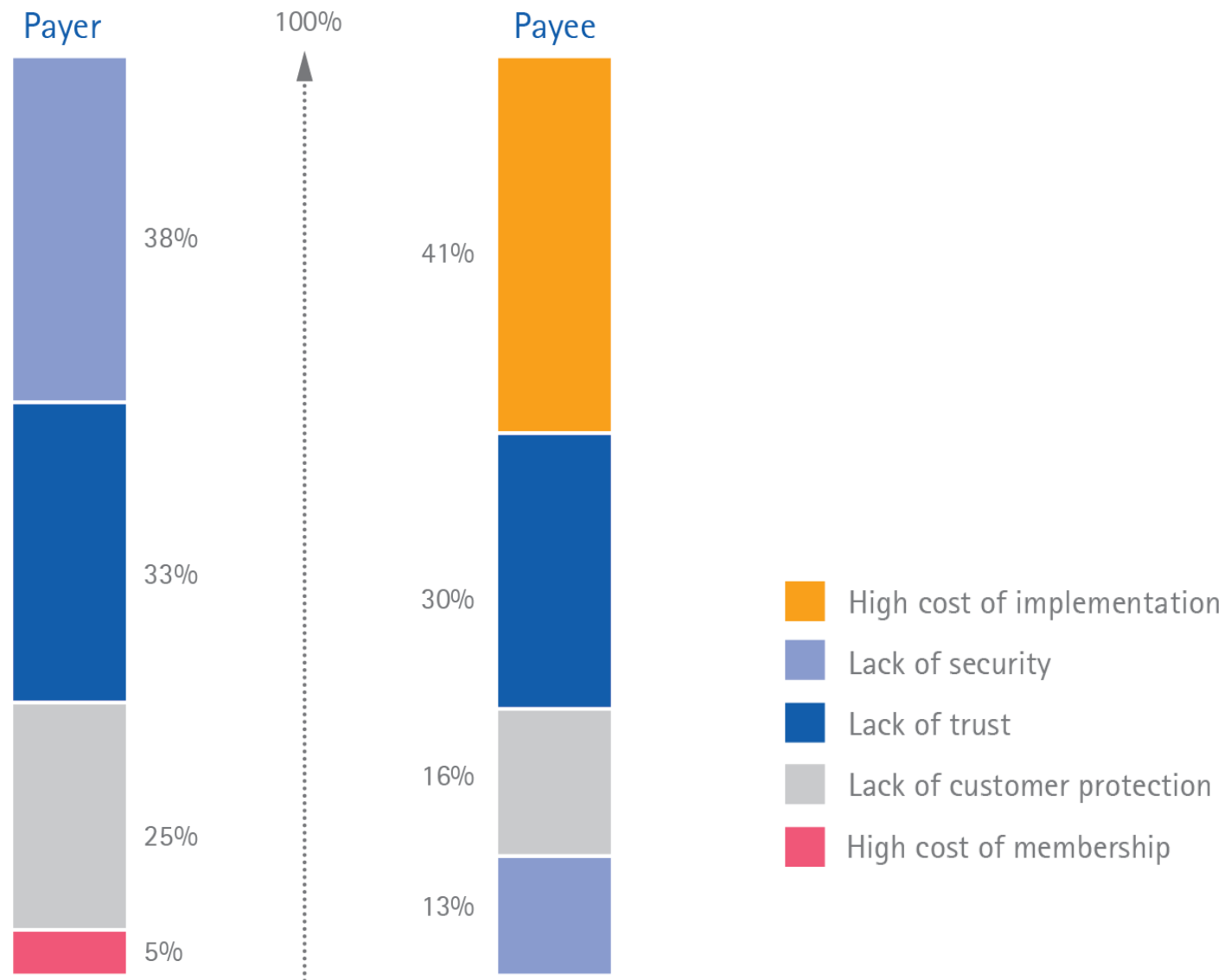
Barriers faced by PSPs;
top innovations outside the UK



- Need to incentivise industry collaboration
- Network effects in two sided markets
- Lack of standards and interoperability
- Presence of legal issues
- Lack of access to payments infrastructure
- High cost of investment to set up an alternative infrastructure

What are the common barriers to innovation?

Barriers faced by payer/payee;
top innovations outside the UK



Summary

What are the policy tools used by other governments to enable innovation?

Changing regulations

- **Setting standards/interoperability** – ensuring the integrity, security and wider adoption of new payments technologies(e.g. migration to ISO20022 with SEPA)
- **Setting deadlines** – driving the development of services by setting deadlines (e.g. SEPA end date regulation)
- **Setting new legal framework** – validating new business models in payments (e.g. PSD2, e-money directive)
- **Issuing licenses** – issuing licenses for the launch of a new technology or service to drive faster adoption (e.g. Nigeria mobile payments license competition, e-wallet in Philippines)
- **Controlling pricing** – controlling pricing to reduce uncertainty and increase investment (e.g. interchange cap regulation)

What are the policy tools used by other governments to enable innovation?

Dialogue and moral suasion

- **Setting vision** – setting goals that drive a behaviour or desired outcome (e.g. NFC standards in Canada, real-time payments system in Sweden)
- **Advocacy** – engaging in discussion with other regulatory and/or industry bodies to influence policy (e.g. Nordic collaborations on shared infrastructure)

What are the policy tools used by other governments to enable innovation?

Monitoring

- **Monitor** – monitor, observe, scan; allow the industry to drive innovation (e.g. Boku carrier billing service, Kaching mobile solution by CBA in Australia)
- **Inspections** – verifying that emerging business models do not put customers, payments ecosystems and financial stability at risk (e.g. AML/KYC checks)
- **Producing reports and payments statistics** – tracking payment developments (e.g. Kenya Central Bank tracking mobile payments access and new services after M-PESA)

What are the policy tools used by other governments to enable innovation?

Imposing sanctions

- **Setting penalties** – controlling behaviour through penalties and charges for non-compliance with rules (e.g. European Commission threats of fines to Visa and MasterCard for interchange fees)

Key lessons from worldwide innovations?

1. Consider end-user and infrastructure.
2. Many different firms innovate.
3. Profits are the primary incentive for innovation.
4. Mass adoption is important.
5. Failure is an acceptable outcome of innovation and can be a sign of healthy competition.
6. A policy toolkit exists to facilitate change.

