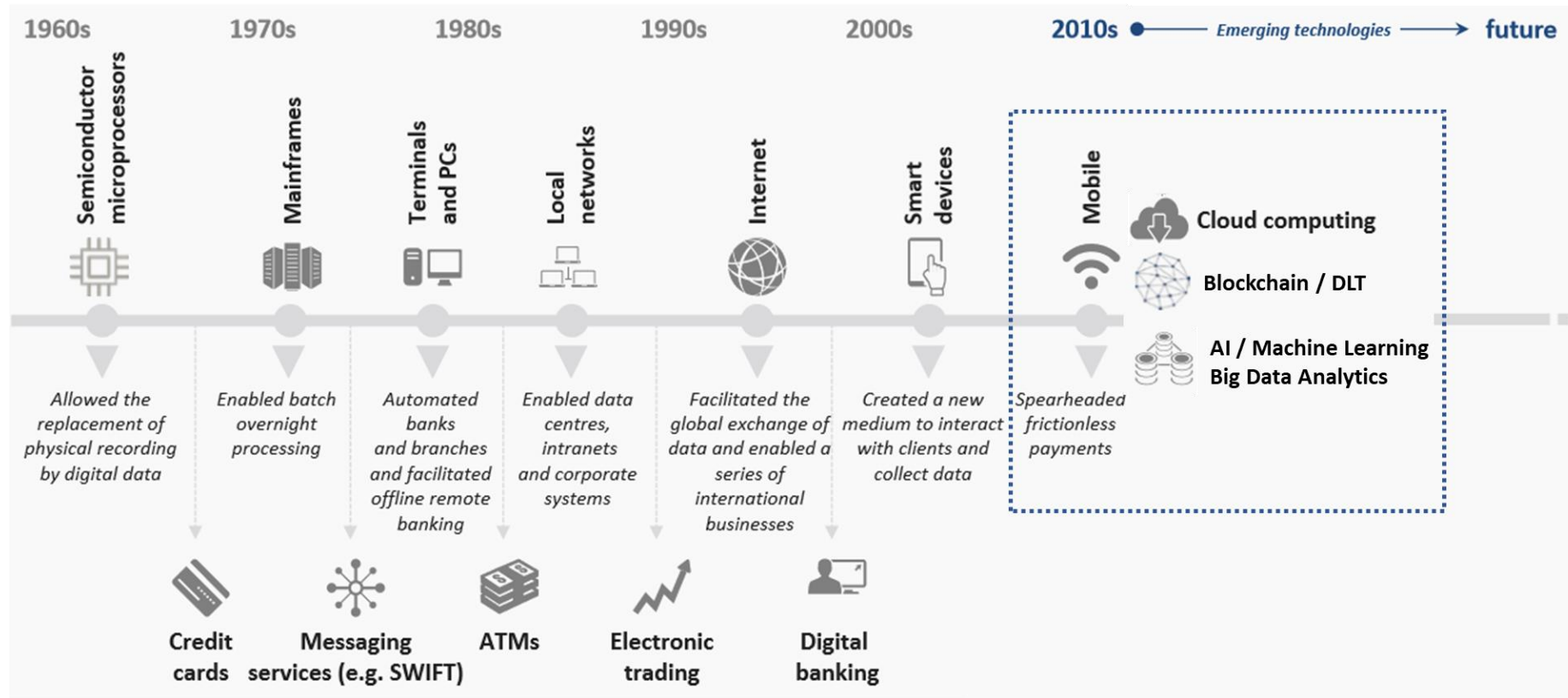


# Regulatory Support for Financial Innovation

**Matthew Saal**

April 4, 2019

# The pace of technology adoption in financial services is accelerating



# FinTech supports financial access

Universal Financial Access 2020: all adults globally to have access to an account to store money and send and receive payments.



## Implication for financial services providers:

Large volume of low value transactions

Sustainable provision of services will require a high degree of automation and straight-through processing

# FinTech is helping address broader inclusion, which remains a challenge even for those with access

## Inclusion Challenges

1. High cost to serve small borrowers and savers, relative to revenue potential
2. Risk due to lack of credit history and collateral
3. Lack of skills, financial literacy, and bankability



Improved access, and automation of services, to reduce cost-to-serve



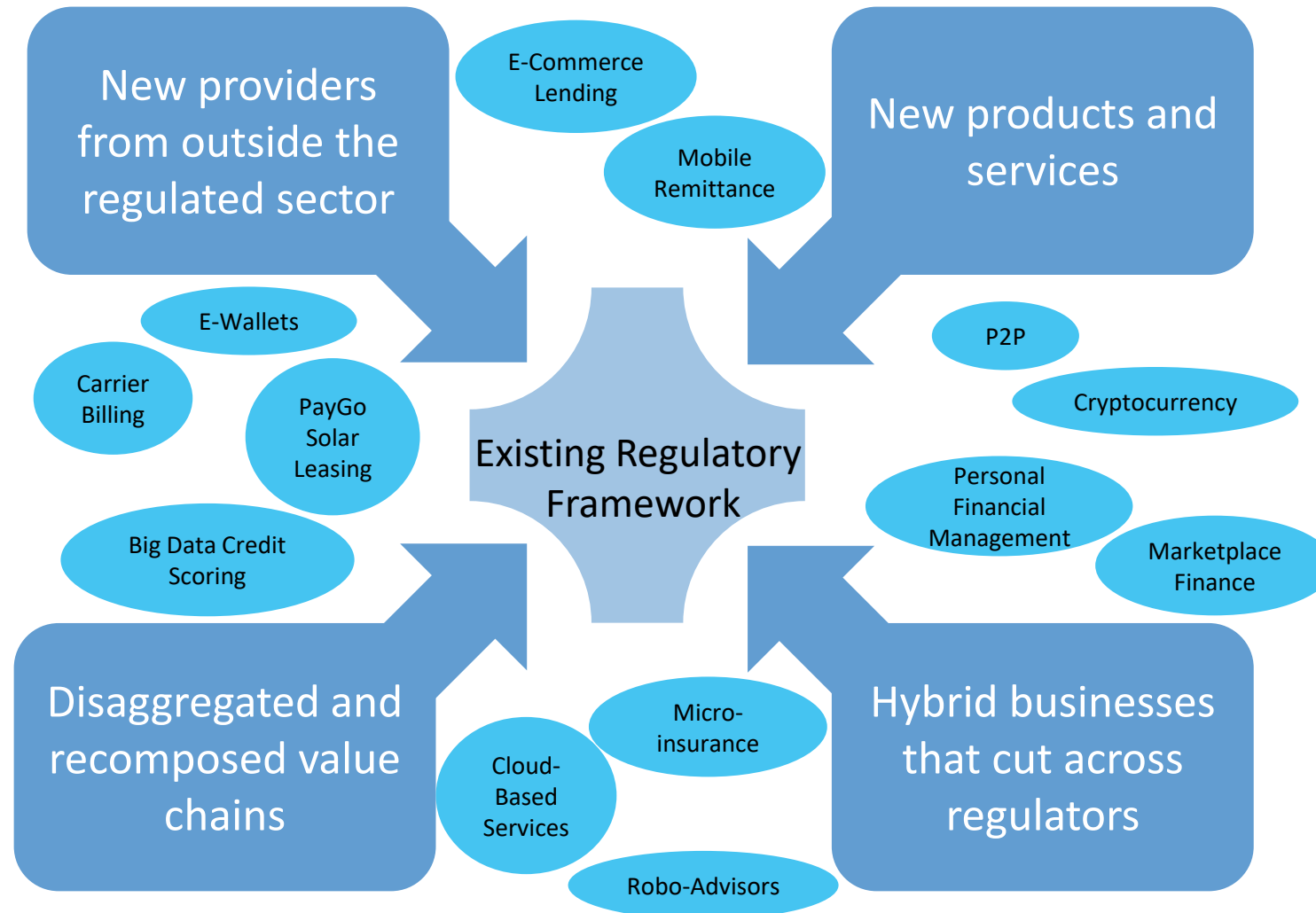
Leveraging data and connectivity of people and assets to assess and manage risks



Tailored products and non-financial services appropriate to each segment

Potential Fintech-enabled Solutions

# Digital transformation of finance challenges existing regulatory frameworks



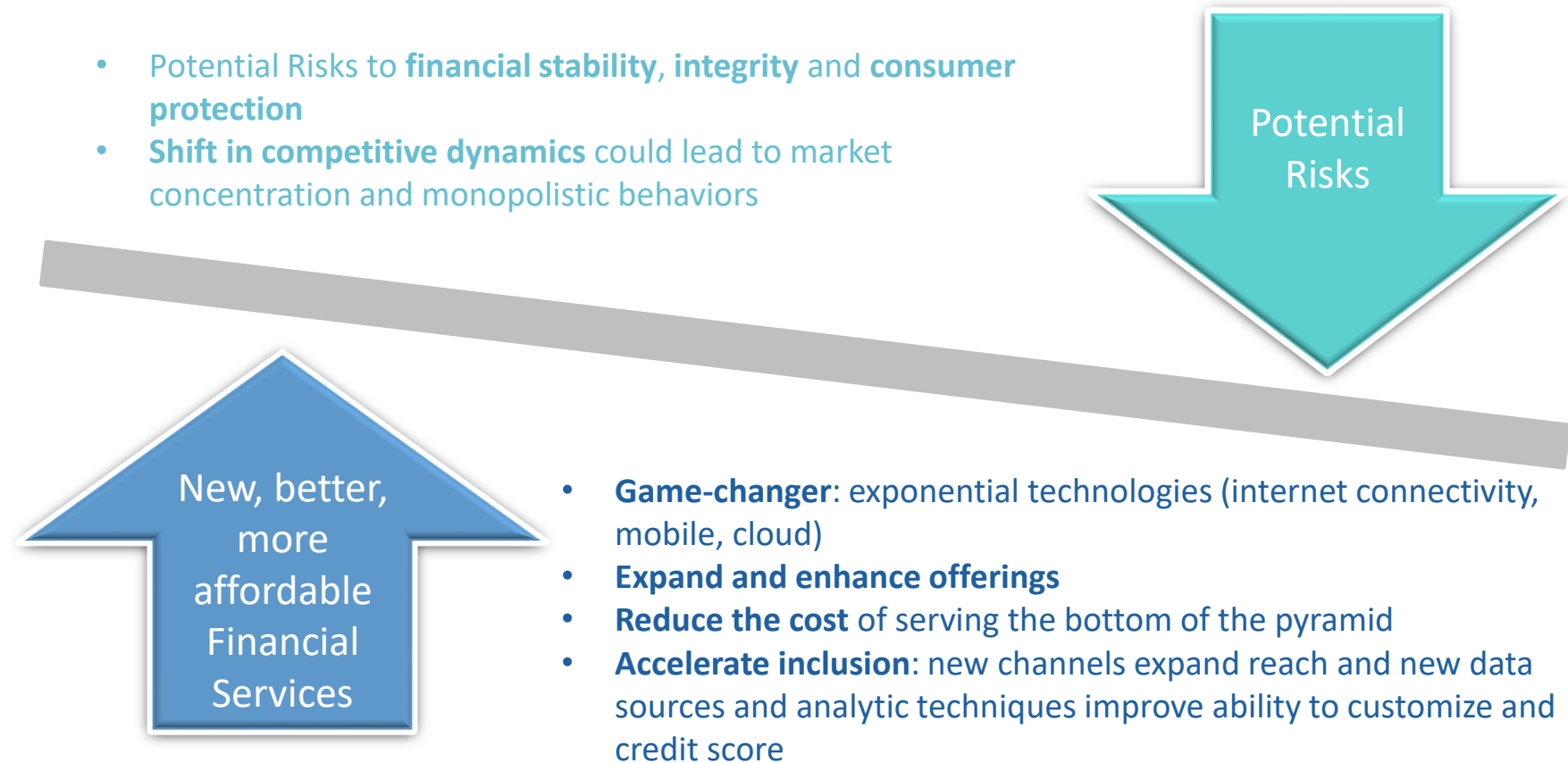
# Impact of FinTech on regulatory objectives

Regulatory Objectives (I – SIP Framework)	Key Benefits	Key Risks
Financial Inclusion	<ul style="list-style-type: none"> <li>• <b>Lower costs and more efficient</b> than traditional and/or informal systems</li> <li>• <b>Access to credit via alternative data sources</b> for unbanked and underbanked</li> <li>• <b>Simple, more reliable, and significantly faster</b> than informal methods</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Micro-segmentation of risk</b> through use of Big Data analytics may lead to financial exclusion</li> <li>• <b>High borrowing rates on digital loans</b>, which make it difficult to fully repay</li> <li>• <b>Gender bias and/or income inequality</b> from the use of AI, ML and Big Data analytics</li> </ul>
Financial Stability	<ul style="list-style-type: none"> <li>• <b>Increased diversification of deposit base and loan portfolios</b> can reduce concentration among systemic financial institutions</li> <li>• <b>Improved data quality and risk data aggregation</b> can increase systemic resilience</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Increased financial interconnectedness</b> may result in expedited adverse financial shocks</li> <li>• <b>Increased operational risks</b>, such as cyber risks, may increase systemic risk</li> </ul>
Financial Integrity	<ul style="list-style-type: none"> <li>• <b>Promote traceability of transactions</b>, supporting CFT</li> <li>• <b>Facilitate easier verification for KYC process</b>, thereby reducing compliance costs</li> <li>• <b>Regulators' use of technology</b> to support financial integrity</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Virtual currencies may facilitate anonymous funding sources or payments</b> rendering AML/CFT checks to be difficult</li> <li>• <b>Decentralized nature of blockchain/DLT may render AML/CFT enforcement unclear</b> if operating outside of country</li> </ul>
Consumer Protection	<ul style="list-style-type: none"> <li>• <b>Increased transparency, more and better information</b> to consumers, reducing information asymmetries</li> <li>• <b>Comparison of financial products and services</b> more quickly and easily</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Limited transparency of fees and charges</b>, which can mislead consumers</li> <li>• <b>Over-indebtedness</b> due to lack of visibility of multiple digital loans of each borrower, push loan tactics</li> <li>• <b>Lack of data protection</b>, leading to misuse of customer data</li> </ul>



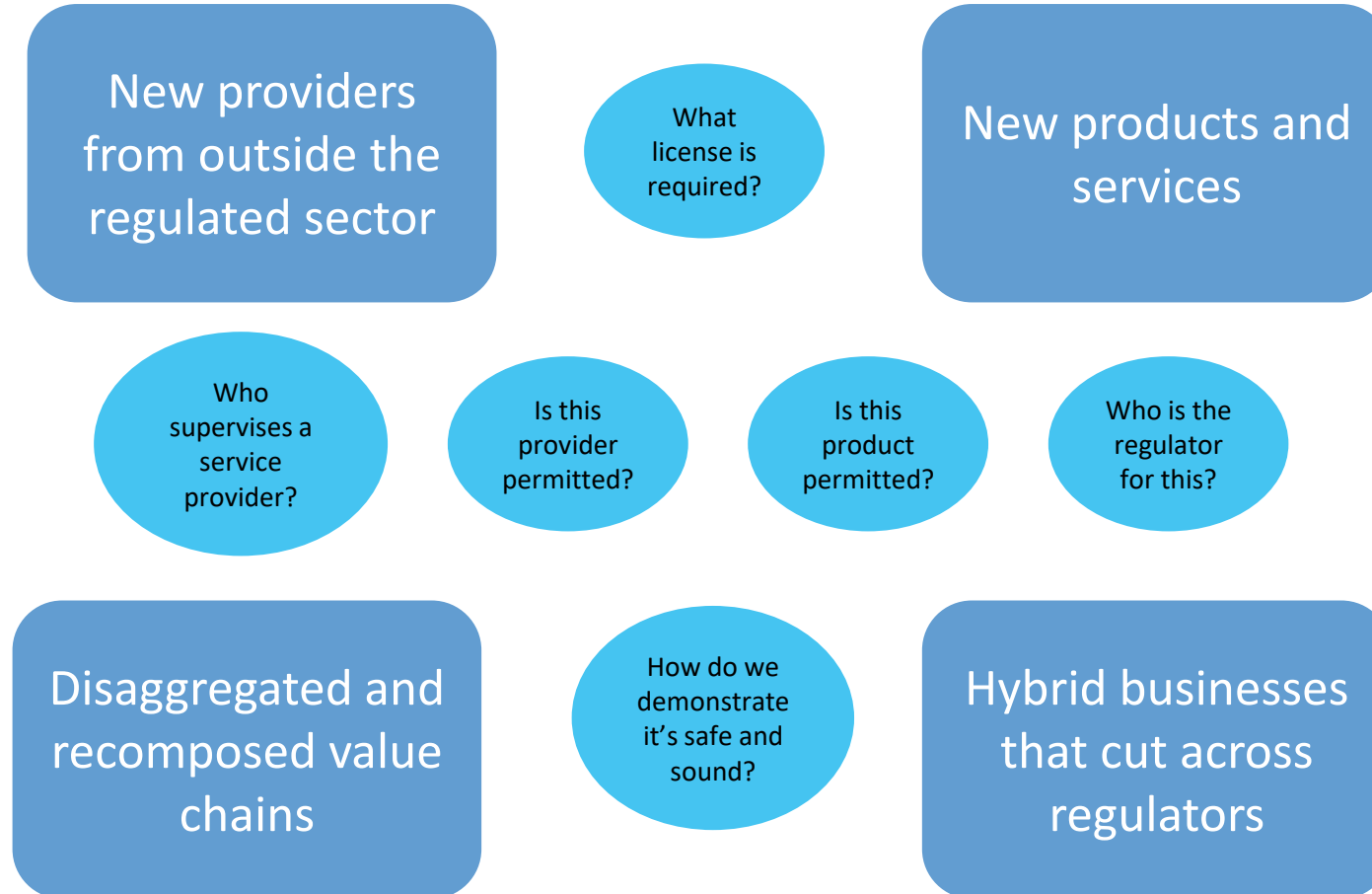
# Regulators must balance the risks and benefits of financial innovation

Leveraging the digital opportunity does not come without challenges



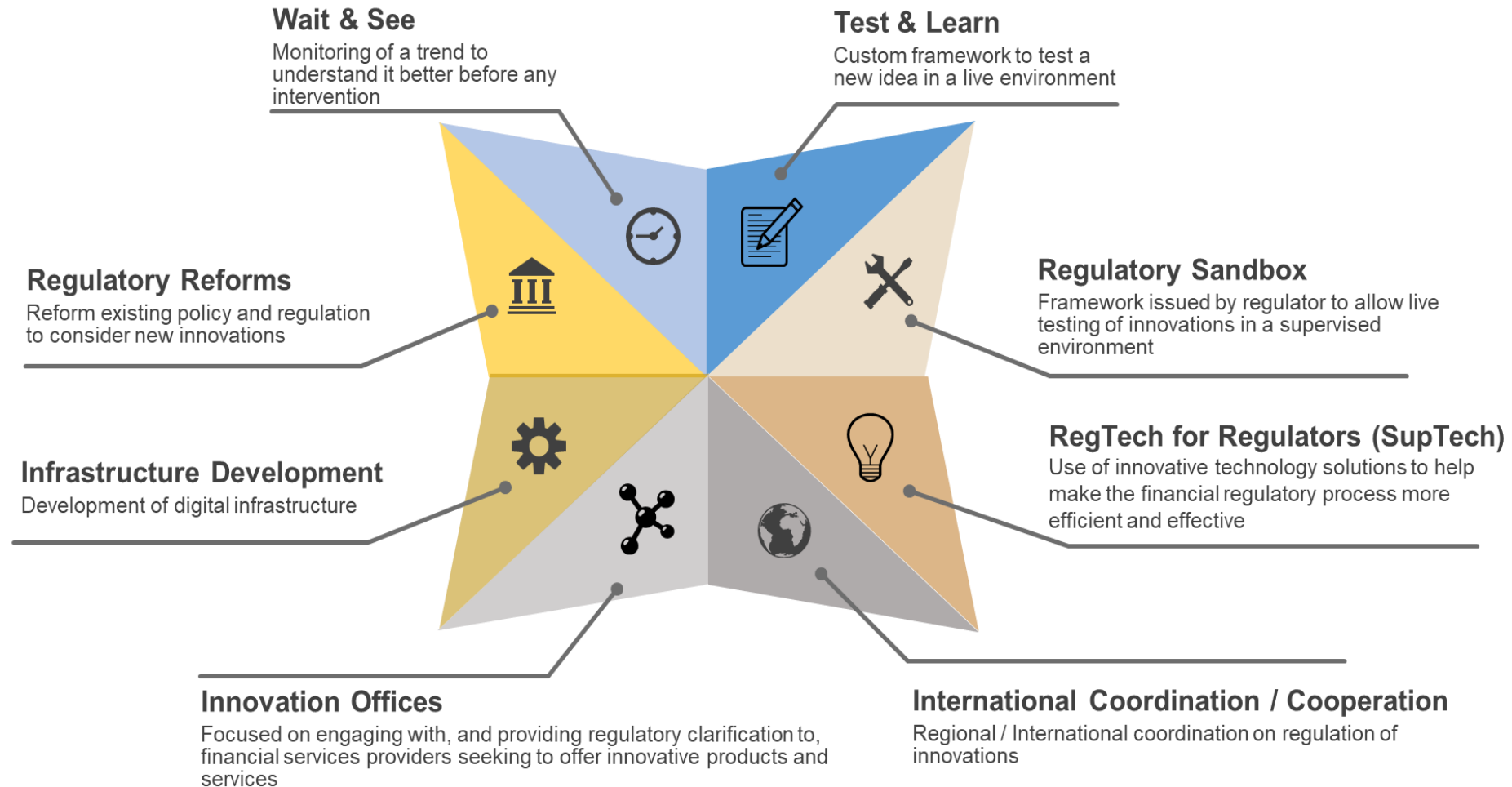
# Why is support needed?

## Regulators' challenge is innovator's hurdle





# Regulatory tools & frameworks to enable innovation

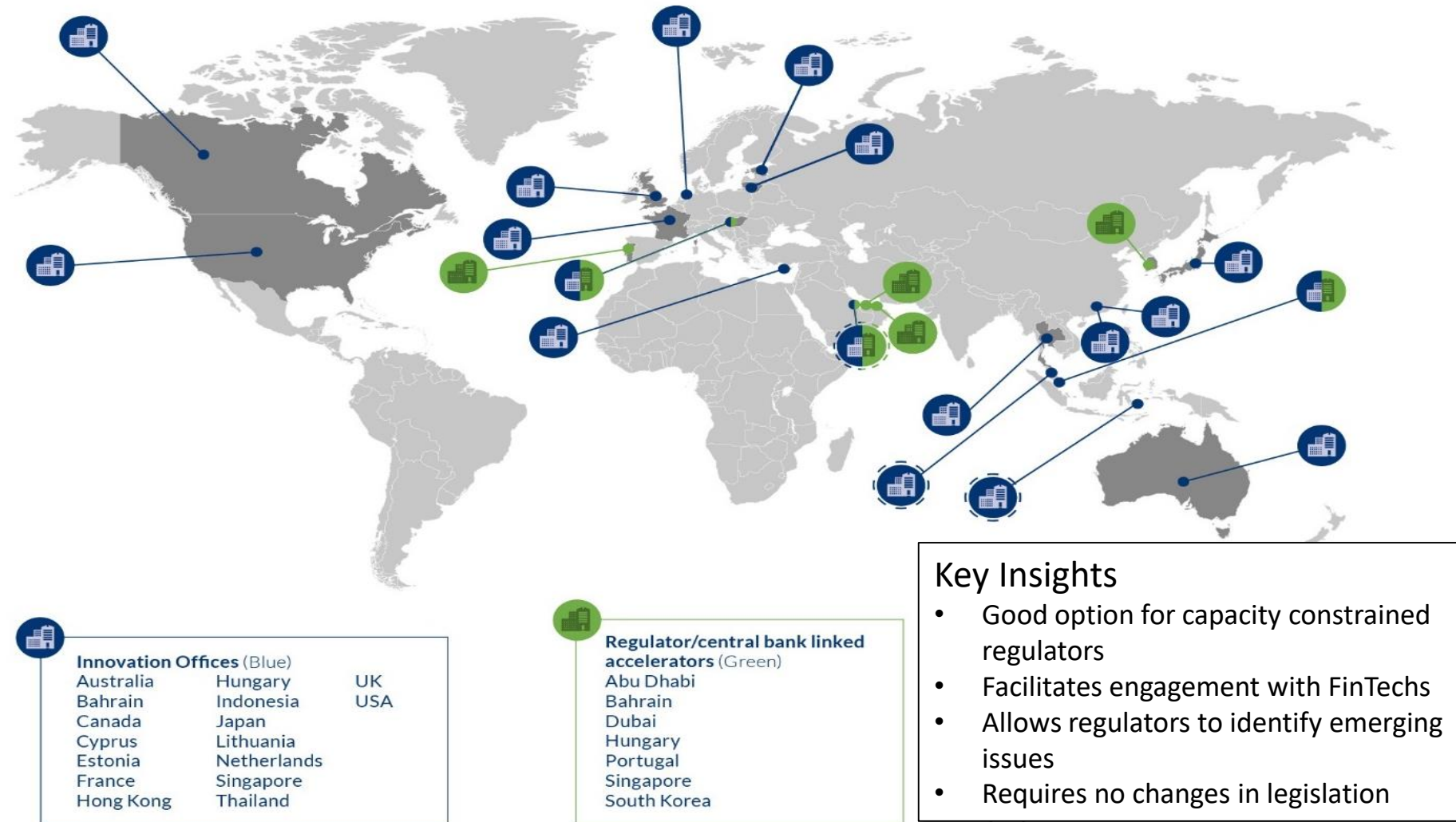


# Regulatory sandboxes



Sources: Jenik and Lauer (2017), Mueller et al. (2018), DFS Observatory (2018) and UNSGSA FinTech Working Group and CCAF (2018)

# Innovation offices



## Key Insights

- Good option for capacity constrained regulators
- Facilitates engagement with FinTechs
- Allows regulators to identify emerging issues
- Requires no changes in legislation

# What is a regulatory sandbox?

- Virtual environment for innovators (existing and start-ups) to **test new ideas** with **real customers**
- Can be open to **authorized** and **unauthorized** businesses and technology providers as based on specific '**Eligibility Criteria**'
- Allows the regulator to **oversee trials** using a customized regulatory environment for each pilot
- Provides **intelligence** on developments, trends and emerging risks
- It is NOT about exemptions from extant laws and regulations



# Sandbox Objectives

## ➤ For Regulator

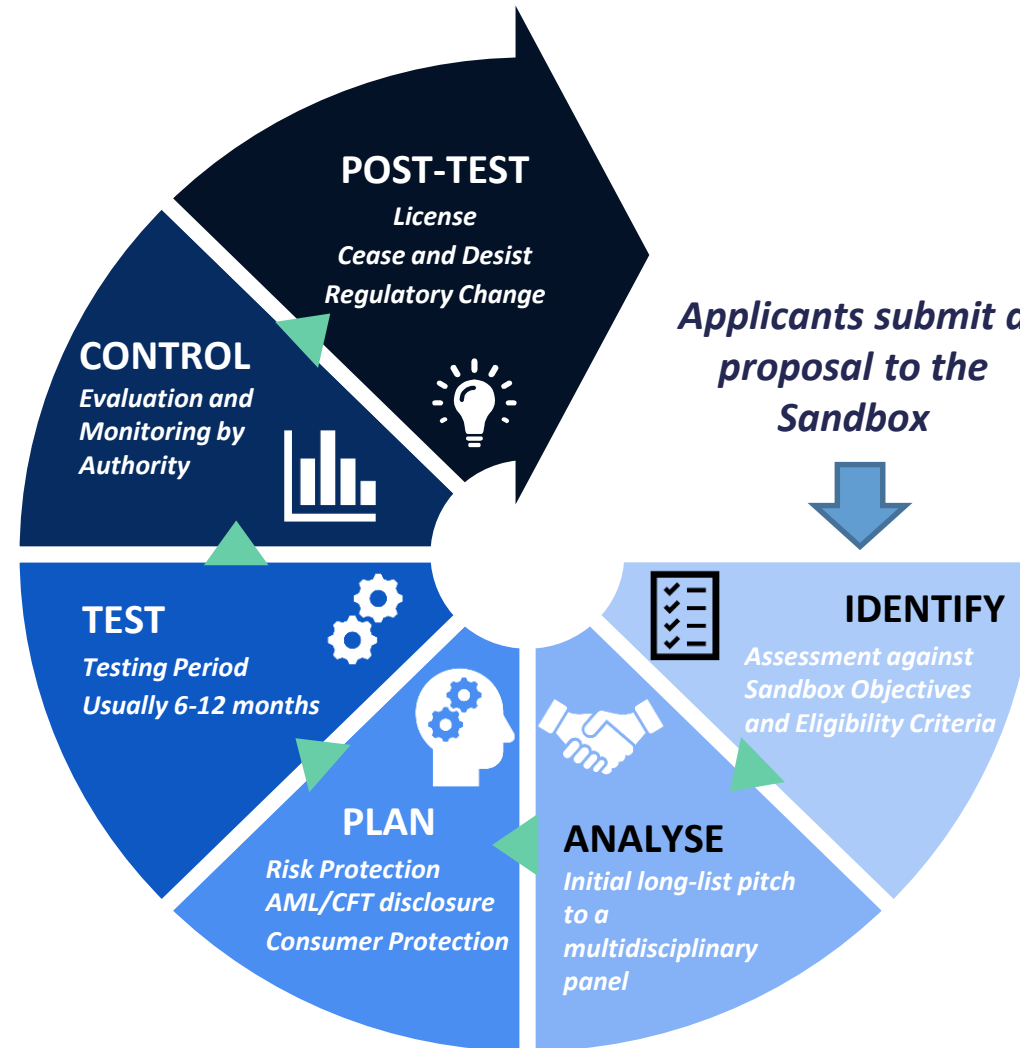
- Develop an ecosystem conducive to innovation
- Foster entry for competition and inclusion
- Understand new technologies
- Test how innovations are covered by current regulation
- Accelerate efforts to develop guidelines for new technologies and business models
- Identify appropriate consumer protection safeguards to require of new products and services

## ➤ For Innovators

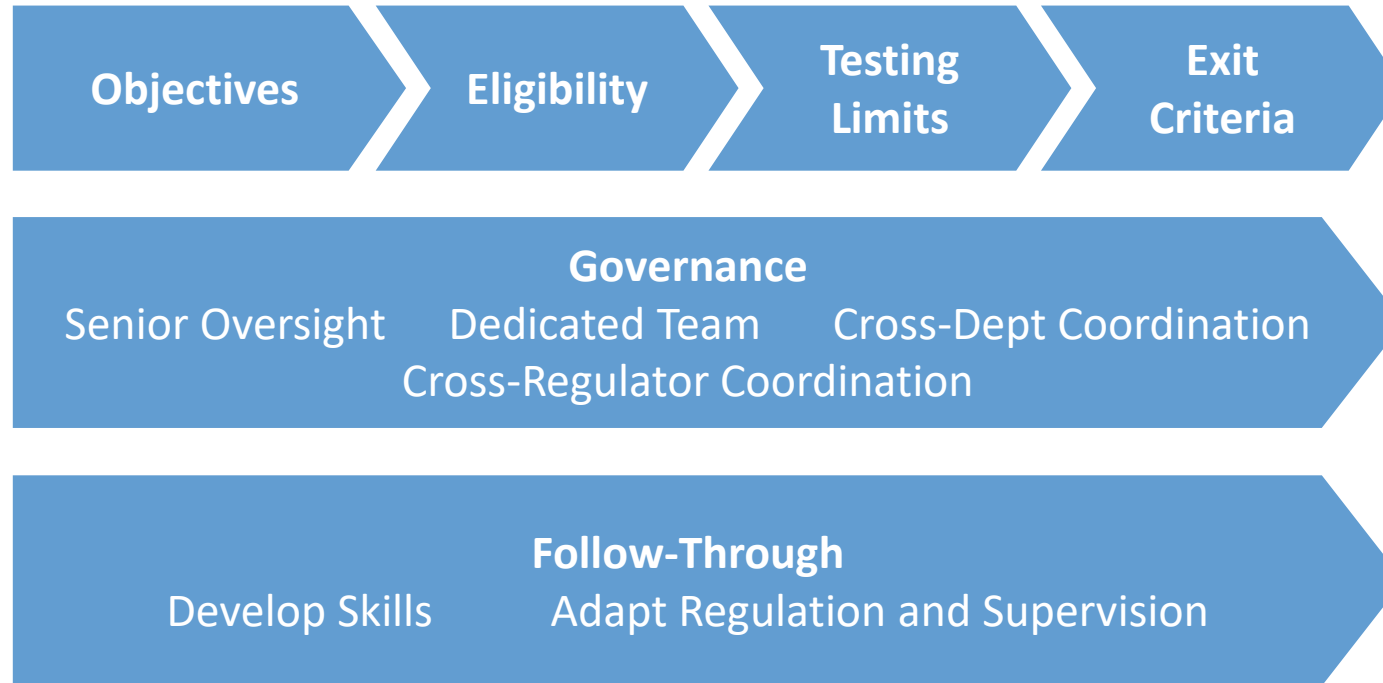
- Opportunity to test innovative products and services
- Reduce regulatory uncertainty for innovators
- Reducing the time and cost of getting innovative ideas to market
- Consumer comfort and assurance
- Better access to finance as product's viability and regulatory comfort are confirmed
- Identify appropriate consumer protection safeguards to build into new products and services

- Improve communication between regulators and innovators

# Typical sandbox lifecycle

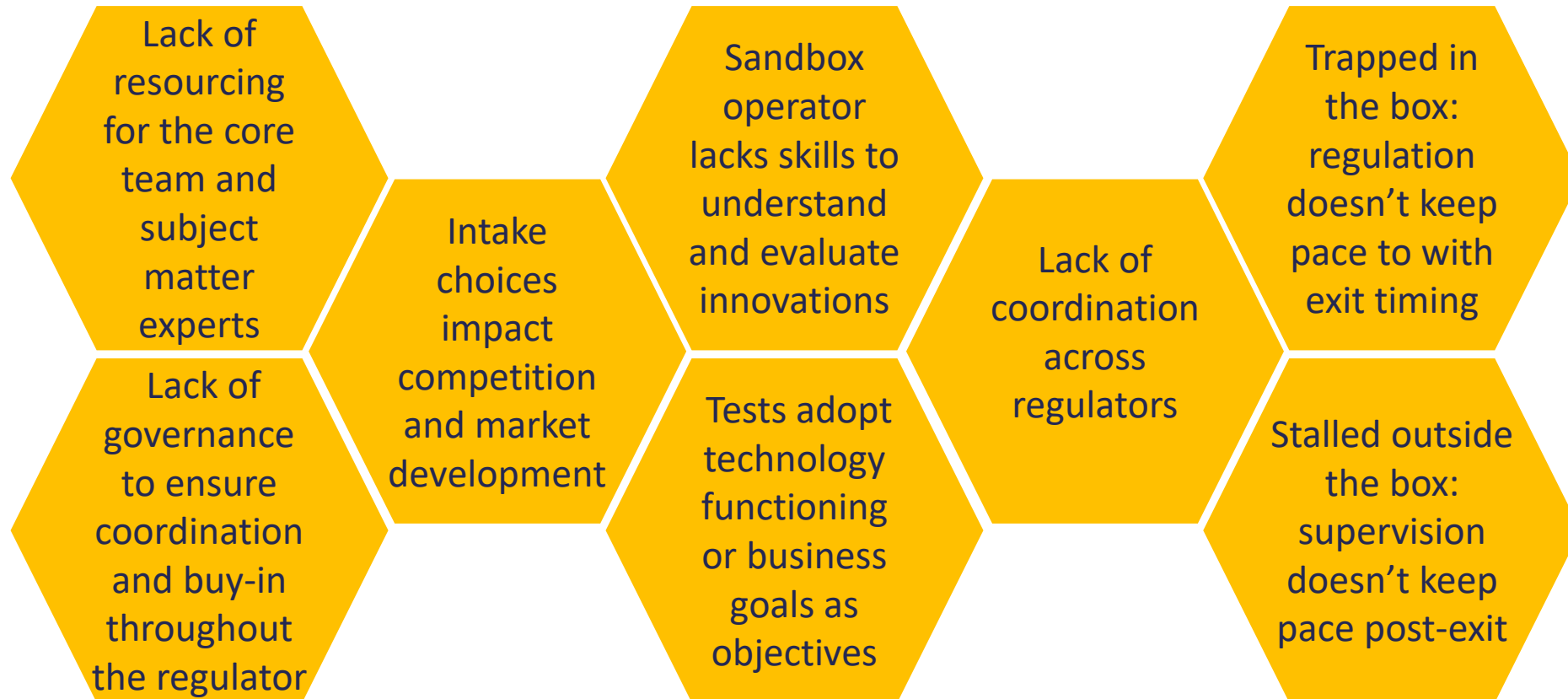


# Requisites





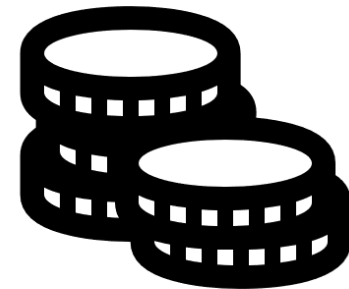
# Risks



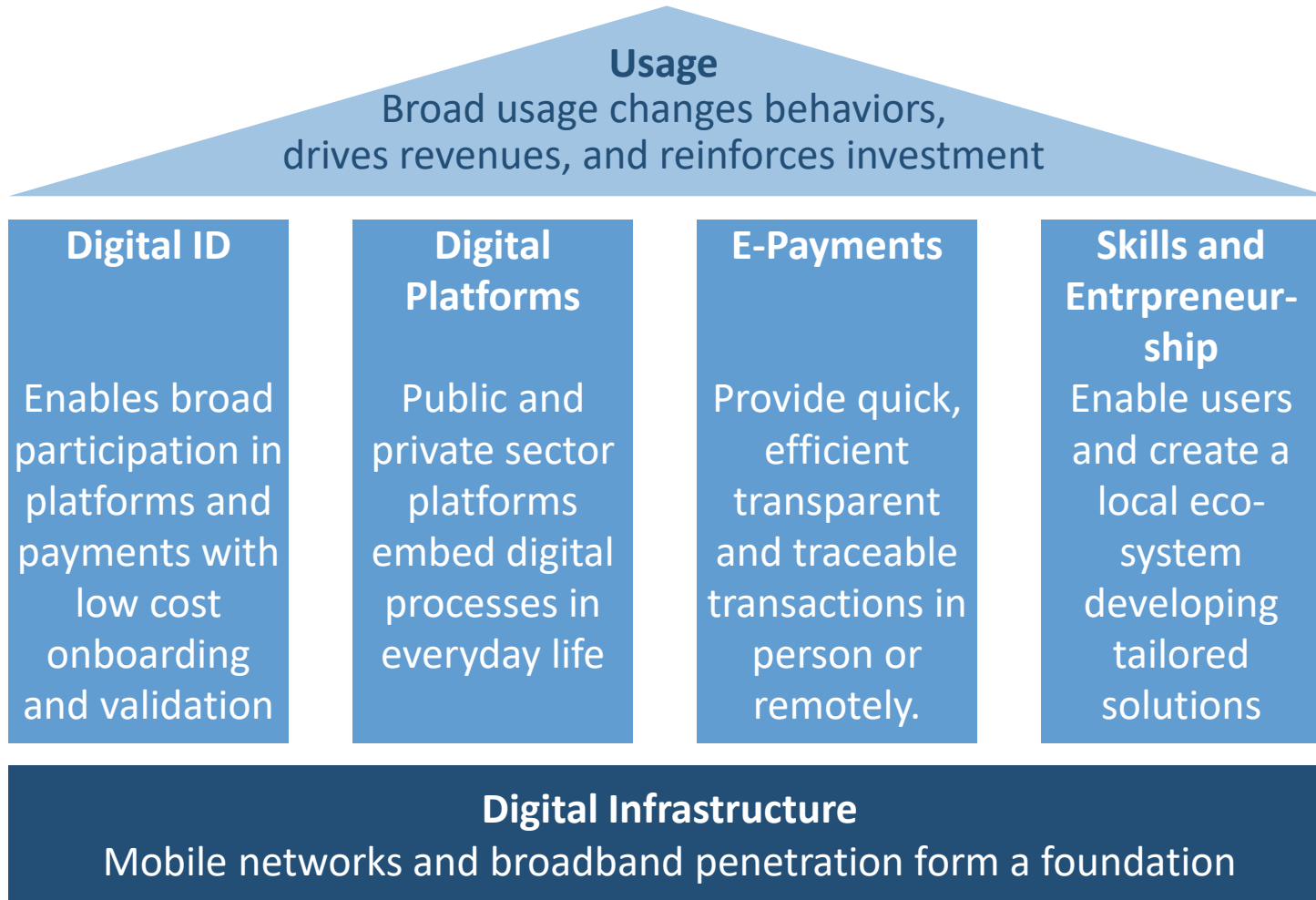
## Malaysia case study: remittances firm

- World Remit, a UK-based FinTech remittance company mainly serving emerging markets, was admitted in Bank Negara Malaysia (BNM)'s regulatory sandbox
- As part of the sandbox, World Remit was interested in testing its online KYC process, even though Malaysian law required conducting KYC checks in person
- The sandbox allowed WorldRemit to work in a controlled environment and show BNM how it works so that they could get confidence in the online KYC process. The testing was successful and well received by customers
- As a result of the tests performed by World Remit in the sandbox, ***Bank Negara Malaysia is currently working on draft regulation to allow online KYC checks***

**Provides a good example of a regulatory sandbox facilitating innovation and benefiting financial inclusion**



# Broader Government role in developing the digital economy



# Examples of programs to encourage digitization of transactions



Brazil digitized G2P payments through its Bolsa Familia Program (BFP) which merged multiple pre-existing conditional cash transfer programs into one electronic benefit card



Peru: BIM Interoperable payments system to encourage broader uptake



Rwanda Revenue Authority implemented m-Declaration, a USSD mobile application that facilitates calculating and paying turnover taxes for micro and small businesses.



Taiwan, others: receipt lottery to encourage retail customers to use digital payments at POS



Tanzania: digitized a range of B2G and P2G payments, including road license fees, customs fees, and usage fees for game parks and health services



Turkey: e-invoicing is required for companies above TL 10 million in annual turnover, with the Revenue Administration as the hub.



Uruguay: VAT reduction for digital payments

# Implementation considerations for innovation support

Assess feasibility and alignment with capacity and objectives

Engage with a wide range of relevant stakeholders; consult to identify challenges and crowdsource solutions

Start small, experiment often and get quick wins

Sequence and combine a variety of approaches for innovation support

Ensure executive buy-in and institutional support, focusing on mindset and culture

Be adaptable, flexible and open to refining the approach

Facilitate inter-agency coordination and collaboration

Develop a theory of impact and metrics of success

Ensure proportionality