

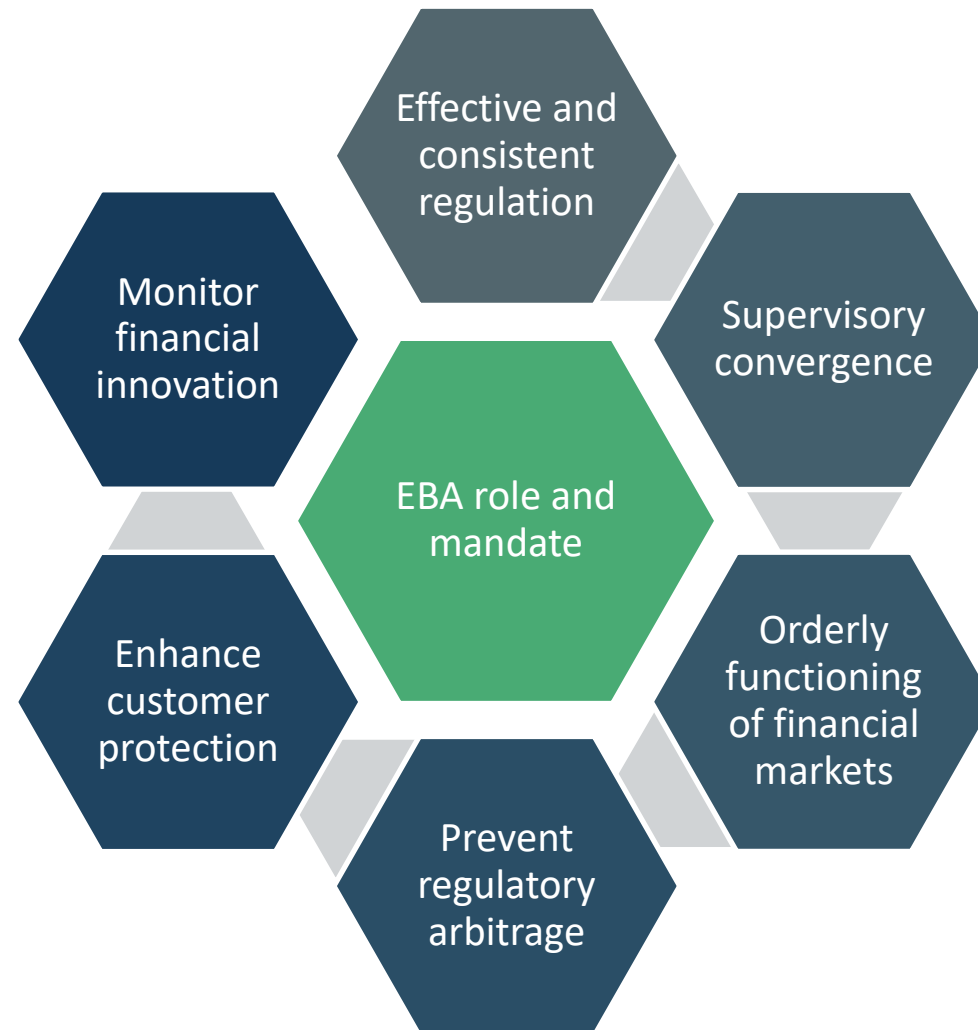


## **POLICY RESPONSE TO INNOVATION AND DIGITALIZATION – WHERE DO WE STAND?**

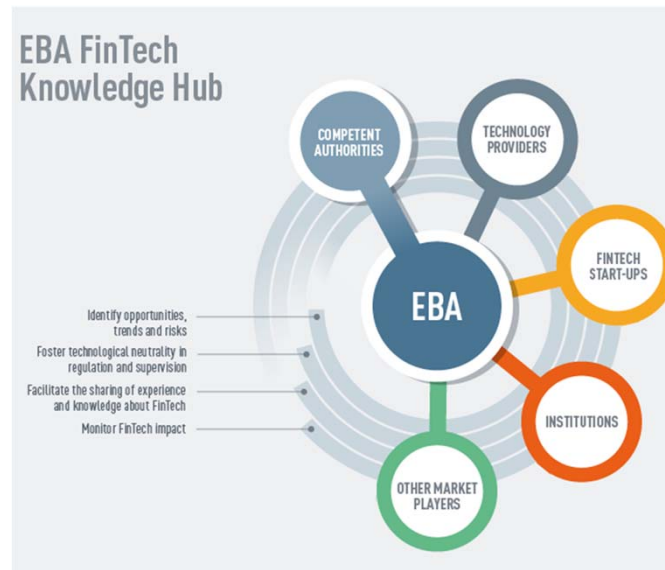
17-18 October 2019 Deutsche Bundesbank Munich | ESE conference

Slavka Eley, Head of Banking Markets, Innovation and Products

# EBA role and mandate



# EBA FinTech Roadmap



# Monitoring of innovation and technologies adoption

A wide range of financial innovations are being applied to support the provision of credit, deposit and capital raising, payments, clearing, settlement, and investment services.

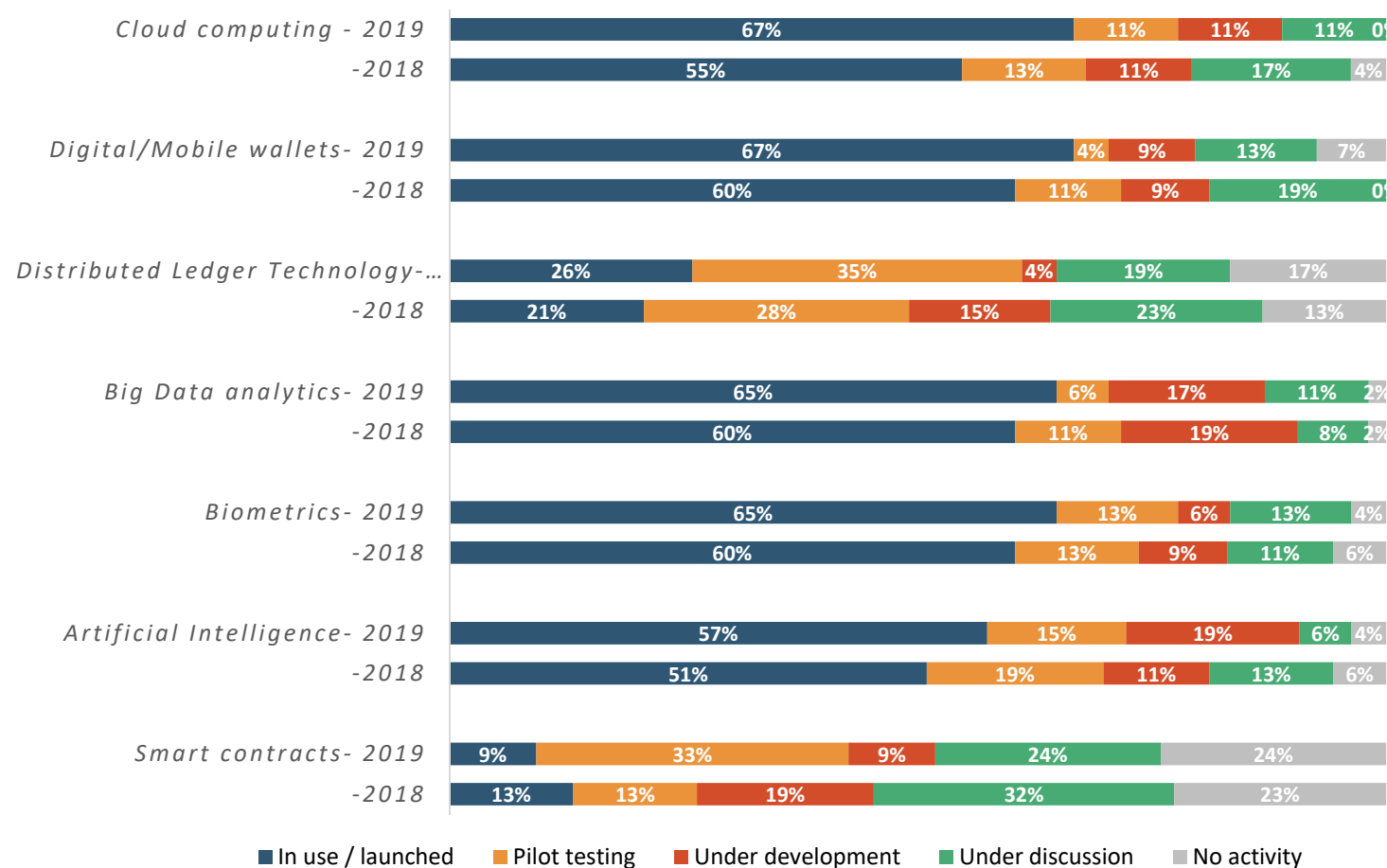
Top 5 financial innovations applied	Status of adoption by incumbent institutions
1. <i>Online distribution channel</i>	<ul style="list-style-type: none"> <li>➤ Use of <b>biometrics</b> (fingerprint, face and voice recognition) widely implemented for customer authentication and identification purposes.</li> </ul>
2. <i>Online platform (e.g. crowdfunding, P2P transfers)</i>	<ul style="list-style-type: none"> <li>➤ <b>Open Banking/APIs</b>: Implementation of PSD2 in progress. Potential to significantly improve competition in the sector by creating new rules for access to consumer data whilst maintaining high standards of protection.</li> </ul>
3. <i>Mobile distribution channel</i>	<ul style="list-style-type: none"> <li>➤ <b>Cloud</b> adoption: Implementation is progressing in many institutions citing cost savings/enhanced data security.</li> </ul>
4. <i>Value transfer networks/DLT</i>	<ul style="list-style-type: none"> <li>➤ <b>Machine learning and Big Data</b>: Explorative phase in many institutions, considered for the algorithms to inform credit scoring, automated advice, with big potential for solutions based on AI. Many institutions investing in exploring wider use of big data in day-to-day activities.</li> <li>➤ <b>Robo-advice</b>: For now more developed in investment services and more based on automated structured questionnaires.</li> </ul> <p>Close scrutiny of <b>ethical aspects</b>, impact on <b>financial inclusion</b> etc. needed.</p>
5. <i>Electronic personal financial management tools</i>	<ul style="list-style-type: none"> <li>➤ <b>DLT</b>: A number of consortia formed, explorative work and testing of cases underway (trade finance is an important area; also money remittance).</li> </ul>

Source: EBA 2017 FinTech mapping exercise

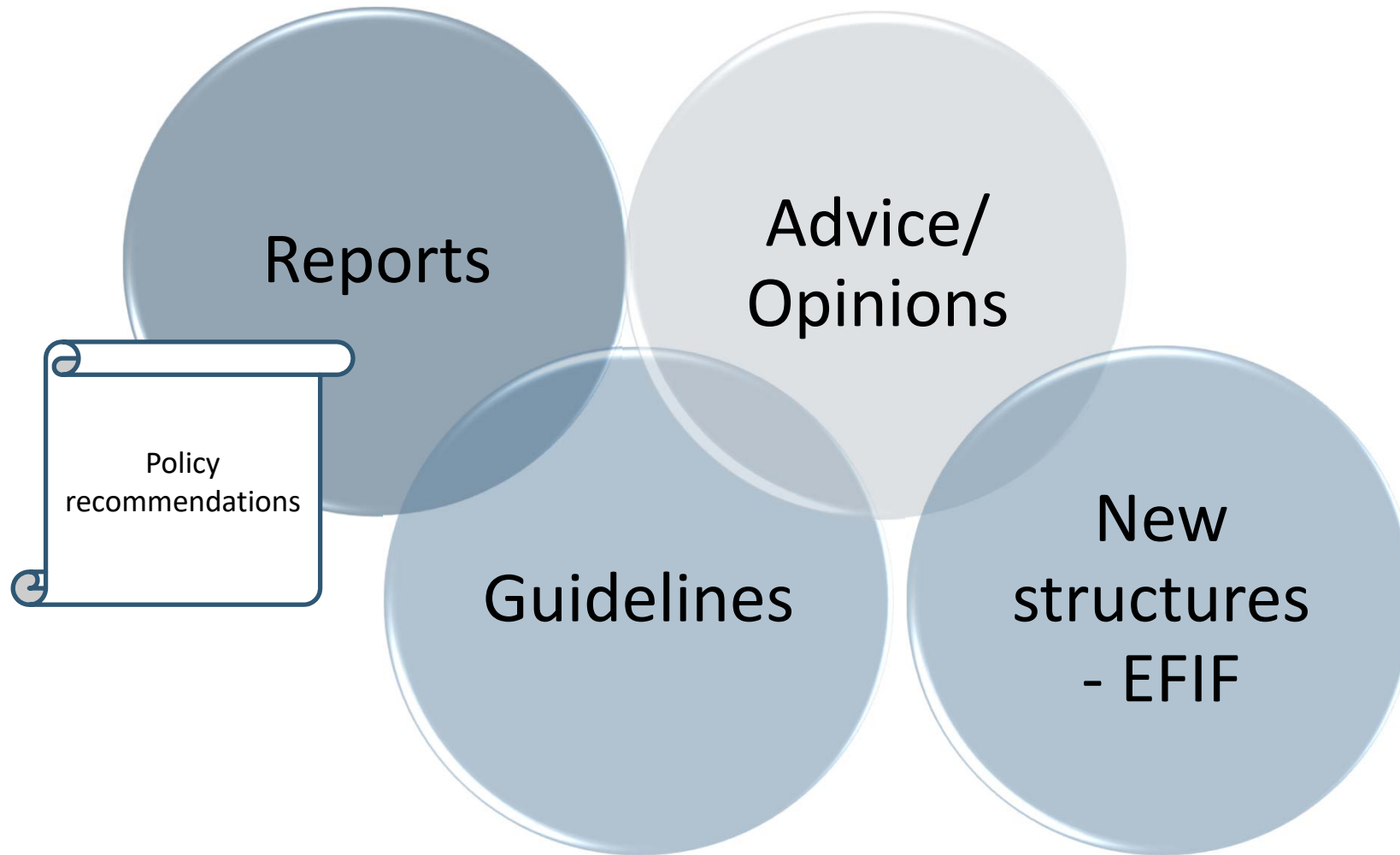
Source: EBA 2018 Impact of FinTech on incumbent credit institutions' business models

# Status of adoption of financial technologies by EU banks

In the context of the EBA Risk Assessment Questionnaire, conducted on a semi-annual basis among banks and market analysts, 53 European banks were asked a series of questions in relation to FinTech. Final results are included in the upcoming EBA Risk Assessment Report (2019).



## EBA policy tools and activities



## Key publications

### Reports – Building and sharing supervisory knowledge

Impact of FinTech on  
incumbent credit  
institutions (2018)

Prudential risks and  
opportunities from  
FinTech (2018)

Impact of FinTech on  
payment institutions and  
e-money institutions  
(2019)

Big Data & Advanced  
Analytics (2019)



# Business models, prudential risks and opportunities

## Key findings

- In general, incumbent institutions are **keen to embrace new and emerging technologies**. Many EU banks follow and/or adopt rather than “wait and see”. PIs and EMIs are **adapting their business models to cope with the competitive pressure** and embrace PSD2 changes
- The current strategy of most banks is to form commercial partnerships with non-bank Fintech firms/start-ups (**win-win situation**) and at the same time, develop in-house own products/services.
- **Payment and settlement** business line of banks as well as **retail banking** appear to be mostly affected by new entrants with a negative impact in incumbents’ revenues. **Growth of the payments sector by PIs and EMIs** suggests relationship with the disintermediation in banking.
- Twofold trend in digitalisation/innovation projects: (i) **digital transformation**, and (ii) **digital disruption**. Banks are planning to **increase their ICT-related spending**. PIs and EMIs are **keen to expand their products and services** and enter new markets.
- **Entrance of BigTech firms** is seen as potential threat by banks, PIs and EMIs. PIs and EMIs also face **key dependencies on banks and card processors**.
- **Legacy IT systems** and maintenance of relevant **expertise and talent** are key challenges for institutions.



# Big Data & Advanced Analytics

- ❑ The element of **trust** in BD&AA solutions is essential. A basic framework for the responsible use and trustworthiness in BD&AAA could outline a number of key principles. A **risk-based approach** could be adopted towards certain principles (such as explainability) depending on the impact of each BD&AA application.
- ❑ Institutions should pay attention on the **risk assessment** of new technology-based tools/solutions.
- ❑ Proper and effective **internal governance** framework and appropriate **organisational measures** are important to be in place during the entire model development process, alongside with investment in technical skills and knowledge.
- ❑ The need of necessary **competence** will become increasingly important when the use of AI/ML techniques becomes more widespread in the financial services industry, raising an important challenge for institutions, supervisors and regulators.
- ❑ The current trend and pace of evolvment may soon set the question on the need to develop AI/ML policies or regulatory frameworks for the application of AI/ML in an effort to facilitate its proper development from a regulatory perspective. Possible steps could mostly focus on **data and ethics aspects** rather than ICT as these appear to be the prevailing areas with a potential need for direction.

## Key publications

### Reports with policy recommendations

Innovation facilitators &  
best practices for design  
(2018)

Regulatory perimeter,  
regulatory status and  
authorisation approaches  
in relation to FinTech  
activities  
(2019)

Regulatory impediments  
to cross-border banking  
and payment services  
(2019)

# Reports with policy recommendations

## Key recommendations

- **Innovation facilitators** (sandboxes and innovation hubs) seen as very useful structures to bridge competent authorities and firms on innovation-related issues. The best practices set out in the report are intended to support good design of innovation facilitators. Greater coordination at EU level was also recommended resulting in the establishment of the European Forum for Innovation Facilitators (EFIF).
- **Regulatory perimeter** – steady scenario with very little national legislative activity affecting the regulatory perimeter of the CAs under the EBA’s remit.
- **Regulatory status of FinTech firms** – (i) move to PSD2 regulated services, (ii) new activities: crypto-assets and crowdfunding, (iii) ancillary services.
- **Authorisation approaches** – proportionality and flexibility under CRD IV and PSD2 suitable for innovative business models.
- **Interpretation of cross-border service** – update needed and more information on cross-border services for home and host supervisor.
- **Further harmonisation** of consumer protection and AML/CFT legal framework needed to enable scaling up of innovation across the single market.

## Key publications

### Guidelines

GLs on ICT risks and  
security management  
(2018-19)

Recommendation on  
outsourcing to cloud  
(2017-18)

GLs on outsourcing  
(2018-19)

# Guidelines

## Key provisions

- **Minimum ICT risks and security standards** for all regulated entities under the EBA remit – principle based
- **Clarification on outsourcing to cloud** – technology seen as an important enabler of innovative solutions
- **Outsourcing** – updated provisions covering new outsourcing practices ‘one to many’

## Key publications

### Advice and Opinions

Advice on legislative improvements for ICT to strengthen operational resilience

Advice on coherent cyber resilience testing framework

Advice on crypto-assets

Opinion on disclosure to consumers of banking services through digital means

# Advice and Opinions

## Key proposals

- Overall **operational resilience** including ICT governance and security - every entity should be subject to general and fundamental requirements on governance and security of ICT
- **Oversight of Third party service providers** - increased use of third party providers brings new vulnerabilities, advising COM to propose a legislative solution for monitoring the activities of third party providers when they are critical service providers
- **EU coherent cyber resilience testing** - three steps (i) cyber-resilience baseline, (ii) an EU wide coherent cyber-resilience testing framework, (iii) coordinated cyber resilience testing exercises
- **Crypto-assets** – typically crypto-asset activities do not constitute regulated financial services under current EU law, resulting in uncovered risks, e.g. to consumers and market integrity. EBA (and ESMA) advised the COM to take forward further work on potential EU-level solutions. The EBA is also progressing actions set out in the report.
- **Consumer disclosure** – proposed review of Distance Marketing of Financial Services Directives



## European Forum for Innovation Facilitators

- ✓ **Launched in April 2019** - The EFIF provides a **platform for supervisors to share expertise on innovations** and to reach common views on the **regulatory and supervisory treatment** of innovative products, services and business models.
- ✓ The EFIF also provides a platform for **supervisors to collaborate** in **responding to firm/group-specific questions** about innovations and to put in place potential **joint testing arrangements**.
- ✓ Topics discussed to-date include:
  - ✓ Tokenisation and DLT;
  - ✓ Stablecoins
  - ✓ AI, Big Data, machine learning
  - ✓ Platforms
- ✓ The EFIF complements innovation monitoring activities of the EBA.

# EBA FinTech

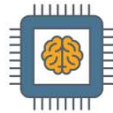
WORK PROGRAMME 2019-2020



## TECHNOLOGY-ENABLED INNOVATIONS



Cloud



AI and Big Data analytics



RegTech / SupTech



Open Banking / APIs



DLT

## AREAS OF REGULATORY FOCUS



Innovation facilitators



Regulatory obstacles to innovation



Licensing and perimeter



Crypto-assets



Operational resilience and cyber security

## ONGOING ACTIVITY





## **EUROPEAN BANKING AUTHORITY**

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