

IAIS Report: FinTech Developments in the Insurance Industry

Peter van den Broeke

With special thanks to Denise Garcia

Research and Development General Director, CNSF



Colombo, Sri Lanka
20 March 2018



Background

Objectives

Overview of FinTech developments relevant to the insurance industry - description, drivers, investment landscape.

Analysis of potential impacts to the insurance landscape and to supervisory approach, based on three scenarios.

FinTech Task Force
Brazil, France, Mexico, US, UK, IAIS Sect.

Roundtable Meetings Research

Feb-Mar 2017
ExCo Approval Publication
www.iaisweb.org

IAIS

Content

- List of Acronyms..... 3
- Executive Summary 4
- 1. Introduction 9
- 2. Drivers of InsurTech Innovation..... 10
- 3. Overview of current technological innovations in insurance and impact on insurance business..... 11
- 4. The InsurTech Landscape 13
- 5. Possible scenarios for the future and changes to the insurance landscape and supervisory approach 19
 - 5.1 Framework for the scenario analysis..... 19
 - 5.2 Description of the current
 - 5.3 Scenario analysis 1: Incu
 - Impact on the market.....
 - Implications.....
 - 5.4 Scenario analysis 2: Insu longer in control
 - Impact on the market.....
 - Implications.....
 - 5.5 Scenario analysis 3: Big!
 - Impact on the market.....
 - Implications.....
 - 5.6 Distributed ledger techno
 - Impact on the market.....
 - Implications.....
 - 5.7 Big Data and Artificial Int
 - Impact on the market.....
 - Implications.....
- 6. Conclusions.....

IAIS

InsurTech start-ups

InsurTech across the value chain

36. InsurTech start-ups are targeting all areas of the insurance value chain and even creating entirely new business models. Every process in the value chain, from product development to claims management is being revolutionized by technological innovations, the pricing and underwriting processes being the most impacted. A detailed description of how InsurTech is affecting each area of the value chain as well as examples of current start-ups that are focusing on the insurance business is provided in annex 2.

InsurTechs are adopting new, innovative technology faster especially within Pricing & Underwriting

InsurTech across the business lines

37. One approach to categorize the new market entrants by classifying the start-ups according to its main line of business was made by CB Insights¹² that mapped the InsurTech landscape focusing on 11 categories:

Overview: innovations in the value chain



- ❖ Usage based
- ❖ Behavioural based
- ❖ On demand
- ❖ P2P



- ❖ Connected devices (IoT)
- ❖ Drones
- ❖ Predictive Analytics
- ❖ Cloud computing



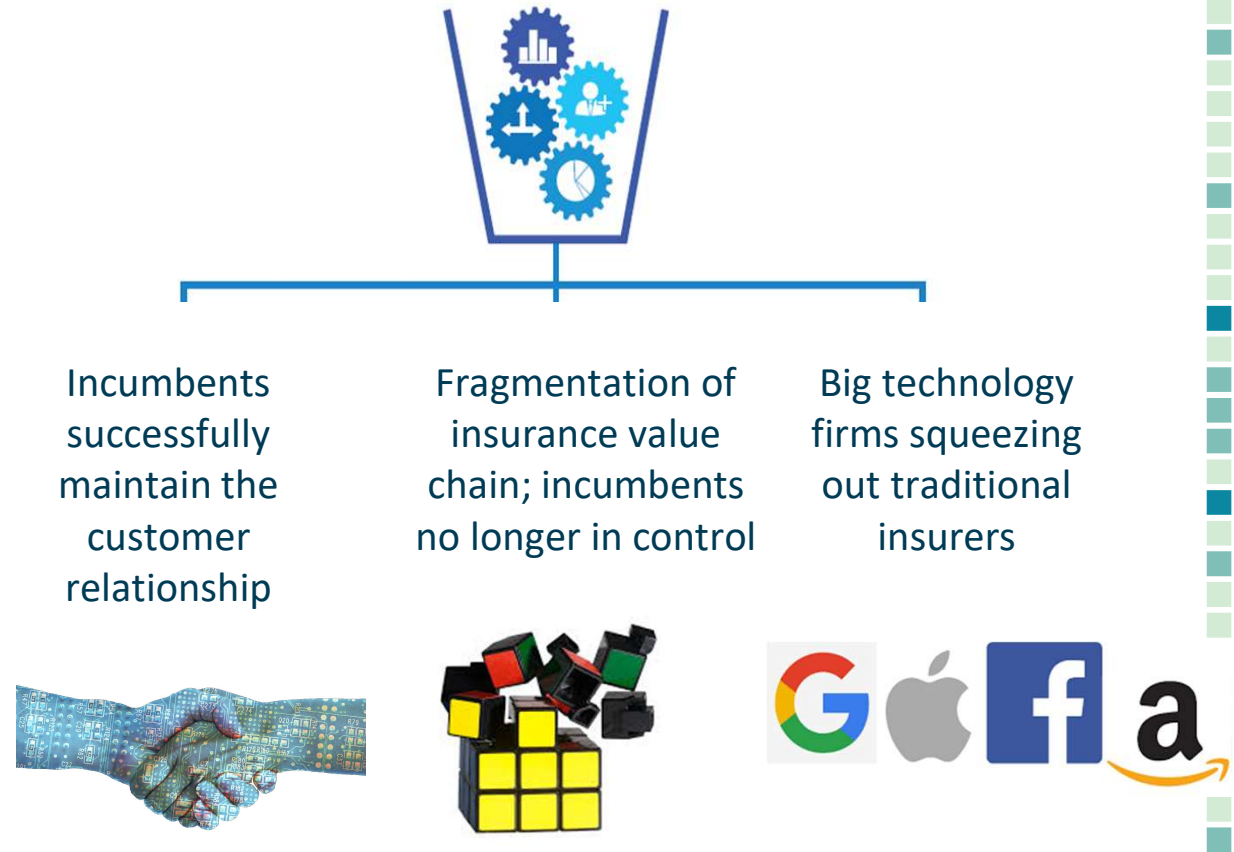
- ❖ Mobile & online distribution, aggregators, comparison sites.



ETHERISC

- ❖ Drones
- ❖ DLT/Blockchain
- ❖ Artificial Intelligence

Scenario Analysis



Scenario Analysis

Competitiveness

Consumer choice

Interconnectedness

Regulatory oversight

BM Viability & Cap. Req.

Conduct of business

Data ownership



Incumbents successfully maintain the customer relationship



Fragmentation of insurance value chain; incumbents no longer in control



Big technology firms squeezing out traditional insurers



Analysis & supervisory considerations (SC)

Competitiveness

Expected to **reduce in long term**.

Consumer choice

Expected to **reduce** -extent varies by scenario.



SC: how to do more to encourage or accommodate competition and new entrants?

SC: how to ensure that the ability to compare products between providers is not compromised as segmentation of customers increases?

Analysis & supervisory considerations (SC)



SC: how to include in current regulatory reports additional information in order to monitor potential risks of interconnectedness?

SC: how to reassess the regulatory framework in order to ensure consumers' adequate protection and to continue to monitor market trends?

Interconnectedness

Expected to **increase**.

Ability of regulatory oversight

Expected to **reduce**.

Analysis & supervisory considerations (SC)

Business model viability & Cap. Req.

Resilience of current business model expected to **reduce**.

Conduct of business

Potential **increase** in risk of reflecting **firm's objectives** rather than consumer's.



SC: how to adjust the regulatory capital framework to include new business models and changes in risk profile changes of insurers?

SC: how to require a minimum level of transparency for consumers that highlight the potential conflicts of interest?

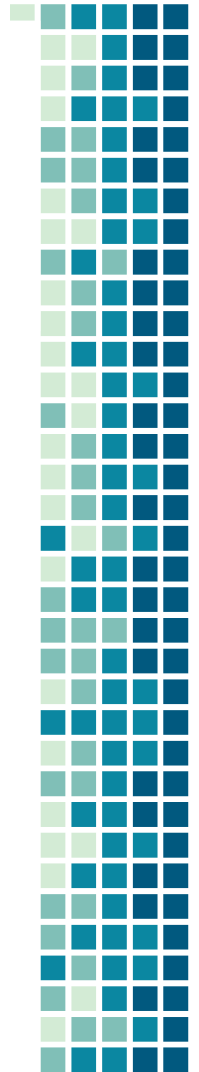
Analysis & supervisory considerations (SC)

Data ownership

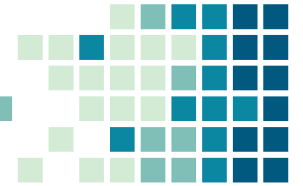
Potential **increase** in risk of unauthorized access, use or transfer of personal data.

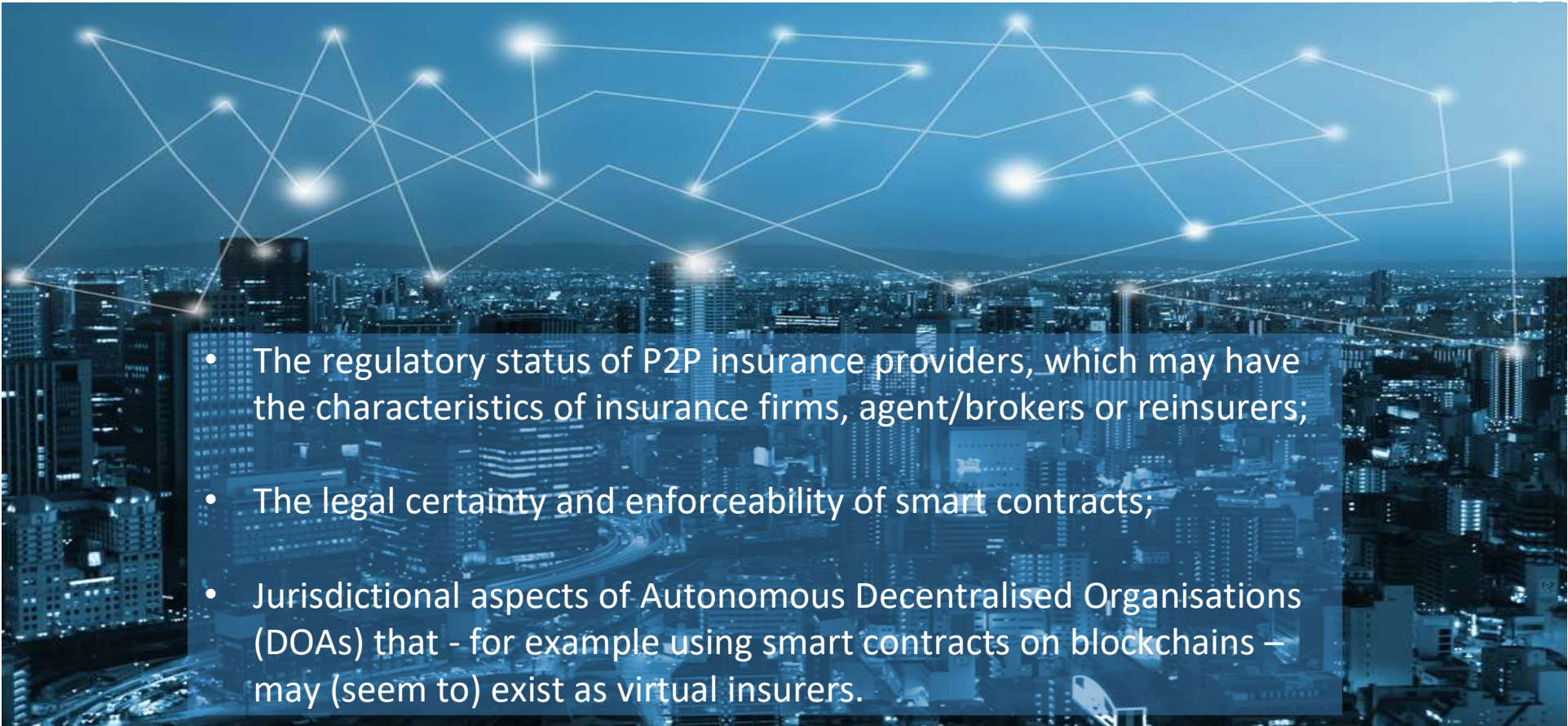


SC: how to strengthen regulatory provisions regarding data access, use and transferability between providers, as well as provisions related to IT management, cyber security and internal controls for outsourcing technical services?



Other legal & regulatory considerations



- 
- The regulatory status of P2P insurance providers, which may have the characteristics of insurance firms, agent/brokers or reinsurers;
 - The legal certainty and enforceability of smart contracts;
 - Jurisdictional aspects of Autonomous Decentralised Organisations (DOAs) that - for example using smart contracts on blockchains – may (seem to) exist as virtual insurers.

Conclusions

- **FinTech developments** are potentially **disruptive**.
- Currently **uncertain** to oversee and understand how the **insurance market** and its **supervision** will be **affected**.
- Scenario analysis and possible implications for supervision can **assist** in shaping the **future strategic direction** of supervisors and IAIS.
- Report presents relevant **challenges** that **insurance supervisors** may face in the **near future** when addressing FinTech innovations.



12th Consultative Forum
Panel 2 Supervisory Approaches on Insurtech and Regulatory
Challenges

Thanks

Peter.vandenbroeke@bis.org

