

# FinTech Roundtable

## Overview of regulatory issues surrounding financial innovation

Presentation at the APFF FinTech roundtable

Andres Wolberg-Stok, Director, Citi FinTech  
San Jose, February 24, 2016



# Agenda

1. FinTech – What & Why?
2. Ecosystem Development
3. A Range of Initiatives
4. Changing the Nature of Banking
5. Financial Inclusion
6. Regulatory, Legal & Policy Issues

# FinTech – What Is It?

**Broadly defined as technology that creates new products and services, delivery mechanisms and platforms in financial services**

Relevant to traditional providers becoming more digital and new entrants disrupting current businesses with new approaches



## Examples include:

- Innovations in payments (e.g. online and mobile payments like PayPal or M-Pesa)
- Currencies (e.g. Bitcoin)
- Software (e.g. back and middle office processing)
- Platforms (e.g. peer-to-peer lending and aggregators)
- Data analytics (e.g. telematics, biometrics and compliance)

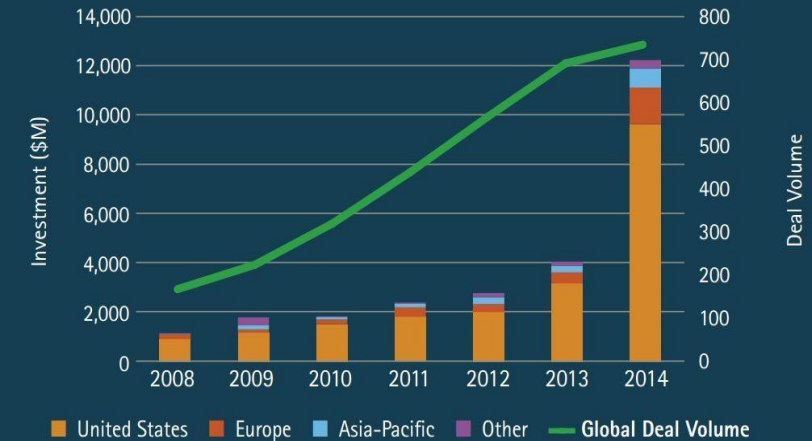
– PWC: States of Guernsey 2015

# FinTech - Why Is It Important?

## FinTech is profoundly changing the way individuals and businesses conduct their banking and financial activities

- Led primarily by the growth of the internet and increased penetration of smart phone technology
- Greater efficiency, extended reach and lower costs provided by innovation assists current providers and new entrants
- Opportunities for countries to develop technology and financial sector by creating FinTech Ecosystem
- Need to consider regulatory, legal and policy issues stemming from technology, platforms and providers
- Privacy, security, intellectual property, customer protection and a level playing field are some of the issues that need to be addressed
- Light touch regulation with intervention when necessary may be advisable to allow innovation

Figure 4: Global FinTech Financing Activity



Source: Accenture and CB Insights

The key is to ensure that regulators and market players collaborate to encourage innovation and provide necessary protections against the backdrop of rapid changes.

# FinTech – Ecosystem Development

**KPMG analysis of different FinTech hubs (Silicon Valley, New York, London, Dublin, Berlin, Tel Aviv, Singapore and Hong Kong) demonstrates that in order to develop a strong FinTech ecosystem the following factors are important enablers:**

- Available and accessible early stage funding for FinTech start-ups and a strong pipeline of opportunities for investors/VC funds;
- Depth of financial services and technology talent and close proximity of these talent pools to each other (in city locations);
- A robust financial services industry, with a vibrant technology start-up community with mentoring, networking and high visibility;
- Government commitment and regulatory support for the FinTech sector specifically, and technology start-ups generally; and,
- Business backing for a FinTech hub, with high levels of collaboration and a strong culture of knowledge-sharing and entrepreneurship

Source: 'Unlocking the potential: The FinTech opportunity for Sydney'. October 2014, KPMG

# FinTech – Ecosystem Development: Example

PWC segmented the FinTech market into three distinct areas according to their characteristics:

## Payments & Remittance

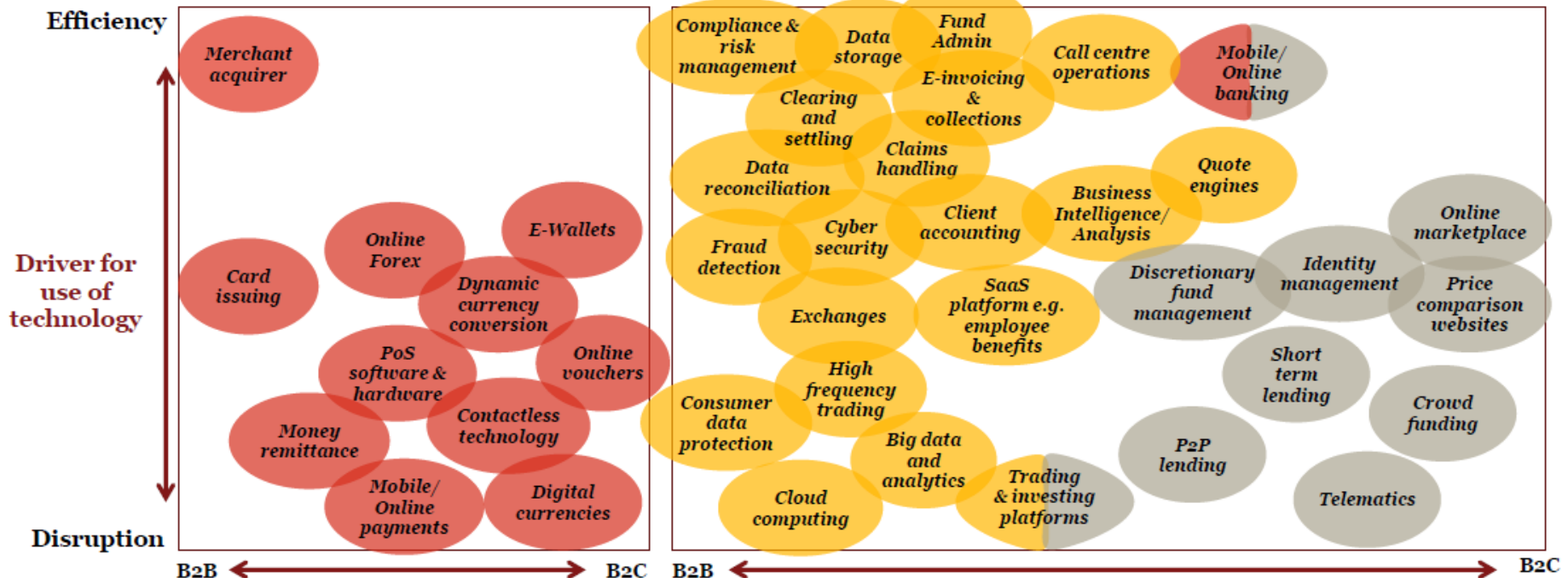
The use of technology to create new markets or methods of processing electronic payments

## Business Process Improvement

The use of technology to improve the efficiency and effectiveness of existing financial services, including business processes, regulation, trading and data

## Customer Engagement

The use of technology to deliver financial services to customers. This often involves streamlining or by-passing existing financial institutions



Source: PWC Analysis - State of Guernsey 2015

# FinTech - Government Initiatives

## Asia Pacific governments are recognizing the need to develop FinTech:

### Hong Kong:

- March 30, 2015: Secretary of Finance established Steering Group on FinTech to advise government on how to develop and promote Hong Kong as a FinTech hub
- The Steering Group comprises 10 non-official members drawn from industry and research and development institutions, as well as relevant Government officials and representatives from the banking and securities regulatory authorities
- The steering group will advise on: 1) Economic and business opportunities provided by the development of FinTech for Hong Kong; 2) Potential and existing gaps of developing Hong Kong into a FinTech hub; and 3) The measures needed to promote Hong Kong as such a hub

### Singapore:

- 2014: Prime Minister launched 'The Smart Nation Program' to create an ecosystem to focus on innovation to create a more efficient economy
- The Monetary Authority of Singapore (MAS) will launch several initiatives to encourage FinTech development and will dedicate S\$225 million over the next 5 years to the government's Financial Sector Technology & Innovation scheme
- July 2015: MAS announced the formation of a new FinTech & Innovation Group (FTIG) to create development strategies and regulatory policies around technology innovation while ensuring safety and security

# FinTech - Exchange Initiatives

## HKEx News Release

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Updated: 02/11/2015

### HKEx supports programme for Hong Kong's emerging FinTech industry

Hong Kong Exchanges and Clearing Limited (HKEx) announced today that it has become a Supporting Organisation of the SuperCharger Accelerator, Hong Kong's first programme dedicated to helping both start-ups and more established financial technology, or FinTech, companies aiming to capture opportunities in Asia's growing markets.

The programme leverages on Hong Kong's traditional strength as Asia's finance and technology gateway. The historic opening-up of China's capital markets offers tremendous opportunities for Hong Kong across multiple asset classes, and HKEx has been setting the pace with unique and innovative solutions such as Shanghai-Hong Kong Stock Connect.

As the core infrastructure operator of Hong Kong's financial markets, HKEx touches almost every aspect of the trade life-cycle, from listing, trading and the distribution of market data to clearing and settlement. The SuperCharger Accelerator will allow HKEx to share knowledge and explore collaboration with some of the leading creative minds in FinTech.

"Harnessing the vibrant creativity that Hong Kong's start-up community offers is hugely important to our future," said Charles Li, Chief Executive of HKEx. "We are excited to be partnering with the SuperCharger Accelerator and look forward to working together with its participants over the coming months, and we hope beyond."

The SuperCharger Accelerator programme will run from 11 January to 8 April 2016. The deadline for applications is 20 November 2015.

For more information about the programme, please visit [SuperCharger's website](#).

Ends



# FinTech - Industry Initiatives

Industry is partnering to further the development of the FinTech industry

November 9, 2015

paymenteye

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## Citi partners with PwC and IBM on FinTech mobile challenge

21 Sep 15 | Author [Ben Rabinovich](#) | [Partnerships](#) | [Mobile solutions](#)

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IBM and PwC have become Citi's strategic partners for the Citi Mobile Challenge in Asia Pacific. IBM will provide mentoring classes and its digital innovation platform, Bluemix, whilst PwC is working with Citi on an acceleration programme across the Asia Pacific region.



IBM's platform will allow developers who are participating in the Citi Mobile Challenge build, test and deploy their FinTech solutions and PwC's programme will provide relevant business leadership and industry content to programme finalists, together with structured mentoring from senior Citi management.

[Citi Mobile Challenge](#) is a next-gen accelerator that features a virtual hackathon as well as an incubator that's connected to a global network of experts and developers.

Citi will make available a variety of APIs from the bank and other leading financial and technology companies to help developers create real-world innovations that could function with existing Citi technology.

A panel of industry experts and financial technology leaders will evaluate the solutions at each event.

# FinTech – And Banks Can Play Too

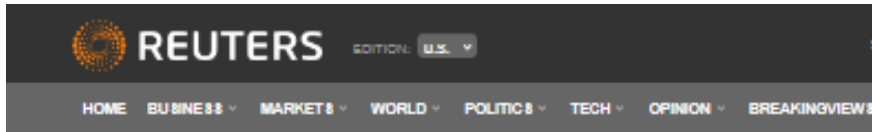
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# FinTech - Industry Initiatives



## Nine of the world's biggest banks join to form blockchain partnership

LONDON | BY JEMIMA KELLY



Nine of the world's biggest banks including Goldman Sachs and Barclays have joined forces with New York-based financial tech firm R3 to create a framework for using blockchain technology in the markets, the firm said on Tuesday.

It is the first time banks have come together to work on a shared way in which the technology that underpins bitcoin - a controversial, web-based "cryptocurrency" - can be used in finance.

Over the past year, interest in blockchain technology has grown rapidly. It has already attracted significant investment from many major banks, which reckon it could save them money by making their operations faster, more efficient and more transparent.

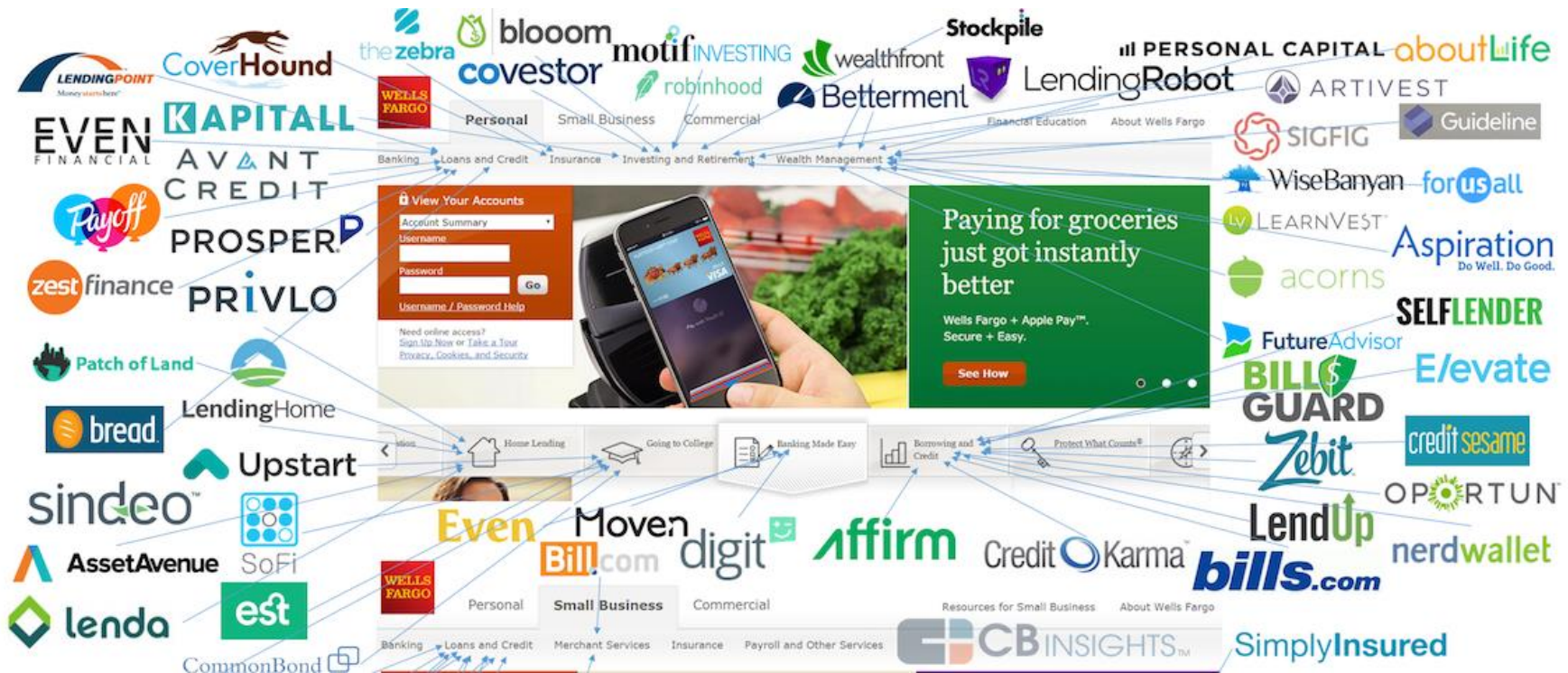
The new project, the result of more than a year's worth of consultations between R3, the banks and other members of the financial industry, will be led by R3 CEO David Rutter, formerly CEO of electronic trading at ICAP Electronic Trading, one of the world's largest interdealer brokers.

Source: Reuters - <http://www.reuters.com/article/2015/09/15/us-banks-blockchain-idUSKCN0RF24M20150915>

**Traditional providers  
tapping into emerging  
new technology**

# FinTech: Changing the Nature of Banking

## Unbundling of a Bank “Death by a thousand cuts?” CB Insights



Source: <https://www.cbinsights.com/blog/disrupting-banking-fintech-startups/>

# FinTech - Financial Inclusion

## FinTech can assist in enhancing financial inclusion

- There are an estimated 1.2 billion people who do not have access to a bank account or formal financial services in the Asia Pacific
- Across the world, nearly 5 billion people are using mobile phones which is 2.5 times more than the number of bank accounts, creating opportunities in mobile banking
- The creation of inclusive financial systems is a powerful tool in the fight against poverty and critical for both social and economic progress and in developing the region's markets
- Enhanced financial inclusion will also help to create deeper, broader and more liquid capital markets and cross border capital flows
- Customer protection and financial literacy need to be considered as delivery mechanisms expand



# FinTech – Regulatory, Legal and Policy Issues

## FinTech presents governments with a range of issues

- Digital data and advanced systems need to be managed by highly-trained professionals backed up by reliable IT infrastructure
- Data collected needs to be effectively utilized by business to enhance competitiveness and efficiency while ensuring privacy of individuals
- Data needs to be secured against fraud, criminal activity and natural disasters in an increasingly complex and interconnected world
- Cross-border data transfer for processing and storage lead to discussions about onshore versus offshore activities
- A level regulatory playing field needed for traditional providers and new entrants to manage risks across the system and equalize costs



# FinTech – Regulatory, Legal and Policy Issues

**Digital data and advanced systems need to be managed by highly-trained professionals backed up by reliable IT infrastructure**

- Introduction of advanced IT education needed in schools to build new skills necessary
- Exchanges with international experts and institutions can help to lift skills
- Investment in IT and basic infrastructure necessary to ensure workability of systems



# FinTech – Regulatory, Legal and Policy Issues

**Data collected needs to be effectively utilized by business to enhance competitiveness and efficiency while ensuring privacy of individuals**

- Firms can utilize data to better meet customer needs by targeting products and services
- Data can help a firm better manage itself and grow via analysis of performance against targets
- Protection of personal information a key concern for citizens, governments and firms





# FinTech – Regulatory, Legal and Policy Issues

**Data needs to be secured against fraud, criminal activity and natural disasters in an increasingly complex and interconnected world**

- Fraud was a risk in the past and continues to be a risk with digital systems
- Cyber systems are increasingly becoming a target of national and transnational criminals
- Offshore back up centers help diversify risks from natural disasters



# FinTech – Regulatory, Legal and Policy Issues

## Cross-border data transfer for processing and storage leads to discussions about onshore versus offshore activities

- Data transfer allows provision of 24/7 service and early release of cutting edge products
- Pooling of data helps reduce costs and achieve greater efficiency benefitting firms and clients
- A limited number of highly protected, well staffed and equipped data centers assists security



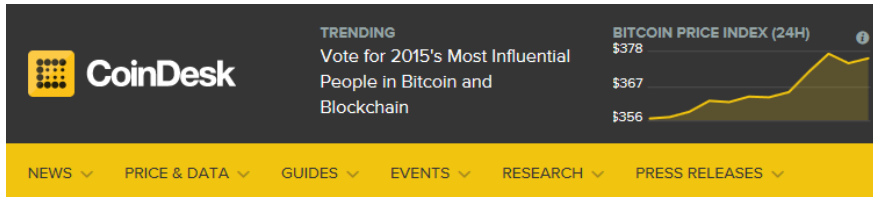
# FinTech – Regulatory, Legal and Policy Issues

## A level regulatory playing field needed for traditional providers and new entrants to manage risks across the system and equalize costs

- Same regulation necessary for a product and service regardless of provider
- Important to still encourage firms to innovate and assist products/services being brought to market
- Light touch regulation with intervention when necessary should provide necessary protections



# FinTech – Regulatory, Legal and Policy Issues



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CRIME • NEWS

## UK Treasury: Digital Currencies Pose Lowest Money Laundering Risk

Stan Higgins | Published on November 18, 2015 at 20:20 GMT

NEWS



Digital currencies were deemed a "low" risk for money laundering and terrorism financing in a report published last month by the UK government.

In a National Risk Assessment released 15th October by HM Treasury, the government said that digital currencies present the lowest risk rating among money laundering vehicles, a list that also includes cash, banks and accountancy services.



Source: Reuters -<http://www.coindesk.com/uk-treasury-digital-currencies-low-money-laundering-risk/>



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## Interpol Event to Discuss Bitcoin's Role in Illicit Asset Trade

Pete Rizzo (@pete\_rizzo\_) | Published on November 16, 2015 at 21:15 GMT

NEWS



A spokesperson for India's Central Bureau of Investigation (CBI), its top law enforcement agency, has revealed bitcoin and digital currencies will be an area of focus during an upcoming conference organized by Interpol to be held in India.

Running from 17th to 19th November, the sixth-annual Global Focal Point Conference on Asset Recovery will more broadly focus on fighting corruption and financial crime.



Source: Reuters -<http://www.coindesk.com/interpol-event-bitcoin-illicit-trade/>

# FinTech – Regulatory, Legal and Policy Issues

Banks' needs mirror Fintech's strengths...

## Fintech's self-assessment of their strengths in competing against banks

How important are each of the following in driving competitive advantage for Fintech?

(Fintech executives who cited "Very Important")



Source: The Economist Intelligence Unit survey, 2015.

The  
Economist

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Unit

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# FinTech – Regulatory, Legal and Policy Issues

...and Fintech's needs mirror banks' strengths

## Fintech's self-assessment of their weaknesses in competing against banks

How important are each of the following in driving competitive disadvantage for Fintech?

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Source: The Economist Intelligence Unit survey, 2015.



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# Final Thoughts

**Important to get  
the  
balance right**



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