



Singapore FinTech Festival Conference 2019

Day 1 key highlights

11 November 2019

Contents

Festival Stage

Singapore: Re-Imagining FinTech

Introduced by Ravi Menon, Managing Director, Monetary Authority of Singapore

Step-change solutions for a planetary emergency by Pavan Sukhdev, President, WWF International

Green Finance for a Sustainable World by Ong Ye Kung, Minister for Education, Singapore, and Board Member, Monetary Authority of Singapore

2020: Banking in a New Global Context

2020: Digital Transformation Agenda

2020: Policy Choices for the Digital Economy

Tech Talk: Innovating with AI by Pat Bajari, Chief Economist, Amazon and Vice President, Amazon Core AI

Sustainability, Finance and Tech Stage - Powered by Deloitte: Sustainable Development

Humanity: The greatest threat to Mother Nature by Will Steffen, Emeritus Professor, Australian National University, Senior Fellow, Stockholm Resilience Centre

- The climate crisis: Our last chance to act

This document is developed by the Monetary Authority of Singapore ("MAS") in collaboration with Deloitte Southeast Asia Ltd ("Deloitte").

It directly reports on and summarises the topics presented and discussed at the FinTech Conference as part of the Singapore FinTech Festival 2019. The contents within this document by no means reflect views and opinions from Deloitte or MAS. Please contact Deloitte, MAS or other appropriate organisations and agencies should you wish to obtain expert opinions on what has been reported in this document.

© 2019 Deloitte Southeast Asia Ltd

2100 – A prosperous future, or a world in ruins?

Hard truths: Developed and Emerging countries' perceptions on sustainability

Change agents for a sustainable future

Fireside Chat:

- Economics of Climate Change: Why should we care?
- AI for Earth

Future of Finance Stage- Powered by Prudential: Banking, Capital Markets and Insurance

Ready for 100 - Reimagining Customers in an Ageing World
by Mike Wells, Group Chief Executive, Prudential

- The Next Generation of Insurance Leaders

Aging & Finance – Societal Readiness and the Emerging Role for FinTech

Open banking - It's a revolution. Navigating your way to a thriving, open, digital future

Innovation from backend to frontend by Datuk Abdul Farid Alias, Group President Chief Executive Officer, Malayan Banking Berhad (Maybank)

- The Impact of Tech in the Financial Services Industry

The New Long Life by Andrew Scott, Professor of Economics, London Business School & The Longevity Forum

- Impact on new business models for insurance in the new digital era

Investment and Global Markets Opportunities Stage - Powered by AMTD: Global Investor Summit

Catching FIRE: the Global FinTech VC View by Ryan Gilbert, General Partner, Propel Venture Partners

- Why Big Tech Invests in the Blockchain Technology?
- Introducing the FinTech Research Platform

Global Investors' Perspectives: Fuelling Growth

Investing for Sustainable Impact

Whose Capital is the Right Capital?

Riding the Investment Wave in Asia

- How to Raise a 100 Million Round by Joel Yarbrough, Vice President Asia Pacific, Rapyd

Exponential Technologies Stage: AI and Big Data

Tech Talk:

- From Phones to AI-Powered Finance by Hong Feng, Chairman & Chief Executive Officer, Xiaomi Finance , Co-founder & Senior Vice President, Xiaomi Corporation
- From FinTech to Finlife: The Future of Digital Finance by Chen Long, Vice President, Ant Financial, Director, Luohan Academy

AI-driven Disruption: the New Normal?

AI for Good

Smart Machines, Smarter Humans?

Power of the New Oil: Data

- Creating the Marketplace Economy of the Future: Business in Real-Time by Brad Peterson, Executive Vice

President Chief Technology Officer Chief Information
Officer, Nasdaq

Himalayas Stage

Global FinTech Hackcelerator Demo Day
Fintech Awards Ceremony
Global Fintech Hackcelerator Winners

Coral Triange Stage

Project Ubin: Enabling Broad Economic Possibilities with
Blockchain-based Payments

Digital Trade Finance and Opportunities in Asia

Sustainability & Climate Change – Banking on a Green
Future (by Ecosystem)

Festival Stage

Singapore: Re-Imagining FinTech

Introduced by Ravi Menon, Managing Director, Monetary Authority of Singapore

9.00 am

Key points

Ravi Menon opened the fourth edition of the Singapore Fintech Festival (SFF), and the first combined edition of SFF and the Singapore Week of Innovation and Technology (SWITCH). He mentioned that a record of 60,000 participants from more than 130 countries were represented at this year's SFF x SWITCH. Spanning 6 halls and hosting over 1,000 exhibitors, the event aims to be the largest FinTech event in the world.

Menon said that FinTech must serve a larger purpose. It is about innovation, inclusion and inspiration. This year, the conference combines the theme of sustainability with FinTech to focus on how technology can be harnessed to create a greener financial system.

The opening talks for this year's SFF would be on sustainability and how FinTech has a larger purpose of 'greening' the world.

A video that captured the FinTech ecosystem story in Singapore to the theme of re-imagining FinTech was played, highlighting these key themes:

4 years ago, MAS started working closely with financial institutions (FIs) and FinTech companies to develop a strong ecosystem of collaboration and innovation. The main goal of this collaboration was to increase efficiency, reduce risk, create opportunities, and improve people's lives.

Some of the achievements over the years include:

1. From less than 50 start-ups in 2015 to over 600 now
2. Less than 5 to over 40 innovation labs
3. Creation of over 1,100 FinTech jobs each year
4. More than S\$1 billion investments in FinTech companies

Innovation is an ongoing work. The ecosystem must continue to experiment, learn from mistakes and keep improving. All partners must stay hungry, challenge themselves and find new ways of doing business and new ways to delight customers.

The next phase of Re-imagining FinTech includes:

- a. Digital Infrastructure: The Singapore Stack of a Digital Infrastructure includes Identity, Data, Consent, and Payment such as
 - i. National digital identity
 - ii. MyInfo
 - iii. PayNow
 - iv. Project Ubin
- b. Innovation: With APIX, FIs now get instant access to a Global FinTech Marketplace, own secured sandbox and On-Demand IT Infrastructure over 26 countries.

- c. Collaboration: Business sans Borders (BSB) is an open and global connector of platforms using artificial intelligence (AI) for discovery of fair prices, open connectivity to supply chain networks, and a marketplace for SME Digital Solutions enabling seamless trade without barriers
- d. Regulations: Regulatory Sandbox is used to facilitate experimentation with defining boundary conditions. A lower cost and a suspension of regulations during the testing period help foster nimber experimentation in a safer space.
- e. Financing: FinTech Research Platform is a comprehensive view of FinTech companies, with access to trusted business profile data and visual comparison of companies with similar profiles developed by Deloitte, S&P Global and MAS. Deal Fridays is an efficient matching tool that is thematically curated and has access to investor networks for connectivity and for increasing the start-ups access to global capital.

FinTech is about innovation, better ways of doings, inclusion and benefiting as many people as possible and it's about inspiration. The FinTech spirit must always serve a larger purpose to improve the lives of individuals and build a more dynamic economy and a more inclusive society.

Photo/s



Step-change solutions for a planetary emergency by Pavan Sukhdev, President, WWF International

9.15am

Key points

The session opened with a video from Sir David Attenborough's "Our Planet, A Reason for Hope", that talks about how it is now possible to save the planet. As birth rates decline and are expected to plateau, the introduction of new green technology signifies an era where all the problems of the Earth have been identified and solutions are now being worked on.

The video highlights steps to save the Earth - stop actions that cause damages, roll out new green technology as soon as they arrive, stabilise the human population, and keep hold of the natural wealth that is currently available to us. If humans follow all of these steps, a harmonious future for all living organisms on Earth can be secured, and in eighty years, the worst of the after-effects of the destruction will pass.

Thereafter, four key areas were highlighted for us to transition towards a sustainable future:

1. Energy Transition – The use of solar grids have increased over the past ten years as it is now readily technologically available and the energy production cost from using solar grids has dropped significantly, replacing energy production that was previously solely from fossil fuel.
2. Food System Transition – An example was given about a master farmer who worked with various small farmers to produce healthy crops through natural farming scale to reduce diet-related diseases (such as diabetes) - which is the number one risk factor for the global disease burden - and input-related diseases (such as cancer risks from herbicides). This is in contrast to corporations focused on achieving higher farming yields by injecting chemicals into the soil, which may lead to a less healthy crop (more sugar) and cause damage to microorganisms in the soil. This behaviour by corporations stems from a lack of understanding of these negative externalities. Now, financial institutions need to consider these externalities as they will eventually affect the bottom line, and result in higher risk and much lower quality portfolios.
3. Corporate Performance Reporting – the concept of Multi-Capital Performance Reporting was introduced using an integrated profit or loss, which basically measures not only financial progress ("Financial Capital") but also Human Capital, Natural Capital and Social Capital. Sweden's largest forestry company was cited as an example that adopts this integrated profit or loss reporting.
4. Financing for Sustainability – There are three ways to perform sustainability financing:
 - a. To finance sustainability projects such as sustainable energy or sustainable agriculture
 - b. Make an impact on society with all investment and corporate activities and
 - c. Take responsibility to focus on sustainability when investing and financing.

Photo/s



Green Finance for a Sustainable World by Ong Ye Kung, Minister for Education, Singapore and Board Member, Monetary Authority of Singapore

9.35am

Key points

Minister Ong Ye Kung began his speech by affirming Singapore's commitment to do its part as a responsible global citizen - to reduce carbon emissions and help make the world greener.

Singapore only accounts for 0.11% of carbon emissions in the world and will not be able to change the world alone, and Singapore's role is to act as an inspiration for the world and catalyse change.

Singapore has a strong foundation in reducing emissions. Here are some of Singapore's key long-term strategies and initiatives in this regard:

- Introduction of a broad-based carbon tax to put a price on carbon emissions
- Limiting its car population, and put a price on the usage of cars
- Building greenery into its urban cityscape and systematically creating wetlands and mangrove swamps to absorb flood water and cushion storm surges
- Development and implementation of the Zero Waste Master Plan to transform Singapore to a Circular Economy, one that reuses resources in a continuous loop.

Minister Ong then shared Singapore's ambition to leverage on Green Finance to make the world greener. As a leading international financial centre, Singapore will do the right thing to help reduce carbon emissions and promote sustainable development in Asia and globally.

Making finance green will in turn mobilise global capital for the green economy and channel finances into new investments in green businesses, technology and infrastructure, reduce carbon emissions, whilst creating jobs and opportunities.

Overall, Green Finance can be a virtuous cycle that brings about economic growth that is environmentally sustainable. This is an important point, as many countries in Asia and other regions are still urbanising, with their people still aspiring to catch up from lower to middle – income living standards, and energy demand for these countries are still rising. Any approach to climate change cannot curtail this growth and dampen hopes.

Singapore can be a leading centre for Green Finance in Asia and the world. This can be achieved through the following steps:

1. **Build financial system resilience to environmental risk**

Climate change poses two main risks to the financial system. The first risk is the physical risk and damage caused by climate change itself. Damage to assets and properties can result in large insurance claims and lower the collateral value of bank loans. The second risk is transition risk arising from policy changes, technological advances or changes in consumer preferences. For example, old fossil fuel assets can become stranded and result in the devaluation of loans and investments in the energy sector. This can be further compounded by other risks such as deforestation, land contamination, water and air pollution, and can threaten the stability of the financial system.

Financial institutions need to build up their resilience to climate change risks by measuring, mitigating and disclosing these risks, and MAS is intensifying its supervisory focus in these areas and is working with counterparts to enhance global practices. Mitigation involves fostering new financing practices. To this end, The Association of Banks in Singapore (ABS) has issued guidelines on responsible financing practices, and the three local Singapore banks have ceased financing new coal power plants and stepped

up renewable energy projects. Lastly, with regard to the disclosure of risks to better inform investors, the Asian Exchanges have implemented sustainability reporting for listed companies to enhance transparency.

2. Develop Green Finance solutions and markets

The second thrust of the strategy relates to the development of Green Finance solutions and markets. These solutions come in several forms:

- **Green Bonds:** MAS introduced a Green Bond Grants scheme two years ago and to date, more than S\$6 billion green bonds have been issued. This scheme has recently been expanded in scope. Globally, more work needs to be done to harmonise standards for better comparability.
- **Green Loans:** There is a need to shift green lending into a mainstream activity for financial institutions. MAS will develop incentives to encourage growth in green and sustainability-linked loans.
- **Risk Transfer Solutions:** In insurance, there is a need to develop a new risk transfer solution that will help meet disaster protection needs, while creating alternative investment opportunities. To catalyse growth in the insurance-linked securities (ILS) market in Singapore, MAS introduced an ILS Grant Scheme last year to fund upfront issuance costs.
- **Green Funds:** MAS will launch a US \$2 billion Green Investment Programme (GIP). Under this programme, MAS will place funds to public market investment strategies which have strong green focus, with asset managers who are committed to deepening Green Finance activities and capabilities in Singapore. As part of the GIP, MAS will also allocate US\$ 100 million to the Bank for International Settlements' Green Bond Fund to support its global green finance initiatives.
- **Green Capabilities:** Singapore is collaborating with education institutions to build up capabilities amongst financial industry professionals. MAS will develop a scheme to support external reviewers and rating agencies who assess and certify green financing instruments. MAS will also work towards anchoring Center of Excellence in Singapore to contribute towards Asia focused climate research.

3. Leverage innovation and technology by Reach, Innovation, Data (RID)

Singapore will harness the power of FinTech to spur Green Finance by scaling up RID.

- **Reach:** Singapore will encourage the application of platform technologies for Green Finance to reach a wider pool of capital and market players. These technologies can also be used to connect supply chains.
- **Innovation:** Singapore will encourage the development of smart algorithms, smart contracts and distributed ledgers to increase speed, ease and transparency of transactions.
- **Data:** Singapore will promote the application of Big Data and advance modelling to measure climate and financial risks and develop new climate risk insurance products.

Photo/s



2020: Banking in a New Global Context

9.50am

Speakers

- Bill Winters, Group Chief Executive, Standard Chartered
- Calvin Choi, Chairman & Chief Executive Officer, AMTD Group
- John Dugan, Chair, Citigroup Inc.
- Noel Quinn, Group Chief Executive, HSBC Holdings plc
- Piyush Gupta, Chief Executive Officer, DBS

Moderator: Haslinda Amin, TV Anchor, Chief International Correspondent Southeast Asia, Bloomberg

Key discussion points

The use of technology (including big data) to manage the customer experience is a key differentiator in banking today and is instrumental for banks to succeed in today's digital age.

Are traditional banks ready to manage the changing dynamics of the banking industry? Digital banks impact the industry by offering a new way of thinking. Differentiated customer propositions and products they offer to customers through use of technology will be the key to their success over the next 3-5 years. Additionally, through partnerships they have much wider access to customers and data which allows the under-banked sector to be better served.

While digital banks operate a more flexible business model than traditional banks, new technologies have enabled traditional banks to re-engineer themselves in areas such as trade finance – but this takes time. Even though technological capabilities for digital trade finance operations are currently available for deployment, banks are still working on proof of concept because scaling requires buy-in and participation from all stakeholders which, in some traditional banks, might take up to 10 years. However, once deployed, the potential for fraud arising from trade finance transactions is reduced. However, it would be highly dependent on the industry players to drive such an initiative.

From a regulatory perspective there is a need for a level playing field which will be largely driven by regulatory equality, i.e. complying with regulatory capital, liquidity and AML requirements. Digital banks need to properly navigate the regulatory landscape in order to compete effectively with traditional banks.

With regards to data, access to global sources of data are important for regulatory compliance such as AML rules, as compartmentalisation of data does not provide a complete picture. Regulators are actively looking into how banks cleanse and store data obtained from customers.

Speakers shared their thoughts on the use of digital currency such as Libra launched by Facebook.

While there appears to be a great demand for use of digital currency in payments and remittances, there are issues that need to be solved before it can be scaled and operationalised. Two key issues are how digital currencies can be regulated and if they can be reliably valued. In order for this to work, participants from the private and public sectors need to work together to address these challenges.

Photo/s



2020: Digital Transformation Agenda

10.30am

Speakers

- Aishah N. Ahmad, Deputy Governor, Financial System Stability, Central Bank of Nigeria
- Henry Ma, Executive Vice President & Chief Information Officer, WeBank
- Kristo Kaarmann, Chief Executive Officer & Co-Founder, TransferWise
- Roman Regelman, Senior Executive Vice President, Head of Digital, BNY Mellon

Moderator: Bob Contri, Global Financial Services Industry Leader, Deloitte

Key discussion points

This session focused on three areas of digital transformation:

- Current state
- Role of the regulators and its impact on the public and private sectors
- Future direction towards financial inclusion, workforce, and sustainability

State of Digital Transformation

There is no doubt that the rapid pace of transformation is impacting everything in digital. The challenges for regulators include how to balance supervision, and encourage innovation yet ensuring that risk in areas such as cyber, consumer, data protection and anti-money laundering are kept in check. Africa was cited as an example of successful financial inclusion and balancing risk where its scale of microloans encourages take-up by consumers who are being treated fairly and do not feel disenfranchised.

Digital is now the way of life - across product, processes and services. Transformation has taken on a digital flavour, with the important differentiator being that the emphasis is now on client-focused transformation; a change from what used to be a product focused approach. The challenge is how this is going to impact new bank ecosystems with the openness that such transformation requires. In addition, there needs to be innovation. Instead of simply replacing core banking, digital transformation should be a rethink in terms of tailored products and services, whilst not forgetting social and other impacts.

Although digital transformation is happening, the financial services world is becoming more fragmented and presents more challenges. For example, the usage of AI will become increasingly challenging, particularly with questions around whether the algorithms can truly be impartial. Also, while a digital bank can up-scale to meet the demands of today's digital-savvy businesses and consumers with new technologies at a lower cost, traditional banks will find it too costly or impractical to handle to do so.

Role of Regulators

The ability to maintain stability, innovation and growth remains a dilemma for regulators. Financial inclusion has allowed many to open accounts for the first time, and it is getting a push with changing population demographic and lack of banking legacy. Another challenge for regulators is meeting the demands of the next generation who will grow up in a digital-only world. It is important to look at digital transformation more holistically and how it is impacting both new and traditional players.

Future Direction

The pace of digitisation will continue to increase, giving consumers and corporate customers a wide variety of choice. Over time, the regulators will create a level playing field.

Photo/s



2020: Policy Choices for the Digital Economy

11.20am

Speakers

- Arunma Oteh, Academic Scholar, University of Oxford
- Daniela Stoffel, State Secretary, Swiss State Secretariat for International Finance
- Senator the Hon Jane Hume, Assistant Minister for Superannuation, Financial Services & Financial Technology, Australian Government
- Saeb Eigner, Chairman, Dubai Financial Services Authority

Moderator: Matthew Gamser, Chief Executive Officer, SME Finance Forum

Key discussion points

The session opened with the speakers discussing the significance of having the right policies in place that enable a conducive environment to realise the possibilities of digital transformation.

On the topic of scale and easy access of FinTech to the most vulnerable, it was brought up that there are still many people in the world who do not have access to basic banking services. Although economic empowerment and inclusive growth are important ways to address these challenges in society, however policy is key in making sure that digitalisation is inclusive and does not further divide the rich from the poor.

The conversation moved on to the need for a clear and reliable regulatory framework so that businesses can understand how legislators think. A clear framework creates a stable and regulatory-friendly environment that is especially important for young FinTech start-ups.

In Australia, the emerging FinTech sector is taking advantage of the robust regulatory framework. Many FinTech players who have done so have seen strong growth over the past few years with some looking to expand internationally. The Australian government has also established a UK and Australia FinTech bridge that creates opportunities for investment, collaboration and regulatory alignment. This bridge can potentially be replicated with other jurisdictions such as Singapore.

One of the roles of FinTech is to facilitate competition within the financial services sector. FinTech can allow for greater competition in the economy with the use of consumer data to help consumers find better deals and create better consumer outcomes.

Dubai, like Singapore, is a small nation and similarly has big advances in FinTech. In Dubai, there has been a shift from hardware to software. Customer engagement has also changed. The public sector has been leading the push for innovation with legislation and laws that create clarity and encourage innovation, and the government is leading the way as a market leader with initiatives such as the 2021 Blockchain Strategy that are promoting innovation among the private sector and establishing Dubai as an innovation hub.

Leadership from the public sector is important; the right leadership encourages the private sector to pioneer new fronts. For example, Singapore's first Prime Minister, Lee Kuan Yew, understood the importance of building the skills for the future and how policy has to start with preparing for the future.

Policy needs to be at the forefront. For instance, in Australia, the current Prime Minister first saw the importance of FinTech as an enabler for the financial services sector when he was the country's Treasury. In Switzerland, the push of a blockchain legislation in the Swiss parliament would take FinTech one step further in the country.

There is also a need to discuss the role of the central bank, stock exchange and payment systems as public goods & services that are traditionally provided by the government can now be easily provided by

private sector. As is the case in Switzerland - the Swiss National Bank, which has traditionally been very conservative, has recently launched a tokenized Swiss Franc which represents a new frontier in FinTech.

It was emphasised how reinvention is necessary and how mindset change is important. Success in Dubai is based on it being a place for people to come and be free to innovate. The key focus should be on the transition of big banks to the big players in the industry such as Apple and Facebook. While FinTech is exciting and innovative, there are vulnerable consumers out there and there is a need for policy makers to balance consumer needs while encouraging innovation.

Regulations need to be flexible to move with the industry as it innovates, and should create the right environment to foster collaboration between new entrants and incumbents as well as cross- border partnerships.

To manage issues arising from rapid changes due to digitalisation, Singapore's regulatory sandbox provides an opportunity for new players to test their business model. Regulatory sandboxes must have a clear objective and be constantly evaluated, given that there are times where the private sector would be ahead of the regulators. It is about accepting a process of trial and error but at the same time making sure the learning is taking place within a controlled arena where regulators have a line of sight to step in when required.

Photo/s



Innovating with AI by Pat Bajari, Chief Economist, Amazon and Vice President, Amazon Core AI

12.00pm

Key points

The session focused on two areas: a macro view of why we should care about Artificial Intelligence (AI) and experiences in deploying AI technologies that work.

Since 1961, the global economy has seen a long, general downward trend in the rate of productivity growth. However, interestingly, the US enjoyed a decade of productivity growth from 1997 to around 2005, during the Information and Communication Technology (ICT) revolution when the Internet started. It can therefore be argued that successful deployment of AI and data technologies to improve productivity, even at a small basis point, would lead to larger economic impact over 10 years.

The reality is that the diffusion of general-purpose technologies often takes two to three decades. During the ICT revolution of the 90's, firms had done their heavy investment a decade prior to any measurable gains being seen in the economy. The success in digital transformation requires organisations to adapt and create complementary inventions to existing systems. For example, when Amazon started, not only did the company need to use the Internet but it had to create recommender systems as well as find new ways to process payments and handle supply chain and logistics.

Over this past decade, Amazon has hired a team of a hundred data scientists to deploy AI and Machine Learning (ML) technologies. Based on this experience, there are 5 steps one can take to apply AI within an organisation:

1. Define what success mean – success needs to be measurable with one number and not with many different KPIs
2. Build an AI, ML or a statistical model – the model consumes the data and makes a prediction. For example, what will be the demand for a particular product in a week or two weeks or a year from now?
3. Make rational decisions based on the model and metric – use decision theory and the pricing of derivative products
4. Test and iterate steps 2 and 3
5. Start over from step 1 to improve your metrics and model

The advantage of using a model-based decision-making method rather than a heuristic model is that the model gets better over time. Additionally, it synchronises the decisions made across the organisation which makes collaboration easier.

The session ended with a reminder to not lose sight of the big picture. Bajari stressed the need to measure impacts of decisions holistically and to optimise for the long-term. It is key to replace guesswork with science in decision making as there are new discoveries in science over time; the same cannot be said for guesswork.

Photo/s



Sustainability, Finance and Tech Stage - Powered by Deloitte:
Sustainable Development

Humanity: The greatest threat to Mother Nature by Will Steffen,
Emeritus Professor, Australian National University, Senior Fellow,
Stockholm Resilience Centre

1.00pm

Key points

Climate change is becoming increasingly intense. The melting ice, rising sea levels, and extreme hurricanes are destroying properties and causing the loss of lives. Statistics show that 80% of the continent was over 40 degrees or hotter during a two-week period in January 2019 and this has never happened before. Greenland and West Antarctica are losing ice at an increasing rate and the ecosystem of the Australia Great Barrier Reef is destroyed.

In the past decades, we had made enormous progress in terms of consumption and lifespan but we have forgotten that we live on a planet that has limited resources. We undermined the value of the life support system in the process of building better lives. The fossil fuel emissions, the burning coals, oil and gas are dominant factors that are driving the increase of global temperature.

We have reached 3 tipping points - melting, circulation change and biome loss. These tipping points do not act individually; they have a domino effect. Scientists are now researching on how this tipping cascades work and how it might affect the future.

We are in a climate emergency. Once the tipping cascades are initiated, there is no point of return. Though we cannot stop the climate change immediately, we can start to plan ahead and act. The financial services sector has a big influence on economic activities, and the sector should stop investing in any new fossil fuel development, stop deforestation and invest in renewable energy which is cheaper and more sustainable.

The climate crisis: Our last chance to act

Speaker

- H.S.H. Prince Max von und zu Liechtenstein, Chief Executive Officer, LGT Group

Moderator: Lisa Genasci, Chief Executive Officer, ADM Capital Foundation

Key discussion points

The session started with a statement that there is an urgency for governments and companies to act. The question is whether the financial services sector has taken note and has started to become a meaningful contributor to sustainability. The answer is that the sector has not been very efficient, and the organisations that have been making a positive impact have not been rewarded.

The financial services sector needs to do a better job by providing transparency in:

- disclosing the organisation's environmental impact
- assessment/rating of those impacts

It is important to look into the organisations that have the solution, technology and deep understanding of science so that they can work collaboratively to create a framework that can address the climate crisis we are facing.

2100 – A prosperous future, or a world in ruins?

2.00pm

Speaker

- Daniel Klier, Chief of Staff to the Chief Executive Officer of Global Banking and Markets & Global Head of Sustainable Finance, HSBC Holdings plc
- Geraldine Buckingham, Senior Managing Director & Chairman, BlackRock Asia Pacific
- Michael Sheren, Senior Advisor, Bank of England
- Tomas Otterström, Head of Responsible Investment and Sustainability Services, KPMG Services Pte Ltd

Moderator: Dominique Duval, Sustainable Banking - Head of Asia-Pacific, Crédit Agricole

Key discussion points

The world's population is expected to reach 11 billion by 2100. Coupled with climate change, there is a pressing need to make responsible and sustainable investments. The question is then why is financial sustainability not progressing faster?

There are four possible reasons:

1. Inconsistent definition of what financial sustainability means
2. Insufficient data to direct funds to sustainable investments
3. Knowledge about financial sustainability is not widespread
4. Illiquidity of financial sustainability assets

The financial sustainability agenda can be progressed not only by ensuring that the right products are created but that regulators are on board with the risk taken in that arena. This can be done via:

1. Accountability
2. Incorporation of sustainability into risk management
3. Disclosures on climate risk
4. Scenario planning

Focus should be on creating new sustainable investment opportunities based on consumer behavior. The solutions are already available today so there is no need to wait for future technology to transition. With a long-term mindset on climate change, governments and policymakers must be coordinated globally. If current global business mindsets remain unchanged, there will be huge implications 30 years from now.

Hard truths: Developed and Emerging countries' perceptions on sustainability

3.00pm

Speakers

- Daniel Hanna, Global Head of Sustainable Finance, Standard Chartered
- Jeff Obbard, Professor, Living Planet, Singapore. Cranfield University, United Kingdom
- Jessica Tan, Co-Chief Executive Officer, Ping An Insurance Group
- Stanislas Pottier, Chief Responsible Investment Officer, Amundi Asset Management

Moderator: Herry Cho, Head of Sustainable Finance Asia Pacific, ING

Key discussion points

The speakers shared what their organisations have done to promote sustainable development, for example stopping the financing of new coal power plant projects, developing a method to measure and reduce carbon impacts on their lending customers, as well as working to redirect the capital to the emerging markets in order to fund sustainable projects through proper financial engineering.

In terms of sustainability, emerging and developed markets differ in four important aspects, namely:

1. Different stages of economic development
2. Population sizes and contribution to carbon emissions
3. Level of impact of the climate change
4. Access to capital

Emerging markets contribute less carbon emissions relative to their population size but will be the most affected due to the change in global climate. Therefore, it is important to redirect the abundance of capital access in the developed countries to the emerging markets to fund green initiatives and help to alleviate climate change issues.

Government support is important in terms of infrastructure provision and funding through subsidies in order to drive the changes. Efforts by private individuals, albeit necessary, would be difficult without government's supports and interventions.

There has been a change in terms of investors' behaviour in recent years and given enough time, there will be a shift in terms of the way the market values the company, with strong emphasis placed on climate-friendly company. This will be achieved primarily through consumers' pressure driven by their purchasing behaviour on the corporations' products as well as the development in technology that will make renewable energy more economically competitive as compared to coal or fossil fuels in the future.

It is important to take actionable steps and to foster cross-discipline collaborations where the financial institutions, governments, scientist and engineers work together to solve the climate change issues and promote sustainable developments.

Change agents for a sustainable future

4.00pm

Speakers

- Achal Agarwal, President - Asia-Pacific, Kimberly-Clark Corporation
- Andrew Lim, Group Chief Financial Officer, CapitaLand Limited
- Bruce Crane, Managing Director, Singapore, OMERS Infrastructure
- Ruth Horowitz, Deputy Chief Executive Officer & Chief Operating Officer, IFC Asset Management Company

Moderator: Rachel Freeman, Former Advisory Manager, IFC

Key discussion points

Entrepreneurs need to think differently and cleverly about the opportunity in clean energy whilst also considering the bottom line. An environment that financially supports these entrepreneurs is therefore needed to encourage innovation. Investors need to take future viability of sustainability into consideration in conjunction with financial outcome.

Sustainability is not a "check box". Organisations must understand the existential threat to nature - if there are no materials to use, there is no money to be made. CapitaLand has gone through a journey to prove to stakeholders that a company can be both sustainable and be profitable. Kimberley-Clark took a gamble on making its sustainability agenda a competitive advantage edge and ended up setting the bar for the industry to follow. Its sustainability reputation has also attracted talent that wants to work for a company with high environmental, social and corporate governance (ESG) priorities. Studies have shown a clear link between good ESG and economic performance so in addition to evaluation on good returns and management, IFC also considers sustainability a key investment criterium. For infrastructure investments such as into power plants, OMERS looks at it both from an economic and an environmental perspective.

Some governments have imposed formal ESG rules on corporates and some of the private sector agencies also have informal regulations on climate risk. There is a crossover - today, countries like Japan, Korea and Taiwan have been luring investors into green investments. India, being very reliant on coal, also has a lot of opportunity for renewable energy. Singapore is having a big revolution in terms of Green Finance in the region and innovative solutions such as partnering with financial institutions to price companies' loans according to how well they score on a number of independently audited sustainability factors.

How does a company get started? The journey begins within the community, as individual citizens need to take the initiative to understand environmental issues and therefore be able to live a more sustainable life.

Photo/s



Economics of Climate Change: Why should we care?

5.00pm

Speakers

- HE Jo Tyndall, New Zealand High Commissioner, New Zealand High Commission Singapore
- Linda Broekhuizen, Chief Investment Officer, FMO - The Dutch Entrepreneurial Development Bank

Moderator: Elsa Palanza, Managing Director, Global Head of Sustainability and Citizenship, Barclays Group

Key discussion points

The session opened by highlighting the opportunities and challenges that have arisen from climate change, ranging from science and policy making to economics. When it comes to economics, New Zealand is an example where the government is actively addressing climate change. Even though New Zealand's carbon footprint is one of the lowest in the world with its relatively small population, there is still the need to act against climate change. If every country with small greenhouse emissions of less than 1% did not take any action against climate change, it will add up to 30% of global emissions that are not being dealt with. This emphasises the importance of prioritising the issues around climate change. Economic transformation is being put forth across the globe that is impacting businesses, operations and people's daily lives. Previously, governments would not act without waiting for another government to move first, primarily because there would be short term costs. However, this is changing, and there is growing evidence that taking action against climate change would not involve a cost to the economy. In fact, if governments do not take action against climate change, the economic cost would be much larger.

The new generation's activism around climate change is increasing. The millennials are saying that this planet will be inhabitable by the time they grew old. From New Zealand's point of view, a recent legalisation was passed for the country to become carbon neutral by 2050. With cross-party support, this is a long-term market and political signal of how New Zealand wants position itself with regard to climate change. Alignment across the different political parties is required, and policies tackling climate change needs to shift away from democratic cycles so that these policies are long-term. Policy making should also undertake a shift - from measuring propensity of GDP within the economy to measuring the well-being in a broader sense.

In terms of integrating climate change into investment strategies, it was mentioned that bringing the public and private sectors together to implement sustainable development goals was a movement that is being done in Europe. Asia is home to 50% of the world's population, and 50% of the carbon footprint is also produced in Asia. Hence, it might seem difficult to support growth while at the same time making sure to reduce emissions. This was where investing in renewable energies are instrumental.

Where collaborations and partnerships against climate change are concerned, New Zealand gave an example of their climate leaders' coalition. In the Netherlands, the Dutch government, NGO's, WWF and other important players cooperated on blended finance that not only included climate mitigation but also climate adaptation.

On the topic of whether countries such as Brazil and Indonesia are too late to reduce emissions and adapt to climate change, it was opined that it is never too late for a country to tackle climate change.

The session ended with the discussion on the progress over the next year, and it was highlighted that there is a need to use data such as Geo data and satellite data to make sustainable financial decisions. 2020 is a significant year for climate change, and long term strategies are being thought through as the new Paris agreement is being enhanced.

AI for Earth

Speaker

- Lucas Joppa, Chief Environmental Officer, Microsoft

Moderator: Olivier Jan, Global Sustainability Leader, Deloitte

Key discussion points

The session focused on Microsoft's "AI for Earth" programme that places cloud and Artificial Intelligence (AI) tools in the hands of those working to tackle global environmental challenges, in areas including climate, agriculture, water and conservation. Lucas Joppa shared that at first, he was not able to get internal buy-in for the original proposal. Investments in this space were already being made, but they were pure research investments. The programme's proposal was then changed to make it not about just about research and incubation, but about action and deployment. Four months later, with this new proposal, and a change of the name to "AI for Earth", it was able to secure a US\$50 million commitment. For Microsoft, sustainability was not something a certain department does for the company; it is something that every business division owns. This was a fundamental phase shift in the way Microsoft approaches the topic of sustainability.

When asked about the sorts of solutions would be offered to tackle these areas and what areas was defined to be included in "AI for Earth", Joppa shared that societally, we have it upside down – what we expect people to do versus the resources that they have to do it. Most of the organisations, such as environmental NGOs, environmental arms of the government and environmental academics, are underfunded. We ask them to save the world, but often do not realise that they do not have the ability to fund in new technologies or solutions to tackle these challenges. Thus, because of these limitations, there is now a platform – "AI for Earth" for people to apply for grants to empower these activities. The grant is used to give people access to technology and resources such as open-source tools, models and infrastructure data. Acknowledging that it is not helpful to give people access to technology that they do not know how to use, Microsoft offers continuous educational programmes that run twice a year for over 50 organisations at a time to help them harness the technology and enhance environmental innovation to do good for earth.

Future of Finance Stage- Powered by Prudential: Banking, Capital Markets and Insurance

Ready for 100 - Reimagining Customers in an Ageing World by Mike Wells, Group Chief Executive, Prudential

1.00pm

Key points

The session opened with three examples of individuals who are living lives beyond the normal. These examples show that the definitions of age are changing. It is shifting to a paradigm where the lines separating quality of life and actual age are increasingly blurred. There are strong arguments in modern times that people are able to live to about 120 years old. As a result of increasing longevity, there is an increasing focus on the issue of quality of life.

The pace of aging is also increasing. Looking back at history, Europe took 50 years to move the median age. However, in Asia, the shift is more dramatic and the graying of the Asian society is moving much more rapidly than it has in Western Europe.

The quality of life matters more than the quantity of life. These demographic shifts brings about interesting social changes, and financial, health and wellbeing challenges. Firstly, there is a need for more finances to support longer life spans. Secondly, there is a need for more social interaction to maintain health and happiness.

In addition, a piece of research was conducted in Singapore on the different activities that people would like to undertake post 62 years of age and it was found that most people want to be able to pursue something that they are passionate about. Specific endeavors such as starting a business, going back to school to learn a new skill are two of the many aspirations shared.

As such, the issue is how these retirement activities will need to be funded.

To address the gap, there is a need to nurture positive habits to ensure a prosperous old age.

Positive Habit 1 - Deferred Gratification: In 1972, Stanford University conducted a study on children to understand how to train child to delay gratification by putting off a marshmallow for 15 minutes in exchange for more marshmallows later. Prudential has a digital programme called Chain which teaches children charity in savings, gifting and financial literacy. Research has shown that the earlier an individual is taught financial literacy, the more likely these individuals are to save through life.

Positive Habit 2 -The Money Box concept: A rounding-up concept that saves some money whenever you make a purchase and places the balance into a savings account.

Positive Habit 3 - Getting people to do what they should do with sound financial advice: Prudential has developed an application called Pulse. Pulse is an artificial intelligence symptoms checker with dengue fever predictive mapping technology and telemedicine referral payment technology. Prudential advisors are equipped with such tools to help customers be healthier and live a longer and higher quality life.

Technology is another method which will help people to live independently for longer. For example, technology can solves mobility challenges.

Another area that requires attention is in the financing of retirement. The cost is approximately twice the anticipated burden for most people. As such, a level of product engineering is required. Thus any innovation which can facilitate behavioural change earlier will help to keep the cost down. These

innovations can be in from areas such as medical, housing or transportation. Something's got to change, as the current model doesn't work for the future.

Photo/s



The Next Generation of Insurance Leaders

Speakers

- Bill Song, Chief Executive Officer & Chief Operating Officer, Zhong An Tech Global
- Chris Wei, Global Chairman, Aviva Digital, Executive Chairman, Aviva Asia & Friends Provident International (FPI)
- Wilf Blackburn, Chief Executive Officer, Prudential Assurance Company Singapore

Moderator: James Lloyd, Asia-Pacific FinTech & Payments Leader, EY - Parthenon

Key points

The session opens with the question of what the future of insurance is, and how changing demographics is impacting businesses.

The themes of aging population and the growing middle class are quite similar across Asia. However, in Singapore, the trends are more extreme as Singapore has one of the fastest aging populations in the world and a population which has one of the highest longevity.

As a result, the insurance business is changing and moving away from simply being there to protect and pay out claims when something goes wrong, to helping people live longer and healthier lives. This means building protection. Insurance is now also involved in prevention and postponement, and is no longer just there to pay the hospital bills.

To that end, the impact of technology and applications that can provide more engagement with customers than traditional insurance, have been very welcomed. One such example is an application which can provide some preliminary diagnosis and monitoring of activities.

In terms of customer engagement, different ways of engagement are needed for different customers. Partnerships enable a joint proposition to be offered at the right point in time, for example an insurance company with a medical provider. In fact, there can be as many as four to five different integrated touch points comprising of both digital and offline channels.

The need to communicate across multiple channels means that new capabilities are needed. Insurance companies do need to get the message out in different ways and consequently spend a lot of time on content creation. This new skill-set/capability for the insurance sector is digital marketing.

Country nuances and preferences are also important considerations for customer engagement.

Technology is absolutely critical and there is a need to recognise that both customers and agents are becoming more digitally savvy. Traditionally, agents used to call to obtain information on customer policies. Currently, chatbots using artificial intelligent applications provide instant quotes and submissions of policy.

Technology is also doing a great job enabling financial consultants to do a better job - they can service their customers more quickly and process applications much faster. So a lot of the administrative work disappears and they are able to now focus on real financial consultancy.

One of the things insurance companies need to do is to get the organisation ready to work with other digital partners. The business has to be nimble as the reality is there is no one model for customers.. It is critical to have good data organisation and management of APIs to enable partnerships.

Insurance companies work with many FinTechs that contribute to parts of the overall value chain. FinTechs are typically not willing to replace the entire value chain. As such, it was a good opportunity to learn new technologies by teaming together. It is not a win-lose but a win-win.

It was shared that the peak of interest by the large digital incumbents is probably over. This is due to the fact that organisations have tried different things have realised that it is not so easy to run such operations. Regulations around the insurance business are not simple.

However, if the right partnership can be struck, it will bring together core capabilities that established insurance companies have, in terms of delivering protection and investment, together with the engagement nuances, data and consumer understanding that digital incumbents have.

It is likely that more insurance companies will work with Internet giants as the data will enable them to better reach their customers. This potentially may be a big technology trend. However, the long tail risks are not easy to understand.

Photo/s



Aging & Finance – Societal Readiness and the Emerging Role for FinTech

2.00pm

Speakers

- Han Yik, Head of Institutional Investors, World Economic Forum
- Keyong Dong, Professor Secretary-General, Renmin University of China & China Ageing Finance Forum 50
- Parul Seth Khanna, Director, pinBox Solutions
- Yumiko Murakami, Head of OECD Tokyo Centre, OECD

Moderator: Harry Smorenberg, Founder & Chief Executive Officer, SCC

Keypoints

The session opened with the goal of addressing two topics – to review few essential facts about aging, and to discuss the pension market and what role finance can play in it.

Today, there are medications that can slow down diseases like dementia and Alzheimer's. With medical discovery, many killer diseases of the past are now considered chronic diseases. With such advances, perhaps we will be able to prolong our lives even further than the present.

With regard to falling birthrates and aging population, India was cited as an example – India's population is aging, and families in India are now stopping at two children from the previous average of four.

The world is facing significant shifts, and societal issues related to an aging population, such as elderly care, are coming to the fore.

Artificial intelligence (AI), Big Data and robots will also change our society, and could likely support the rebalance of working income globally.

While living like turtles would be ideal for longevity, what is crucial, is financial literacy and financial planning. It is important to have a firm grip of our finances, and then social security and pension systems can adapt and change accordingly.

To tackle the pensions time bomb in the case of the US, there are four critical points:

- Create an easy-to-use savings dashboard, which pools information about multiple pensions and state benefits in one place
- Use technology to reduce costs, improve product and advice customisation
- Pursue deregulation to help the system adapt more easily to the life choices faced by the 21st-century retiree, many of whom are a new breed of healthy seniors still leading active lives
- Press the financial services industry to improve retirement products and better understand the demand for a more flexible system that provides greater asset diversification

Policies that can encourage better Aging and Financial Inclusion.

- Use data and evidence
- Strengthen digital and financial literacy
- Support lifetime financial planning
- Customise to address the diverse needs of older people
- Innovate to harness inclusive technologies
- Protect by tackling financial abuse and fraud of older people
- Target key audience and address their vulnerabilities

Photo/s



Open banking - It's a revolution. Navigating your way to a thriving, open, digital future

3.00pm

Speakers

- Francesco Simoneschi, Co-Founder & Chief Executive Officer, Truelayer
- Michael Tang, Global Financial Services Digital Transformation Leader, Deloitte
- Noriaki Goto, Regional Executive for Asia & Senior Managing Executive Officer, MUFG Bank, Ltd.
- Todd Schweitzer, Chief Executive Officer & Founder, Brankas

Moderator: Michael Lawrence, Chief Executive, Asia House

Keypoints

The session started off with a question about whether Open Banking was a revolution. The broad consensus was that it was an evolution.

The topics covered in this session were very broad, and they can be summed up as follows:

Revolution/Evolution

- The shift from traditional banking to digital banking was the bigger revolution – Open Banking is simply a function of this.
- Open Banking is an evolutionary approach as there was adoption, adoptability and then permeation.
- Open Data, rather than Open Banking, is the current opportunity everyone is discussing, as it will have the ability to bring tailored products and services into the digital experience seamlessly and without friction.

Adoption

- Asia and other economies have approached Open Banking bottom-up, whilst Europe has been top-down.
- API efficiency and use will bring down the costs for all participants and open up customer segments (particularly the unbanked for financial inclusion). API efficiency means branches and other big capital outlays are not needed, and both traditional and challenger banks will have the ability to reduce capital and improve operating efficiency and increase revenue. For customers, this will simply mean more choice and an improvement in the way they can receive financial services.
- One-stop portals for customers' financial wellbeing and spread are not yet here, but it is the ideal. It would need much more than individual ecosystems for this to happen. Open Banking is myopic at the moment, and the opportunity is much wider.

Risks

- Risk is always the flip side of the coin and regulators need to do more to make customers aware. There are big issues around ethics, bias, systemic risk and governance to discuss, as well as common liability models when things go wrong. These are areas that must be tackled by the public and private sector. Ultimately, this is about trust. All parties must also address third party risks as banks bring FinTechs, payment providers and other challenger banks into their networks.
- Banks are realising that they cannot escape all residual risk but must improve risk assessments and work with regulators to strengthen the environment.
- Transparency is key to helping improve adoption of Open Banking globally.

- Challenger banks, FinTechs and payment providers need regulators to take streamlined approaches, otherwise the timing and cost of compliance can erode their funding.
- Giving up data cannot be a one way street for Open Data; it needs to be an equal playing field.

Opportunities

- Traditional and new players must change their mindsets to embrace disruption and this is precisely the opportunity that has been brought about.
- Apart from retail banking, there is some uncertainty as to how Open Banking will open up commercial banking. It appears that the big opportunities lie in SME banking.
- It is unlikely a case of the winner takes all, even though non-banks with great technology are now becoming financial services providers.

Future

- In the next 12 months, identity will be seen as a big play, and there will be a focus on making experiences frictionless and trying to overcome privacy/security hurdles.
- There will also be improvements to the regulator role especially in area of stewardship, and there will be discussions about common liability model and the further unbundling of traditional banking products.

Photo/s



Innovation from backend to frontend by Datuk Abdul Farid Alias, Group President Chief Executive Officer, Malayan Banking Berhad (Maybank)

4.00pm

Key points

The session starts with a description of the Maybank Digital Transformation journey known as “Maybank 2020”. It is an ongoing journey in which Maybank experienced severe disruptions over the past five to six years, and went through various “ups” and “downs” as it embarked on the transformation process.

In the design of their mobile application and website, the bank focused on providing great customer experience by concentrating on the design and iterating it based on honest user feedback. The bank continuously strives for the most advanced yet acceptable outcomes, pushing boundaries to achieve excellence in digital hygiene factors like speed, reliability and security, which are often taken for granted.

Beginning on an ongoing transformation journey in 2014 - Amongst a myriad of events, banks were optimistic about the future following the recovery from financial crisis. Maybank wanted something that was relatable to the users and started a yearlong in house process of gathering inputs for a defined goal and watching the developed countries and Chinese digital payment companies.

The bank recognized the need to understand the user, and noticed the trends where users were moving gradually online and a steady acceleration towards smartphone usage, particularly in younger customers. The bank also learnt from the mistakes from using “tiles” for the bank’s website in 2013 which turned out to be a disaster.

2014: In September 2014, Maybank launched its mobile application. While the mobile application was not popular with users initially, the mobile application performed its intended purposes and was further refined over the next two years to adopt finger print technologies to make it more frictionless for the users.

2016: Fast-forward to July 2016, the bank introduced “Maybank Pay” which is the bank’s Near Field Communication (“NFC”) mobile payment and also launched Samsung Pay to meet the customer’s need to use the quickest form of payment with the least friction.

At the end of the year, Maybank launched “Maybank Heart” realizing that the bank could be the trusted party in the area of online donations, and the bank is looking to do more in this platform.

2017: In 2017, the result was far more symbolic – the bank launched the New Maybank mobile application, this time with biometric face and voiceprint, empowering the bank’s customers to know their financial status and make payments within seconds.

In the same year, the bank also launched the digital token, which was developed in-house, stepping away from the password sent via SMS, which both reduced waiting time and cost while improving security and setting a tone in defining industry standards.

In the same year, the bank also launched Maybank QR Pay and towards the end of the year, the bank was working with Chinese mobile payment solutions Alipay and WeChat Pay to enable cross-border payments for Chinese tourist and many key merchants in Malaysia.

2018: As the Maybank mobile application was enjoying its successes, the bank was also diligently working on the new desktop website on the background overcoming the “tiles” experience and poor design. The refreshed website, “Maybank2u Reimagined” was met with positive comments and comments for further improvement. The website was also optimized for smartphone experience. Users can also now apply for financial products online.

2019: The bank is now looking to work in partnership with Grab Pay, which evolved from a taxi hailing app to one of the largest mobile payment solutions company in the region.

Datuk Abdul Farid concluded the session that while the bank has come a long way, he acknowledges that it is not “there” yet as digital transformation is a continuous ongoing journey.

Photo/s



The Impact of Tech in the Financial Services Industry

Speakers

- Christian Unger, Co-Head of the Industry Value Creation & Co-Head of the Entrepreneurial Governance and Operating Directors, Partners Group
- David Tiller, Global Head of Client Technology Solutions, Standard Life Aberdeen
- Diane S Reyes, Group General Manager, Global Head of Liquidity & Cash Management, HSBC Holdings plc
- Jason Tu Jianyu, Co-Founder Chief Executive Officer, MioTech

Moderator: Peiyong Chua, Partner, Financial Regulation, Linklaters

Key discussion points

The session started off by explaining that technological change have accelerated its pace and it is the most creative and potentially most disruptive force in Financial Services ecosystem.

There has been an increase in the investment of technology funds on a whole and the use of technologies in assisting the industry. An example would be the use of artificial intelligence in terms of sourcing for deal opportunities.

It has been observed that the financial industry is overwhelmed by data, especially where risk is concerned. One such example is in helping National Institutions identify risk factors particularly in the Environmental, Social and Governance (ESG) risk areas with the use of AI.

HSBC has seen AI assist their front and back office teams globally and help the Bank's clients become more efficient at their Treasury and cash management operations. Two quick examples were the use of Biometrics, which allowed customers to access the Bank's mobile applications, and in the most secure matter possible, using facial ID. The other is in relation to transaction tracking via networks such as the SWIFT network. In Asia particularly, the bank is looking to adopt things like chatbots and social media payment platforms, and the bank intends to bring these over to the developed markets and take advantage of these capabilities.

Some time during the discussion was spent looking at where technology will go next and how it can be used to engage clients. Financial institutions can now able to provide client solutions on a more personal scale than before, instead of the old commoditised product.

Some of the benefits and challenges in terms of the managing of data on from AI perspective include too much data at times. This data may not always be relevant, and can be a benefit and a challenge at the same time. However, with more data, the financial market would need to come up with ways to leverage on the data to generate more risk insights or signals.

Partnerships are key success factors in innovation. Partnership with FinTech companies is a win-win solution to ensure that the technology lands where it belongs, and partnership with the regulators is critical to solve governance or standards issues.

Photo/s



The New Long Life by Andrew Scott, Professor of Economics, London Business School & The Longevity Forum 5.00pm

Key points

This session looked at how Artificial Intelligence (AI), Robotics and Longevity are going to change the world together. They will dramatically change how we work, what our careers would look like, how the economy operates and how our relationships evolve.

The best practice life expectancy (BPLE) increases by 2-3 years every decade. BPLE can be defined as the maximum life expectancy observed among nations at a given age. This holds true for Singapore which sees its citizen life expectancy increase by 3 years every decade.

One interesting point to note is that as life expectancy increases, the proportion of healthy mindfulness remains constant. This means that we are aging better as most of these years of life have been healthy years. The question is, what we would want to do with all these extra hours?

As people live longer, their behaviour changes. As everyone has more years ahead of them, they act younger. Hence, there is a need to readdress how life can be structured as each individual lives longer and has more time at hand. There are four key aspects to consider as we structure our lives over a 100 years:

1. Financial assets – The ability to accumulate sufficient financial assets for a smooth retirement.
2. Productive assets – The changing paradigm of skill set and knowledge expected of an individual, which dictates the need for lifelong learning.
3. Vitality assets – The ability to maintain good physical and mental health.
4. Transformational asset - The ability to deal with change as we lead multi-stage lives.

If we put technology on top of this, it is even more evident that we go through more stages of life and career changes as technology disrupts the labour market.

Hence, this is where FinTech can come in to support a longer and more positive life. The focus should not be on using technology for existing solutions but to develop new products to support the changing dynamics of life.

Photo/s



Impact on new business models for insurance in the new digital era

Speakers

- Prash Pandit , Managing Director, IAG Insurtech Innovation Hub Pte Ltd
- Shamus Weiland, Global Chief Information Officer, Manulife
- Yannick Even, Director, Head of Digital & Smart Analytics APAC, Swiss Re

Moderator: Avril Hong, Presenter, CNA

Key discussion points

Millennials as a target customer segment: The discussions focused on the Asia-Pacific insurance market and the disruptions in the insurance industry, before shifting to how consumer behaviours and expectations are changing, particularly the millennials. As the pace of innovation and rates of adoption is increasing exponentially, these customers are expecting high standards of Digital Solutions after the bar set by industries. Consumers expect transparency and selection choices, and digitalisation offers a great platform for that capability.

Millennials are delaying the home and car purchases as they are using the likes of 'Uber' and 'Grab'. Thus, single item insurance starts playing a vital role in the overall Insurance value chain. Insurers should start by insuring a laptop, Xbox or daily items used by millennials use that is of great value to them. This helps to build a relationship that allows insurers to be relevant for a longer time.

They are willing to share more data with insurers from their connected watch to any other devices. This helps to create more personalised products and services, including a slightly different model of pricing and risk assessment. Thus, it is a great virtuous cycle.

Enhancing partnership with Tech vendors: First, look at the problem and identify which technology can help to solve it. Then, see if it is possible to build it in-house or necessary to partner with external vendor to build this capability at scale.

Prevention paradigm in insurance: There is a paradigm shift is towards prevention in insurance. For example, preventing drowning in the backyard pool or detecting reps at an ocean is incredibly important and close to the heart of insurers, given the number of deaths through drowning incidents annually. Machine learning and computer vision models now enable insurers to help without placing a camera at the beach or the house pool. Insurers have also started rewarding healthy behaviours by tracking them through wearables, or using telematics to gamify car insurance.

Technology enabling good customer service: A good example is eClaims, where customers can submit claims in a much easier and faster way. The processing time is cut in half, so customers can receive the claims decision sooner. This results in consistently higher customer satisfaction rates for that service. Recently, a partnership of an insurance firm with a leading Healthcare medical platform was announced in China, which gives access to customers to Quality Health Care Services. Another good example is insuring gestational diabetes for Singapore women during their pregnancy.

Cyber security threats in customer data collection: Role of regulators becomes extremely important in this. Insurers need to follow a multi-pronged approach to deal with different threat vectors. Hence, everything from customer authentication to entitlements management, should have a data leakage protection. Insurers also need to ensure that they have systemic and automated capabilities at the scale that they operate at, and those capabilities need to continuously evolve to keep up with the increased risk of cyber threat.

Technology helping customers in climate catastrophes: After a catastrophe happened, insurers can actually leverage technology to go into an area in three to four hours, where they can compare the before and after images. For example, flying a drone, which is safer than sending an insurance employee to assess the damage, and is also quicker to evaluate the actual loss

Photo/s



Investment and Global Markets Opportunities Stage - Powered by AMTD: Global Investor Summit

Catching FIRE: the Global FinTech VC View by Ryan Gilbert, General Partner, Propel Venture Partners

1pm

Key points

The session began with an observation that more investments have been focused on financial technologies in recent years. 2019 has been a busy year for venture capital (VC) and is a particularly great year for investing in FinTech.

There are two major drivers that have given rise to the birth and growth of FinTech unicorns under the VC landscape. The first driver is the expansion of financial services. This expansion is not about disruption, but more about rebuilding and re-wiring financial services by focusing on payments, credits, savings and automated investing. FinTech startups have also been tapping into areas such as insurance and real estate, making investing in FIRE (Financial services, Insurance and Real Estate) a growing trend. However, catching FIRE is a challenge as it is quite competitive and in this early-stage, VC firms are watching the developments closely.

The second driver is the increase of mobile app usage by the public. Mobile phones (Android and iPhones) are the most powerful devices in today's world, and some financial institutions recognise this more than others. The usage of mobile phones will continue to impact future growth, and VC spending is moving in this same direction, so it is crucial for incumbent financial institutions to act quickly and capitalise on the opportunity.

The top 10 projections of the future for the FinTech industry was presented at the session, which shows where venture capitalists will be investing in over the next 10 years:

1. FinTech drives new business models: All companies can be FinTech companies if the key to their new business model is the ability to pay, disburse funds and manage assets.
2. Sharing economy breaks in: Sharing economies are breaking into financial services in a way that has not been seen before. This is particularly so in China with certain types of insurance models and significant consumer participation that have seen great results with strong support from regulators.
3. Blockchain finds its applications: Numerous companies are focusing on the essence of the blockchain and the digital ledger as a means of supporting existing business models and building new ones.
4. Digital becomes mainstream: The digital infrastructure is becoming more mainstream.
5. Open Data: Open Data is in big demand in Europe and United States, but the question remains on the identity, accuracy and completeness of this data for financial institutions to utilise and make decisions from.
6. AI, ML, CV, RPA: These acronyms are here to stay as the growth and volume of data is increasing, and the use of AI and machine learning models become inevitable. However, exercising caution when it comes to decision making regarding these AI models is still required.
7. Big Tech's big moves: The new developments that are coming out from the Big Tech companies such as Apple, Google and Amazon, and the companies that will follow them.

8. Cybersecurity and risk management: With more FinTech players entering the market, the need of proper risk management and cybersecurity tools increases as well.
9. Asia leads: Asia is the undisputed leader in the FinTech space because of the support from its governments in the area of innovation. Foreign investors are making numerous trips to invest in the technologies that are being built here in Asia.
10. Regulators use technology too: Regulators are also entering the technology space and this will also make a difference in the future.

Why Big Tech Invests in the Blockchain Technology?

Speaker

- Jack Lee, Managing Partner, HCM Capital, FoxconnTechnology Group

Moderator: Patrick Murck, Chief Legal Officer, Transparent Systems, Affiliate, Berkman Klein Center, Harvard University

Keypoints

The session began by highlighting the growing interests of blockchain investments and why investors are putting more energy into investing in blockchain technologies. While the internet has been a big player in the last decade along with the biggest tech market players such as Google, Amazon, Tencent and Ali Baba, distributed ledger technology (DLT) is bringing a layer of trust and efficiency and it will soon become the next generation of "internet of value".

Although traditional equities, meaning investing into blockchain companies, still remains applicable today, there is increasing interest in investing in tokens and tokenised investments is becoming a new fundraising model, rather than pure equity, for blockchain. It is believed that within the next 5-10 years, tokenised investments will be more prominent to investors for blockchain technology.

With regard to how the retail market is looking into tokens and to the market share between the application of tokens for equity institutions versus retail institutions, it appears that 98% of tokens were still invested through retail investments. However, equity institutions will play a bigger part in later years as more centralised bodies, such as central banks, are looking to leverage from decentralised models.

There is a positive social impact of blockchain applications – they can help people without access to a traditional bank account have access to alternative banks that decentralise the middle-man, thereby encouraging financial inclusion. The creators of a tokenised platform can reach their customers directly without the cost of intermediaries.

Currently, most of the investments being made are in start-ups that take interest in helping people get access to tokenised funds when banks will not lend them money, and lowering the cost of lending by getting rid of financial intermediaries and providing more peer-to-peer platforms that more people can have access to.

Photo/s



Introducing the FinTech Research Platform

Speakers

- Damien Pang, Deputy Chief FinTech Officer, MAS
- Bob Contri, Global Financial Services Leader, Deloitte
- Clemens Thym, Chief Operating Officer China, S&P Global

Key points

In 2018, investors reported US\$12 billion available for ASEAN enterprises for 2019-2021, and FinTech is one of the sectors that attracts high investment interest. Despite the hype of regional investments, early stage FinTech companies still face challenges in accessing these funds. Research showed that demand for greater access to quality information was high among investors, particularly around obtaining current and reliable company data, complete market intelligence to create more comprehensive targets, and less reliance on existing networks to find opportunities which leads to slow due diligence processes and missed opportunities.

The FinTech Research Platform, a collaboration between Deloitte and S&P Global Market intelligence, supported by the Monetary Authority of Singapore (MAS), was developed to tackle these challenges and make the due diligence process more transparent, reliable and current.

Deloitte developed the concept and background to the platform taking into consideration the factors that are important to the stakeholders, i.e. the investors and the banks that provide the capital for these investments. S&P Global Market Intelligence developed the data strategies, which included filling the missing gaps to provide more comprehensive data and ensure data quality on the platform, so that stakeholders can make decisions more quickly, and with accuracy. 40 data sources were used to build this platform and they were mapped into a common master and the necessary engineering of features was done to create a comprehensive set of data.

After creating this prototype, Deloitte and S&P Global Market Intelligence are exploring the idea of taking this platform to market, with a consideration to link this platform to APIX, the API-Exchange platform supported by MAS.

Photo/s



Global Investors' Perspectives: Fuelling Growth

2.00pm

Speakers

- Abheek Anand, Managing Director, Sequoia (India) Singapore Pte Ltd
- Ben Savage, Partner, Clocktower Technology Ventures
- Hugh Young, Head of Asia Pacific, Aberdeen Standard Investments
- Raj Dugar, Managing Partner, Asia, Eight Road Ventures

Moderator: Victor Alexiev, APAC Head for Citi Ventures Programs & Strategic Partnerships for ICG, Citigroup, Inc.

Keypoints

2019 has been an interesting year for venture capital (VC), with a surge of both exits and IPOs. Globally, financial services has been a big focus for VC's due to new investment opportunities. These have come about from regulatory changes allowing such developments like Open APIs leading to formation of interesting new companies; companies introducing new ways of targeting end-users that have historically been under-represented; and a new phase of B2B given that consumer-facing FinTechs that are now more established and are challenging/disrupting/replacing incumbents.

This new phase of B2B is one in which FinTechs are collaborating with incumbents to support- rather than challenge or disrupt. Entirely new technological innovations are unlikely to appear in financial services as FinTechs tend to re-deploy technology already used in other verticals.

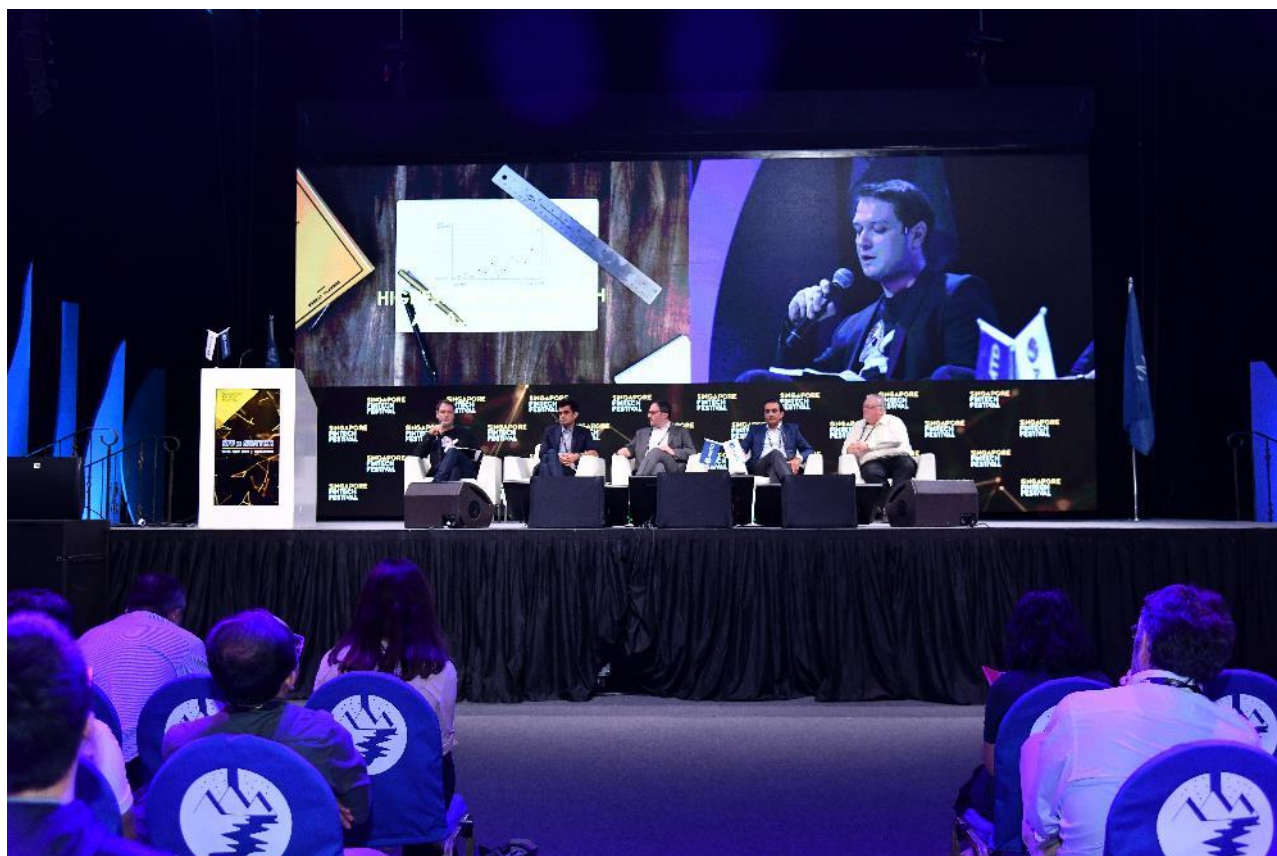
With regard to capital investment, there is a definitive and unstoppable shift of investment from public to private markets. FinTech as an investment category for VCs is relatively new yet corporate VC investment is at an all-time high. Over 2019, there has been a continued influx of capital into financial services innovation, both into new fund formation and into FinTechs, leading to some large capital raises and high valuations. There seems to be no great concern about the current and impending economic and geopolitical risks: successful founders will build businesses for the long-term and to withstand cyclical vicissitudes. It was agreed that market noise is useful because it 'separates the wheat from the chaff' to expose winners.

A reminder was issued that liquidity does not disappear in times of economic distress; it is merely re-directed into safe havens. Investors build additional capital raises into their strategies and will stand by their investments as long as founders continue to execute well.

It is important to recognise that media hype instances, for example WeWork, should not be read into and applied to the broader tech sector. Although a disconnect between private and public market valuations exists, it is a misperception that private markets tend to overvalue - in some places, for example India, the reverse is true because public markets value companies that are fundamental to the economy such as those that promote financial and social inclusion. With regard to Environmental, Social and Governance (ESG) Investing, the view was that the inflection point for ESG is likely 4-5 years away.

The key success factors for FinTechs are their ability to deploy clever products and design choices into the right markets, navigate the regulatory landscape and leverage technology in order to maintain operational diligence.

Photo/s



Investing for Sustainable Impact

3.00pm

Speakers

- Arnaud Caudoux, Deputy Chief Executive Officer, Bpifrance
- Ganesh Rengaswamy, Co-Founding Partner, Quona Capital
- Oki Matsumoto, Founder Chairman Chief Executive Officer, Monex Group, Inc.
- T. V. Mohandas Pai, Chairman, Aarin Capital Partners
- Vivek Pathak, Regional Director, International Finance Corporation

Moderator: Kabir Kumar, Director, Flourish Ventures

Key discussion points

The session opened with the sharing of four forces that draw focus on impact investing:

- Challenges around climate change, and social inclusion and exclusion.
- Trade-offs of impact financing and measurement of impact.
- New generation's expectations for businesses to not only serve themselves, but to serve a greater good.
- Increasing calls to fix capitalism such as short-term focus on businesses, disproportionate wealth and salaries, gender inequality and lack of diversity.

There were different opinions on what impact investing means. In general, it means creating solutions that could make a difference at scale in society.

There is a danger of overusing the word 'impact investing'. When renewable energy became fashionable, it attracted 'greenwashing', and the same could happen with 'impact-washing'. Instead, to keep it simple, it is to look at whether investments make a positive or negative impact.

It was pointed out that capital markets have become too large that it could influence the design of society. There is a need to govern how the funds are used. As the amount of money continues to become larger, money has become a commodity. People no longer think of just how to increase the amount of money; they are trying to achieve something more, like changing the society, and pursuing their passion. These are important for impact investment.

One of the key challenges of impact investing is to balance short and medium term goals with the long term goal. It is a clear foundational principle that positive impact leads to positive outcomes and performance in long term. However, as life is usually more about the short and medium term, private markets usually don't scale on the principle of throwing more money to create larger opportunities.

It was argued that the distinction between profit and impact does not exist. In an example of a neobank, which helps SMEs in India to gain access to capital, investors on the platform clearly want to create a monopoly within the platform. We cannot deny that while it is for profit, the impact they created was unbelievably broad.

There was an opinion that when an investment is profitable, it is obvious that it fills a gap. However, some cases are less obvious, such as blockchain investments. Thus, it is important for the public investor to explain to the people the value they see in the investments and how it is going to create impact in the future.

The sessions ended with an urge for a new funding model, which pulls together public grants and private funds to solve the world's hardest problems such as climate change.

Photo/s



Whose Capital is the Right Capital?

4.00pm

Speakers

- Abhinav Jhunjhunwala, Chief Executive Officer, AJ Capital Asset Management Pte Ltd
- Jojo Malolos, Chief Executive Officer, JG Digital Equity Ventures (JGDEV), Board Director & Adviser, Wing (Cambodia) Limited Specialised Bank
- Khanh Tran, Head of Technology Investments, VinaCapital Group
- Rajeev Natarajan, Managing Director & Head of Asia-Pacific, ICONIQ Capital (Singapore)

Moderator: Jinesh Patel, Partner, Dymon Asia Ventures

Key discussion points

The session opened by talking broadly around the significant amount of venture capital (VC) money that is coming to the region over the last few years. Many start-ups and entrepreneurs are trying to figure out which types of capital they should be taking and from whom.

Start-ups that have immediate impact to the business ecosystem, such as airline, bank, manufacturing and property development, are popular with investors.

Start-ups which look like they could be a unicorn someday are being highly sought after. They try to understand the specific problem to be solved, and create opportunities and platforms to address them along the line. Hence, a lot of it is really strategic.

With regard to long-term capital investment, there is a view that even though the capital is allotted with a financial motive, when it comes to raising external capital, however, much about the value would be either strategic or financial.

A strategic move is also about operational capabilities, and the question asked was how valuable is operational capabilities when making the decision to invest.

It was shared that the operating leverage that comes from a network and an ecosystem of highly influential entrepreneurs is fundamentally the most important thing, apart from the capital alone. In terms of investing in a country, it was described that in Vietnam, the whole ecosystem of VC and start-ups are young and inefficiencies in the systems is common across many industries. They are lacking innovation and it also does not make economic sense for them to reach out to the people living in rural area as 60% of the people are still unbanked. It is impossible to sell e-commerce or anything online for those who do not have a bank account.

With regard to the investments which are flowing in the region, from the global investor perspective with no regional funds, they fundamentally want the capital to compete.

There was an opinion that there is not enough capital funds moving around in the Philippines, with limited VCs existing. With not many foreign companies coming into the country, it depends more on start-ups to address its local requirements. On the other hand, there seems to be more investments pouring into Vietnam.

The discussion moved to the difference between family offices in Europe and Asia and where the value differentiation beyond the capital is.

It was mentioned that in Europe, the family businesses is more matured because it is now in its second, third or fourth generation. Whereas in Asia, there is not much strategic angles to family offices, which are not yet institutionalised.

On the topic of ESG, it is believed that ESG and sustainable investing is here to stay for the long-term.

Photo/s



Riding the Investment Wave in Asia

5.00pm

Speakers

- Anju Patwardhan, Managing Partner, CreditEase FinTech Fund
- Aymerik Renard, General Partner, Hardware Club
- Baijayant 'Jay' Panda, Investor and Former Member of Parliament of India,
- Jing Ulrich, Vice Chairman of Global Banking & Asia Pacific, J.P. Morgan

Moderator: Paul Santos, Managing Partner, Wavemaker Partners

Key discussion points

The FinTech trends in Southeast Asia is expanding to include greater financial inclusion with the use of robotics process automation and financial intelligence within financial services. There is also a dramatic transformation of banking systems in India with biometrics and technology that has improved India's ranking in terms of ease of doing business. The lowering cost of processing is leading to companies embedding computer vision and artificial intelligence into more devices across industries, thus improving processes with inexpensive automation and generating opportunities across Europe, US and Asia.

The tightening of investment approvals by The Committee on Foreign Investment in the United States has impacted investors' investment strategies. This has resulted in a more cautious approach to B2C FinTech investments and investment trends in the US has shifted towards B2B in recent years.

As a result, these companies are experiencing increasing cost and more volatility from the tariffs in manufacturing supply chains. Procurements and venture capital funding will be more cautious, resulting in slower growth in startups that cannot manoeuvre through these frequent changes. On the flip side, new US immigration policies will force talent out of the US and boost startup environments in their home counties, and in regions such as Southeast Asia.

Though tensions currently exist, the short term market sentiments is improving with recent positive news between US and China. Nonetheless, with US elections in 2020, negotiations between the 2 nations are expected to continue and therefore it is advisable that companies capture any window of opportunity to raise capital.

India has a number of bilateral agreement with China, and will have one with the US very soon. India will continue to attract foreign investment and see continued growth.

China has successful tech unicorns and global FinTech funding continues to grow, though market caution is also increasing. Still, there is investor appetite in high growth companies and an urgency from startups to raise capital with uncertainty in the near term.

The lack of a tech powerhouse, and a pool of talents in the region creates tremendous opportunities for Southeast Asia in the supply chain and advance manufacturing sector.

With Southeast Asia being part of China's growth strategy, and a large and young population, it is forecasted that the internet economy will grow to US\$300B by 2025 with lots of investment opportunities across the technology, and FinTech space.

Finally, the rapidly improving connectivity in travel will trigger an explosion of economic activity in the region.

Photo/s



How to Raise a 100 Million Round by Joel Yarbrough, Vice President Asia Pacific, Rapyd

Key points

The four pillars to investment funding are product-market fit (solutioning and scalability), talent (culture and diversity), execution (vision and partnerships), and capital (education, trust and communication).

Rapyd is a Fintech-as-a-Service platform that enables integration of local fintech and payment capabilities into any application to help companies scale globally via local payments networks. Since 2016, Rapyd has secured \$155M in funding from a variety of investors. For example, its Series C round in Oct this year raised \$100M from a mix of both venture capital and payments industry peers.

Among the top eCommerce markets, there is a fairly clear demarcation of international and local payments between developed and emerging regions respectively. International payments total \$849bn across the largest markets in US, Europe and Australia, whereas local payment across Asia, Middle East and Africa, Russia and Brazil reached \$1.147tn so far in 2019, with China accounting for \$740bn. The overall electronic payment opportunity is much larger with \$150tn worth of B2B collections & disbursements, \$20.7tn in offline retail, and \$2.8ttn in e-commerce opportunities.

Payments has become a national priority in some countries but the complexity is growing. Mandates to go cashless, real-time bank transfer schemes and e-wallet scaling require strong local KYC and local data rules, fee caps and a commitment to financial inclusion. Local payment networks can be critical to customer conversion, retention and upselling. Many non-financial companies are already recognising this, with a local example being Grab expanding into digital payments.

To win quickly, it is unrealistic and wasteful for startups to build payments platforms themselves. This is where FinTech-as-a-Service platform can play a useful role in offering end-to-end services from funds collection, disbursement and wallet services through to settlement, pricing, and reconciliation.

Exponential Technologies Stage: AI and Big Data

From Phones to AI-Powered Finance by Hong Feng, Chairman & Chief Executive Officer, Xiaomi Finance , Co-founder & Senior Vice President, Xiaomi Corporation

1.00pm

Key points

The session opened with a brief history of Xiaomi as a corporation and its achievement as the youngest company on the Fortune Global 500. Xiaomi currently has over 20,000 employees worldwide and adopts a triathlon business model – three lines of businesses in hardware, internet and new retail. This comprehensive business model enables Xiaomi to provide affordable and high quality products to its consumers.

Xiaomi has built an ecosystem that has incubated over 100 smart device companies in the past 5 years with major successes and two companies have since gone public. Xiaomi is also currently working with all its ecosystem partners to build the largest Artificial Intelligence of Things (AIoT) platform with 198 million connected smart devices. These smart devices are connected and controlled via Xiaomi's recently launched Smart Artificial Intelligence (AI) Speaker, a voice control hub that controls and connects smart devices within Xiaomi's ecosystem.

This ecosystem of smart devices has provided Xiaomi with more information on its manufacturing process as well as its consumers, which in turn enables Xiaomi to provide better financial and retail services.

Through Xiaomi's triathlon business model, the company has a deep understanding of manufacturing, operations and technology through its digitisation efforts across its end-to-end processes – from idea generation to retail operations to finance. This means that Xiaomi is able to evaluate a manufacturing enterprise comprehensively through data obtained from consumers and from within the ecosystem, both of which provide powerful information and useful risk control methodologies for Xiaomi's financial institution partners.

In summary, Xiaomi's partnership ecosystem, deep understanding of the consumer, manufacturer and retailer, and experience in technology have enabled Xiaomi to collaborate and work with its partners together to be more successful.

Photo/s



From FinTech to Finlife: The Future of Digital Finance by Chen Long, Vice President, Ant Financial, Director, Luohan Academy

Key points

The session started with a sharing of the central theme for the future of digital finance, where finance should ultimately be accessible, affordable and sustainable, with opportunities for all individuals to have access to a rich set of financial services.

Finance has traditionally been less inclusive and less accessible. A majority of companies and individuals had inadequate access to financial services. It is a contention that the biggest opportunity within the financial services space is inclusive finance.

Globally, there have been multiple efforts within this space to build a more inclusive finance ecosystem, for example the microfinance movement. However, one of the biggest challenges that remains in finance is information asymmetry.

It was acknowledged that while concepts on digital finance continued to be actively discussed, there is a lack of dialogue on failures within finance. There is merit in understanding these failures to truly understand how technology can be a real driver for businesses and ultimately, the economy.

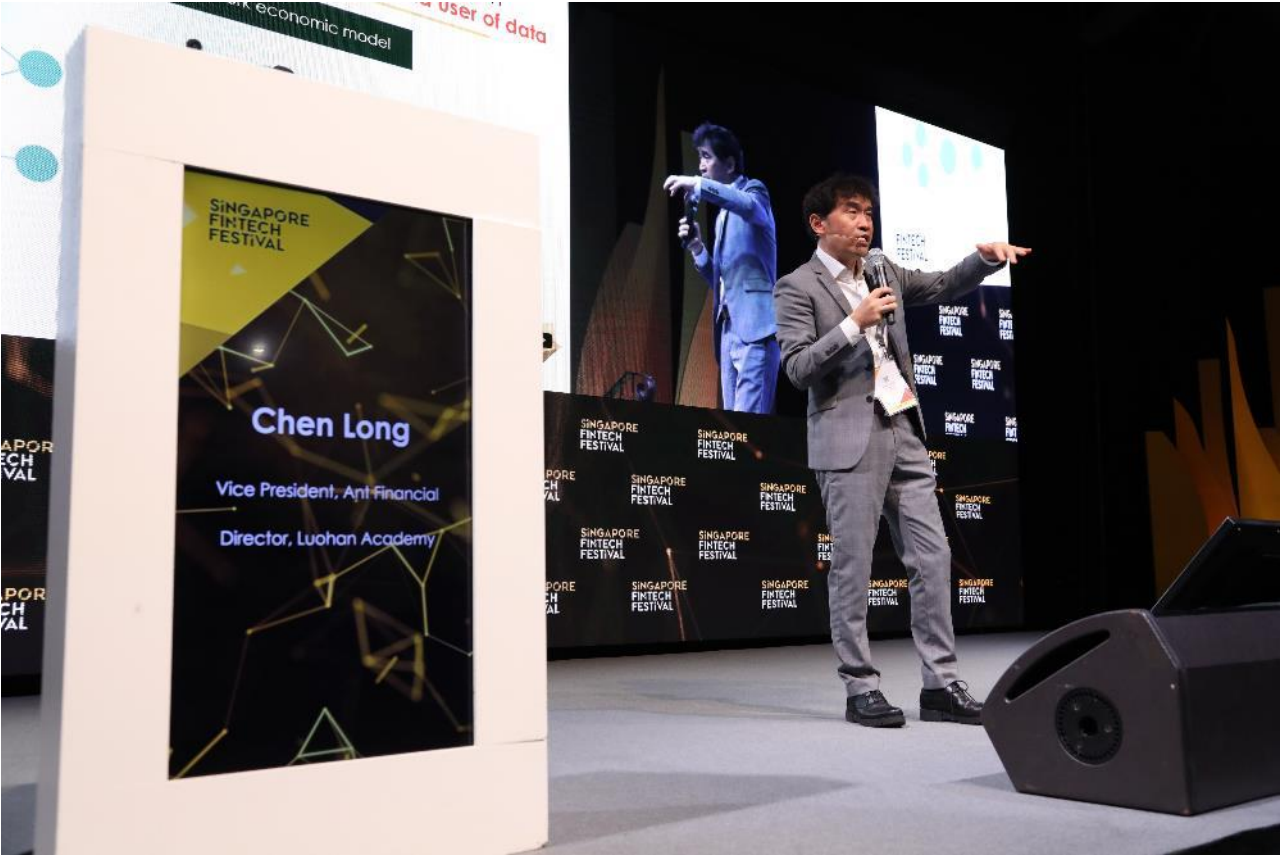
To illustrate this point, the accelerated change in China's digital finance sector due to technology was cited as an example. China has, in the past ten years, transformed itself into an extensive, digitally enabled country. As a result, finance is now much more inclusive and accessible. There is now a shift towards a more inclusive financial system through the extensive use of mobile payments in China, and the increasing adoption and penetration of mobile payments in less developed regions in the world.

Information is the new collateral. Traditionally, startups may find it difficult to obtain financing without collateral due to the lack of information about their financials and credit worthiness. With digitisation and information widely available, funding is much easier to obtain. It appears that there is now a convergence and reduction in inequalities in financial accessibility across wealth management, payment and financing in China.

Three pillars – connectivity, intelligence and trustworthiness – help reduce cost and increase efficiency within the market via digital technology. There is a shift from a traditional supply chain economy to a networked economy, as day-to-day users become producers and users of data to make consumption decisions. With digitisation of data, institutions such as banks have real time access to users' data and credit profiles to make financial decisions. Finance is not merely about risk return tradeoffs; its real purpose is to serve the real economy.

Several notable trends in finance were also shared during the session, including data privacy, zero information proof, user centricity of data and transparency within the finance sector.

Photo/s



AI-driven Disruption: the New Normal?

2.00pm

Speakers

- Arvind Sankaran, Venture Partner, Jungle Ventures
- Brad Carr, Senior Director of Digital Finance, Institute of International Finance
- Coenraad Jonker, Co-Founder & Chief Executive Officer, TymeGlobal, Non-Executive Director, TymeBank
- Laura McCracken, Executive Vice President, Financial Institutions & FinTech, Wirecard

Moderator: Jo Ann Barefoot, Chief Executive Officer & Cofounder, Alliance for Innovative Regulation

Key discussion points

The session opened by highlighting Artificial Intelligence (AI) and how it is disrupting various businesses currently. AI has been around for decades and there had been many predictions that it was going to change everything, but it was just hype; those predictions failed due to many reasons. But now with the explosion of data and technology, there have been many recent successful use cases.

We are at a monumental inflection point - as we become more digital, more data is collected which is helping technology companies to build platforms that can power economies. These platforms can connect with multiple business and people, resulting in exponential growth.

Due to the advancement of technologies such as cloud, data analysts now have access to amazing tools that help to analyse data faster to produce better insights quickly. AI is evolutionary because of big data and it is evolving every year with new technologies that are helping analysts to find the hidden correlations in the data.

Data is becoming abundant and cheap, and computing power is growing exponentially with advancements in GPU and CPU chips which can process the data quicker than before.

Many financial institutions have use cases across credit risk, market risk, fraud detection, anti-money laundering and market trading strategies. It was highlighted that there is a need for organisations to share data so that technology can provide better insights. However, organisations are unable to share the data due to various limitations such as regulatory, compliance and cross border access. In this regard, there is a need to set up environments that are safe and can protect privacy while being sufficiently transparent in sharing data between organisations.

Due to the availability of data from customers such as browsing and search histories, it is now possible to predict customer's interests. Previously these kinds of predictions were based on the demographics of customers, such as age and location, which did not result in successful predictions.

It is important to create a balance - you cannot make everyone happy. If social media data is encrypted end-to-end for privacy, the government will be unable to access the data to check for fake news, child predators or terrorism. It is not about AI, it is about the organisations' code of conduct that they live by. When an organisation with the right code of conduct implements any machine learning model, this code of conduct should be built into the model.

It was agreed that there is a need for transparency and regulatory guidelines on machine learning algorithms, instead of considering an algorithm as a black box and simply accepting predictions. There is a need to know how these predictions are made and the data used for these predictions. There is a need for big organisations like banks and insurance companies to come together with FinTech start-ups to leverage on their technologies and provide better solutions for customers.

AI for Good - Opening by Mr. Raymond Knops, Minister of the Interior and Kingdom Relations, The Netherlands

3.00pm

Key points

The session opened with a speech that touched on the fact that while it is usually the onus of the government to provide inclusive services to their citizens, and to ensure that privacy and human rights are protected, citizens should also participate proactively in the debate about these new technologies, instead of standing aside and following the government's lead.

Photo/s



AI for Good - Panel discussion

Speakers

- Mr Raymond Knops, Minister of the Interior and Kingdom Relations, The Netherlands
- Nicolas Chapados, Co-Founder & Chief Science Officer, Element AI
- Vincent Iswara, Chief Executive Officer, DANA

Moderator: Malavika Raghavan, Head, Future of Finance Initiative, Dvara Research

Key discussion points

The speech was followed by a panel discussion on how Artificial Intelligence (AI) can be used for good and provide solutions to world issues such as healthcare, fraud prevention, and money laundering, just to name a few.

Speakers described how their companies are using AI for good, for example, helping organisations implement, operate and scale AI in an explainable and trustworthy way.

With all the benefits that AI brings, there are challenges as well. Transparency is important, and laws passed by the authorities on what is permissible and what is not, must be abided. On the issue of allowing AI to make autonomous decisions, the opinion was that while AI can be allowed to make low-level decisions, the future of AI is a combination of human and machine to make the important decisions.

On the point of safeguarding AI, it was emphasized that having appropriate and up-to-date policies implemented, is important, when deploying AI.

There are also trade-offs in terms of the accuracy of AI versus the amount of constraints set by humans. Adding restrictions will reduce accuracy to a certain extent. While these trade-offs exist, we should not be afraid to have such conversations, as they can aid researchers to minimise the trade-offs so that we can be in a better position on the curve.

Using a banking example in Africa, where an automated AI system issued less credit to women than men, it was highlighted that the issue is whether such sensitivities should be discussed, as AI is increasingly making such decisions. It was generally agreed that talking about these sensitivities is good, as it is a way to force us to rethink how the decision is being made, and how to improve the new tools being developed, like AI.

When asked who should be responsible if AI goes wrong, the consensus was that it should be traced back to the human who implemented the specific AI function.

On the possibility of operating AI across countries with different privacy policies, it was suggested that AI should go beyond national level to regulators such as the European Union's General Data Protection Regulation.

Lastly, regarding AI's red line, it was opined that anything violating fundamental human rights is the red line, and it was agreed that the power of AI should be in the right hands.

Photo/s



Smart Machines, Smarter Humans?

4.00pm

Speakers

- Andy Maguire, Group Managing Director & Group Chief Operating Officer, HSBC Holdings plc
- Dean Tong, Managing Director & Head of Group Human Resources, United Overseas Bank (UOB)
- Lu Yu, Managing Director, Senior Portfolio Manager, Allianz Global Investors
- Tan Bin Ru, Chief Executive Officer, OneConnect Financial Technology

Moderator: Greg Miller, Co-founder & Executive Director, Faethm.ai

Key discussion points

Smart machines do lead to smarter humans, although this depends on the individual's mindset in adopting technology. In the investment arena, Artificial Intelligence (AI) can enhance investment opportunities but machines should not wholly replace humans as some areas still require judgement, intuition and experience, that is, human capabilities. Technology can enhance outcomes of work but, ultimately, humans should continue to be accountable for decisions and be able to explain the reasoning and outcomes behind decisions powered by technology.

To this end, the Future of Work involves readiness of employees, and awareness and preparedness within organisations. Financial and investment knowledge is still required but having an understanding of technology and programming is also becoming necessary. The most important skills in an organisation today are adaptability and being able to frame a problem to answer the right questions. Education systems must help the next generation to develop a sense of self and there should be some digital aspects and technology awareness built into the curriculum. It is also just as important that education in this space available to all as continuing education to include those who wish to upskill. All told, however, a company may provide the opportunity but an individual must be willing to accept it and to embrace change.

At the corporate level, an organisation needs to be agile with technological changes as changes are hard to predict beyond a five-year horizon. The nature of work will continue to evolve and morph, rather than a concept that is prescriptive or scientific.

With regards to diversity and inclusion, the impact of technology varies across developed and less developed markets. In developed markets, technology has- continues to help women, as technology required diverse solutions and therefore diverse mindsets in order to implement successfully. The future brought about by technology is bright but of utmost importance is collaboration across all partners within the ecosystem – IT, HR, government, individuals, education systems, businesses – in playing a role to ensure smarter humans for smart machines.

Photo/s



Power of the New Oil: Data

5.00pm

Speakers

- Elena Alfaro, Head of Data & Open Innovation, Client Solutions , BBVA
- Katharine Kemp, Senior Lecturer, Faculty of Law, University of New South Wales
- Xavier Faz, Lead, Business Models, CGAP

Moderator: Charles Ross, Editorial Director, The Economist Intelligence Unit

Key discussion points

It was pointed out that applying the metaphor “data is the new oil” to the data revolution is not entirely accurate as, unlike data, oil can only be used once. Also, unlike oil, data is not a resource waiting to be extracted and monetised. That being said, data is like a raw material in that it needs to be refined - its value lies in its transformative power.

Nowadays, data often pertains to personal information which impact an individual’s human rights if the data is being used either against them or inappropriately. Indeed, some organisations that have superior access to aggregated data can wield a huge amount of market power. Surveys from around the world show that consumers are increasingly concerned about their online privacy. Europe has taken a huge step up in terms of regulation with GDPR which requires specific consent for data collection, use and sharing. GDPR is commonly used as the highest common denominator for privacy for companies operating across multiple jurisdictions. In the US, the California Consumer Privacy Act is used by many companies as the highest standard across all US states.

Even consensual data sharing can have issues, though. If, for example, an individual uses various service providers and each holds data, the individual will have a difficult time managing his/her personal data across all the providers. To overcome this, India recently authorised an ‘account aggregator’ that gathers data and consolidates data from multiple sources and allows an individual to manage permissioning from a single access point.

There is a long road to obtaining consensus across jurisdictions but there are already some common themes in the way regulators approach data privacy which can be built upon. A number of large companies are being or have been sued over their privacy policies and privacy settings resulting in some very big fines, so the expectation is that one can expect to see similar actions taken against smaller firms as well. All told, however, companies need not fear that data privacy laws are a hindrance to innovation as a lot can be done with data even after the imposition of restrictions. It was pointed out that the problem is not about having rules but rather about bad actors doing bad things because a tiny proportion can lead to a loss of an entire population’s trust.

Data can be used for good, especially for the unbanked or those to whom conventional credit scoring is unattainable. In micro-financing experimentation, individuals can start by taking out small micro-loans and by demonstrating consistent and good repayment behaviour, enable an increase in their credit limit, allowing them to borrow more. This self-effectuating credit improvement cycle then results in individuals creating their own credit score.

Photo/s



Creating the Marketplace Economy of the Future: Business in Real-Time by Brad Peterson, Executive Vice President Chief Technology Officer Chief Information Officer, Nasdaq

Key points

The session focused on data and machine learning and how they are enabling the future of markets in real time.

A healthy market has four key elements:

1. Structure and Rules – Providing fairness and access for all participants
2. Data – Bringing buyers and sellers together
3. Technology – Infrastructure that is efficient, scales and works for participants
4. Trust – Transparency

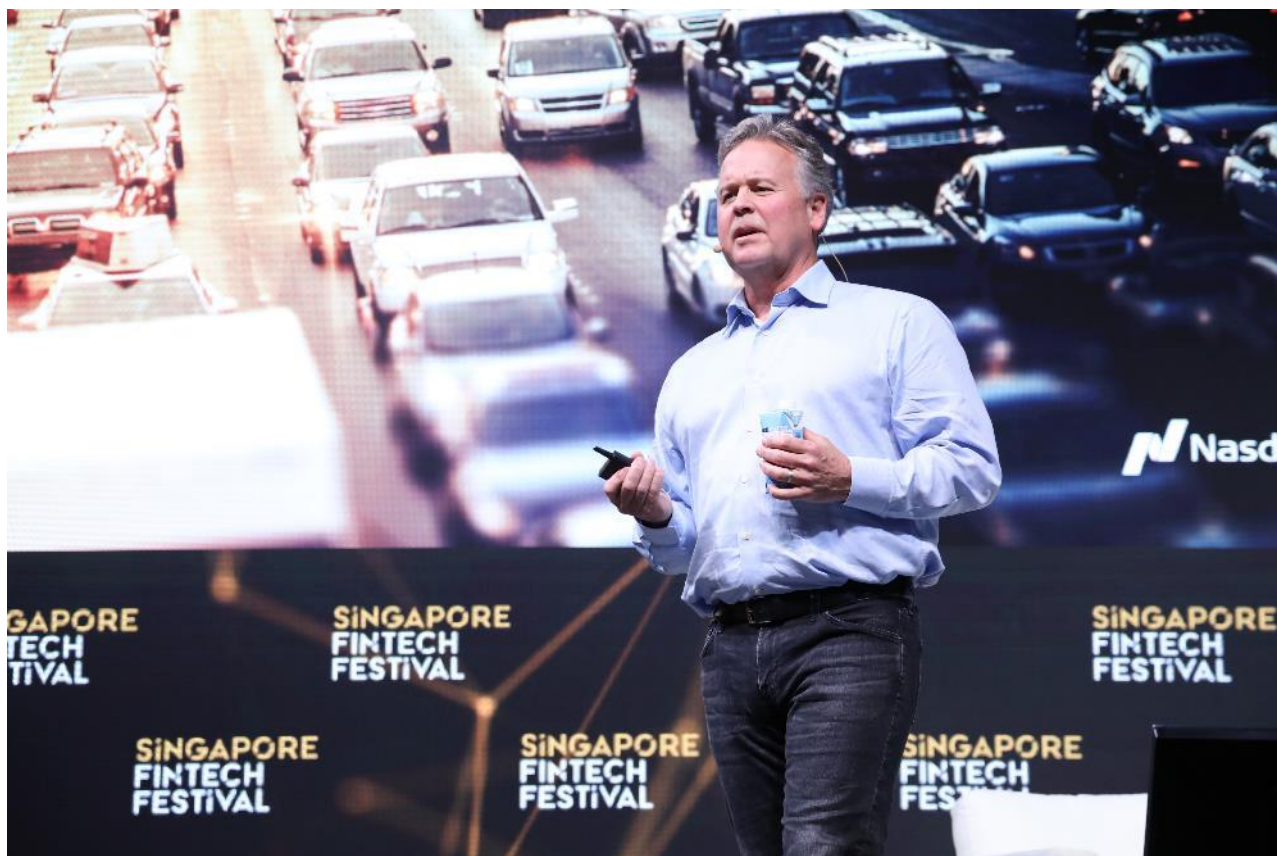
With these components in place, scarce resource allocation can be optimised using machine-to-machine marketplaces.

Data is the lifeblood of markets, with both buyers and sellers relying on real-time data to make decisions and thereby facilitating the market place activities.

From a technology perspective, Cloud and the API economy are viewed as foundations that enable the global markets in real-time. With cloud technology, data can be stored and accessed from any location. With a compelling set of APIs, data eco-systems will be able to be integrated and exchange data.

With the four components of the marketplace and cloud and API technology in place, the creation of efficiencies will be possible. This will then facilitate price innovation.

Photo/s



[Himalayas Stage](#)

Global FinTech Hackcelerator Demo Day

1.00pm

Key Points of Opening Speech by Carlos San Basilio, Secretary General, Spanish National Treasury

Carlos San Basilio expressed in his opening speech that he has expectations to learn from the Hackcelerator in Singapore to bring ideas back to Spain for similar implementation. Basilio spoke of a close economic and financial relationship with Singapore, and that, there can be closer collaboration in the area of FinTech for both countries, as both are leading FinTech locations. Basilio mentioned Spain has 300 well-established FinTech companies and 700 FinTech startups which can benefit from a similar process like the Hackcelerator. Basilio thought that if Spain maintains its momentum, there may be collaborative initiatives taken together.

Basilio then proceeded to speak about the need for policy makers to have a sound grasp of the magnitude of the FinTech industry and its related issues. Basilio further articulated the regulator's conundrum in managing the FinTech industry – how to preserve stability and competition in the Financial Services industry given the risks that the FinTech industry presents without hindering innovation and financial inclusion that FinTech brings. Basilio was particularly concerned about the risks that could potentially disrupt the global finance industry associated with the participation of FinTech by large technology companies with huge customer bases. As a result, there is a call amongst the regulators to establish guidelines and common practices to address the various risks assessed in the FinTech industry without stifling innovation and the best opportunities in the industry. Therefore, at the world stage, FinTech is often a hot topic amongst regulators such as the International Monetary Fund, the Financial Stability Board, and in the G7 and G20 meetings.

Basilio then mentioned the recent FinTech developments in Europe citing the implementation of the payments directive adopted due to the relevance and changes in regulation. He then concluded that Spain and other countries want to move beyond regulations, and are interested in following the example of Singapore to have a well-managed and controlled area to screen and assess new projects.

Key Highlights of 2019 FinTech

The Monetary Authority of Singapore (MAS) announced the three winners of the Global FinTech Hackcelerator.

1. There were 200 submissions from 30 countries to address 70 problem statements in the following focus areas: *Banking and Finance, Insurance, Financial Inclusion, and General*. There are two tracks, the Local Track and the Global Track, with 10 finalists selected for each track. The 20 selected finalists go through a 12-week mentorship programme to further define their products for marketing in the ASEAN market. The winners of the Global FinTech Hackcelerator, supported by KPMG Digital Village, were selected through the Global FinTech Hackcelerator Demo Day, where they had pitched their innovations to an industry panel of judges.
2. The winners of the FinTech Awards, supported by PwC Singapore, were selected from a total of 245 submissions from over 30 countries. The twelve winners were selected under four categories - Singapore Founder, ASEAN SME, ASEAN Open and Global by an international panel comprising industry experts across multiple domains. Three of this year's winning solutions were returning finalists from the FinTech Awards in 2018. The winners are:

Demo Day Judging Panel for the Selection of the Global FinTech Hackcelerator Winners

- Chia Tek Yew, Head of Financial Services Advisory, KPMG Singapore
- Chua Chek Ping, Head of Strategic Alliances and FinTech, Group Channels and Digitalisation, UOB
- Gautam Mukharya, Chief Risk Officer, HSBC Singapore
- Jeremy Ong, Chief Customer Operations Officer, AXA

- Jimmy Ng, Group Chief Information Officer, DBS
- Magdalene Loh, Head of Innovation, Prudential
- Pranav Seth, Senior VP, Head of E-Business, Business Transformation & The Open Vault, OCBC
- Srikanth Raju, General Manager, Commercial Software Engineering, Global Financial Services, Microsoft Corporation
- Thomas Krogh Jensen, CEO, Copenhagen FinTech
- Tilman Ehrbeck, Managing Partner, Florish Ventures
- Tommy Teo, Managing Director, Vulcan Capital

Demo – Banking and Finance

1. DiligenceVault (USA)

DiligenceVault is a digital diligence platform for asset managers and allocators. It strives to make the investment information exchange process easy and collaborative. For allocators, DiligenceVault facilitates the collection, structuring and normalisation of data across investments. For asset managers, DiligenceVault centralises content, data, documents and workflows to create a responsive and institutional client service outcome.

2. Jibrel (Switzerland)

Jibrel is a blockchain and smart contract development company that seeks to leverage cryptography, distributed ledger and smart contract technologies to build financial networks.

3. Solidatus (Singapore)

Solidatus offers a business process-engineering tool that enables the visualisation of complex processes and data flows, and seeks to enhance governance, business transformation and reporting.

4. Suade (UK)

Suade is a regtech start-up, which automates regulatory data requirements for financial institutions and minimises the cost of change involved with a new iteration of financial regulations. Suade allows financial institutions to process large volume of granular data while complying with the required regulatory controls and governance.

5. Value3 Advisory (Singapore)

Value3 is a B2B capital markets artificial intelligence platform for independent, predictive and automated credit ratings, research and analytics. It combines financial data with unstructured online digital footprints, local and global news, corporate/regulatory events, market sentiments, geopolitics, demographics, industry trends and patterns of the companies from diverse sources to transform data overload into actionable insights.

Demo – Insurance

1. Covergo (Hong Kong)

CoverGo enables insurers, brokers and bank assurance partners to digitise and distribute insurance products more quickly. It provides an end-to-end solution including instant pricing, underwriting, policy admin, claims, analytics and open insurance APIs to increase connectivity and automate insurance processes. It also allows insurers to integrate with distribution partners, online businesses and data providers to analyse customer profiles and distribute most appropriate products at the most appropriate time.

2. neoEYED (India)

neoEYED is a behavioural artificial intelligence solution that helps banks and enterprises detect digital identity frauds by analysing the way the users interact with web/mobile applications.

3. Pula (Kenya)

Pula restructures agricultural insurance and seeks to use technology to insure the previously unbanked, uninsured and untapped market of smallholders across the globe. It facilitates crop and livestock insurance coverage, and works with Fortune 500 companies, global NGOs, research institutions, and governments to help provide smallholders the protection they need in an increasingly unpredictable climate.

4. Skyglyph (Bulgaria)

Skyglyph is a collaborative web platform that uses remote sensing and machine learning for better crop monitoring and production risk management. It analyses images and other data from satellites, drones and even smartphones to detect crop damages and risks.

5. 360F (Singapore)

360-ProVestment is an artificial intelligence enabled product recommendation engine for life insurance and wealth management. It strives to provide institutions with a reliable means to leverage their in-force policy data to not only identify up-sell and cross-sell opportunities but also detect the need for product portfolio review and prepare the customers for their next life stage.

Demo – General

1. Comply (Vietnam)

Comply incorporates smart automation and collaboration into the regulatory compliance process and enables financial institutions to respond to regulatory changes better. It also strives to help compliance teams save time and reduce regulatory costs through artificial intelligence-enabled regulatory insights, regulation management, and monitoring.

2. Fluidly (UK)

Fluidly is an SME Financing start-up, which uses artificial intelligence to analyse the financial data in a company's accounting system, and predict its future cash flow requirements. Based on the insights derived, Fluidly will empower accountants to provide suitable advice to their SME clients on the available financing options in the market.

3. MindBridge (Canada)

MindBridge Analytics' platform automates the ingestion and analysis of data, and learns from user interaction to identify financial data anomalies for analysts, finance professionals and regulatory teams. It leverages its proprietary machine learning algorithms and its team of artificial intelligence professionals to review all transactions to detect anomalous patterns of activity and to generate a risk-weighted analysis.

4. RISQ (UAE)

RISQ seeks to make businesses more efficient and effective by enabling automation and integration capabilities in financial software.

5. Ukheshe Payment Solutions (Pty) Ltd. (South Africa)

Ukheshe empowers merchants, traders, street vendors and freelancers to accept and make real-time digital payment without the need to have a bank account. Users can choose to withdraw their funds at a specific retail partner, top up their telecommunication or utility account, or send the funds to any mobile number.

Demo – Financial Inclusion

1. Aflore (Columbia)

Aflore is a direct sales network of financial services for the underbanked. It recruits women from the underbanked communities, and equips them with training, tools and support to become trusted financial advisors who will distribute loans and financial products within their trusted networks.

2. Maxtrace (Uganda)

Maxtrace is a digital traceability and sustainability solution that track crops through the value chain, from farmer gate to the point of export. It seeks to enable price transparency and allows farmers who pass the inspection tests to be able to charge better pricing.

3. Elifinty (UK)

Elifinty uses artificial intelligence and machine learning to give their young customers, insights into their spending patterns, and tailored financial tips. It also enables their customers to keep track of their financial activities.

4. Kwara (Kenya)

Kwara helps to build safety nets by digitising savings cooperatives, which are member-owned financial associations that have a wider reach to the unbanked than the traditional institutions. It also seeks to enable the unbanked to have easy access to low-cost instant loans.

5. **Solfeh (Jordan)**

Solfeh provides emergency cash loans to employees of its client organisations on a demand basis. Acting as an intermediary, Solfeh offers employees access to instant online microloans for which the employees repay in instalments through monthly deductions from their salaries.

Photo/s



Fintech Awards Ceremony

5.00pm

Key points

FinTech Awards supported by PwC Singapore

The FinTech Awards recognises innovative FinTech solutions that have been implemented by FinTech companies, financial institutions and technology companies. Twelve winners were selected under four categories - Singapore Founder, ASEAN SME, ASEAN Open and Global by an international panel comprising industry experts across multiple domains, evaluating them on four criteria: (i) Impact, (ii) Practicality, (iii) Interoperability, and (iv) Uniqueness and Creativity. The 12 winners will walk away with a combined prize money of S\$1.2 million. All 40 finalists of the FinTech Awards will be presenting their innovations on 12 November at SFF x SWITCH.

The winners of the FinTech Awards supported by PwC Singapore for the following categories are as follows:

Award Category	Placing	Company Name	Solution Name	Country	Prize
Singapore Founder	1st	Onchain Custodian	SAFE Platform	Singapore	S\$150,000
	2nd	Finaxar	FXR One	Singapore	S\$100,000
	3rd	Optimai Pte Ltd	Optimai PRIME	Singapore	S\$50,000
ASEAN SME	1st	InfoCorp Technologies Pte Ltd	FarmTrek Project in Myanmar	Singapore	S\$150,000
	2nd	Brankas	Brankas Open Bank Platform	Singapore	S\$100,000
	3rd	Zigway	Zigway	Myanmar	S\$50,000
ASEAN Open	1st	CredoLab Pte Ltd	CredoScore	Singapore	S\$150,000
	2nd	MyCash Online (SG) Pte Ltd	MyCash Online	Singapore	S\$100,000
	3rd	Razer Pay Holdings Pte Ltd	Razer Fintech	Singapore	S\$50,000
Global	1st	TransferWise	Borderless Account	United Kingdom	S\$150,000
	2nd	OakNorth	OakNorth	United Kingdom	S\$100,000
	3rd	VoxSmart Pte Ltd	VSmart	United Kingdom	S\$50,000

Description of Company and Awards:

Award Category	Placing	Company Name	Solution Name	Description of Company and Solution
Singapore Founder	1st	Onchain Custodian	SAFE Platform	Onchain Custodian (ONC) is a Singapore-based FinTech that offers a global, standardised, resilient and compliant custody service for the safekeeping of institutional digital asset investments. SAFE platform offers a multi-signatory cold storage that enables businesses to co-manage their assets or delegate full custody to ONC, based on multi-approved instructions from the client that are securely authenticated on ONC's platform.
	2nd	Finaxar	FXR One	To provide liquidity to SMEs, Finaxar Credit Lines enable business payments through a single, integrated platform that aligns with businesses' cash flows. FXR One is a lending-as-a-service platform that allows banks to provide unique credit products to SMEs.
	3rd	Optimai Pte Ltd	Optimai PRIME	Optimai aims to make investments simpler, smarter and safer. It also seeks to empower financial institutions to go-to-market and scale their business quickly through their multi-asset, multi-market integrated PRIME platform. The platform enables financial institutions to manage their business, risk, operations and compliance for capital markets, wealth management and banking services.
ASEAN SME	1st	InfoCorp Technologies Pte Ltd	FarmTrek Project in Myanmar	InfoCorp Technologies is a Singapore-based integrated FinTech and AgriTech company that brings inclusive financial services to the livestock industry in emerging markets via its blockchain-based platform, FarmTrek. FarmTrek provides cattle registry, livestock insurance and lending to smallholder cattle farmers in Myanmar.
	2nd	Brankas	Brankas Open Bank Platform	Brankas aims to address the last mile problem for open banking in emerging economies. Brankas OpenBank technology empowers banks, FinTech partners and users to build and activate real-time secure Application Programming Interface (APIs) for payments, identity, transaction data, and more. Brankas was a finalist of the FinTech Awards (ASEAN SME category) in 2018.
	3rd	ZigWay	ZigWay	ZigWay helps low-income families in Myanmar gain direct access to cheap and flexible nano loans (\$5 to \$200) via their phones. It provides a fully automated loan process and allows them to make daily repayments that match their daily earnings. Zigway was a finalist of the FinTech Awards (ASEAN SME category) in 2018.
ASEAN Open	1st	CredoLab Pte Ltd	CredoScore	CredoLab is a Singapore-based FinTech that develops bank-grade digital scorecards for banks, consumer finance companies, auto lenders, online and mobile lenders, insurance companies, and retailers from smartphone device metadata. CredoScore algorithm churns all the metadata from smartphone devices into a score that can be applied to businesses to improve the quality of decisions taken

	2nd	MyCash Online (SG) Pte Ltd	MyCash Online	MyCash Online provides unbanked migrant community in Malaysia, Singapore, and Australia with access to financial products and services through mobile phones. It enables unbanked migrant workers to purchase financial products and services online and remit money across countries without any bank account, using their mobile phones.
	3rd	Razer Pay Holdings Pte Ltd	Razer Fintech	Razer Pay, a B2C e-wallet, was established as the FinTech arm of Razer Inc, a lifestyle brand for gamers. Razer also provides B2B solutions including online-to-offline payments. Razer Fintech is an offline-to-online digital payment network that seeks to provide fast and convenient digital payments to youths, millennials and the underserved consumers. It enables consumers to perform cash-over-counter top-ups directly into their Razer Pay e-wallet
Global	1 st	TransferWise	Borderless Account	TransferWise seeks to make international money transfers cheap, fair and simple. Its Borderless Account is a multi-currency account that allows users to send, hold and spend money in 49 currencies.
	2 nd	OakNorth	OakNorth	OakNorth provides SMEs with the debt finance they need to compete against large corporates. OakNorth allows financial institutions to significantly improve and accelerate their credit decision and monitoring capabilities. It pulls in a wide range of relevant internal and third-party data sets that enhance credit analysis and creates a forward-looking view on the borrower's business growth through benchmarking and detailed scenario analysis.
	3 rd	VoxSmart	VSmart	VoxSmart provides multi-channel mobile surveillance solutions such as mobile voice calls, SMS, voicemail, WhatsApp and WeChat text messaging recording. VSmart helps financial institutions reduce risk and enable global compliance through multi-channel mobile surveillance of financial users. VoxSmart was a finalist of the FinTech Awards (ASEAN Open category) in 2018

Judging Panel for the Selection of the FinTech Awards Winners

Full Name	Title	Organisation
Andreas Braun	Managing Director	Accenture Technology
Frank Desvignes	Global Head	AXA Next Labs
Anju Patwardhan	MD	Credit Ease
Ho Kok Yong	SEA Financial Services Industry Leader	Deloitte
Jinesh Patel	Partner	Dymon Asia
Sam Liew Lien Ban	MD, Head of Business Partner and Solutions	GIC
Gautam Mukharya	Chief Risk Officer	HSBC
Tan Yinglan	Founding Managing Partner	Insignia Venture Partners
Tobias Puehse	Vice President, Innovation	Mastercard
Zia Zaman	Chief Innovation Officer	Metlife Asia
David Rutter	Founder and Managing Partner	R3
Murli Buluswar	Senior Advisor	The Boston Consulting Group

Huy Nguyen Trieu	Founder / CEO	The Disruptive Group
Susan Hwee	MD and Head, Technology and Operations	UOB
Chris Boncimino	Head of Innovation and Design for Asia Pacific	Visa

Photo/s



Global Fintech Hackcelerator Winners

Key points

FinTech Awards supported by KPMG Digital Village

The winners of the Global FinTech Hackcelerator supported by KPMG Digital Village are as follows (company name listed are in no order of merit):

Company Name	Solution Name	Prize Money
Pula Advisors GmbH	Pula	S\$50,000
Arthance LLC	Diligence Vault	S\$50,000
MindBridge Analytics Inc.	MindBridge AI	S\$50,000

Photo/s





Coral Triangle Stage

Project Ubin: Enabling Broad Economic Possibilities with Blockchain-based Payments

1.00pm

Key points

The session began with a brief introduction of Project Ubin. Project Ubin hopes to achieve two main objectives:

- To better understand blockchain technology and its potential benefits when applied to clearing and settlement of payments and securities
- Eventual goal of developing simpler-to-use and more efficient alternatives to today's systems, based on a digital central bank issued token

Project Ubin started in 2016 and Phase V commenced this year. From working on Project Ubin for the past three years, the team realised that blockchain technology has reached a very advanced level of maturity and the focus of Phase V is to showcase the purpose of Project Ubin and its real life implications. Phase V has two main components:

- In collaboration with JP Morgan, to build and develop a blockchain payment network for multi-currency payments
- Possible integration testing with different blockchain applications with the different FinTech partners

To demonstrate that there is business value in Project Ubin, the team has been on a journey over the last six months and has identified more than 100 use cases and engaged with more than 40 companies. Four use cases were showcased today to highlight their integration to Phase V:

1. Trade and Procure-to-Pay Document Exchange (Digital Ventures)

Digital Ventures' Procure to Pay (PTP) is a blockchain platform which buyers and sellers use to exchange trade documents like Purchase Orders (PO) and invoices. It also allows financial institutions to provide payment settlement and trade finance. The platform is beneficial to buyers as it automates the accounts payables processes through three-way matching. This is performed by checking the content of the invoice against data in the PO and the goods receipt document. It also benefits the supplier as it provides faster and easier access to invoice financing.

2. Bonds Issuance and Lifecycle Management (STACS)

STACS is a blockchain platform for the issuance and lifecycle management of bonds. The team have built their own proprietary blockchain protocol, called stacks blockchain, as well as enterprise application for business users to issue, service, clear and settle securities on the blockchain platform. Integrating with Project Ubin has allowed the company to connect STACS with the Ubin payment network to achieve instant atomic Delivery vs Payment (DvP) where securities or bonds on the stacks blockchain can be delivered.

3. Healthcare Claims Lifecycle Management (Digital Assets)

Digital Assets provides an application that streamlines and automates the complex process of healthcare service delivery and payments. Digital Assets modeling language and open source blockchain platform uses smart contracting language and runtime to build out the logic of a healthcare claim adjudication situation or scenario. The application models the lifecycle of hospitalisation claims, which currently

involves patients, hospitals and integrated shield plans. The integration with the Ubin payment network allows for efficiencies through tighter integration with smart contracts for conditional payments.

4. DvP of Digital Currencies and Digital Private Equity Securities (1exchange)

1exchange is Singapore's first fully regulated private exchange providing accessibility to private equity. The company is using blockchain to enable tradeable digital securities and has already been deployed on Ethereum which is one of the largest and most mature network. Blockchain is used in two main ways:

- For every share listed on the exchange, there is a digital representation on the blockchain
- Every time there is a share transfer or settlement, the trade is also reflected on the public Ethereum network. Hence, there is an up-to-date ledger of every share movement.

Through integration with Project Ubin, it is the very first time digital securities can be paid by digital currency on a regulated exchange.

Photo/s



Digital Trade Finance and Opportunities in Asia

2.00pm

Speakers

- Andrew Raymond, Chief Executive Officer, Bolero International
- Carl Wegner, CEO Designate, Project Voltron
- Henry Roxas, Global Head of Trade Finance, R3
- Tawfique Hamid, Chief Revenue Officer, MarcoPolo

Moderator: Samuel John Mathew, Managing Director & Global Head, Documentary Trade, Standard Chartered Bank

Key discussion points

The session started with the context that world trade has been growing since the Asian Financial Crisis. However, this has slowed down in view of the US-China trade war. That said, the trade finance world is changing with the advent of technologies such as Big Data, Application Programming Interfaces (APIs), and Blockchain.

The main topic of discussion was which countries in Asia has the most potential for digital trade, and how FinTech providers can seize these opportunities.

Singapore and Malaysia was highlighted in the context of trade finance – Letter of Credit (LC). Between these two countries, the arrival of goods happens before the required documents. As such, with a short shipment time, there is an opportunity to automate clearance processes. As US-China trade war continues, there will be opportunity with China and Vietnam as more people will be using more LCs.

Singapore was championed due to its young labour force, competitive wages, inflows of Foreign Direct Investment (FDI), and a supportive regulatory environment. Current long term trends points to businesses shifting their manufacturing production to ASEAN. Within ASEAN there are many national trade projects and Blockchain technology may create efficiency and hence neutralise costs.

From a bank's perspective where there is a huge Small-Medium Enterprise (SME) working capital financing gap, the challenges are to onboarding the SMEs, and the cost of Know Your Customer (KYC) and Customer Due Diligence (CDD).

SMEs often face difficulties when requesting their banks to issue LCs. Furthermore, LCs are stacks of paper regardless of shipment size. Therefore, it would be of the bank's interest to automate the communication between buyer and seller and then issue the LCs. In addition, simplifying an LCs will provide cost savings and therefore more trade will open up.

From a similar top down strategic perspective, major buyers and suppliers should collaborate with banks in creating a commercial model that will subsidize the long tail of suppliers. For example, the Singapore government is supporting SMEs around the Networked Trade Platform (NTP), hence creating an inclusive environment. This trend is growing and other similar platforms are emerging around ASEAN.

From the blockchain perspective, interoperability is key and different business networks and national platforms will have to decide where to link. However, the weakest link will bring down the security of the entire ecosystem. The question on hand is what should be the common platform and what should be the standards.

In terms of digitisation and its challenges, it was acknowledged that building an ecosystem is a team sport and collaboration is essential from banks, buyers and sellers. In the present moment, everyone had realised that the bigger benefit is actually to inter-operate and set standards.

On the issue on how can there be more collaboration, how can standards be established, and the exchange of data, there was the opinion that Asia banks are worried about disintermediation. However, regulators have provide the platforms and initiatives to invite the banks to participate in trade initiatives.

Sustainability & Climate Change – Banking on a Green Future (by Ecosystem)

3.00pm

Speakers

- Bradley Busetto, Director, UNDP Global Centre for Technology, Innovation & Sustainable Development, UNDP
- Esther An, Chief Sustainability Officer, City Developments Ltd
- HE Jo Tyndall, New Zealand High Commissioner, New Zealand High Commission Singapore
- Isabel Wijsen, Founder, Bye Bye Plastic Bags
- Jason Wolf, Senior Vice President & General Manager, SAP Asia Pacific Japan Ariba & Fieldglass
- Maya Hari, Vice President & Managing Director, Twitter Asia Pacific
- Pamela Lee, Director (Policy & Planning), National Climate Change Secretariat, Strategy Group Prime Minister's Office, Prime Minister's Office
- Sau Sheong Chang, Chief Executive Officer, SP Digital, SP Group
- Shasha Ridzam, Group Head of Global Affairs & Sustainability, AirAsia Group

Moderator: Amit Gupta, Chief Executive Officer, Ecosystem

Key discussion points

Collective action is key. No single country or government can make a difference alone – it has to be a collective goal/action. While there has been some positive action, for example, the Paris Agreement and New Zealand's commitment to zero emissions by 2050, governments need to make more conscious efforts to seek alignment in normalising sustainability and climate change into government policy. In the business arena, corporations must stop thinking just about prosperity, and put the well-being of people and the planet first. Global companies have pledged carbon neutrality and some have delivered but there needs to be more focus on building sustainable products. Cities should engage the entire value chain in sustainability initiatives – right from regulators, investors, builders, contractors, to consumers. An example is Singapore setting targets like having 30% of its nutritional needs met by locally produced foods by 2030 to reduce carbon emissions due to food imports.

Digital technology can provide solutions for climate change by helping to reduce emissions and to develop smart cities, or create sustainable agriculture. An example is the Singapore Power Utilities app that helps influence consumer behaviour by gamifying the monitoring of electricity use and giving rewards for reduced electricity consumption.

The power of individual activists, especially millennials in driving the change: the real tipping point is Young Activism – passionate young individuals/millennials, like Greta Thunberg, are taking massive decisions towards sustainability – for example, preferring to pay more to buy sustainable products or choosing to work for sustainable firms. Individuals within organisations are creating movements borne out of their own passions which then become a huge movement, sometimes globally.

Social media platforms show three key trends in sentiment about climate change - consumers are more conscious and are making sustainable choices in food; consumers are making greener choices like moving away from plastic straws and reducing their individual carbon footprint; and corporations have started putting money where their waste is. Education is the key to engage people - simple lessons like not using plastic and turning off the lights must be taught from childhood as they will influence and shape future behavior.

Photo/s

