The Economist CORPORATE NETWORK

# Learning from disruption

## *Lessons from and for Asia*

**Summary paper**

Sponsored by

FOUNDATION FOR A SMOKE-FREE WORLD

The Economist CORPORATE NETWORK

**The world leader in global business intelligence**
The Economist Intelligence Unit (The EIU) is the research and analysis division of The Economist Group, the sister company to The Economist newspaper. Created in 1946, we have over 70 years' experience in helping businesses, financial firms and governments to understand how the world is changing and how that creates opportunities to be seized and risks to be managed.

Given that many of the issues facing the world have an international (if not global) dimension, The EIU is ideally positioned to be commentator, interpreter and forecaster on the phenomenon of globalisation as it gathers pace and impact.

**The Economist Corporate Network**
The Economist Corporate Network (ECN) is The Economist Group's advisory service for organisational leaders seeking to better understand the economic and business environments of global markets. Delivering independent, thought-provoking content, ECN provides clients with the knowledge, insight, and interaction that support better-informed strategies and decisions.

The Network is part of The Economist Intelligence Unit and is led by experts with in-depth understanding of the geographies and markets they oversee. The Network's membership-based operations cover Asia-Pacific, the Middle East, and Africa. Through a distinctive blend of interactive conferences, specially designed events, C-suite discussions, member briefings, and high-calibre research, The Economist Corporate Network delivers a range of macro (global, regional, national, and territorial) as well as industry-focused analysis on prevailing conditions and forecast trends. Find out more at: **corporatenetwork.com**

**EIU subscription services**
The world's leading organisations rely on our subscription services for data, analysis and forecasts to keep them informed about what is happening around the world. We specialise in:

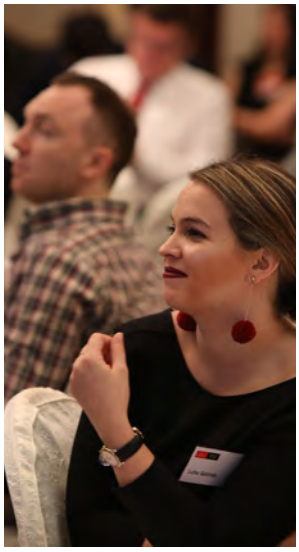
- **Country Analysis:** Access to regular, detailed country-specific economic and political forecasts, as well as assessments of the business and regulatory environments in different markets.
- **Risk Analysis:** Our risk services identify actual and potential threats around the world and help our clients understand the implications for their organisations.
- **Industry Analysis:** Five year forecasts, analysis of key themes and news analysis for six key industries in 60 major economies. These forecasts are based on the latest data and in-depth analysis of industry trends.

**EIU Consulting**
EIU Consulting is a bespoke service designed to provide solutions specific to our customers' needs. We specialise in these key sectors:

- **EIU Consumer:** We help consumer-facing companies to enter new markets as well as deliver greater success in current markets. We work globally, supporting senior management with strategic initiatives, M&A due diligence, demand forecasting and other issues of fundamental importance to their corporations. Find out more at eiu.com/consumer
- **Healthcare:** Together with our two specialised consultancies, Bazian and Clearstate, The EIU helps healthcare organisations build and maintain successful and sustainable businesses across the healthcare ecosystem. Find out more at: eiu.com/healthcare
- **Public Policy:** Trusted by the sector's most influential stakeholders, our global public policy practice provides evidence-based research for policy-makers and stakeholders seeking clear and measurable outcomes. Find out more at: eiu.com/publicpolicy








**"Learning from disruption" executive breakfast forum**

This event summary paper, *Learning from disruption: Lessons from and for Asia*, reviews the presentation and panel discussion contents of an executive breakfast forum held in Hong Kong by The Economist Corporate Network (ECN) and sponsored by the Foundation for a Smoke-Free World on October 11th 2018. The event contents entailed a presentation by Robert Koepp, Director of ECN Hong Kong, and discussion contributed by the following alphabetically listed panellists:

- Wayne Lotter, Director, Business Improvement and Transformation, Telstra
- Cat Rüst, Head, Innovation Technologies, UBS Global Wealth Management
- Doris Luey Sisi, Head of Social Innovation, New World Group
- Derek Yach, President, Foundation for a Smoke-Free World



# Contents

# Acknowledgements

*Learning from disruption: Lessons from and for Asia* is a publication of The Economist Corporate Network (ECN). It summarises and analyses the contents of an executive breakfast forum held on this subject by ECN in Hong Kong in October 2018.

ECN gratefully acknowledges the participation of the panellists and other organisational leaders who participated in that event. We also appreciate the support of the Foundation for a Smoke-Free World, sponsor of the forum and this event summary paper. Irrespective of participation or sponsorship, ECN conducted the forum and compiled this report independently according to our editorial standards.

Robert Koepp, director of ECN in Hong Kong, planned and researched the presentation contents of the forum. He also wrote this paper with assistance from John Marrett, analyst for Asia at The Economist Intelligence Unit (The EIU). Robert Willock, director of ECN in MENA, provided helpful editorial comments. Gaddi Tam, graphic artist at The EIU in Hong Kong, managed report graphics and typesetting.

January 2019



# Introduction

This is an event summary paper that reviews the presentation and panel discussion contents of an executive breakfast forum held by The Economist Corporate Network (ECN) in Hong Kong on the topic of the lessons from disruption in an Asian context.

Needless to say, economic disruption is a broad subject. Our event focused on technology-based disruption occurring across three representative sectors in Asia: energy, mobility and finance. From that basic framework, we conducted an on-stage panel discussion with organisational leaders who represented a wide range of industries. The discussion also included questions and comments from an audience of assembled senior executives. A key goal of this exercise was to explore how not only shareholders and corporate managers can benefit from the forces of disruption, but how these powers can be positively harnessed towards improved social outcomes and quality of life for the people of Asia.

The paper covers two sections. The first highlights data and observations produced by ECN for the event. The second mainly recaps and ties together key parts of varied opinions expressed during the panel exchange while interweaving some parts of ECN's analysis. Our executive forum did not seek to provide conclusive answers to what exactly should be learned from disruption and nor does this document. Instead the intent has been and remains to provide data and observations that can stimulating creative thinking on an important subject, one that affects all companies, industries and economies. This paper assumes no position on what companies and societies should do in the face of technology-based industry disruption other than to be aware that disruption is occurring and warrants response. Despite such neutrality, ECN hopes that readers will find the information contained in this document useful for exploring ways to be better prepared to confront and benefit from the disruptions it describes.

# Technology-based industry disruption

To innovate is vital not only for individual businesses, but for economies and societies as a whole. New technological innovations offer the potential to improve firm performance, rejuvenate mature industries, and contribute to the health of economies and people themselves. Disruption—from the Latin *disrumpere*, meaning to "break apart"—connotes a destructive force but it can also be harnessed positively. As with the economic concept of "creative destruction", disruptive technology can create new markets and industries in the process of eliminating outdated ones.

## Smart and mobile

The most obvious form of **modern technological disruption** has taken shape in the form of computing, a field where Asia currently enjoys a noticeable edge in its most popularly adopted form of computer technology. The world has witnessed several periods of disruption following the advent of modern computing in the 1970s, which has now culminated in the ever increasing computational power and functionality of **smartphones**. Smartphone handset hardware and application software ("apps") are areas where China and South Korea enjoy particular market strength.

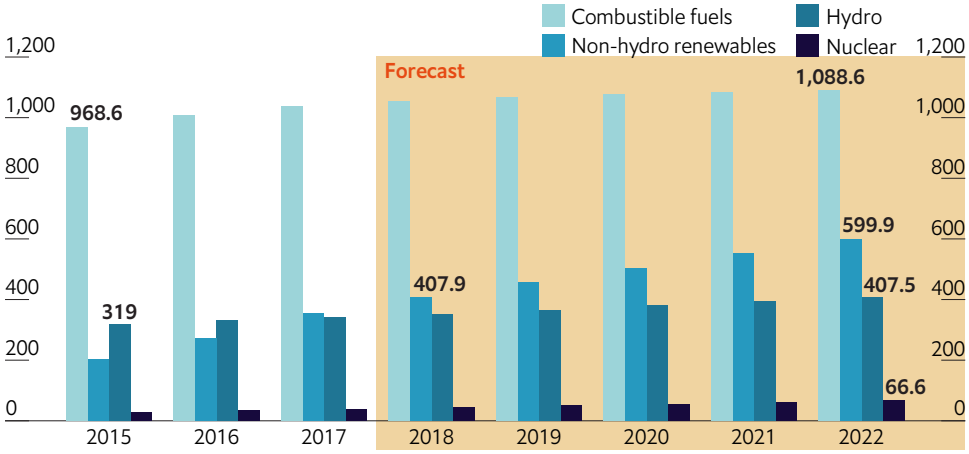
**Top 5 Smartphone makers by shipments, market share**
Q2 2018

| Rank | Vendor | 2Q18 Shipments (m) | 2Q18 Market share | Y-o-Year change | Headquarters |
|---|---|---|---|---|---|
| **1** | **Samsung** | **71.5** | **20.9%** | **-10.4%** | **South Korea** |
| **2** | **Huawei** | **54.2** | **15.8%** | **40.9%** | **China** |
| 3 | Apple | 41.3 | 12.1% | 0.7% | US |
| **4** | **Xiaomi** | **31.9** | **9.3%** | **48.8%** | **China** |
| **5** | **OPPO** | **29.4** | **8.6%** | **5.1%** | **China** |
| | Others | 113.7 | 33.2% | -18.5% | |
| | Total | 342.0 | 100.0% | -1.8% | |

Source: IDC.

## Learning from disruption

**China electricity capacity (GWe)**
2015-2022




Sources: The Economist Intelligence Unit; OECD/IEA.

In an even more fundamental industry, **energy**, clean and renewable power technology is disrupting the supply chains of industries long reliant on traditionally consumed hydrocarbons. Recognising the long-term economic, ecological and human health risks of fossil fuels, China has embraced the development of clean energy technology. The country is now a global leader in clean energy markets such as photovoltaic solar panels, where it dominates global manufacturing output and installed capacity. China and other developing Asian countries are gravitating towards low-carbon economic models via top-down reforms and policies backed by incentives and subsidies for more efficient industrial operations. This has the added socio-economic benefit of **reduced pollution**. Countries pursuing a clean energy strategy not only can mitigate the negative effects of polluting industries, but reap frontrunner profits from the advanced technologies being developed.

At the micro economic level, businesses in Asia and around the world are capitalising on consumer demand for a smaller environmental footprint. Brands focused on minimal aesthetics, reduced packaging and renewable-origin production materials—such as Japan's Muji—are benefiting from a growing market for environmentally friendly products.

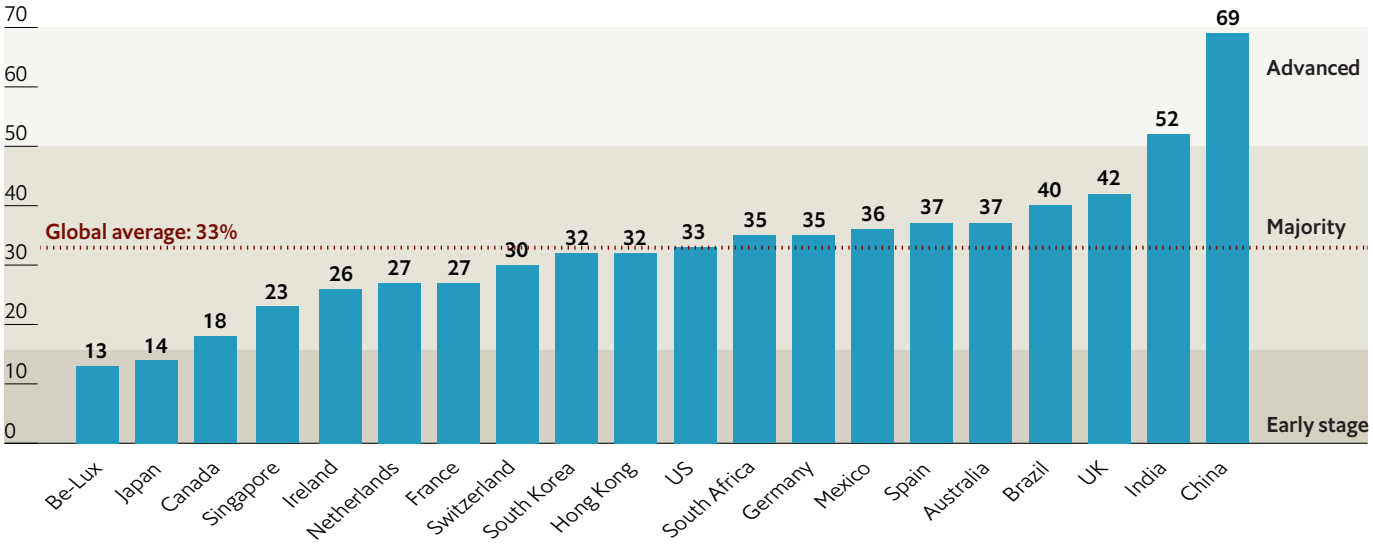
New forms of **mobility**, both in terms of transportation vehicles and mobile technologies more broadly, have been massively disrupting industries globally over the last two decades. The obvious example is the mobile phone, which has gone beyond providing the simple convenience of portable voice communications

to an ever expanding assortment of specialised personal, social and commercial functions. Here too Asia has been at the forefront of innovation, producing increasingly popular smartphones and offering a widening array of mobile apps and services that the technology supports. The rapidly advancing functionality of smartphones, an area where China in particular has taken a lead, is upending a diverse array of industries.

## Cross pollination

Tellingly, differing but interoperable new technologies in clean energy, transportation, computation, and smart phones are overlapping and cross pollinating in remarkable ways. This is profoundly altering the concept of mobility itself. Breakthroughs in clean energy and automation technology are spurring near simultaneous advances in new energy vehicles (NEVs) and computer-controlled autonomous "self-driving" cars. Non-polluting, autonomous vehicles are envisioned to ultimately resemble a giant multifunctional smartphone on wheels, whereby passengers are encased in a travelling information and entertainment platform.

**Progress of FinTech adoption globally and across 20 markets**
% rate of adoption, 2017




Source: EY.

Less ambitious but immediate results can already be seen in the shared bicycle services that have drastically changed commuting patterns in densely populated Chinese cities. Bike sharing has exploited a nexus between transportation

## Learning from disruption

and smart phone technology, creating new options for urban mobility while resurrecting a mode of transport until recently no longer deemed relevant for mass commuting.

Traditional means of **finance** are being revolutionised by novel forms of digital technology. Blockchain allows for decentralised accounting via a distributed ledger. This in turn has led to the emergence of cryptocurrencies, untethered from government-issued fiat currencies. A still emerging technology, cryptocurrency so far has a mixed record in Asia, enthusiastically adopted in Japan but banned in China (although China is home to the largest base of cryptocurrency miners). More widespread is the financial technology (fintech) appearing in day-to-day financial management and exchange. China and India have led the way in adoption of consumer fintech, ranging from peer-to-peer financing platforms to mobile personal banking. In both countries disruption has occurred not only by providing mobile access for existing services, but empowering participation in financial systems.

A common thread running between these two Asian nations' exceptional performance as fintech adopters is the role of **government and regulation**. In the case of India, incomplete personal identity records had created an enormous gap in its financial system by disenfranchising hundreds of millions of citizens who were unable access bank accounts and other basic financial services. In 2009 the government rolled out Aadhaar, a unique identity system based on a person's biometric data. Some 1.2bn Indians are now enrolled in Aadhaar and, supported by a newly developed electronic funds transfer infrastructure, are able to access and link bank accounts, pension savings, welfare disbursements and mobile phone cards.

Regulators in China have adopted nearly the opposite approach, where instead of introducing new top-down fintech initiatives they have largely stayed hands-off. The objective instead has been to allow entrepreneurial experimentation from the private sector. This has facilitated successful efforts by Chinese technology firms, most notably Alibaba and Tencent, to pioneer digital wallets and mobile financial transaction platforms. Chinese fintech companies have accrued so much and such highly correlated Big Data on users that they have been able to use that information to innovate new consumer and business credit products. An intentional but nevertheless ironic outcome of China's loose regulatory approach has been that private fintech providers have developed offerings that in important ways exceed those provided by commercial and retail banking, sectors dominated by government-controlled state-owned banks. Fintech in China is thus remarkable not only for its exceptionally high rate of adoption, but the way that regulators have ceded some aspects of control in order to foster disruptive innovation.

# Lessons from disruption

Panelists representing varied backgrounds in industry and public policy at the *Learning from disruption* executive breakfast forum shared a range of opinions about the most significant disruptions occurring today. A core objective of the event was to help organisational leaders consider ways to benefit from rather than be victimised by fundamental transformations across industries. A broader intention was to stimulate thinking beyond the rewards that shareholders and managers can gain to consider ways that all people in society can benefit.

## For and from industry

Not surprisingly, panel participants frequently noted the impact of **mobility** as a powerfully disruptive catalyst. Some pointed to how specific advances in miniaturisation of high-speed processors, Global Positioning System (GPS) devices and liquid-crystal display (LCD) touch screens have turned mobile phones into sophisticated computing devices that can accumulate, process and communicate a wide breadth of data. The same technology features in new automobile models, allowing end users (as well as manufacturers and insurers) to track the condition and usage of a vehicle over time. Applied towards benefitting the **healthcare** industry and healthcare consumers, mobile medical devices can continually monitor individuals' health indicators, facilitating data analysis to enhance prevention, diagnosis and treatment.

Further relating how innovative companies can harness the positive forces of disruption in the **energy** as well as healthcare sectors, one panellist made reference to the case of DSM. Founded in the early 20th century as the government-owned Dutch State Mines, through staying ahead of changing economic and market conditions, DSM had transformed itself into a chemicals company by the 1970s. Following privatisation in the 1990s, it again undertook a period of fundamental reorganisation to emerge today as a diversified firm with products serving the health, nutrition and materials sectors. DSM's repeated ability to reinvent itself offers a potential benchmark for major Asian economies like China, India and Indonesia. These countries confront the overlapping challenges of dependency on



coal and other fossil fuels as well as the need to reform the state-owned enterprises that tend to dominate energy and other primary economic sectors. According to the panellist, reinvention of these industries and their dominant players would provide a profitable and efficient way forward.

The **automotive** industry, another often characterised by state-ownership or heavy industry regulation in Asia, is also one whose products represent a large source of energy demand. Volvo, originally a Swedish car brand now owned by China's Geely, is the first major global car manufacturer to commit to produce only hybrid or full-electric powertrains for all its models from 2019 onwards. The pioneer of the modern motor vehicle and of assembly line production, Ford, has adopted a long-term strategy that de-emphasises the concept of a product offering altogether. Rather, Ford is positioning itself as a provider of mobility services. Along similar lines, transformation in transportation and delivery services has been underway in China and throughout Asia through a plethora of ride-hailing, carpooling, food delivery, and bicycle-sharing apps. Go-Jek, a Jakarta-based logistics and ride-hailing venture, claims title to being Indonesia's first "unicorn", a privately held startup company valued at over US$1bn. Singapore-based Grab, another tech unicorn, provides a smartphone app offering similar services across South-east Asia.

Within the auto and transportation sectors, the simultaneous, interlinked wax and wane of business models and technology can be seen in how the rise of Mobility-as-a-Service (MaaS) and NEVs coincides with the demise of personal car ownership and the internal combustion engine. In terms of the latter, where industry pushes and the market pulls towards a move away from pollution-emitting combustible fuel, parallels also can be derived for **combustible tobacco**, the world's leading source of premature, preventable death.

## Implications for health and economics

Within the tobacco industry, a traditionally available and less-harmful (though still unhealthy) alternative has been smokeless tobacco: chewing tobacco and snuff or snus. Because of tobacco's inherently toxic and carcinogenic qualities, a search for safer, technology-based alternatives has been ongoing. Results have ranged from development of the nicotine patch to the **electronic cigarette** (e-cigarette). Here too, contributions from Asia stand out. The current form of e-cigarettes is credited to the Beijing-based inventor, Hon Lik, who patented his technology in 2003. China has since come to dominate worldwide manufacture of these products. Yet adoption of e-cigarettes in China is low, some would argue because legal bans on

smoking tobacco are not effectively enforced.

So far the best known direct technology-based challenge to the tobacco industry, use of e-cigarettes—popularly known as vaping—is far from universally condoned and the products remain highly controversial. In fact, on October 10th 2018, the day before ECN held the *Learning from disruption* forum, the Hong Kong government announced a total ban on e-cigarettes. Although the move was unexpected, shortly before the government's pronouncement a group of local healthcare advocacy organisations had called for just such a blanket prohibition, citing an alarming rise in vaping by youth.

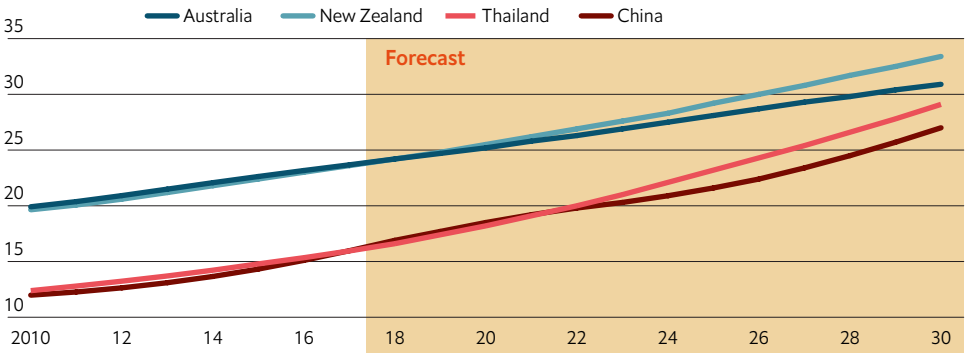
Stemming from the debate on e-cigarettes, one of the discussion points considered by the panel was the role of **wearable technology**. Commonly known as "wearables", the innovations surrounding wearable devices are essentially disrupting the still disruptive technology of smartphones. The potential of wearables—which currently appear in such forms as smartwatches, fitness trackers, health monitors, augmented reality glasses and the like—is to replace smartphones and other computing devices by eliminating the need for handsets or any hand-held device altogether. In regards to smoking and other addictive or unhealthy behaviour arising from chemical dependency, substance abuse, harmful eating habits and similar "bad habits", wearable devices can provide real-time monitoring and feedback to users to help modify behaviour. In more proactive applications, wearables can be used to guide positive activity, serving to psychologically nudge, train or educate users on techniques and the science of healthy lifestyle choices.

Whatever course businesses, regulators, and societies as a whole in Asia take for adopting the lessons of disruption, sheer demographic momentum means that the region is undergoing profound changes in the nature of its populations and workforces. Analysis by The Economist Intelligence Unit shows that Asian economies at a middle-income level of development such as China and Thailand are on track to approach the **old-age dependency ratios** (the proportion of those aged over 64 to those aged 15-64) of fully developed, mature economies within just over 10 years. This means that while lacking the levels of personal wealth and national economic development enjoyed by more prosperous countries, many Asian nations will need to support an older population with a smaller labour pool than upon which they previously could rely.

This fundamental demographic shift implies much for industries and governments. The most direct implication is that demand in Asia for healthier workers, with the capacity to labour more productively and for more years of their life, will rise in line with increasing old-age dependency ratios. At a minimum,

## Learning from disruption

**Old-age dependency ratios**
(%)




Note. Old age dependency ratio is the proportion of those people older than 64 to those aged 15-64.
Sources: The Economist Intelligence Unit; UN.

even if not gainfully employed, older members of a population will need to lead healthier, more active lives than currently is the case. Otherwise, on average they will wind up posing an increasing economic burden on their societies. Likewise, competitive advantages will accrue to companies, industries, and economies where younger members of society can optimise their health and wellbeing to be as economically productive as possible.

This impinging reality underscores how learning from and integrating disruptive forces increasingly is not so much a strategic option as it is a strategic imperative.

## Key takeaways

The event's assemblage of diverse voices on the discussion panel was intended to provoke new thinking and not necessarily reach unified conclusions. Nevertheless, key takeaways generated during the on-stage dialogue that threaded through the discussions or elicited especially strong comments include:

- Asia is advantageously positioned to build upon strengths it enjoys with disruptions occurring in **energy**, **mobility** and **finance**.
- Government **policy and regulation** have important roles to play, sometimes through top-down initiatives and sometimes through a hands-off approach that facilitates private-sector innovation.
- Demand for better social outcomes, such as reduction of **pollution** or improved **healthcare** delivery, is further pulling disruption across industries along with internal forces pushing industrial change.

- Rising **old-age dependency ratios** in Asia underscore the economic and social imperative to foster healthier, more active and productive populations.
- With **combustible tobacco** as the world's leading source of premature, preventable death, it is an industry especially ripe for disruption. The harmful effects of smoking will only exacerbate the economic risks brought on by growing old-age dependency ratios.
- Some support the adoption of **e-cigarettes** as a solution. Yet vaping presents a controversial remedy, even though Asia has led in the invention and manufacture of the technology. A more acceptable and sustainable solution might be through positive behavioural modification and education enabled by **wearable technology**.
- The power of ongoing advances in **mobility** frequently arose as a point of discussion. There was basic consensus that such technology, whether coming from the **automotive and transport** sector, **smartphones** or **wearables**, is creating massive disruption throughout multiple industries. Our panel discussion indicated that ongoing disruptions in mobility should be expected to continue.

## The Economist Corporate Network

The Economist Corporate Network is The Economist Group's advisory service for senior executives seeking to better understand the economic and business environments of key global markets.

Delivering independent, thought-provoking content, The Economist Corporate Network provides clients with the information, insight, and interaction that supports better-informed strategies and decisions. The Network is led by experts with in-depth knowledge of the geographies and markets they cover. Its membership-based operations expand across Asia, the Middle East, and Africa.

Through a distinctive blend of interactive conferences, specially designed events, C-suite discussions, member briefings, and high-calibre research, The Economist Corporate Network delivers a range of macro (global, regional, national, territorial) as well as industry-focused analysis on current and forecast trends.

The Economist CORPORATE NETWORK

# A MEETING OF GREAT MINDS

The Economist Corporate Network is a networking forum for business leaders, blending the collective intelligence of The Economist Group with the insight and experience of senior executives working in the world's most exciting regions.

Our events help interpret the economic and business trends driving the business world, and offer our members the opportunity to network and gain insight from peers, Economist Group experts and invited speakers.

The Economist Corporate Network's executive briefing and networking service is limited to top-level leadership.

## LOCATIONS

**SOUTH-EAST ASIA**
Singapore
Kuala Lumpur

**CHINA**
Shanghai
Beijing
Hong Kong

**NORTH ASIA**
Tokyo
Seoul

**MIDDLE EAST & AFRICA**
Johannesburg
Dubai

**Request to join by visiting www.CorporateNetwork.com/Join**

**The Economist Corporate Network Asia**
Beijing, Hong Kong, Kuala Lumpur, Seoul, Shanghai, Singapore, Tokyo

For enquiries, please contact us at **ecn_asia@economist.com**