



Ask the Experts:

**Supply Chain Digitalization in the Industrial,
Manufacturing & Transportation Industry**

**Baker
McKenzie.**

Renew & Reinvent
Own the Future



1

Introduction

Yaeko Hodaka

Renew & Reinvent
Own the Future

Agenda

- 1** Introduction | Yaeko Hodaka
- 2** IMT Sector Trends | Ben Simpfendorfer, Silk Road Associates
- 3** Ask the Experts Panel Discussion | Moderator: Anne Petterd
Speakers: Adrian Lawrence, Riza Buditomo, Ning Liu and Ben Simpfendorfer, Silk Road Associates
- 4** Closing Remarks | Yaeko Hodaka

Housekeeping



The session is being recorded



Please use the Q&A function at the bottom of your screen to submit your questions.



As most of us are presenting from our home environment, please excuse the occasional background noise or potential connectivity issues.



2

IMT Sector Trends

**Ben Simpfordorfer, CEO,
Silk Road Associates**

Renew & Reinvent
Own the Future

Key Messages



Global supply chain is shifting.



Digitization will shake up the supply chain.

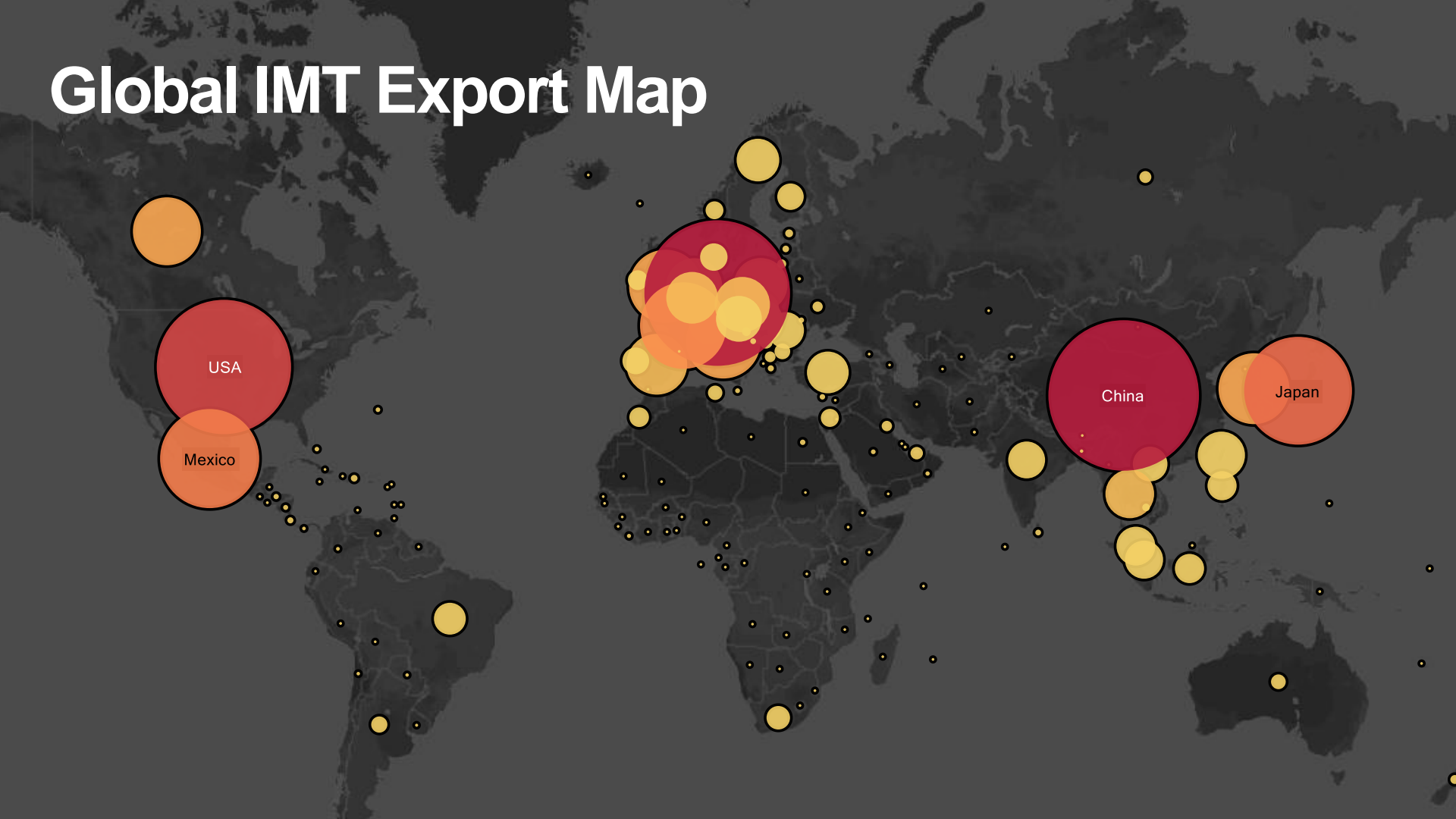


COVID has accelerated digital adoption rates.



But digitization is still slow in traditional sectors.

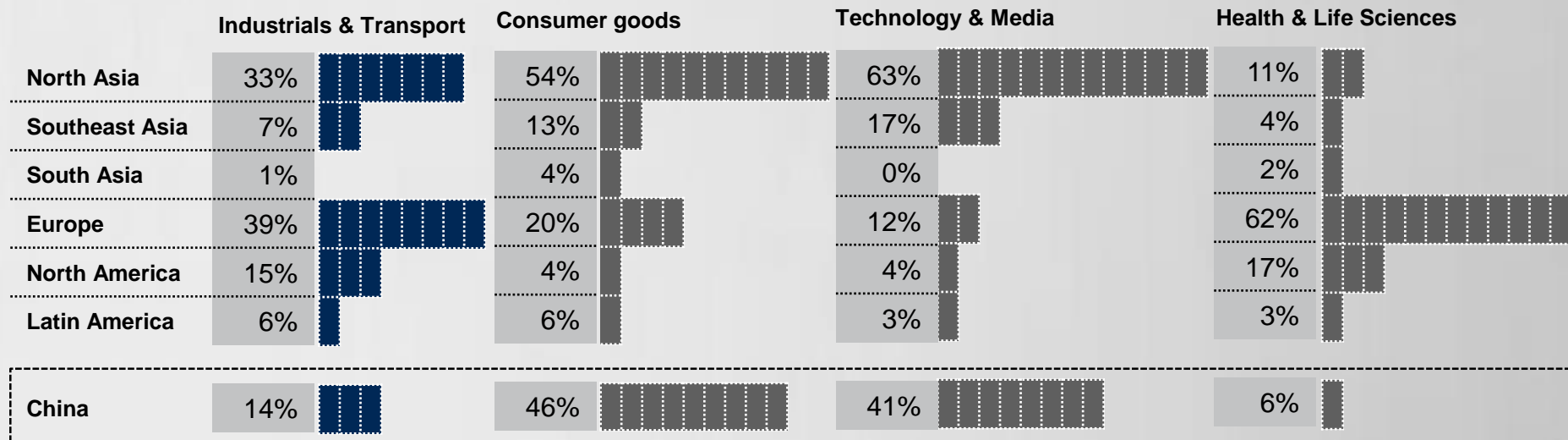
Global IMT Export Map



Global Shares

Industrial, Manufacturing & Transportation industries are more evenly spread across North Asia, Europe, and North America relative to other sectors.

Global export market shares by product



The Next 5 years

Four key trends will drive global IMT supply chains over the next five years



'China+1'

Re-locating production to other low-cost countries, especially ASEAN, Mexico and India.



'In China, For China'

Retaining or investing in production in China for sale of product to the Chinese market.



Reshoring

Slowly developing suppliers in the US or Europe, starting with specific products.



Regulation

Responding to regulatory pressure to produce 'critical products' in home markets.

Digital Supply Chain

The Digital Enterprise



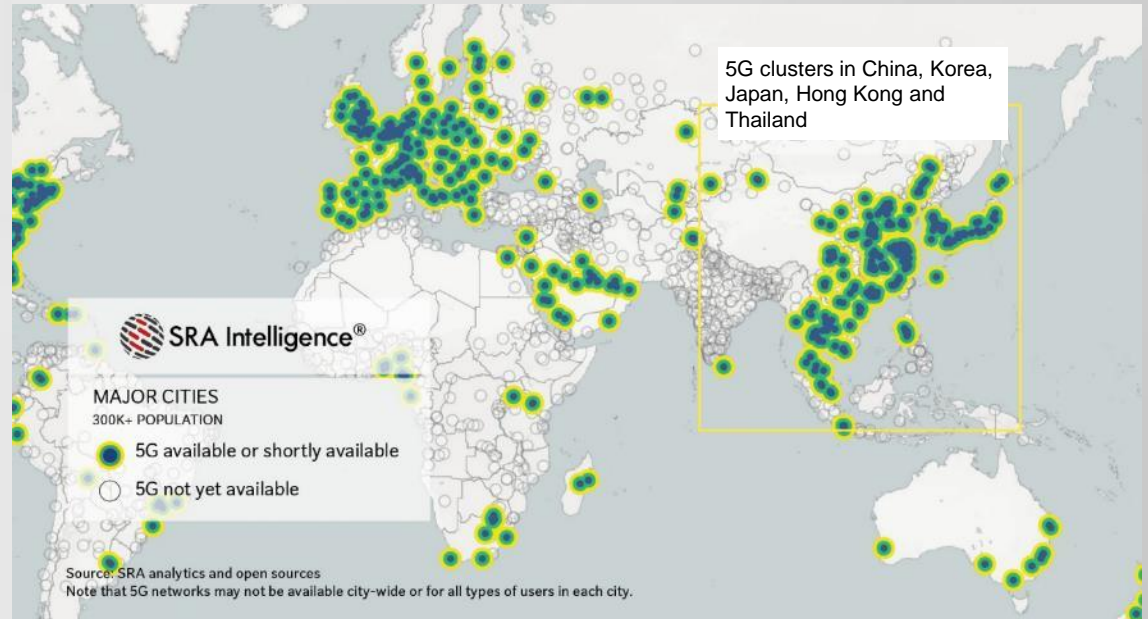
Digital workplace	Digital engineering and manufacturing	Digital logistics	Digital products & services	Digital customer & channel management
<ul style="list-style-type: none"> E-finance Digital HR Internal knowledge sharing 	<ul style="list-style-type: none"> Vertical integration Big data process optimization Predictive maintenance Condition monitoring Augmented reality Integrated digital engineering Digital factory 	<ul style="list-style-type: none"> Integrated planning and execution Logistics visibility Smart warehousing Spare parts management Autonomous and B2C logistics Supply chain analytics 	<ul style="list-style-type: none"> Digitally enhanced products Intelligent and connected products and solutions Automated data-based services Digital business models 	<ul style="list-style-type: none"> B2BC customer interaction Digital customer experience Omnichannel sales integration Omnichannel marketing Point-of-sale-driven replenishment Customer lifetime value management

Digital Infrastructure

5G rollouts have the 'potential' to support the digital supply chain. But...

5G has had a mixed response

- 5G should create significant opportunities in the industrial sector.
- North Asia & Thailand are well advanced in 5G rollout strategies.
- But firms are generally still slow to adapt to 5G opportunities.



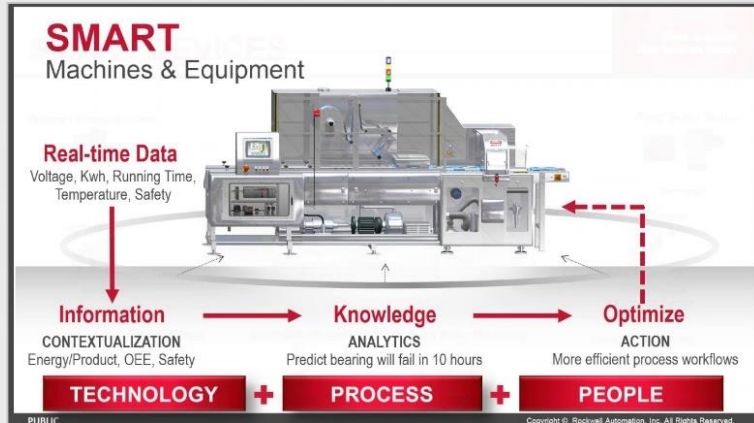


Digital Factories & Analytics

Renew & Reinvent
Own the Future

Smart Factories

Smart machines provide real-time production data to the cloud. Technology companies are potential disruptors.



Machines connect to the cloud

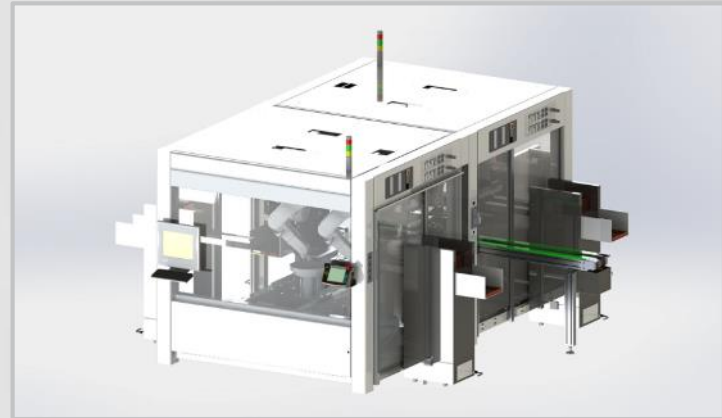
- Smart manufacturing connects machines and data feeds to the cloud.
- Data analytics improves efficiency and maintenance of production.
- Engineers access data via smart devices and have rapid response times
- Smart manufacturing adoption rates are faster among leading companies.

Micro Factories

Firms are increasingly exploring micro-factory opportunities rather than reshoring full production lines to Europe and the US.

Micro factories support re-shoring

- Smaller footprint and 'exportable'.
- Highly automated process requiring less energy, less material, and a small labor force.
- Lower freight costs if set-up near to end consumer.
- Competitive at manufacturing low volume products with short product life-cycles.
- Not a replacement for commoditized large-volume low-cost production.



ESG Data Analytics

ESG data analytics is a fast growth sector that will accelerate the adoption of smart equipment and, potentially, smart manufacturing.

Environmental

Sample Datasets

- Emissions
- Waste
- Energy use
- Water use

Connected Machines

IoT equipment connected to the cloud and automated reporting

Social

Sample Datasets

- Diversity & inclusion
- Average training hours
- Lost days to injuries
- Human rights policies

Governance

Sample Datasets

- CSR strategy
- ESG reporting
- Compensation
- Shareholder rights

Manual Input



Digital Logistics

Renew & Reinvent
Own the Future

Logistics

4PL and 5PL industrial will drive digital adoption rates across the supply chain, especially for direct-to-consumer business



4PL

Manages entire supply chain for the client
(Amazon, Deloitte)



5PL

RFID, blockchain, digital



Logistics Disruptors

Optical recognition systems are improving supply chain efficiency, reducing costs and managing liabilities in the air freight sector.

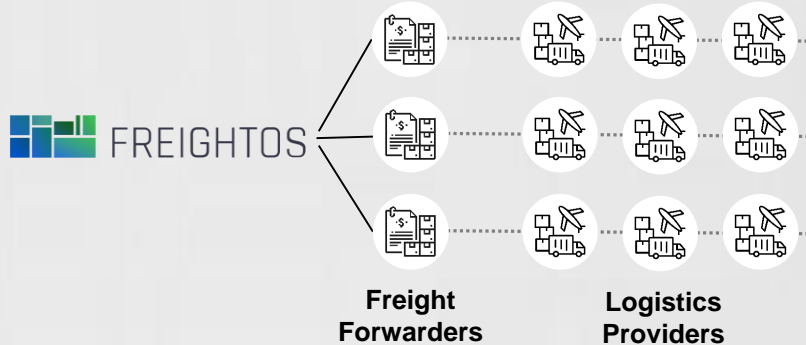


Air Cargo Optical Recognition Systems

- Virtual Control's CODEX creates **digital twins** of air cargo assets and shares via the cloud.
- CODEX uses imaging technologies to measure the accurate size of the shipment and identify any potential damage.
- CODEX digital twins provides cost savings by accurately measuring freight volume and provide verifiable proof of damage.

Logistics Disruptors

Asset-light disruptors are changing the logistics industry



Freightos

- Think of 'Expedia', but for freight forwarding
- Freightos provides rapid quotes from multiple freight forwarders
- Embedded in B2B e-commerce platforms, such as Alibaba



Traditional Freight Forwarder

- Gets your goods from A to B
- Acts as a 'broker' for multiple logistics firms
- Is typically secretive about rates



Digital Products & Services

Renew & Reinvent
Own the Future

Digital Products & Services

TG3D digital design software is an example of speeds up product design process. Designers and factories do not need to share physical samples



3D Fabric Swatches & Fashion Design

- Apparel & fashion industry is traditional very tactile, preferring physical samples.
- But COVID has changed the way designers work with teams and suppliers.
- 3D technologies permit the rapid creation of new swatches and share digitally.
- 3D fashion designs are visualised on 75+ real body shapes and shared with factories

Solutions. Not products

Focusing on after-market solutions can deliver higher returns rather than selling products. Technology is accelerating the change.

BUILT
ROBOTICS



Autonomous Construction Vehicles

- Built Robotics converts construction equipment to permit autonomous operation
- Technology uses lidar, GPS and Wi-Fi to guide machinery, similar to self-driving cars.
- Built Robotics **charges a usage fee when the machines are in autonomous mode.**
- Business model offers a glimpse of how digitization may disrupt the IMT sector.



3

Ask the Experts Panel Discussion

Renew & Reinvent
Own the Future

Ask the Experts Panel Discussion

Moderator

Panelists



Anne Petterd
Partner
Baker McKenzie



Ben Simpendorfer
CEO
Silk Road Associates



Adrian Lawrence
Partner
Baker McKenzie



Ning Liu
Senior Economist
Baker McKenzie FenXun



Riza Buditomo
Partner
HHP Law

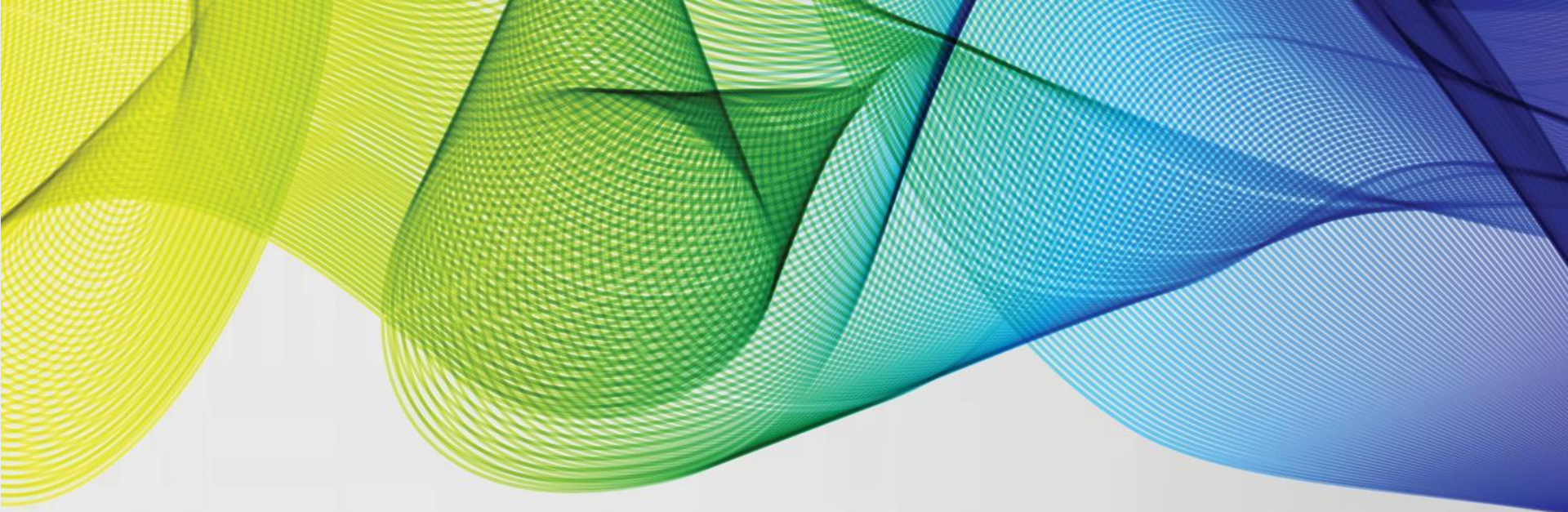


4

Closing Remarks

Yaeko Hodaka

Renew & Reinvent
Own the Future



**Baker
McKenzie.**

Renew & Reinvent
Own the Future