



Ports Australia

Future Trends in Cargo Shipping

27 June 2019



Peter Creeden
MPC International Pty Ltd

MPC International Pty Ltd

- Started in January 2019
- Boutique advisory firm focused on bridging the gap between today's supply chain players and the future digital platforms
- Supporting transport and supply chain companies in making decisions about data and technical needs, general management, and corporate governance advice.
- Supporting tech companies with UX design, software product management, corporate governance, financial planning and expert supply chain advice
- Introducing companies to the latest in IoT technologies

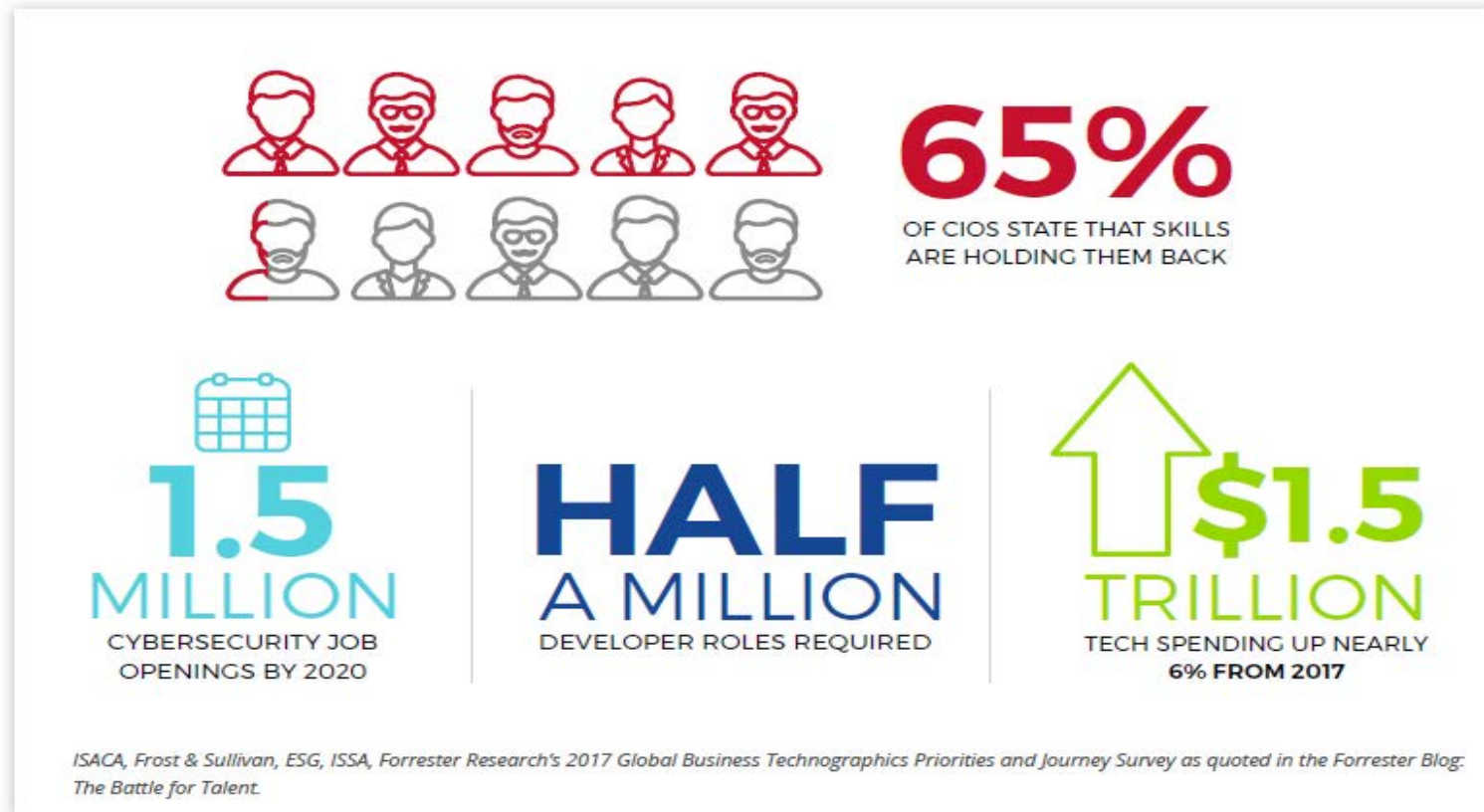


Agenda

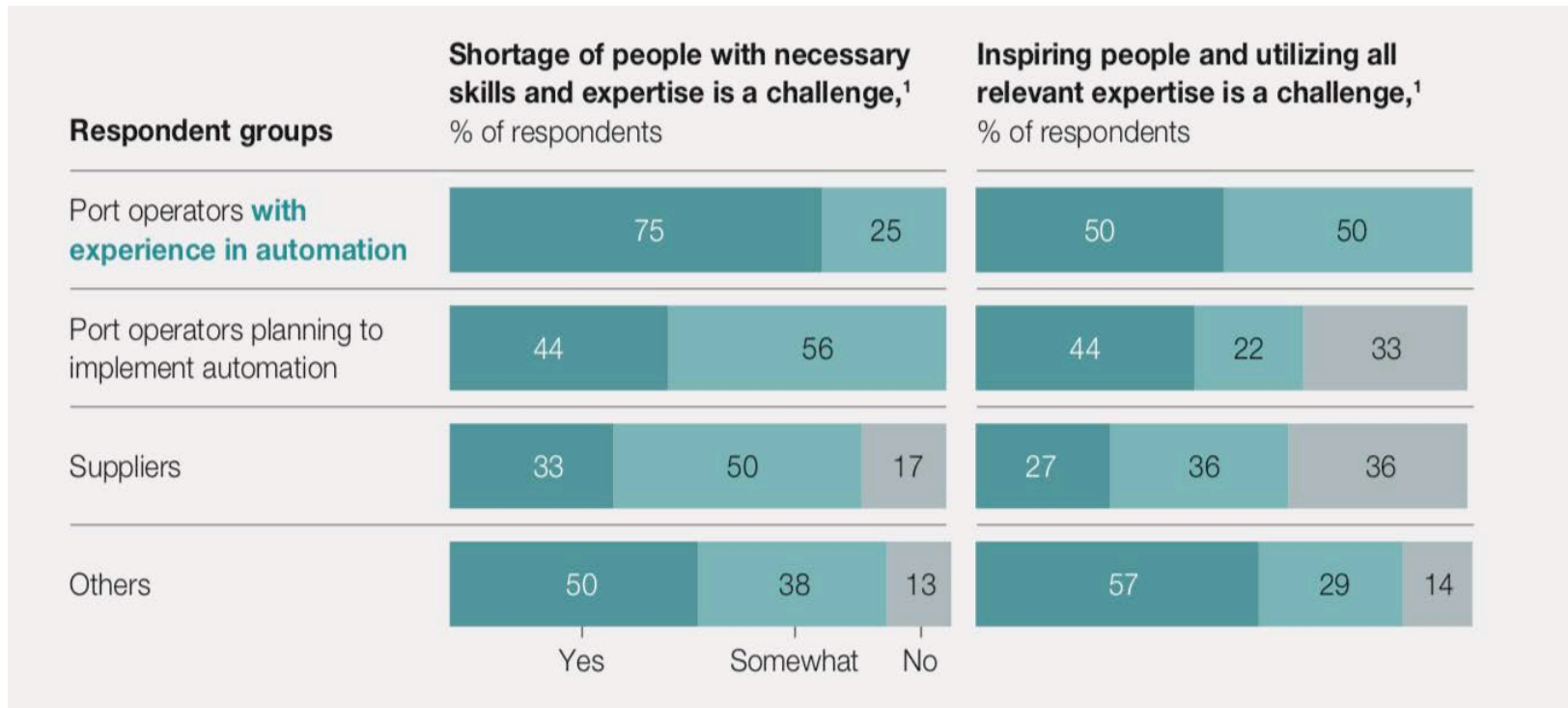
- **Employment & Workforce Trends**
- Global Shipping Trends
- The slow progress towards digitalization



AI and machine learning will create jobs, not displace jobs



A lack of talent for specialized technical positions is a common issue



¹ Figures may not sum to 100%, because of rounding.
 Source: Expert interviews; McKinsey Container Terminal Automation Survey, 2017
 McKinsey & Company, The future of automated ports.



Skill shortages are now becoming a critical issue



Foto: Sergey Nivens /Fotolia



Centre for Workforce Futures



- The Centre for Workforce Futures brings an innovative multidisciplinary and problem-focused approach to research focused on work, workforce and workplace, with application to public policy, industry and the community
- The Centre's research focuses on two overarching questions:
 - What are the current and emerging challenges and opportunities for Today's workforce?
 - What public policies and management strategies can foster decent work, along with sustainable and inclusive workplaces in modern societies and economies?



Centre for Workforce Futures



• Key issues

Faced with emerging forms of work, technology, disruptive business models and social, economic, environmental and demographic dynamics on a global scale, the Centre for Workforce Futures is dedicated to undertaking problem and solution focused research that investigates the following critical issues:

- The impact of international and national economic, social, demographic, technical and environmental factors on the organisation of work and employment, workplace cultures, management, leadership and the health and wellbeing of working people and working life in Australia and globally
- Changing workforce knowledge and skill needs in response to digital disruption (due to emerging technologies such as AI and machine learning, blockchain, cybersecurity, automation, Internet of Things) and their implications for the location of work, education, training and inter-generational resilience
- Diversity at work and beyond, including government, business and not-for-profit employer approaches to and management of immigration, changing patterns of employment, labour force participation and inclusion of women, men, Indigenous Australians, varied cultural and identity groups, migrants and refugees of all ages and abilities
- Changing approaches to innovation, regulation and supply chain management in industry and transport as a key enabler for sustainable economic growth and safe employment in Australia and overseas.



Contact the Australian Maritime College @

Dr. Prashant Bhaskar - Director

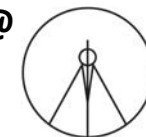
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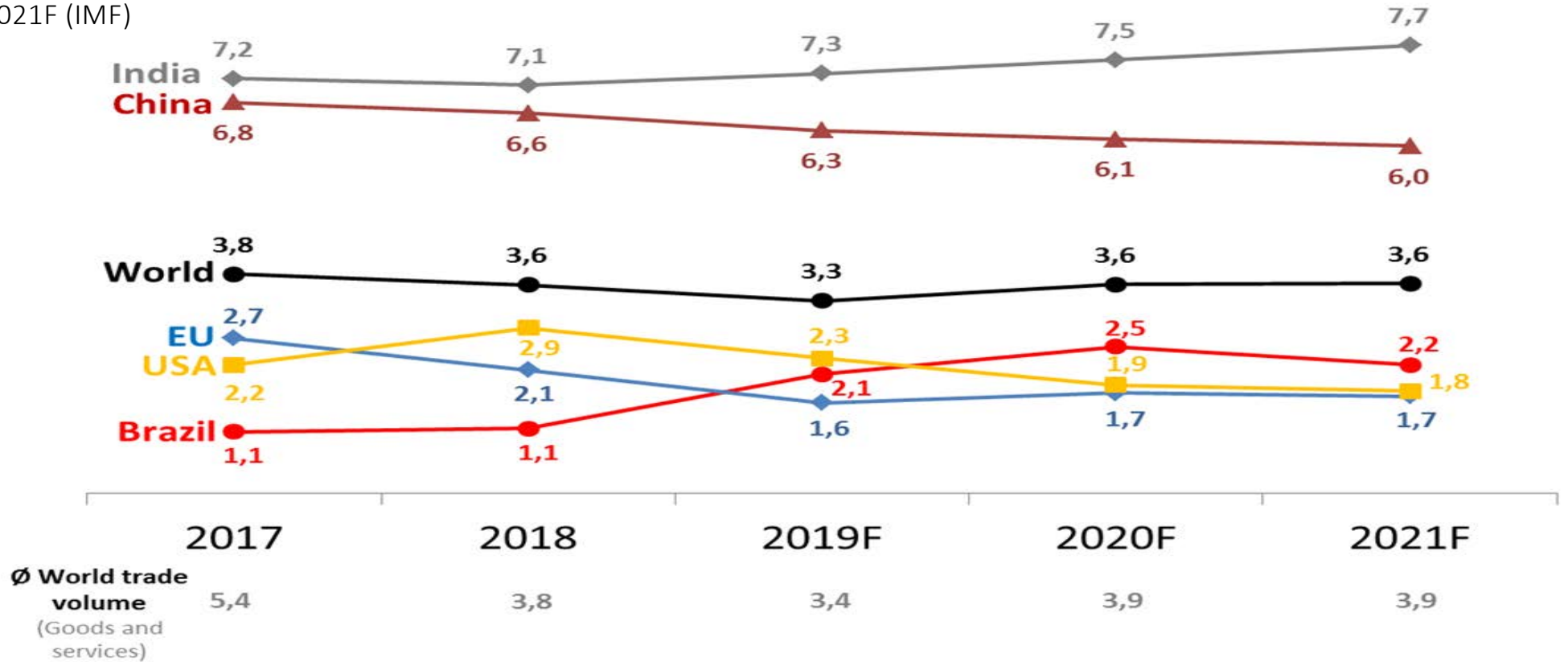
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Development of GDP growth projections

2016 – 2021F (IMF)



Source: International Monetary Fund (IMF), World Economic Outlook Apr 2019

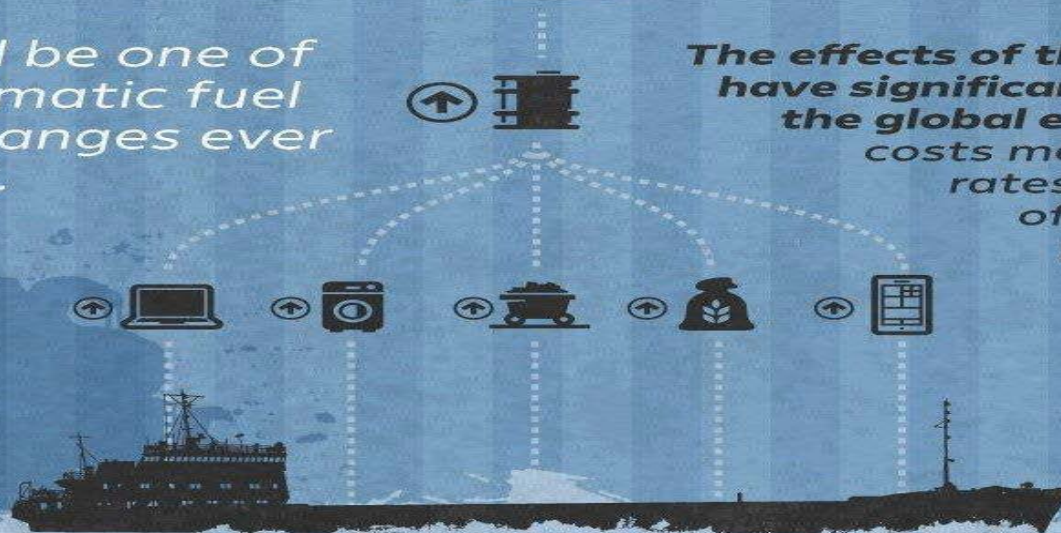
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Ripple Effects in the Global Economy



IMO 2020 will be one of the most dramatic fuel regulation changes ever implemented.

The effects of this change could have significant implications on the global economy. Rising fuel costs means rising freight rates, with the majority of costs being passed on to consumers.

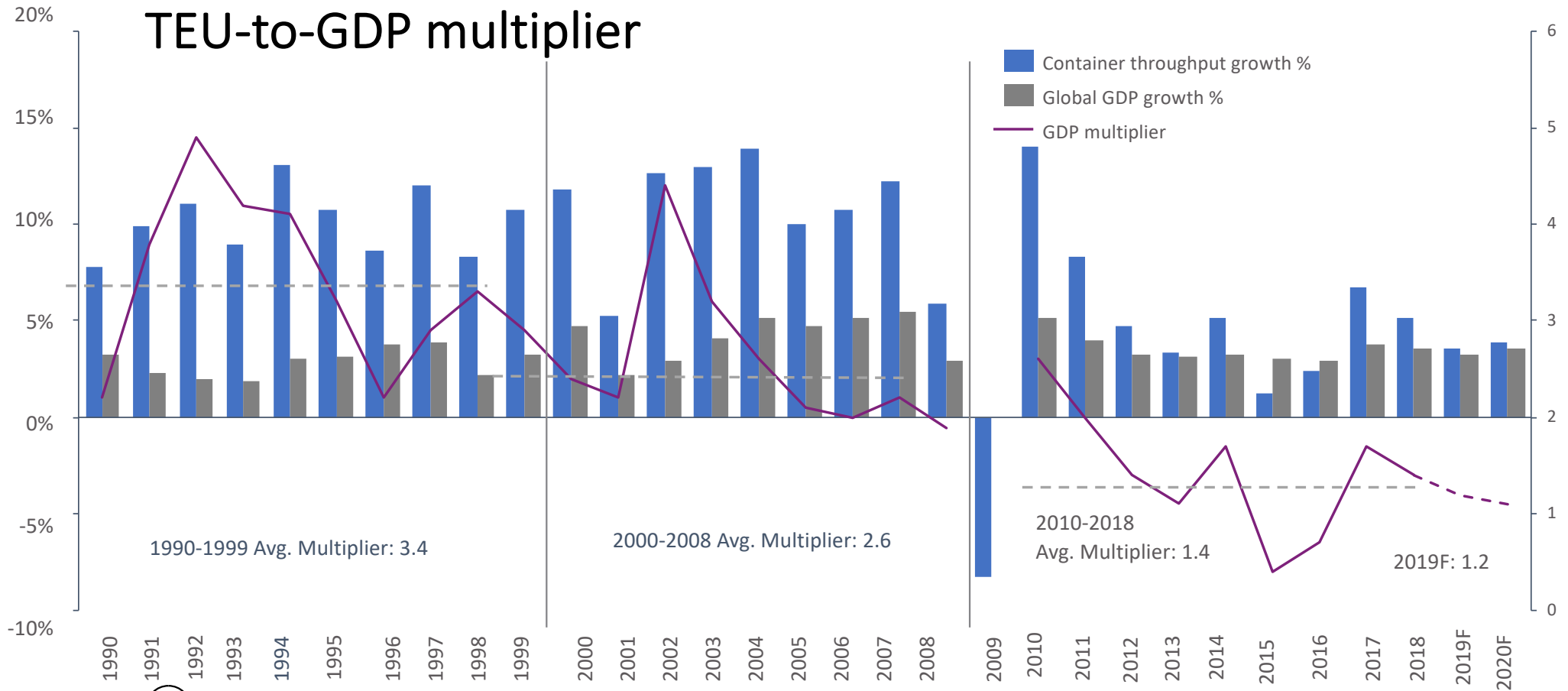


“ In a full compliance scenario, we estimate the total impact to consumer wallets in 2020 could be around US **\$240 billion.** ”

**Goldman
Sachs**

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Global container throughput vs GDP growth



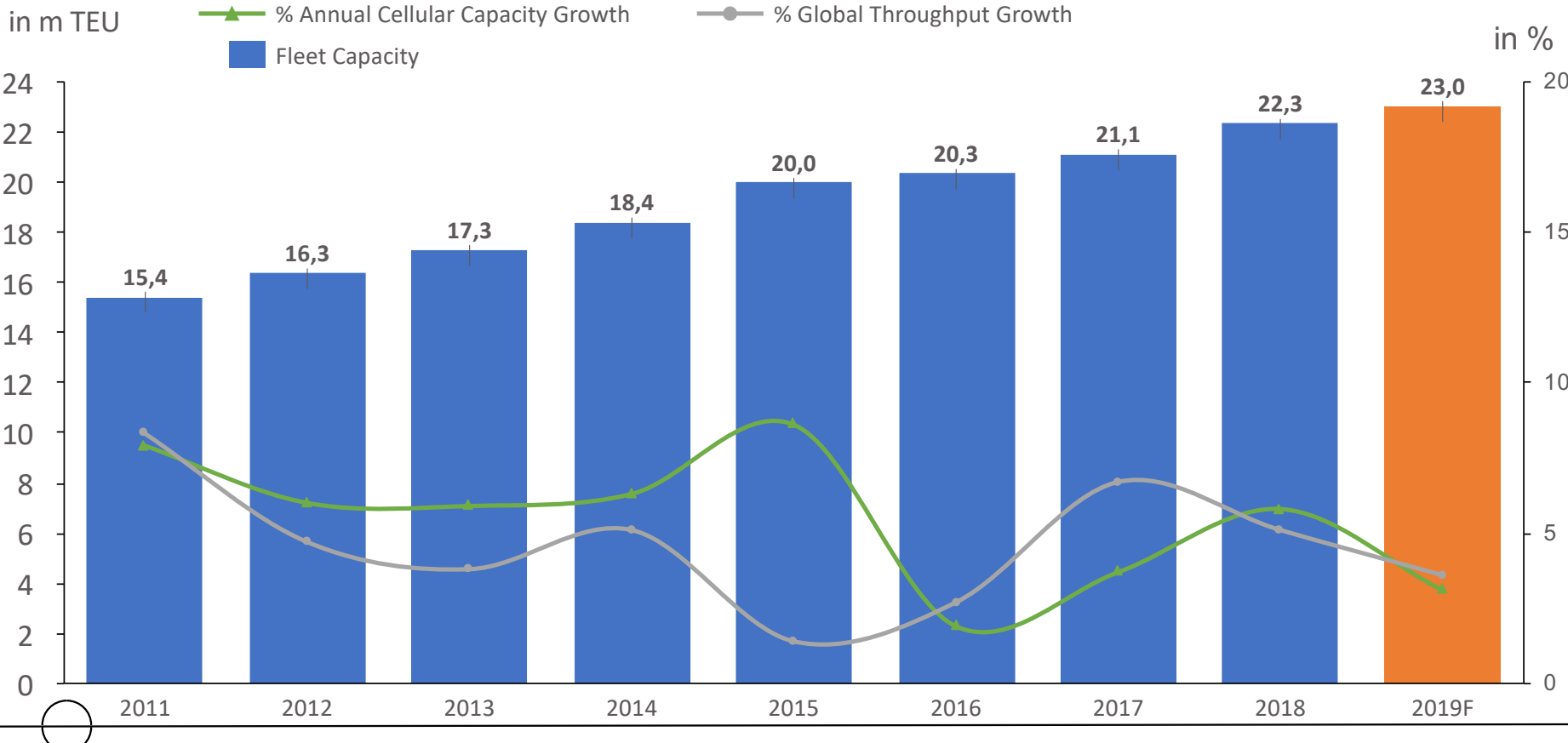
Source: Alphaliner Monthly Monitor April 2019

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Cellular Fleet Growth vs Global Throughput

2011-2019F (in %)

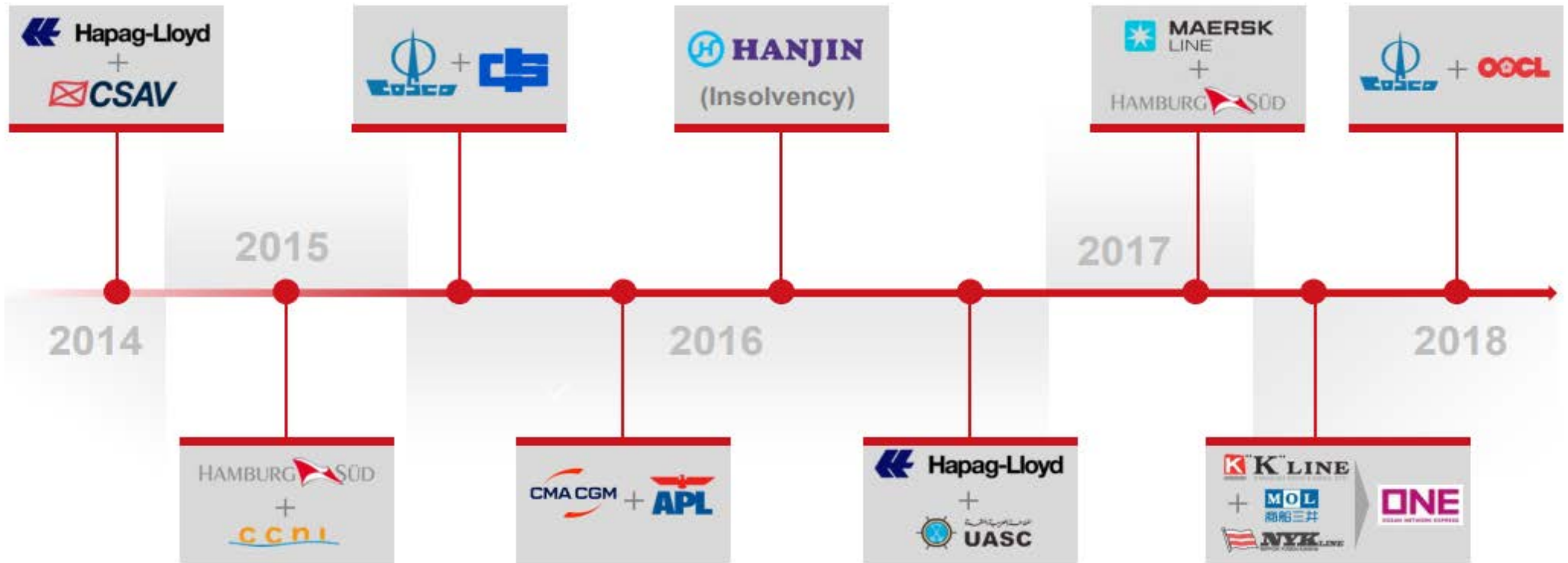


Source: Alphaliner Monthly Monitor April 2019

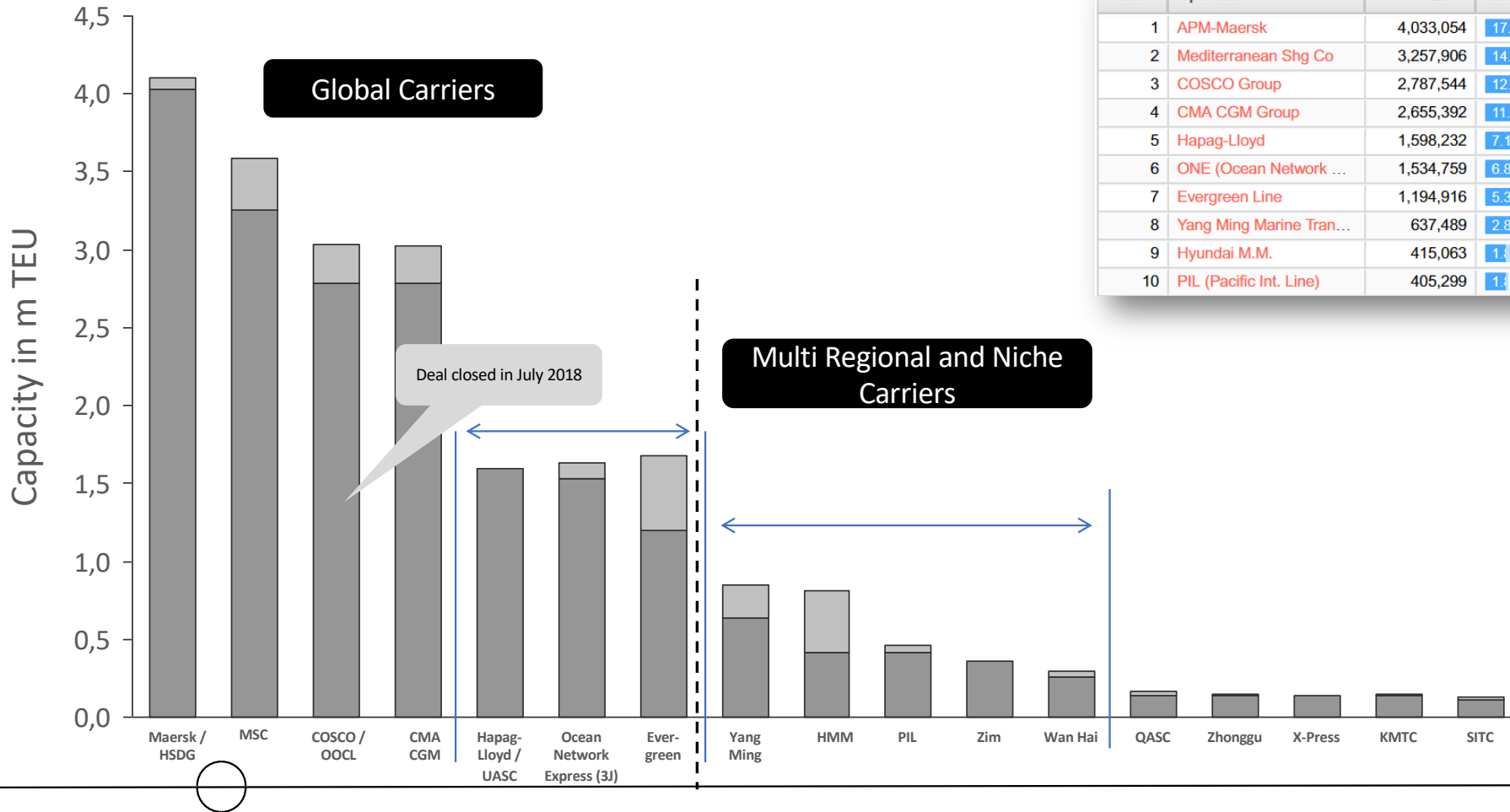
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Industry consolidation acceleration - 2014 to 2018



Shipping line consolidation

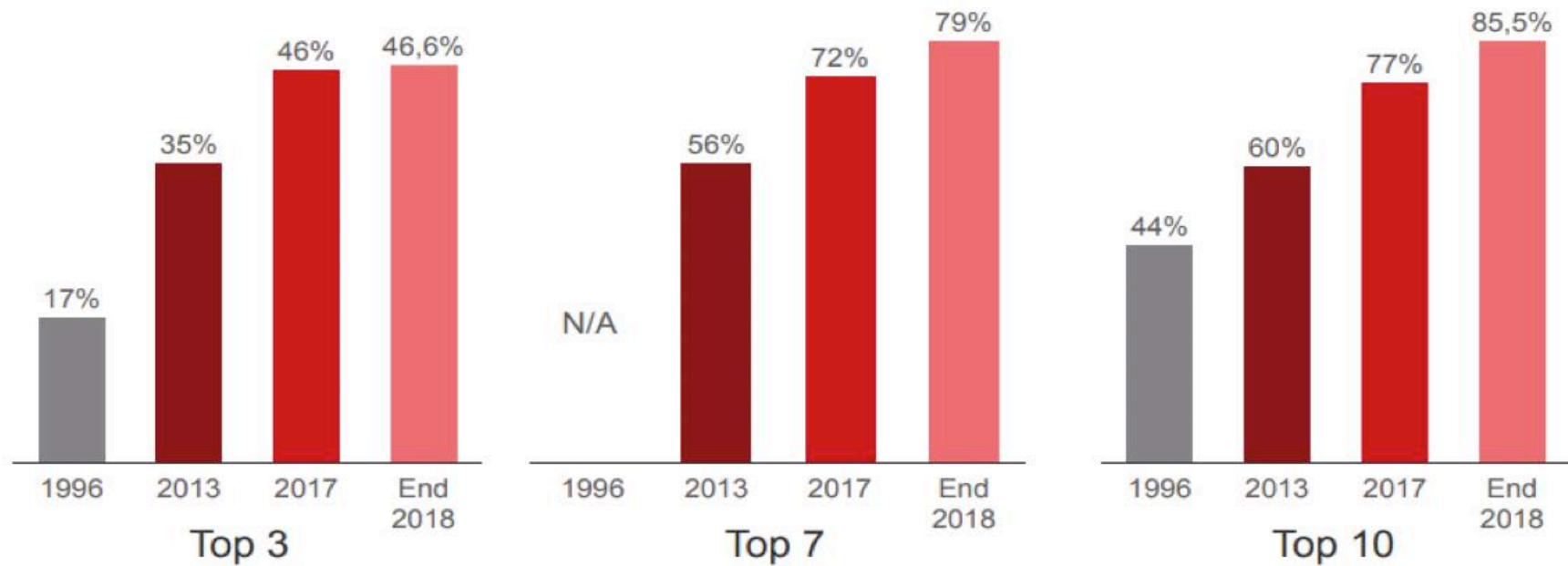


Rank	Operator	TEU	Share (%)
1	APM-Maersk	4,033,054	17.8
2	Mediterranean Shg Co	3,257,906	14.4
3	COSCO Group	2,787,544	12.3
4	CMA CGM Group	2,655,392	11.7
5	Hapag-Lloyd	1,598,232	7.1
6	ONE (Ocean Network ...)	1,534,759	6.8
7	Evergreen Line	1,194,916	5.3
8	Yang Ming Marine Tran...	637,489	2.8
9	Hyundai M.M.	415,063	1.8
10	PIL (Pacific Int. Line)	405,299	1.8

Source: Alphaliner Top 30, Alphaliner Monthly Monitor April 2019

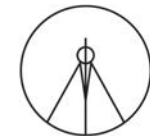
Growing market share

Today, the top 3 carriers hold half of the global market capacity



Source: AXS- Alphaliner, by slot capacity

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Consolidation in the supply chain

- Shipping lines depend too much on highly volatile ocean freight rates and fuel prices
- To reach a higher level of revenue diversity, and thus stability, shipping lines are expanding their business deeper into the supply chain.
- It is not only shipping lines that want to control the supply chain so do the terminal operators and transport companies

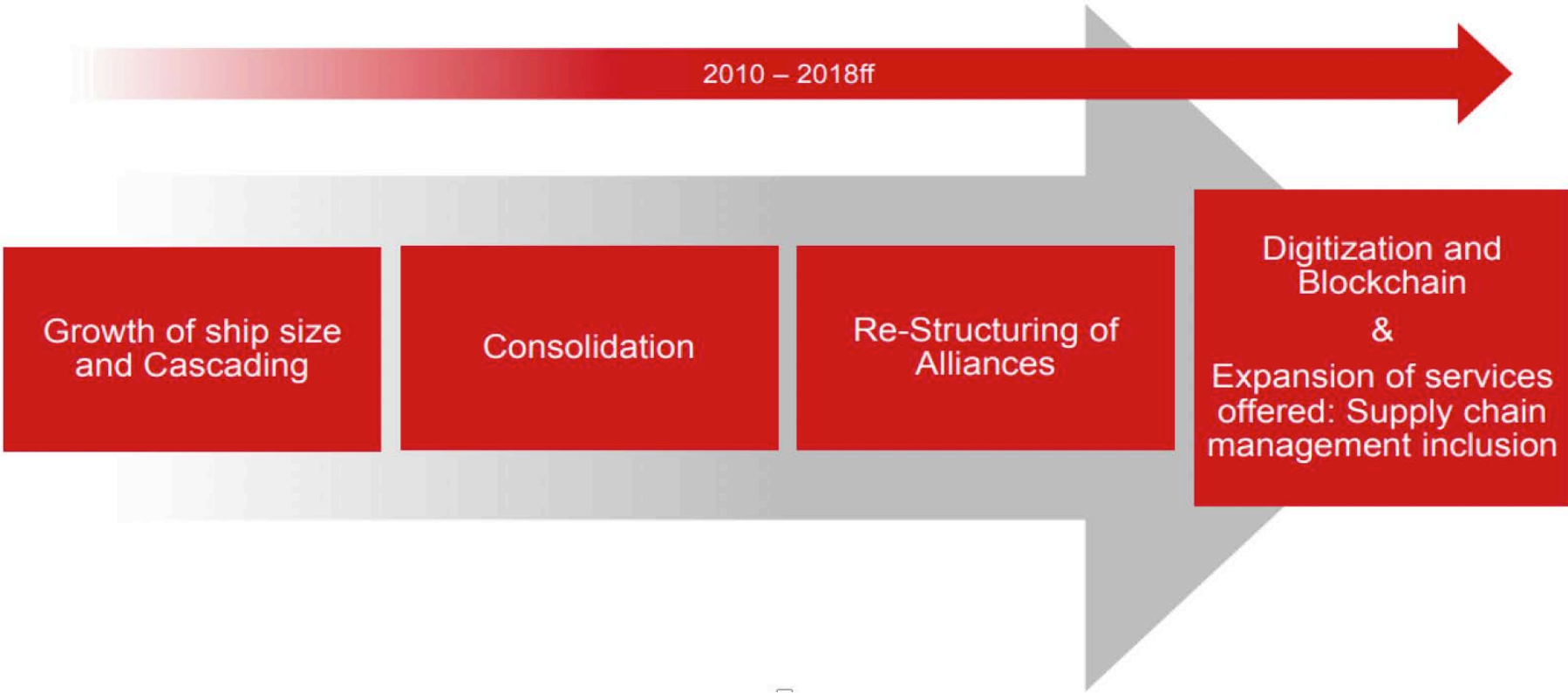


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Catalyst of digitization in the supply chain



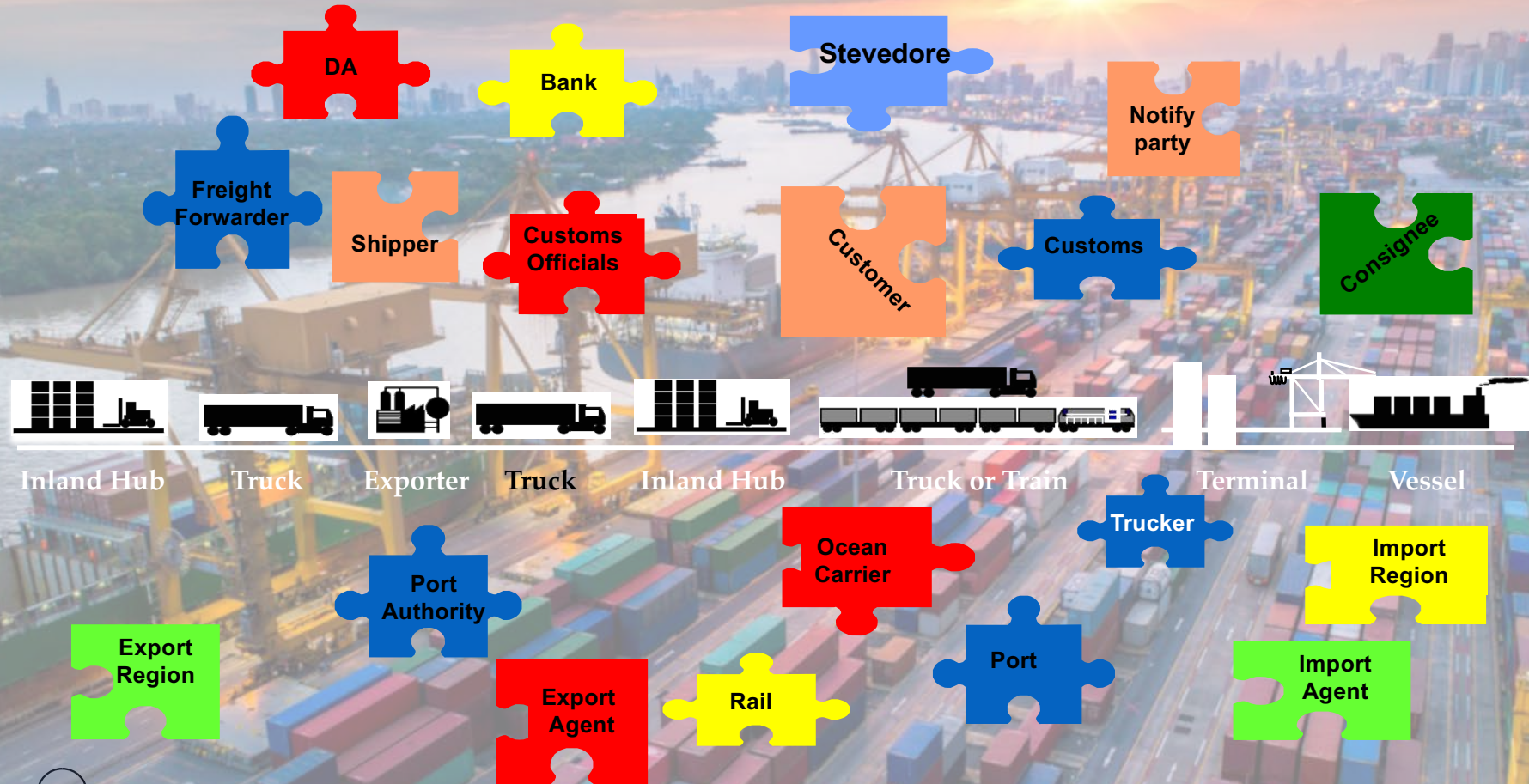
The digital landscape is changing and the pace will quicken

- VCs have found another trillion dollar market to up end: **SHIPPING & LOGISTICS**
- 2016-2017 445 start up companies created
\$4.5 Billion USD invested
- 2018 \$4 Billion USD invested



Source: [QUARTZ Article 20th April 2017](#)

New digital platforms will require coordination and collaboration



Thank you

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