



# Logistic sector overview and development in the ASEAN region

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- ## Key Insights from Past Experiences

# General Overview of the Logistics Sector in ASEAN

# Currently, there are four (4) major trade routes within ASEAN itself

1

## ASEAN India Route

India represents one of the key nations that undertake trades with ASEAN and China. Trades span across other routes whilst passing through ASEAN countries until it reaches China via the ASEAN China Route.

3

## South North Route

The South North trade route is the most important trade route with goods flowing through Thailand, Malaysia and Singapore via land, air and sea whilst transiting in ports along the straits of Malacca.

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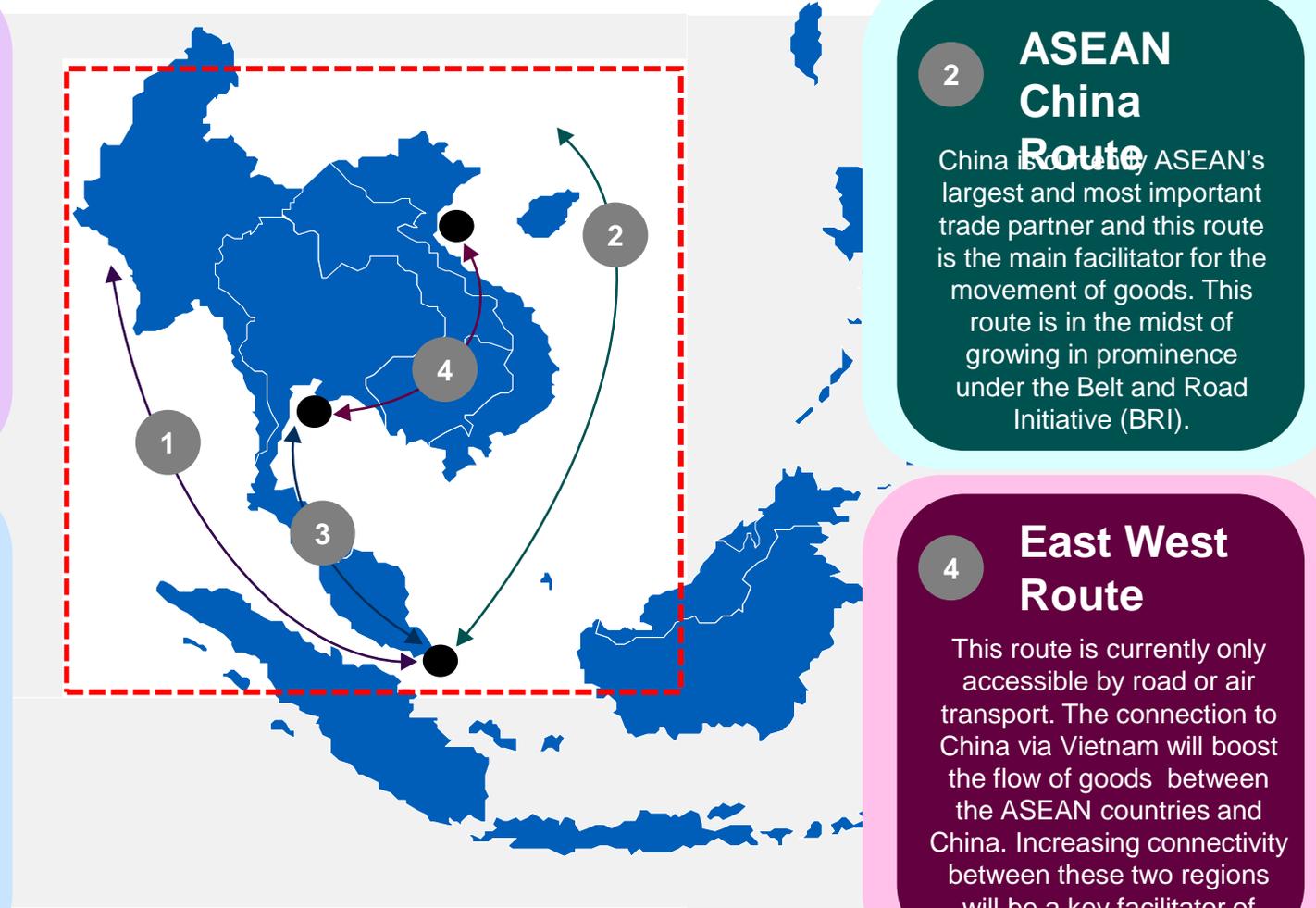
## ASEAN China Route

China is by far ASEAN's largest and most important trade partner and this route is the main facilitator for the movement of goods. This route is in the midst of growing in prominence under the Belt and Road Initiative (BRI).

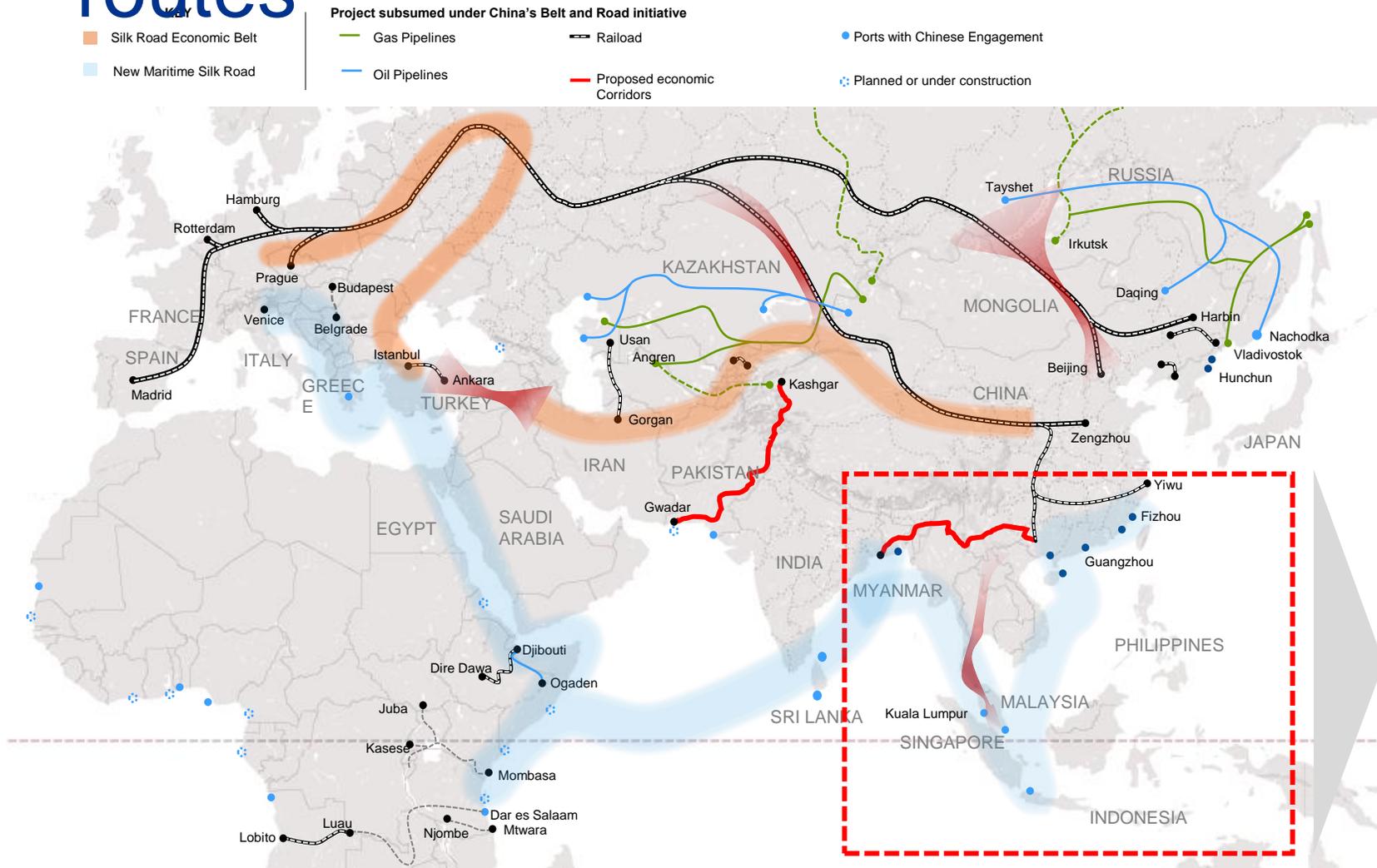
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## East West Route

This route is currently only accessible by road or air transport. The connection to China via Vietnam will boost the flow of goods between the ASEAN countries and China. Increasing connectivity between these two regions will be a key facilitator of sustained growth in the future.

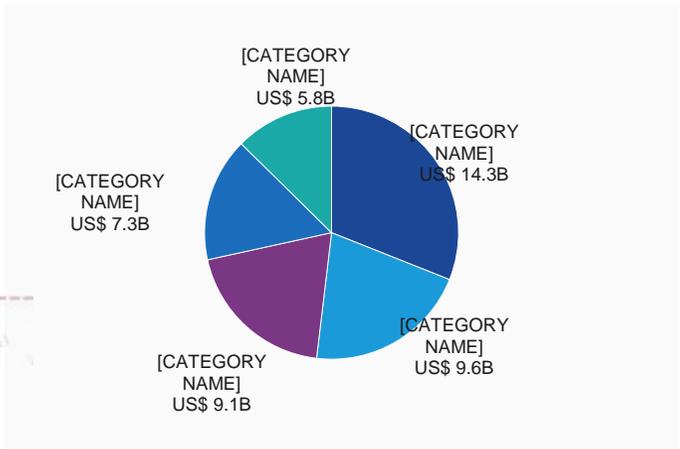


# There are several major projects within ASEAN aiming to strengthen existing trade routes



“Under Belt and Road Initiative (BRI), **China sees ASEAN countries to be the land bridge between the regions with the highest population density**, whilst members of ASEAN regards BRI as an opportunity to increase connectivity. **This, coupled with trade, people and capital, it has the potential to deliver an economic value for the local and international economies.** For that reason, economies that is most active in these facets are likely to benefit from this initiative.”

### Top 5 BRI Projects in ASEAN (approx. \$4.6B in Value)



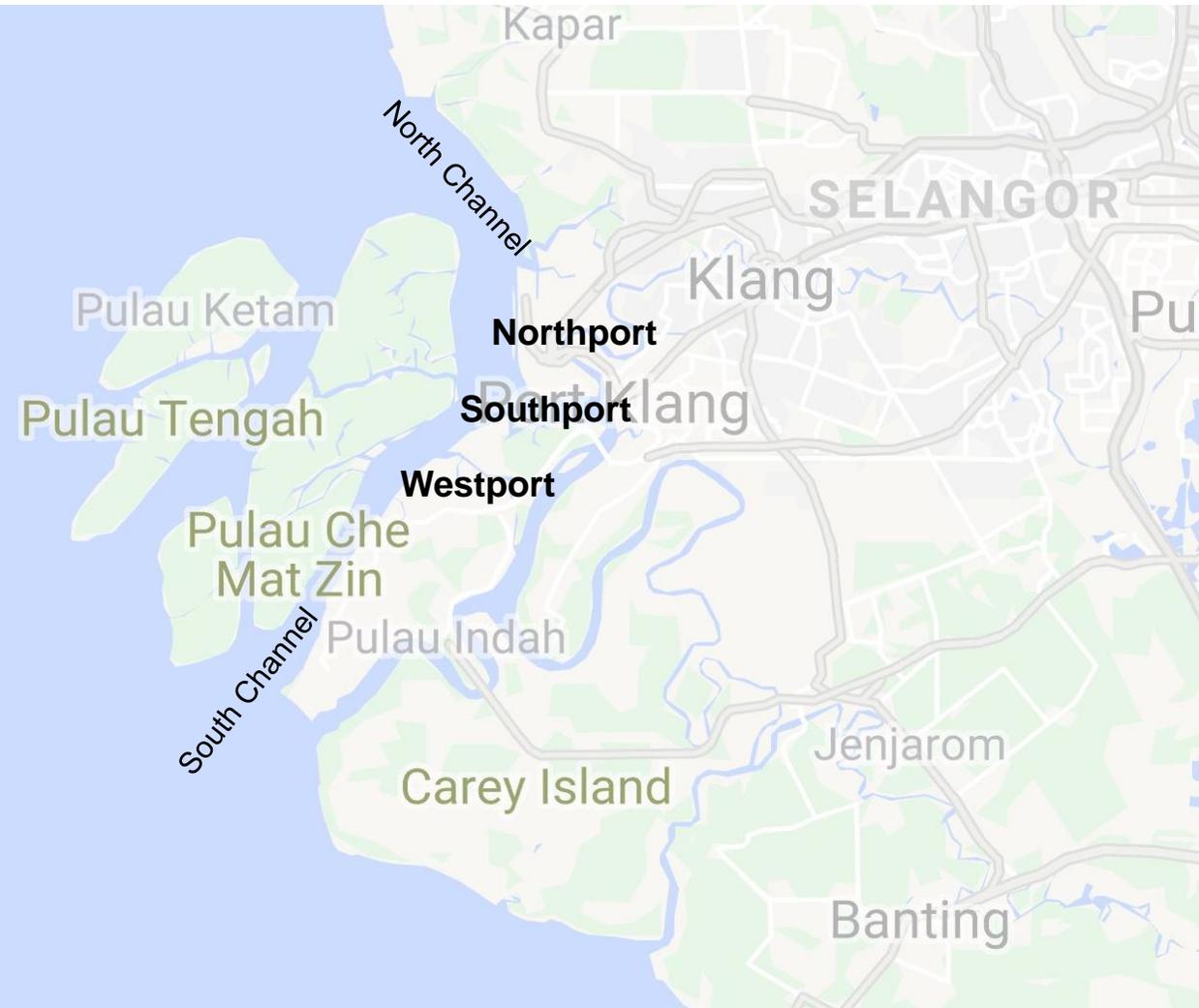
Source: China and Southeast Asia: Many Belts and Roads to turn, CIMB Asean Research Institute 2018 & LSE

# Expected growth in trade and logistic activities for ASEAN ports



## Trade routes plying Straits of Malacca

About 80% of world's maritime trade between east and west passes through Straits of Malacca



Source: China and Southeast Asia: Many Belts and Roads to turn, CIMB Asean Research Institute 2018 & LSE



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# ASEAN countries would be the land bridge between the regions with the higher population densities

The colossal scale of Belt and Road Initiative (BRI) projects covering the overland of Economic Belt and a Maritime Silk Road has great importance in shaping the logistics climate in the South East Asia (ASEAN). Members of ASEAN regards BRI as an **opportunity to increase trade and investment through improved logistics.**

## Chinese Economy Role in BRI

China becomes the **main outbound investor** as it focuses on higher added-value economies through capital connectivity.

**Transport and logistics portfolio** has the highest concentration of BRI investment, as railway attracts USD190 billion investment, followed by automotive, ports and shipping category.

International investment vehicle, and private sources in emerging economies reverberated BRI efforts through financing projects alongside the Chinese government-back entities.



## BRI Capital Flow



USD7 billion in chemicals, plastics, and rubber products per annum.



USD16 billion in microchip per annum.



Growth in Chinese-Cambodia trade has been driven by food processing industry.



Myanmar is a competitor to the Chinese clothing manufacturers

## South East Asia



### High and Medium Income Economies

These countries provide inputs to China's manufacturing industry. Malaysia hope to play a larger role as China shifts its manufacturing into higher value-added sectors.

### Lower Income Economies

They rely on China's outsourcing needs. China's increasingly challenging demographics and rising wage costs, suggests that these channels of trade connectivity are likely to deepen in the years ahead.

Singapore



Malaysia



Cambodia



Myanmar

## China-ASEAN Trade

Source: China and Southeast Asia: Many Belts and Roads to turn, CIMB Asean Research Institute 2018 & LSE

# Overall, the development in logistics infrastructure coupled with economic growth potential of ASEAN remains promising



## Promising economic outlook for the ASEAN region...

Strong economic growth

→

Home to more than 600 million people and has the **third largest labor force** in the world.

**5%↑**  
per annum

**GDP growth forecast** for the next decade.

Suitable demographic profile

→

**Working class dominates** the population and **forecasted to grow by 55 million** over the next decade. Moreover, ASEAN's young demographic continues to attract MNCs to invest heavily in the region.

Surging middle-class

→

10.9% ↑  
2012 to 2023

84.4% falls under USD 10-15,000 per annum

A higher proportion of this group is expected to shift to USD 15-50,000 per annum

The recent crystallization of the **ASEAN Economic Community (AEC) in 2015** and other free trade agreements have resulted as a **single market** and production base that allows a greater volume of goods to be made and to passthrough. It has also led to an **increasingly transparent legal** and regulatory framework for intra-ASEAN trade.

**India and China drives the trade volume** – the world's big and growing consumer bases which are driving trade in the region.

**ASEAN trade volume** is expected to **increase** by 130% and be valued at USD 5,653 billion by 2023

## ...Coupled with robust infrastructure under development

### Widening maritime network

The **global shipping landscape demands larger ports** with improved cargo handling capacity.

ASEAN nations have the potential for robust maritime interconnectivity given the geographical location. **This potential is not fully seized.**

Under the ASEAN Connectivity Masterplan, 19 ports in Indonesia will be constructed to accommodate ships with capacity of 5,000 twenty foot equivalent units (TEU)<sup>11</sup>.

### Strengthening road transport and railways

Some ASEAN nations are archipelagos, making sea transport of paramount importance.

**Current scheduled investments** in ASEAN's rail network amount to **USD200 billion (2013)**, set to benefit peninsular economies the most.

It is further estimated that an annual investment of **USD60 billion (2016)** would be required for water, power, rail, road and other infrastructure to meet projected future demand.

### Introduction of automated warehousing within the region

ASEAN region **makes up more than 370 million internet users (2018)** which implies a lucrative opportunity for e-commerce logistic providers. **Alibaba set up a trading and logistic hub in Malaysia** to secure the first-mover advantage.

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# Whilst ASEAN countries are poised to grow, there are still key challenges that need to be addressed



## Key economic indicators:

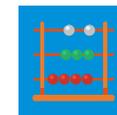
	Singapore	Thailand	Vietnam	Malaysia	Indonesia	Philippines	Brunei	Lao PDF	Cambodia	Myanmar	Average Annual Growth
Population	5.7 m	67.9 m	95.5 m	32.8 m	267.0 m	108.7 m	0.4 m	6.9 m	16.5 m	53.0 m	+ 11.3 %
GDP Growth	3.6 %	3.9 %	6.8 %	5.9 %	5.1 %	6.7 %	1.3 %	6.9 %	7.1 %	6.8 %	+ 5.3 %
FDI Inflows	\$18,752 m	\$2,370 m	\$419 m	\$3,990 m	\$702 m	\$374 m	\$33 m	\$7 m	\$20 m	\$273 m	+ 10.7 %
Total Trade Value:	←————— \$2,574 Billion* —————→										+ 14.9 %



## Key challenges/issues affecting the region as a whole:



Corruption Index



Wide Spectrum of Income Levels



Patchy Technological Readiness Levels



Dissimilar Economic Conditions

Source: World Bank, OECD, ASEAN Statistics, World Economic Forum

\*Breakdown not available

Nonetheless, the future of ASEAN remains promising notwithstanding the social/economic disparities



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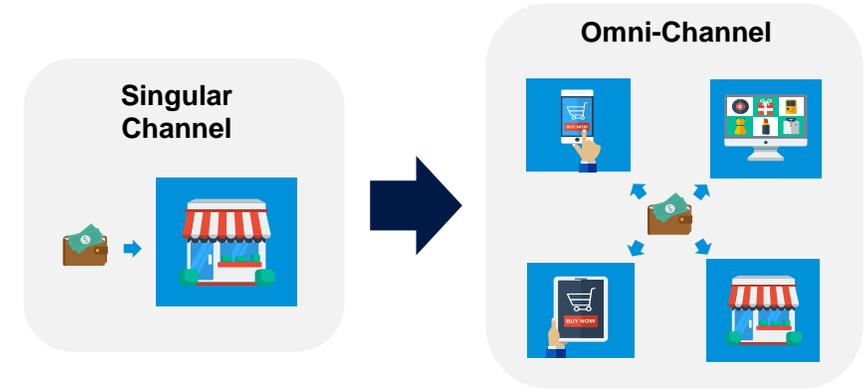
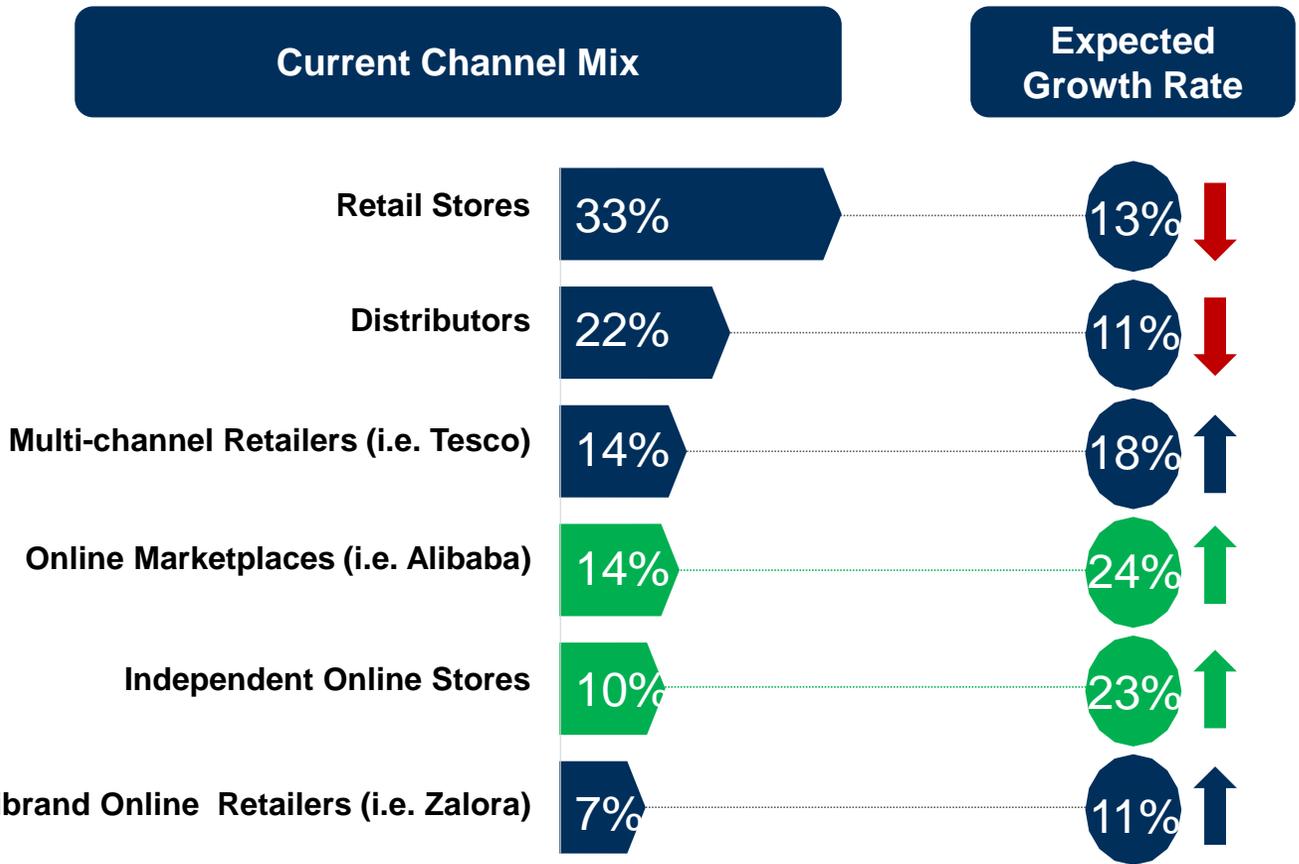
# Outlook of the Logistics Industry in ASEAN

# Changing consumer behavior and technological enablement have transformed the logistics sector landscape in Malaysia



Due to technological enablement of e-Commerce, consumer channels are expected to shift dramatically...

...which have also vastly revamped the consumers' journey...



...necessitating organisations to shift focus on three (3) growth drivers

- 1 Adopting New Sales Channels
- 2 Products/Services Innovation
- 3 Maintain Customer Loyalty

Source: DHL Logistics Supply Chain Trade Trends, DHL-IDC Manufacturing Insights Survey



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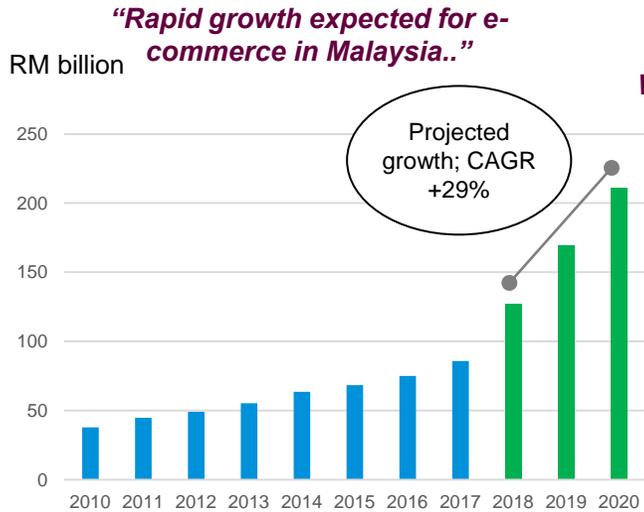
# Developments in technology have impacted the supply chain structure in Malaysia and the ASEAN region



## Increased Complexity



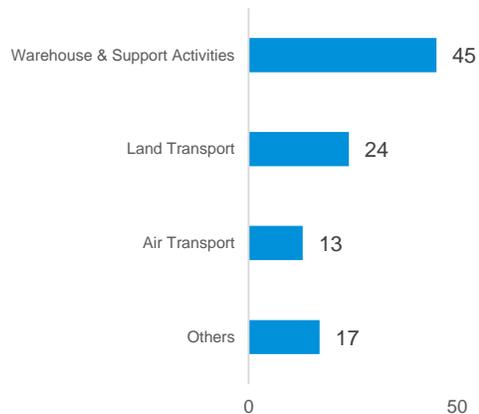
“e-Commerce has dramatically changed the way businesses are conducted.”



**GDP Contribution of E-commerce**

Source: MITI and DOSM

*“Increasing innovations from traditional roles especially in Warehousing and Support Activities..”*

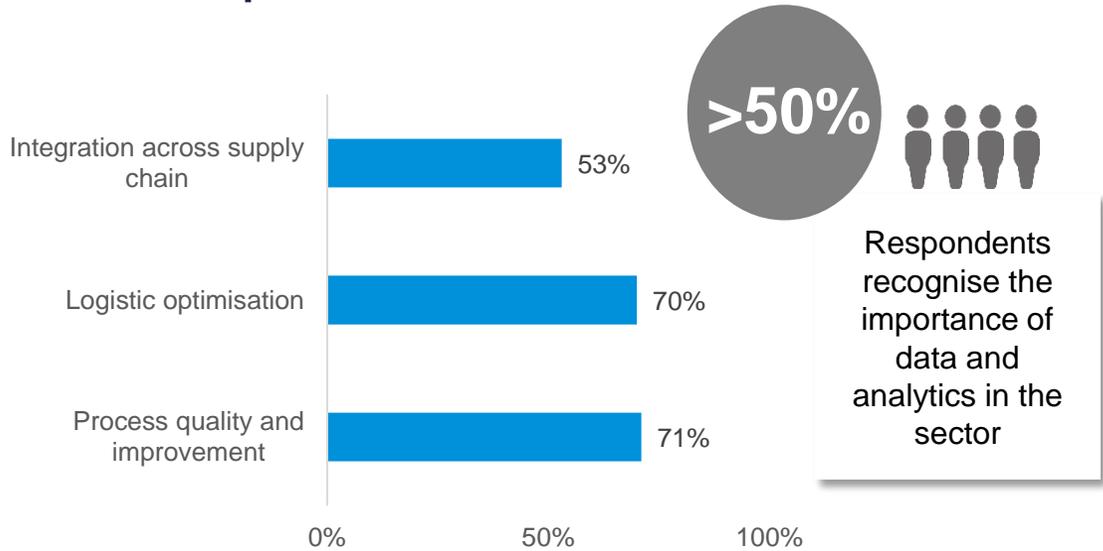


**Percentage distribution of value-added by activity, 2017**

## Technological Disruption



“Increasing use of data and analytics, and continual optimization.”



**Role of Big-Data in the Logistics Sector**

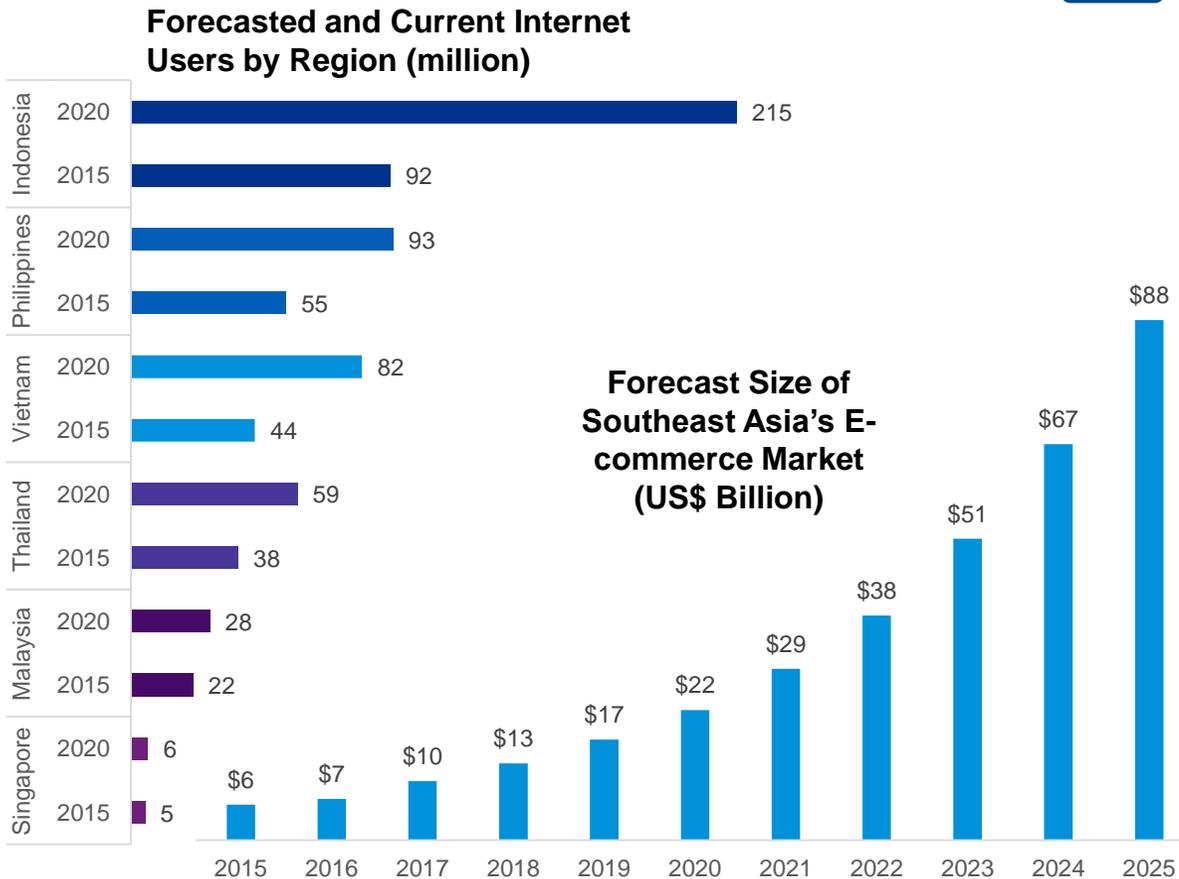
Source: 2017 Third Party Logistic Study, KPMG Analysis



# Logistics effectiveness and efficiency is crucial to sustain growth potential

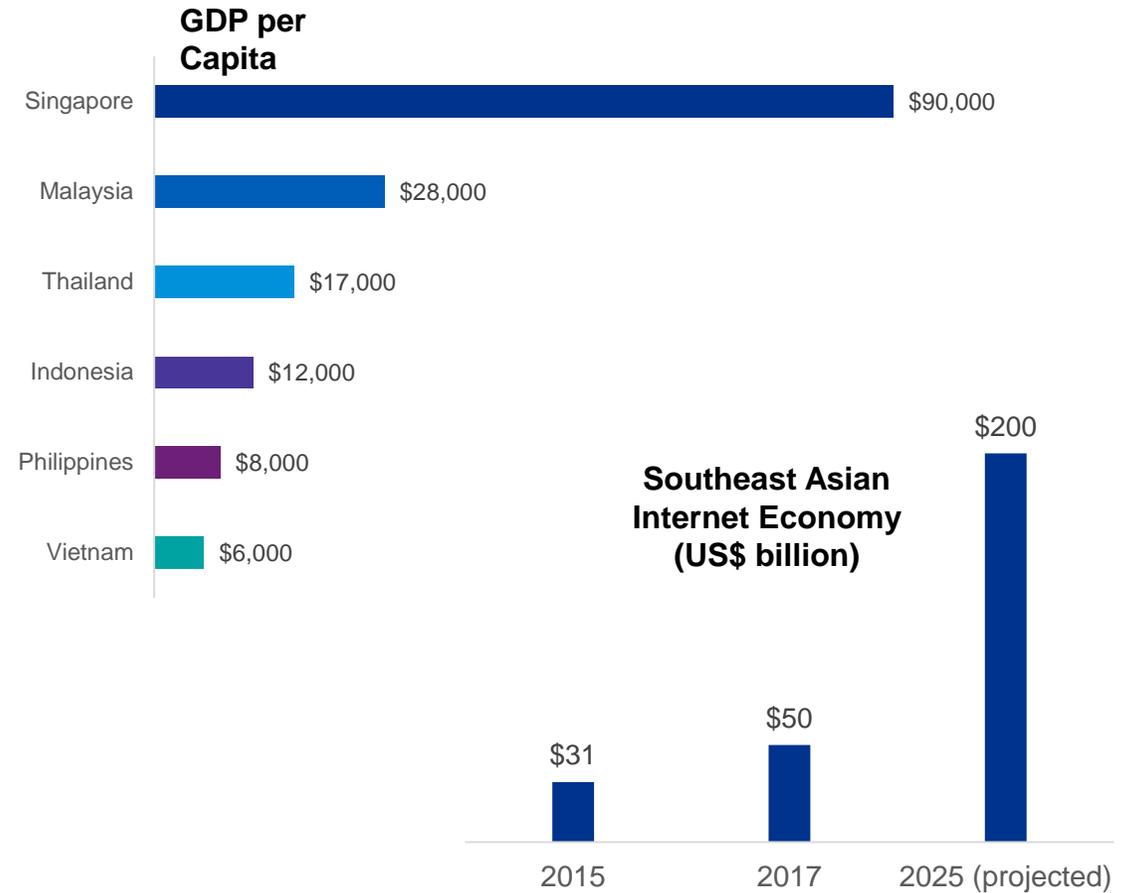


## ASEAN e-Commerce industry



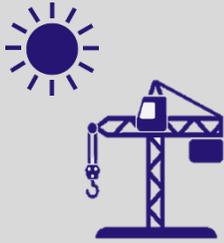
Source: Business Insider

## ASEAN Economy Overview



# Singapore's Tuas Port: world's largest port terminal and a showcase for how technology allows it to cope with growth

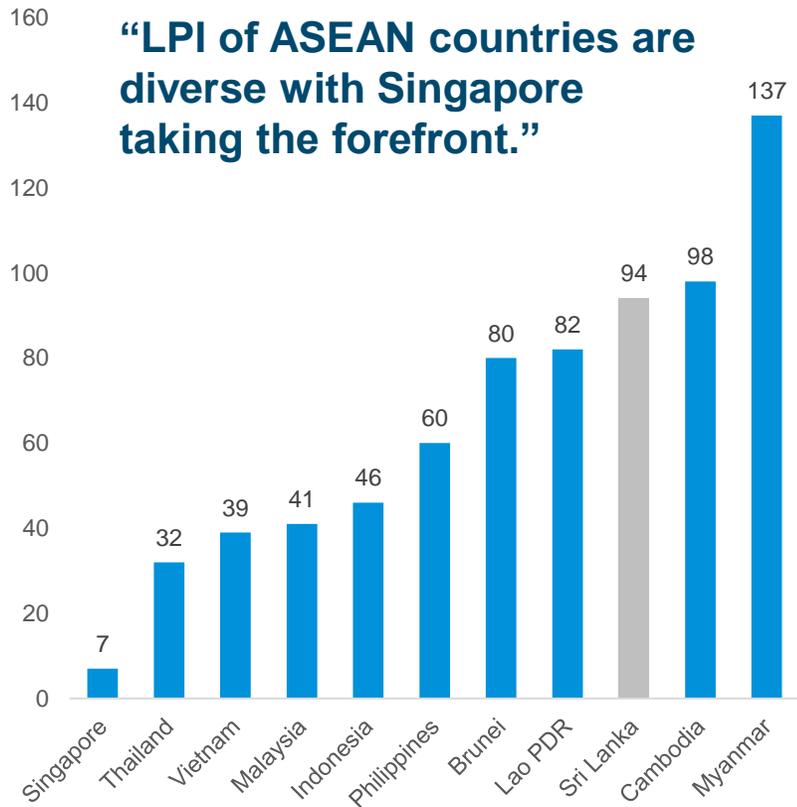


					
<b>Floating Platforms</b>	<b>Drones</b>	<b>Automated Technology</b>	<b>Tracking Arriving Vessels</b>	<b>Just-In-Time Arrival System</b>	<b>Green Technology</b>
The use of multi-purpose floating platforms to <b>reduce waiting time and free up space at sea</b>	Used for <b>deliveries and inspection</b> of vessels with unprecedented mobility	<b>Automated cranes for automated operations</b> with computers and cameras used to ensure safety of containers	<b>Reduce waiting time</b> of calling vessels and <b>optimise port services</b>	<b>Arrival information conveyed digitally</b> with a new Vessel Traffic Management System used to manage and track vessels	Cranes and guided vehicles are <b>powered by electricity and supported by solar energy in hybrid manner</b>

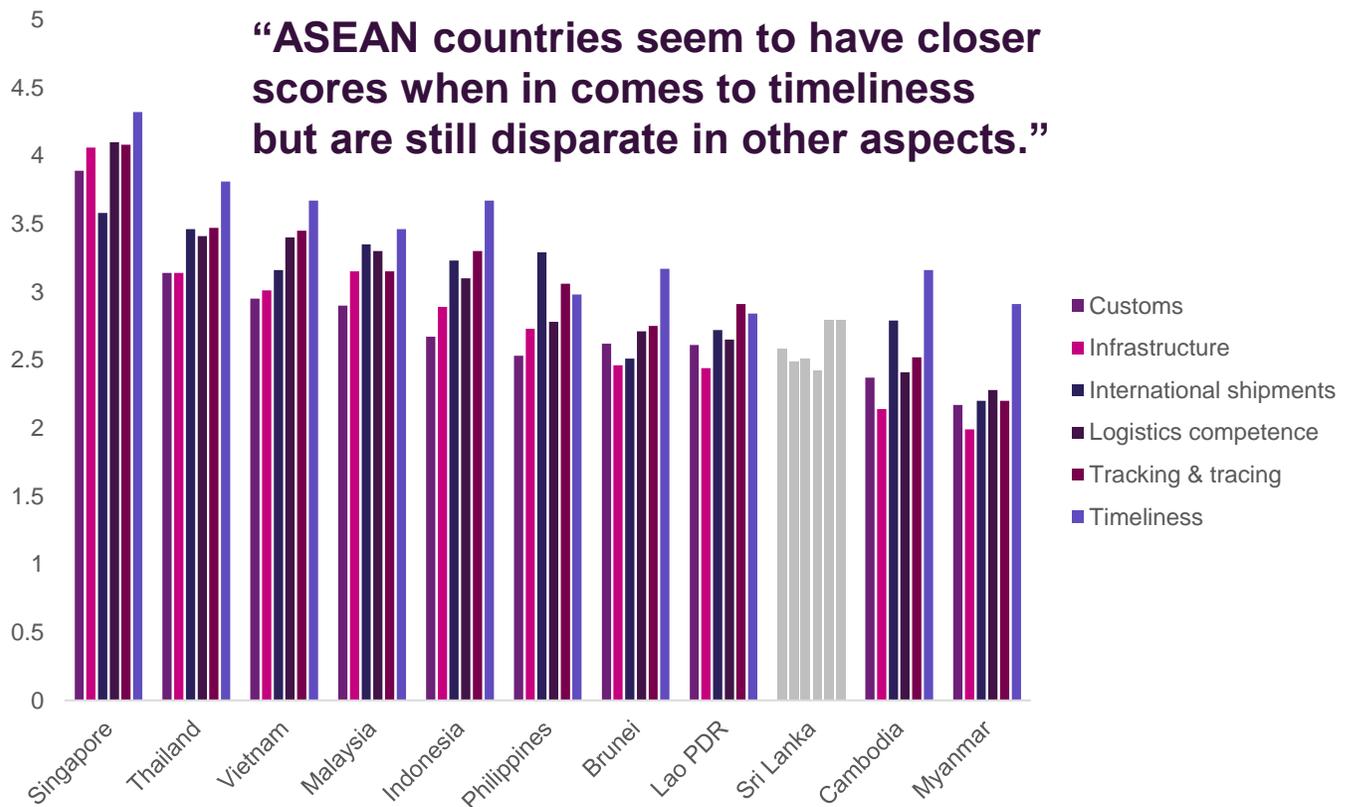
# ASEAN countries experience disparate performance in the logistics industry



## Logistics Performance Index (LPI)



## Logistics Performance Scores



Source: World Bank, Logistics Performance Index 2018



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# Sub optimal logistics performance may be due to the absence of a comprehensive policy for the sector



	 Singapore	 Thailand	 Vietnam	 Malaysia	 Indonesia	 Philippines	 Brunei	 Lao PDF	 Cambodia	 Myanmar
<p><b>Specific roadmaps, master plans to grow the sector are in-place</b></p>	✓ Productivity Roadmap of Transport and Logistics Industry; Land Transport Master Plan 2030; Air Transport Industry Transformation Map 2025; Maritime Plan; Smart Nation Initiative with Transport as one of the focus areas	✓ National Logistics Development Strategic Plan (2007–11) endorsed by the Thai Cabinet in February 2007; Thailand's Logistics Development Strategy (2013–17); Trade Facilitation and Supply Chain Management for Competitiveness	✓ Government recently approved action plans for improving the competitiveness of the logistics sector in 2017	✓ National Logistics and Facilitation Master Plan, 2015–2020; currently being implemented	✓ National Logistics Blueprint (SISLOGNAS), 2011–25	✓ Introduced National Logistics Masterplan in 2017 which aims to advance Philippines' competitiveness in logistics sector	✗ None – Existing master plans and initiatives are only focused on general transportation needs	✗ None – Existing master plans and initiatives are only focused on general transportation needs	✗ None – Existing master plans and initiatives are only focused on general transportation needs	✗ None – Existing master plans and initiatives are only focused on general transportation needs
<p><b>Availability of specific central coordinating agencies to spur sector growth</b></p>	✓ The Prime Minister's Office for Smart Nation Initiative oversees this sector	✓ National Logistics Committee	✗ No central coordinating agency yet*	✓ National Logistics Task Force	✓ National Logistics Team	✓ Cabinet-level Task Force reporting to the Office of the President	✗ No central coordinating agency			

\*Government of Vietnam is currently in the process of establishing a dedicated team to oversee the sector.

**Key Insight:** It is implied that LPI growth is positively correlated with Government intervention for the sector.

Source: IASEANS – Yusof Ishak Institute



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# Government intervention and/or support, with proper strategic planning based on country-specific requirements, are crucial for the

## Key Impetus that Spurred Logistics Growth in ASEAN



Source: KPMG Analysis

**Key Insights from  
past experiences as  
a practitioner in the  
Industry**

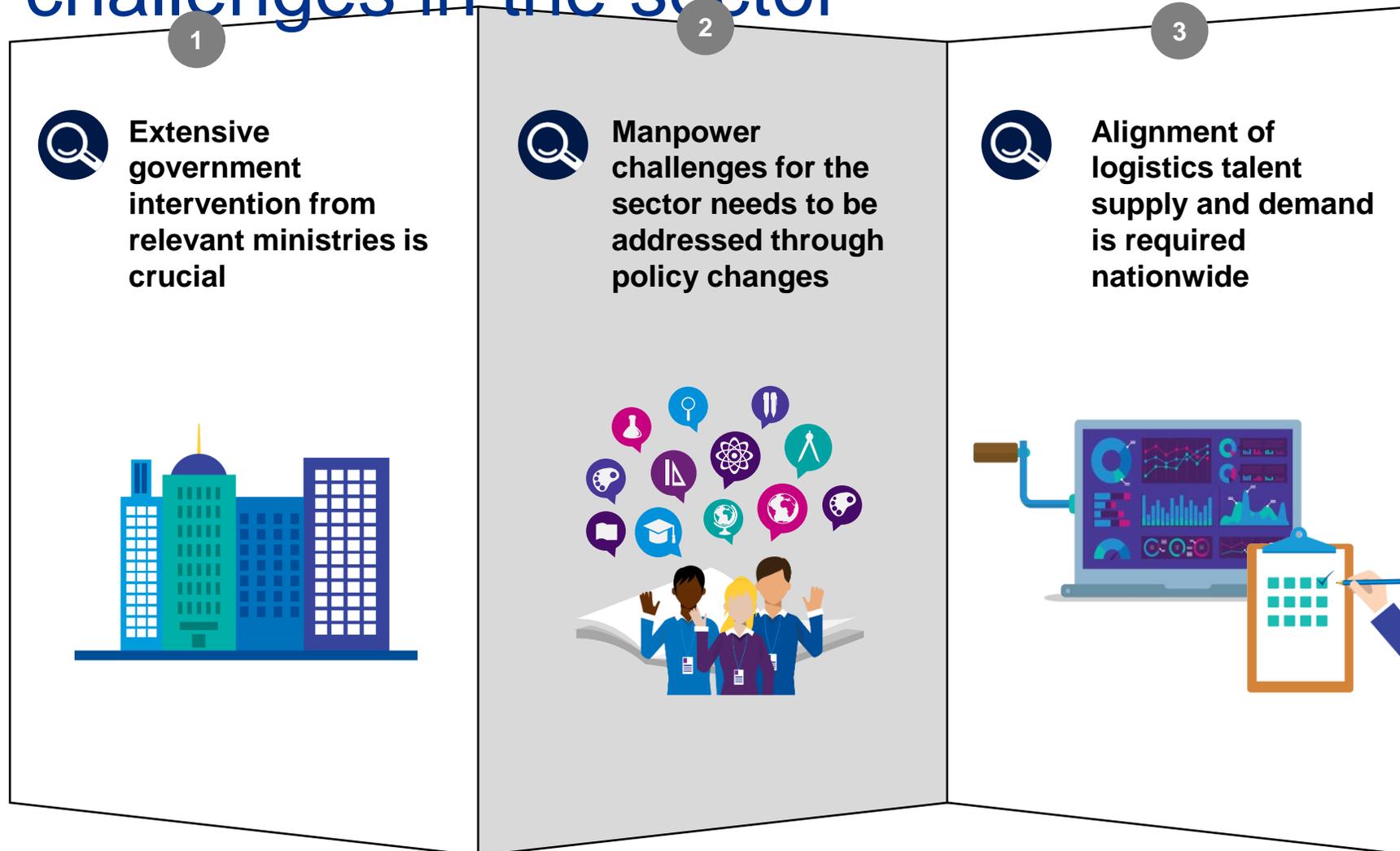
# Strategic placement and management of port user needs is crucial for the long term sustainability of ports in Malaysia



### How KPMG Helped?

- 1** KPMG strategically identified new locations for setting up new ports
- 2** KPMG engaged and interviewed port users on their satisfaction rates alongside deriving improvement opportunities
- 3** KPMG developed financial models for port operators in-line with future demand and developments

# Malaysia's key ministries have formed a strategic partnership to tackle manpower challenges in the sector



### How KPMG Helped?

- 1** KPMG devised long term strategic plans for both Ministries on tackling the issues
- 2** KPMG studied the HR requirements of the sector through extensive research and stakeholder interviews.
- 3** KPMG conducted a nationwide dialogue session for wide-range of stakeholders

# Moving forward, to better manage future logistics demand, there will be the need to enhance policy making and streamline governmental endeavours

To cope with future & potential demand, ASEAN may need to focus on...

**Key Considerations for the ASEAN Logistics Sector**



**Greater use of technology** as used in advanced nations and through knowledge sharing



**Leverage win-win trade routes** with neighbouring countries in ASEAN, such as through the BRI

## Strengthening Policy Mandate



**Policymaking should be firm** as flexibility allows for non-compliance



**The Voice of the Customer (VOC) is important** to drive policies

## Overcoming Domestic Challenges



**Government would need to unify efforts** if sector oversight is fragmented



**Government may need to actively intervene** in sector development

## Establishing Partnerships



**Co-operative initiatives should be sought** amongst related government entities



**Greater levels of economic cooperation** within the region's countries

...in view of the dynamic landscape and expected growth in the region

**Thank you**