



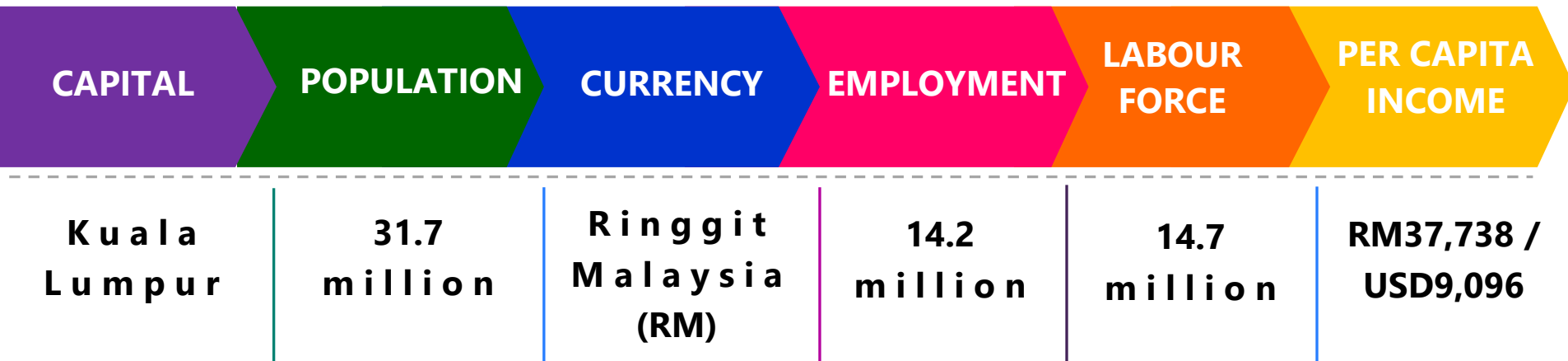
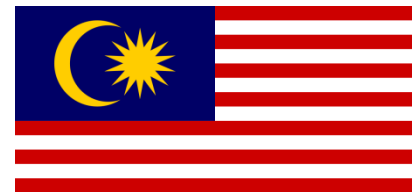
# TOURISM AND TECHNOLOGY IN MALAYSIA

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Ministry of Tourism and Culture, Malaysia (MOTAC)

# MALAYSIA

in brief 2016



Source: Bank Negara Malaysia Annual Report 2016

# M A L A Y S I A – Tourism Performance 2 0 1 7

ARRIVALS

**25,948,459 (3.0%)**

EXPENDITURE

**USD 20 Billion (+0.1%)**

PER CAPITA

**USD 792 (+3.2%)**

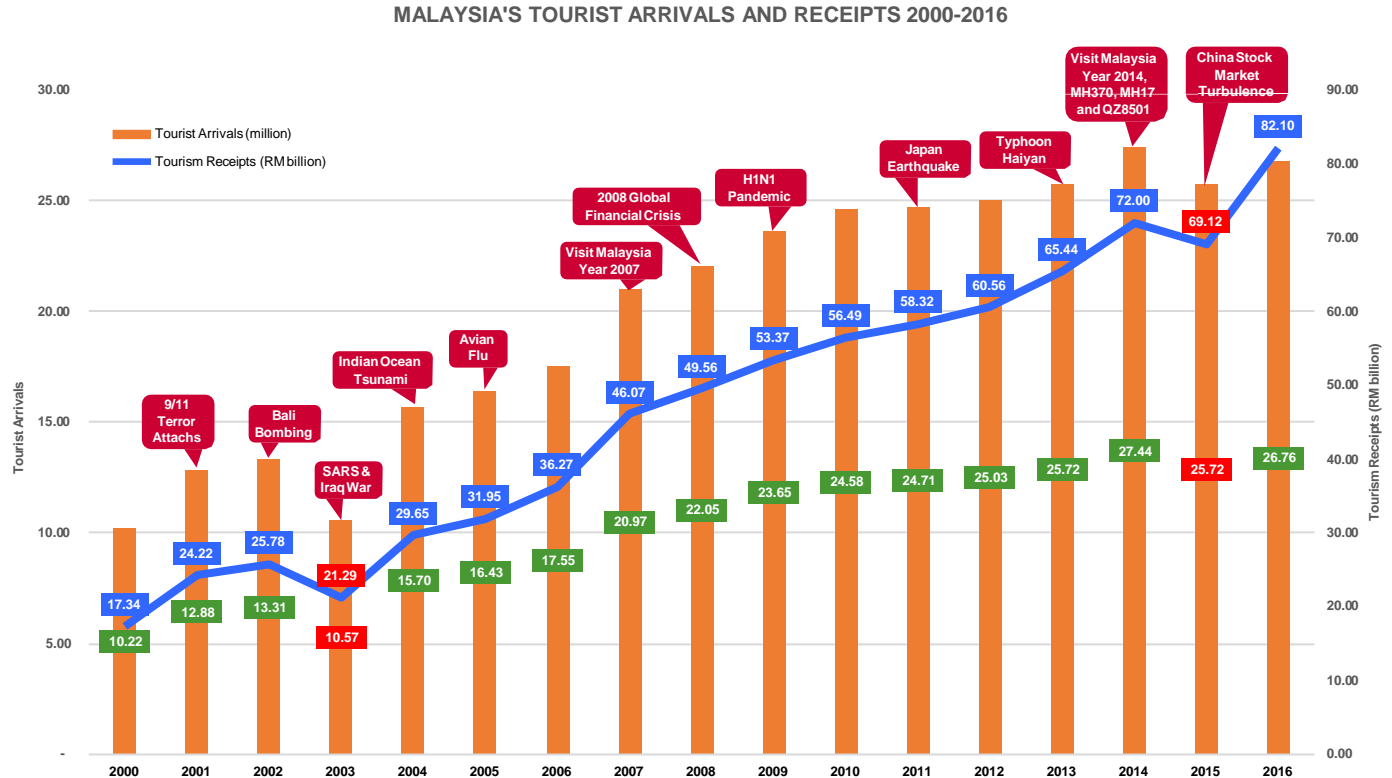
STAY

**5.7 nights (-0.2 nights)**

# Overview of Malaysia's Tourism Industry

## International Tourism Arrivals and Receipts (2000-2016)

- Malaysia has seen positive growth in tourist arrivals from 2000-2016.
- There were two declines in arrivals and receipts, which were in 2003 and 2014
- However, the industry has been quick to recover and surpass the performance of previous years, as shown by the rise in arrivals and receipts after the incidents.



# CONTRIBUTION TO GDP

## Tourism Subsector Total Contribution to GDP 2000 & 2016

- In 2000, the tourism subsector contributed a total of RM 41.3 billion to GDP. This was 11.59% of total GDP.
- The tourism subsector's contribution increased to RM 182.4 billion to GDP in 2016. This represented 14.83% to total GDP.
- Tourism has grown to become the 3<sup>rd</sup> most important contributor to the economy in 2016.

### Malaysia's GDP 2000

**RM396.4**  
BILLION

**(12%)**  
Tourism Total  
Contribution To GDP  
RM41.3 Billion



### Malaysia's GDP 2016

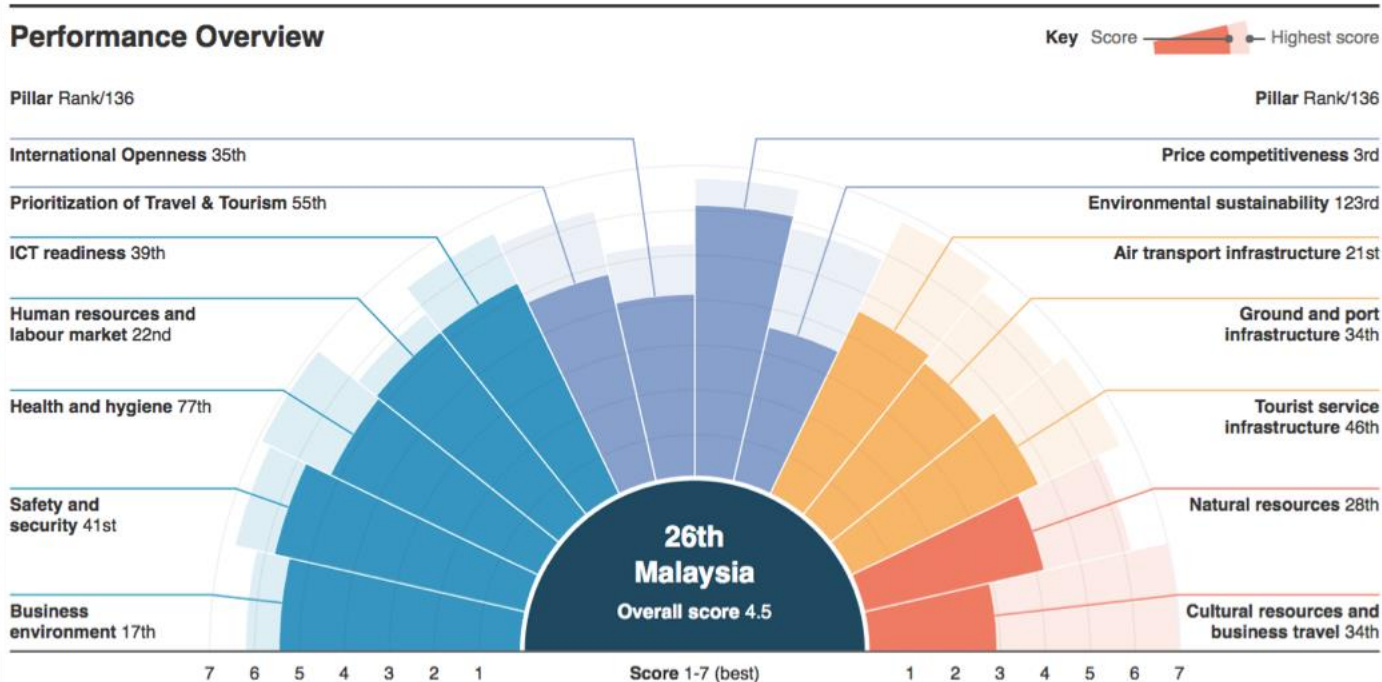
**RM1,230.1**  
BILLION

**(15%)**  
Tourism Total  
Contribution To GDP  
RM182.4 Billion

# WEF Travel & Tourism Competitiveness Index 2017

## Performance Overview of Malaysia

- Malaysia's strengths are price competitiveness (3/136), business environment (17/136) and air transport infrastructure (21/136)



# THE DISRUPTIVE DIGITAL REVOLUTION





# THE ~~MOBILE~~ ~~PERSONAL~~ ~~DIGITAL~~ ~~NATURAL~~ ~~REVOLUTION~~ ~~TRUSTED~~

UBER



NETFLIX



# Industrial Revolutions



## FIRST

Water and steam power is used to create mechanical production facilities

90 Years

1784:

First mechanical loom

## SECOND

Electricity lets us create a division of labor and mass production

70 Years

1870:

First assembly line

## THIRD

IT systems automate production line further

55 Years

1969:

First programmable logic controller

## FOURTH

IoT & cloud technology automate complex tasks

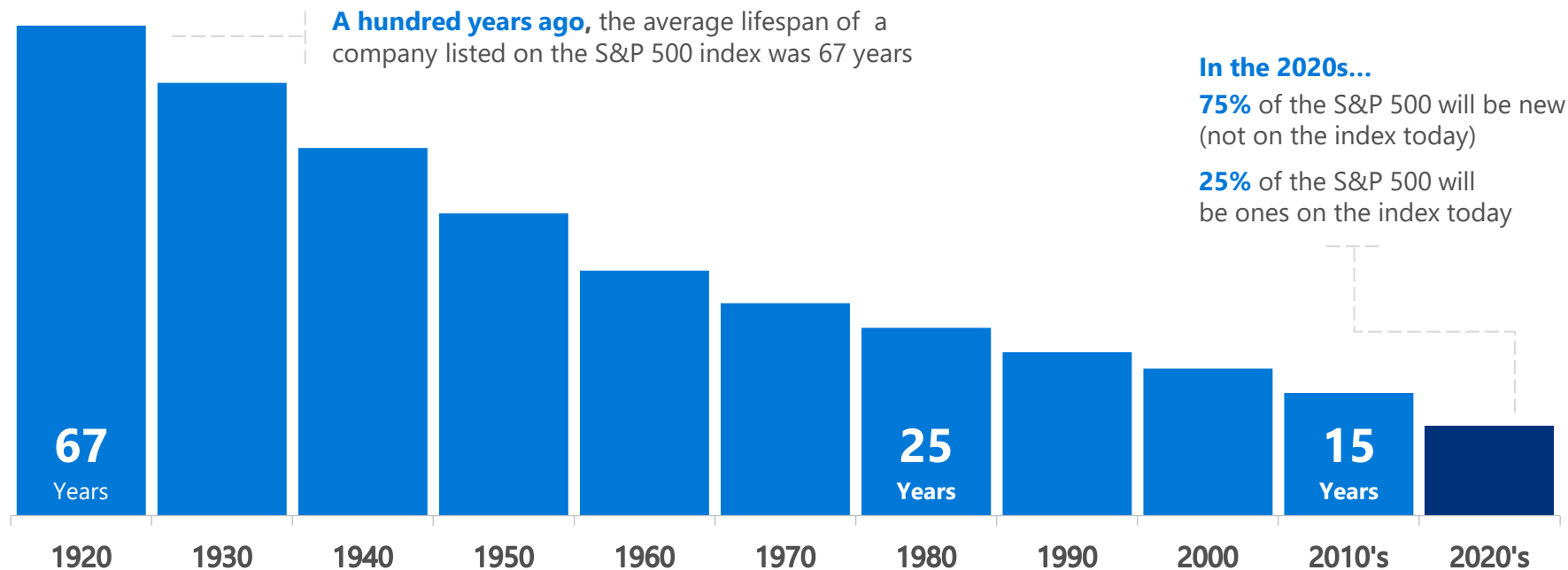
Today



# The Fourth Industrial Revolution

- **Physical:** Autonomous vehicles, robotics, 3D printing, new materials
- **Biological:** Genetic diagnostics, treatment, engineering
- **Digital:** IoT, Blockchain, disruptive business models

# The time to adapt to disruptions is shrinking



Source: BBC

# No matter your industry, technologies can help you stay ahead



## Retail & Tourism

- Real Time Offers & Personalized Services
- Demand Forecasting
- Sentiment Analysis



## Manufacturing

- Manufacturing Ops
- Connected Cars



## Financial Services

- Customer Experience
- Risk Assessment



## Health

- Remote Health Monitoring
- Population Health Management



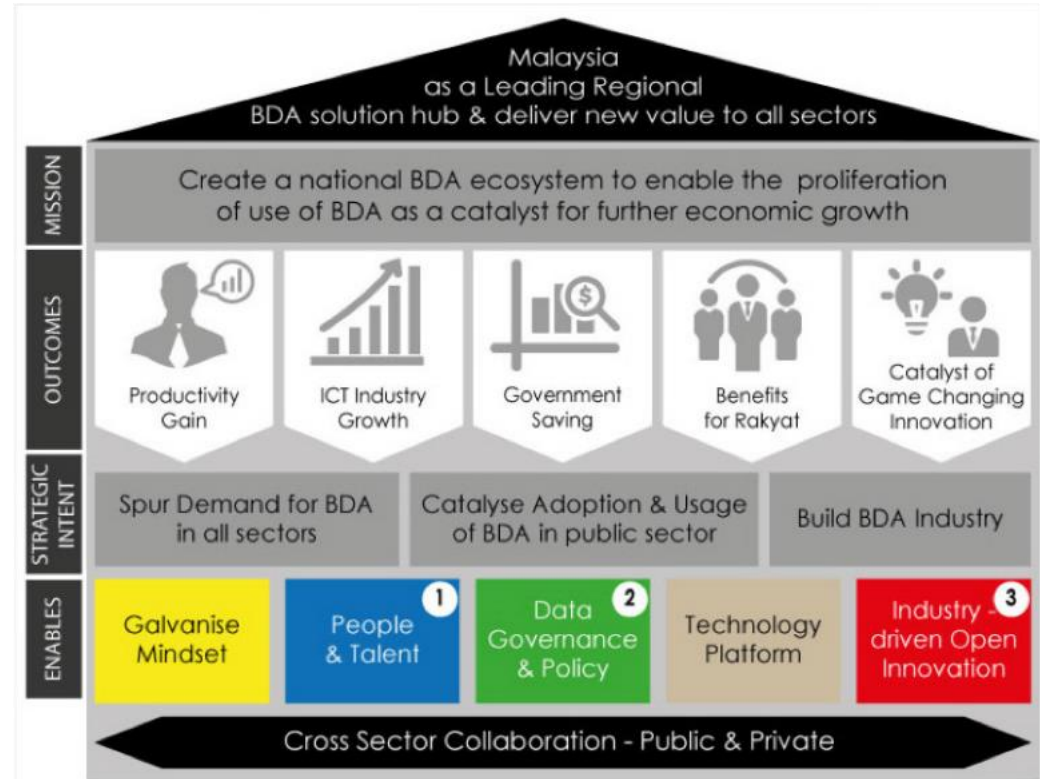
## Government

- Smart Buildings
- Transit & Traffic Optimization

# E-Tourism

## Big Data Analytics (BDA)

- Big data initiatives in Malaysia is being driven by MDEC through the **National BDA Framework**.
- Malaysia is being positioned as the **leading BDA solution hub** in the ASEAN region.
- **Public-private partnerships** has been identified as the key driver for the successful implementation of the BDA framework.









# E-Tourism

## Early Adopters of BDA in Malaysia

- “Green shoots” of BDA adoption in Malaysia, but it **needs to be ramped up**.
- The Malaysian **tourism industry is suitable for implementation of BDA** at the destination and national level.
- Among the requirements for successful BDA implementation is the employment of **data scientists**.

### EARLY ADOPTERS OF BDA IN MALAYSIA

Private Sector	BDA-native Startups	Public Sector
Majority of Use Cases in Retail or Customer Analytics and Logistics	Data Driven, scaling into multiple countries	Pockets of POCs conducted; full roll out yet to take off
 <ul style="list-style-type: none"><li>▪ Analyse &amp; predict credit card customer* spending habits</li><li>▪ 20% revenue increment</li><li>▪ # of Data Scientist: 4</li></ul>  <ul style="list-style-type: none"><li>▪ Optimise flight routes, identify weakest link</li><li>▪ Enable aircraft to fly new efficient path</li><li>▪ Saving 1% (14 million kg) of flight fuel annually</li><li>▪ # of Data Scientist: 3</li></ul>	 <ul style="list-style-type: none"><li>▪ Recommendation engine based on viewing habits</li><li>▪ Currently has &gt; 1 mill subscribers</li><li>▪ # of Data Scientist: 3</li></ul>  <ul style="list-style-type: none"><li>▪ Data Platform for SMEs</li><li>▪ US\$2.5m economic impact yearly</li><li>▪ &gt; 3000 service professionals on-board</li><li>▪ # of Data Scientist: 3</li></ul>	 <ul style="list-style-type: none"><li>▪ Water gate automation control using data analytics in Sekinchan, Selangor</li><li>▪ POC saw an increase of paddy yield by 20%</li></ul>  <ul style="list-style-type: none"><li>▪ Flood prediction released 7 days earlier instead of 1 day</li><li>▪ Flood warning released 2 days earlier instead of 6 hours</li><li>▪ Rolled out in flood prone areas in Kelantan, Terengganu &amp; Pahang</li></ul>

Source: Adapted from MDEC, Malaysia's National Big Data Analytics Initiative, Oct. 2016.



# TOURISM MEGATRENDS



## 1. Silver hair tourists

- Emergence of Silver hair tourists with specific desires and needs for:
  - customisation
  - service consumption
  - security
  - desired products and experiences (health and wellness, soft adventure, volunteer tourism etc.)



## 2. Generation Y&Z

- Tech savvy, technology driven age groups that are very different from one another.
- Has specific needs for communication, consumption and tourist experience (adventure, independent, etc.)



## 3. Growing middle class

- The middle-class population is expected to increase up to 4.9 billion by 2030.
- Most of the growth is expected from Asia.
- Their characteristics will have a growing importance and impact on the tourism sector.



## 4. New destinations emerging

- Emerging markets will soon overtake developed markets in international arrivals with 58% of the share.
- China will continue to be a major source market but representing diverse sub segments.



## 5. Political tension, terrorism

- Need security and stability to prevent terrorism and ensure safety for all tourists.
- Political tension, terrorism and civil riots are unpredictable and impose a threat to the future of tourism in any destination.

# TOURISM MEGATRENDS (con't)



## 6. Technological (r)evolution

- A game changer, and is already dominating how the industry operates.
- Provides more possibilities to entice Millennials and iGen.



## 7. Digital Channel

- Growth of SoMo (Social + Mobile) is bringing a real revolution, which is disrupting the entire sector on an ongoing basis.
- Digitalisation of tourism has led to new competitors shaking up a lot of long-term business plans.



## 8. Loyalty v.X.0

- Loyalty programmes now have to be integrated into the tourist experience.
- A dynamic digital environment allows for new, innovative loyalty programmes, based on precise insights through Big Data.



## 9. Health and healthy lifestyle

- Aging tourists, Millennials, a growing middle class, and the digital revolution contribute to importance of living a healthy lifestyle.
- Health and healthy lifestyle will become more integrated into multiple dimensions of tourism offerings.



## 10. Sustainability

- Sustainable tourism development requires the participation of all relevant stakeholders as well as a strong political leadership.

A low-angle, upward-looking photograph of the Petronas Towers in Kuala Lumpur, Malaysia. The towers' distinctive curved, ribbed facades are prominent, meeting at the skybridge. The sky is filled with soft, white clouds. A solid magenta horizontal band is superimposed over the upper portion of the image, and a solid blue band is superimposed over the lower portion, creating a layered effect behind the text.

# THANK YOU

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