



20
Years and Beyond

Malaysia at the forefront of Data Economy:
An overview of the National BDA Framework and ADAX

ABOUT MALAYSIA DIGITAL ECONOMY CORPORATION (MDEC)

ESTABLISHED IN

1996

GOVERNMENT
OWNED &
FUNDED

**LEGISLATION & POLICIES
(ICT RELATED)**

ADVISORS TO THE GOVERNMENT OF
MALAYSIA

DIGITAL MALAYSIA

A NATIONAL AGENDA TO PROGRESS THE COUNTRY
TOWARDS BECOMING A DEVELOPED DIGITAL NATION

20

Years and Beyond

DIGITAL BUSINESSES ARE STILL EVOLVING



WELCOME TO THE NEW WORLD

The world's largest
taxi company,
owns no vehicles.



The world's most
popular media
owner, creates no
content.



The world's largest
accommodation
provider, owns no
real estate.



The most valuable
retailer, has no
inventory.

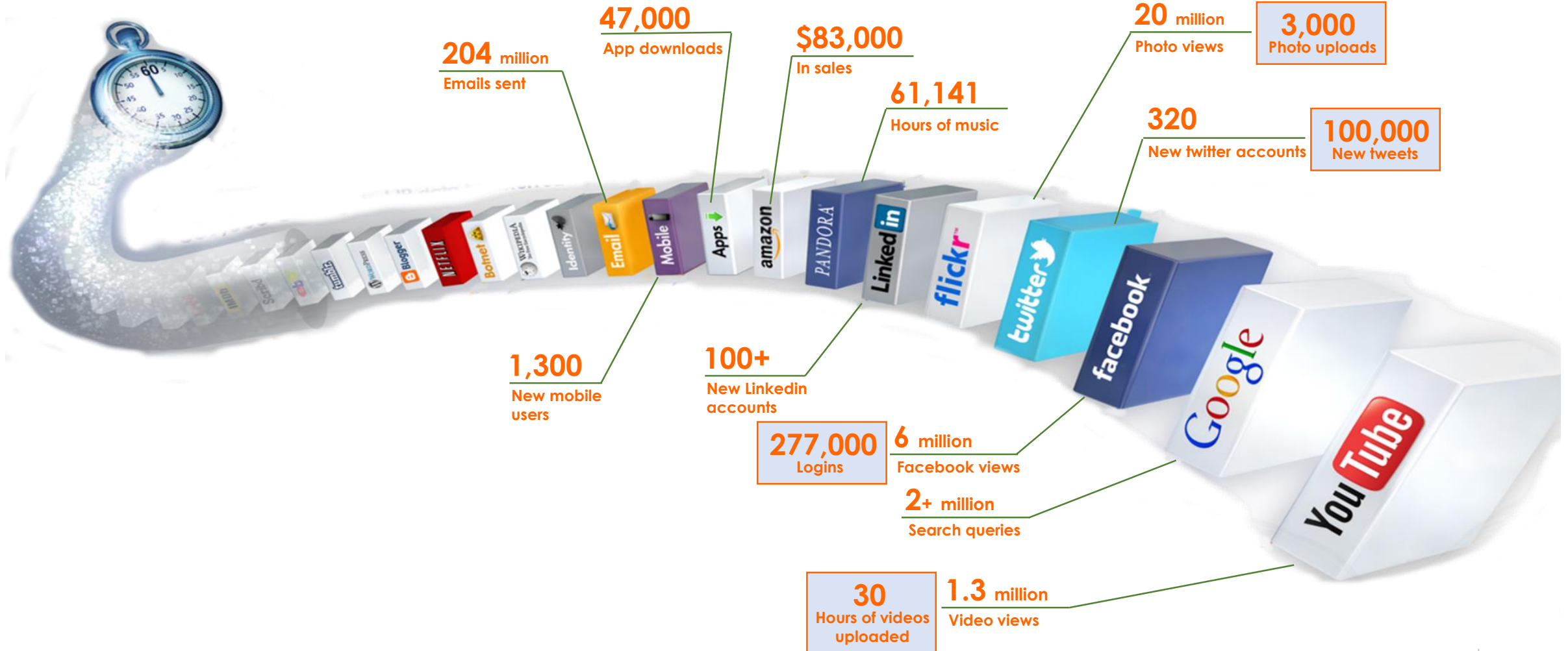


What is Big Data?

Big Data is an evolving term that describes any voluminous amount of structured, semi-structured and unstructured data that has the potential to be mined for information.

Big Data Explosion Around The World

What Happens in an Internet Minute?



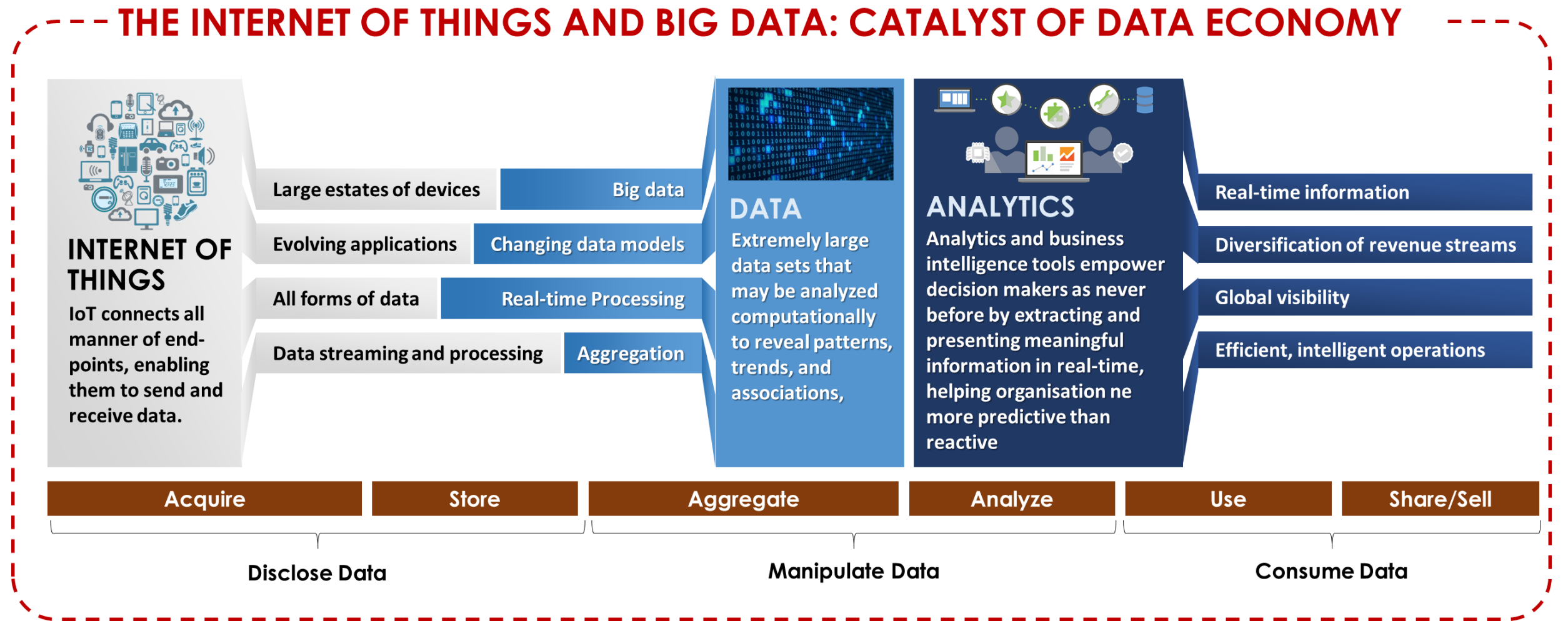
SOURCE: INTEL

What is Big Data Analytics?

Big Data Analytics is the process of examining large data sets containing a variety of data types - i.e. big data - to uncover hidden patterns, unknown correlations, market trends, customer preferences and other useful business information.

DATA ECONOMY

Ability of an organisation to leverage big data and analytics as an asset to make strategic business decisions, improve operational efficiencies and drive revenue growth as well as create new and innovative business models.

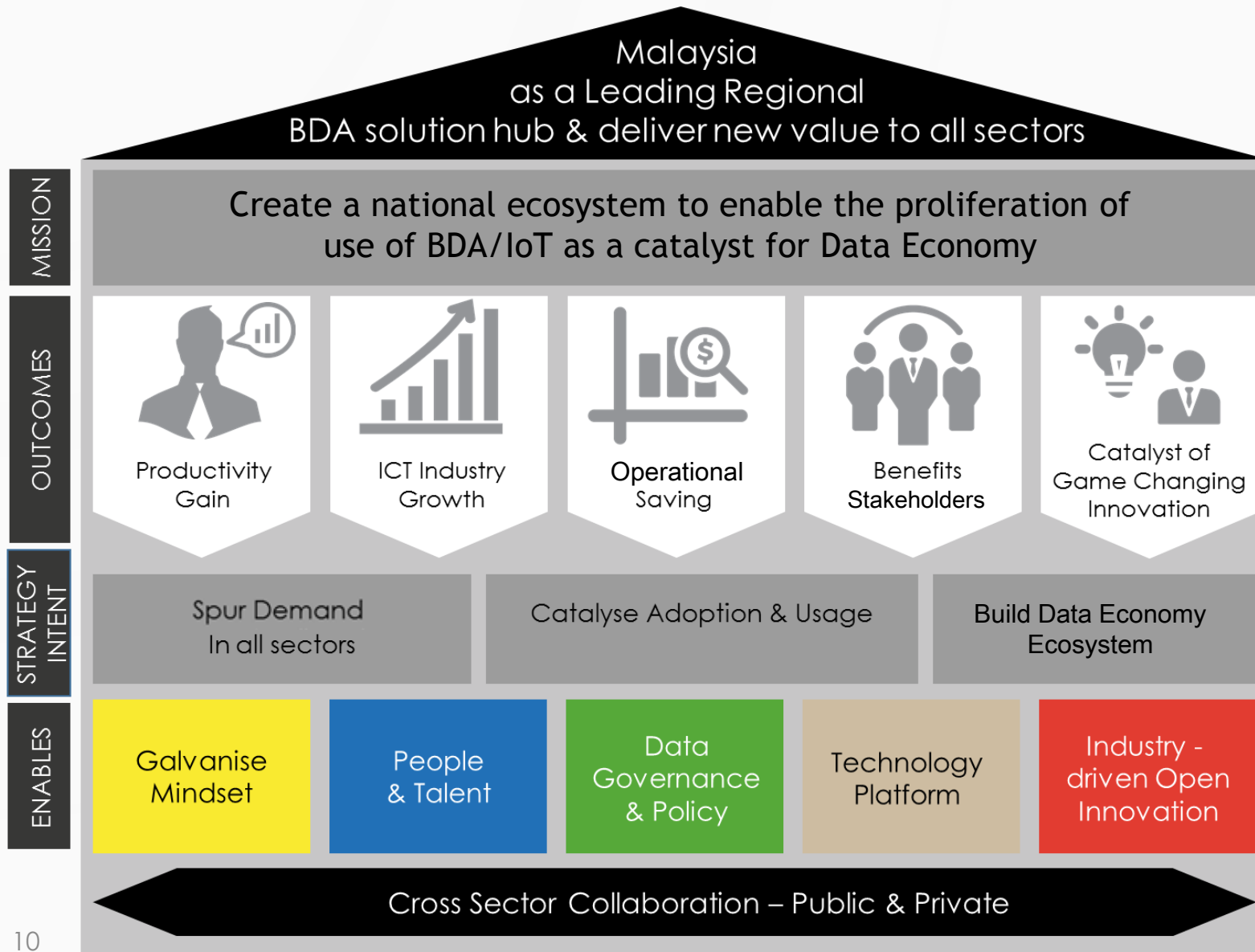


Reference source: Frost & Sullivan, Accenture Technology



NATIONAL
BIG DATA
ANALYTICS INITIATIVE

NATIONAL BDA FRAMEWORK



Key Initiatives:

Galvanise Mindset

- Big Data Week Asia 2017

People & Talent

- Develop Data Scientists
- Talent marketplace @ ADAX

Data Governance & Policy

- Driving more open data

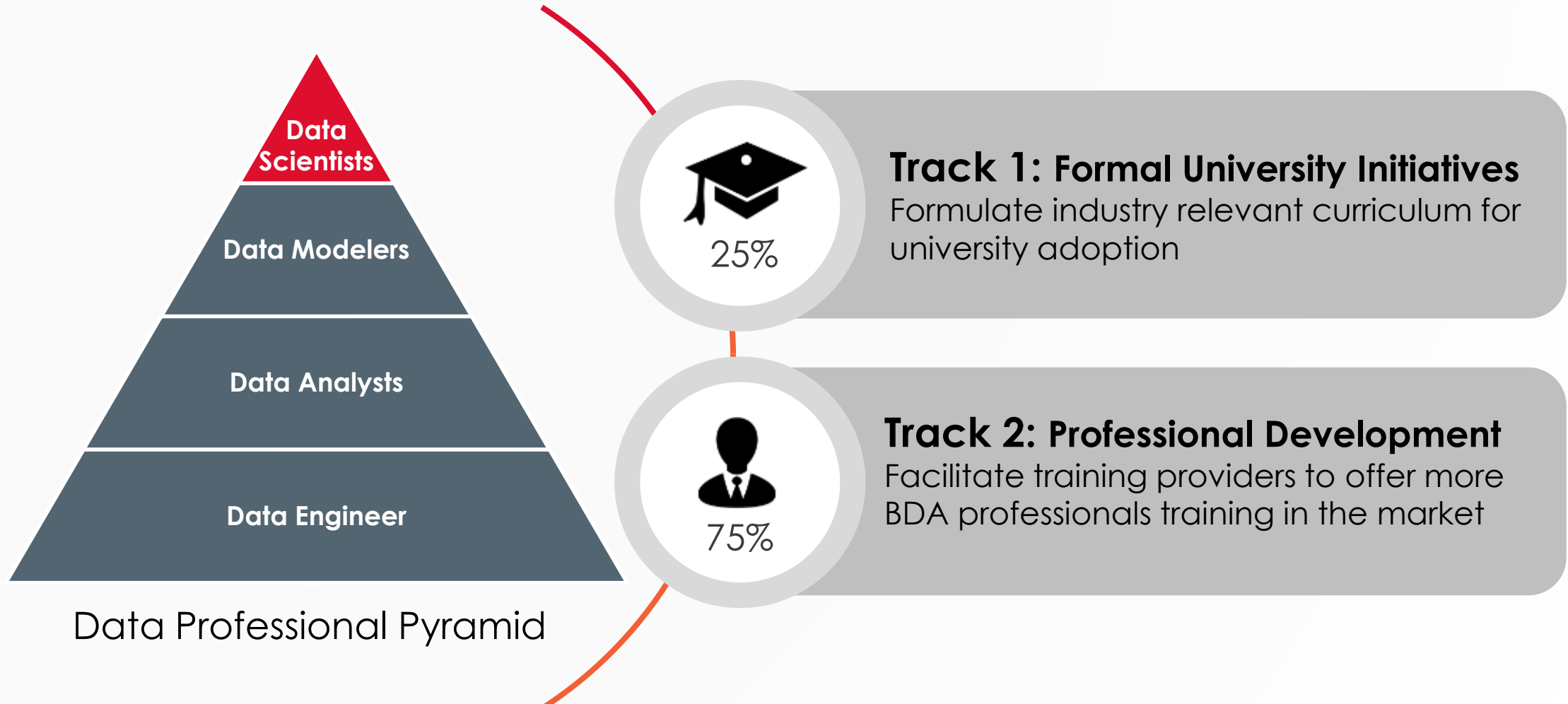
Technology Platform

- ASEAN Data Analytics Exchange (ADAX)
- Data Exchange Platform (DXP)

Industry - driven Open Innovation

- IoT focus area
- BIG App Challenge 4.0
- Accelerating industry-driven use cases

TWO TRACKS TO CREATE DATA SCIENTISTS



New forecast: 20,000 Data Professionals, inc. 2,000 Data Scientists by 2020

TRACK 1: TRADITIONAL, ACADEMIA ROUTE



Postgraduate program
in Data Science

> 6 Unis.

MMU, APU, UUM, UMS,
UKM, UTM

Undergraduate degree
with Data Science
specialisation

> 7 Unis.

UM, MONASH UNIV,
SUNWAY UNIV, APU,
UiTM, UNIMAS, MMU

Introducing a Data
Science module to
non-ICT degree courses

> 7 Unis.

UiTM, USIM, UTAR,
USM, UUM, UTHM, UTM



“Malaysia is the **only country to have prioritized the importance of excellence in data science as a national strategy** and I believe that it is well positioned to leap frog other countries by embedding it across the curriculum, resulting in more data driven decision making organisations.”

Professor Karim Lakhani, Harvard Business School
20 September 2016, BDA International Advisory Panel Meeting

TRACK 2: FAST TRACKED FOR EXISTING PROFESSIONALS

People
& Talent

BROAD-BASED CERTIFICATION PROGRAMME

Blended MOOC Data Science Certification Program

- **Highest single batch sign-up** for Data Science MOOC globally
- Passing rate of over **40% vs 9%** globally

coursera

INTENSIVE CRASH COURSE

Enterprise Scientist Bootcamp

- Intensive 8-week program to develop Data Scientists, based on **Cornell University's The Data Incubator** fellowship
- 135 graduates by end 2016



EDUCATING C-SUITE

Harvard Business School Executive Programme

- Business Analytics & Big Data Workshop for C-level
- **First time held outside Boston, USA**



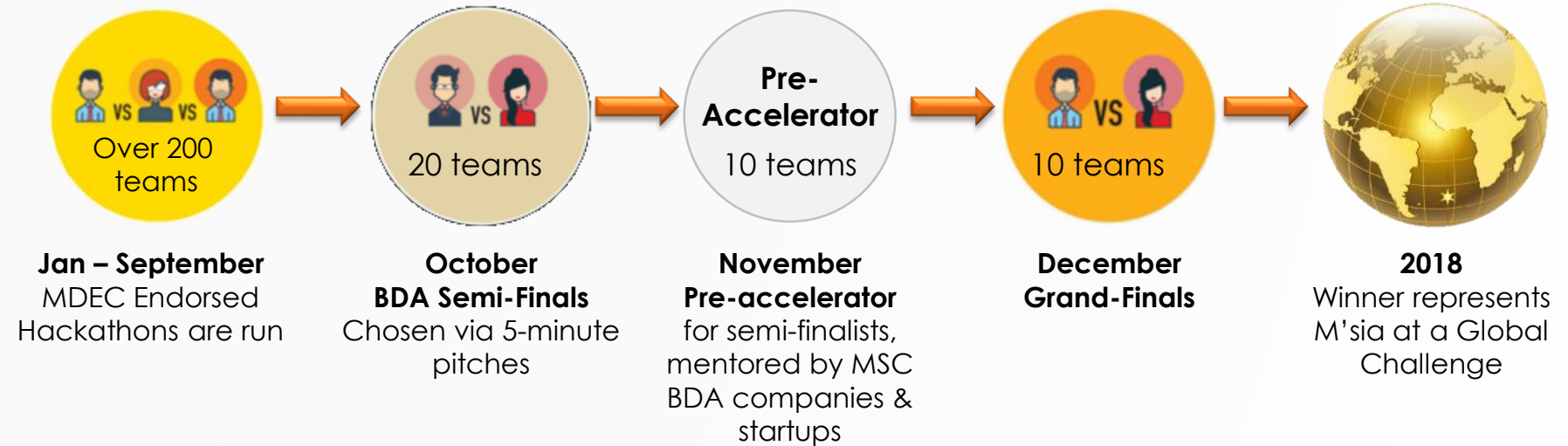
**HARVARD
EXECUTIVE
PROGRAM**



Professional
Development

BIG APP CHALLENGE 4.0

Industry -
driven Open
Innovation



OBJECTIVES

Surfacing raw talent

Job matching

Developing Use Cases

Potential MDEC Endorsed Hackathons in 2017

- Grab-World Bank Open Traffic
- Angelhack KL
- Pepperthon
- MAMPU Open Data
- NASA International Space Apps Challenge
- KDU-Quandratix
- Dreamcatcher-Fusionex
- CIMB-SAS
- APU BAC



AngelHack KL 2016

Driving Transformation

BIG DATA WEEK ASIA 2017

Galvanise
Mindset

Big Data & technology showcase, celebration, learning & networking events

DAY 1 MON	DAY 2 TUE	DAY 3 WED	DAY 4 THURS	DAY 5 FRI	DAY 6 SAT	DAY 7 SUN
CONFERENCE BIG DATA AWARD		SATELLITE EVENTS WORKSHOPS HACKATHON			TECH JAM ART/TECH XHIBIT	
VENUE : KLCC		VENUE : ADAX & VARIOUS			VENUE : ADAX	

DATE: 2 – 8 OCTOBER 2017



Some of the 15+ BDWA 2016 satellite events



BigIT Technology
Malaysia 2016



CPA Congress 2016



2nd International
Conference On Soft
Computing In Data Science



Self-service Visualization For
Everyone Workshop



Data-Driven Startup
Workshop



Microsoft R Workshop



Opentraffic Platform
Training



Asia Pacific University's
Data Science Week 2016



ASEAN DATA ANALYTICS EXCHANGE (ADAX)

A one-stop hub to pull the BDA ecosystem together to create solutions and adopt BDA

Technology
Platform



Public-private Partnership Model; Located at Bangsar South



SHOWCASE AREA



TALENT DEVELOPMENT
SPACE



SANDBOXING
ENVIRONMENT



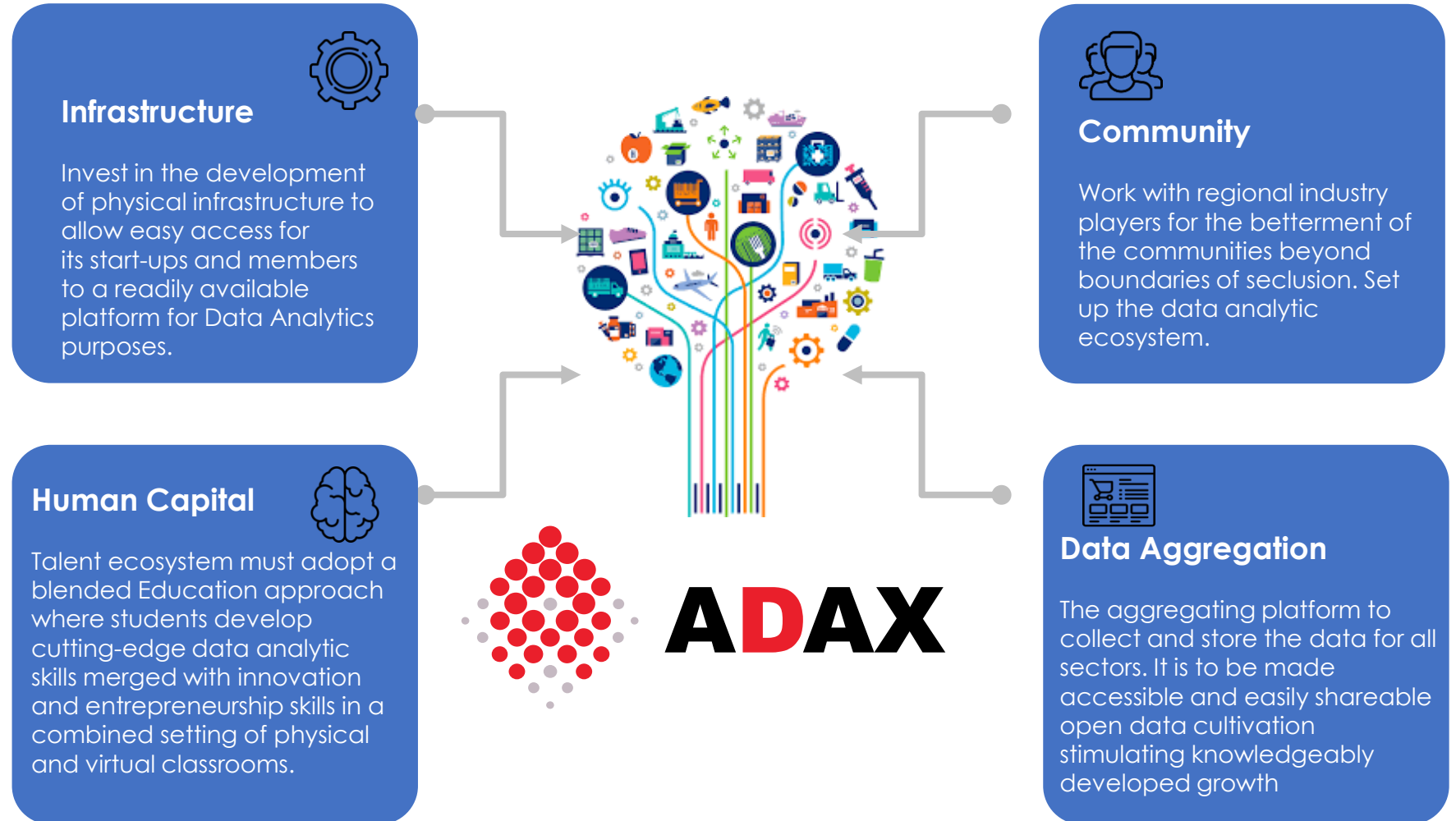
BRIEFING/VISUALIZATION
ARENA



STARTUP CO-LOCATION

ADAX's

Business Pillars



ADAX ACTIVITIES

Technology
Platform

INNOVATION LAB



1. Demo / Showcase
2. Sandboxing
3. Product Launch & Grow Programme
4. Experts Meet & Greet
5. Corporate & Community Project

TALENT DEVELOPMENT



1. Technical Classes / Massive Open Online Courses
2. Hackathon
3. Job Matching
4. Shared Training & Tech Labs

STARTUP



1. Accelerator Prog.
2. Industries Collaboration
3. Access to Funding & Go-To-Market



IMPACT OF THE NATIONAL **BIG DATA** ANALYTICS INITIATIVE

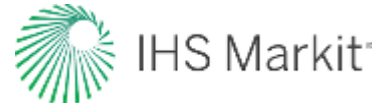
BDA SOLUTION PROVIDERS ARE GROWING DYNAMICALLY

FOREIGN INVESTMENTS

22 COMPANIES
FROM 6 COUNTRIES



- Global leader in customer experience management
- **Building next generation CMS**



- World leader in analytics, providing **business analytics in Defense, Oil & Gas, etc**

LOCAL MNCs GROWING BIGGER

32 LOCAL COMPANIES



- Intelligent Data Management Platform serving Intel, Air France, & Australia Post
- **80% of revenue via exports**



- Business intelligence & visualization tools serving DHL, Citibank & Epson
- **>50% of revenue via exports**

STARTUPS SCALING UP

47 STARTUPS



- **Fintech risk assessment** using analytics & machine learning for loan processing
- **RM83M funding raised**
- Development in M'sia for US Market



- Real-time Consumer Sentiment & Emotion analytics
- **Expanded to 5 countries within 12 months**

MALAYSIA AS A BDA SERVICES HUB

30 MNCs



- Irish-based global leader in credit and customer services and **decision analytics**



- French-based leading provider of technology and services for the **oil & gas industry**

SOME EARLY BDA ADOPTERS

PRIVATE SECTOR

Majority of Use Cases in Retail or Customer Analytics and Logistics



- Analyse & predict credit card customer' spending habits
- 20% revenue increment



- Optimise flight routes, identify weakest link
- Enable aircraft to fly new efficient path
- Saving 1% (14 million kg) of flight fuel annually

BDA-NATIVE STARTUPS

Data Driven, scaling into multiple countries



- Recommendation engine based on viewing habits
- Currently has > 1 mil subscribers



- Data Platform for SMEs
- RM10.5mil economic impact yearly
- > 3000 service professionals on-board

PUBLIC SECTOR

Pockets of POCs conducted; full roll out yet to take off



- Water gate automation control using data analytics in Sekinchan, Selangor
- POC saw an increase of paddy yield by 20%



- Flood prediction released 7 days earlier instead of 1 day
- Flood warning released 2 days earlier instead of 6 hours
- Rolled out in flood prone areas in Kelantan, Terengganu & Pahang



BDA IN TRANSPORT: EXAMPLE USE CASE

BDA IN TRANSPORT – EXAMPLE USE CASE

Big Data is transforming Public Transportation, especially Rail Transportation

Plan Phase

Planning and Demand Modeling

Better understanding of customer journeys

Operations Phase

Predictive Maintenance

Improve equipment utilization by proactive maintenance before failure

Event Response

Better response during the planned and unplanned events

Personalized Services

Personalized services based on better understanding of customer needs



MALAYSIA DIGITAL ECONOMY CORPORATION SDN BHD
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