數位國家啟動!!
數位公務員的第一堂課

30萬公務員的數位轉型大挑戰

2017數位政府高峰會
2017 DIGITAL GOVERNMENT SUMMIT

Smart City - Data Driven

eGL
SINGAPORE

NUS
National University
of Singapore | ISS
INSTITUTE OF SYSTEMS SCIENCE

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Connected

12-year-olds in Singapore spend 6½ hours daily on electronic devices: Survey

PUBLISHED APR 2, 2017, 5:00 AM SGT

Source: Straits Times, Singapore

In front of screen Hours / week

46 12-year olds
24 9-year olds

Social Media Apps

77% 12-year olds
55% 9-year olds

Mobile Device Ownership

70% 12-year olds
52% 9-year olds

Source: We are Social

Source: We are Social

People

- *Connected*
- *Tech savvy*
- **MELLENNIALS**
- *Ambitious*
- *Different Aspiration*
- *DEMANDING!*

Do not forget rest of the society !

Devices

GROWTH IN THE INTERNET OF THINGS

THE NUMBER OF CONNECTED DEVICES WILL EXCEED **50 BILLION** BY 2020

BILLIONS OF DEVICES

- 2020: 50.1B
- 2019: 42.1B
- 2018: 34.8B
- 2017: 28.4B
- 2016: 22.9B
- 2015: 18.2B
- 2014: 14.2B
- 2013: 11.2B
- 2012: 8.7B
- 2009: IoT INCEPTION
- 2003: 0.5B
- 1992: 1M

Source: Cisco
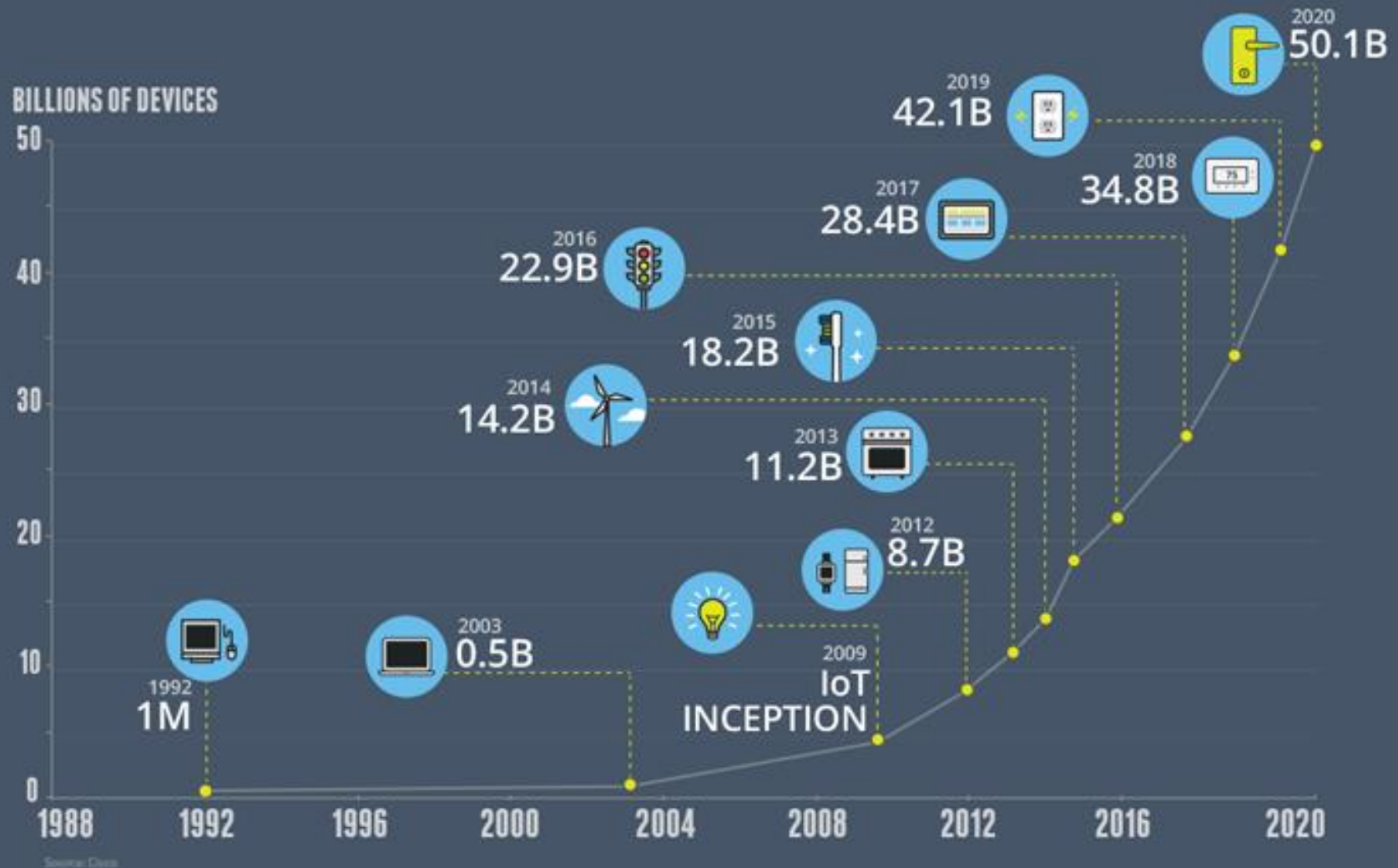
Data

Changing face of data…

Mainframe Kilobytes → Client/Server Megabytes → The Internet Gigabytes → Mobile, Social, Big Data & The Cloud Zettabytes
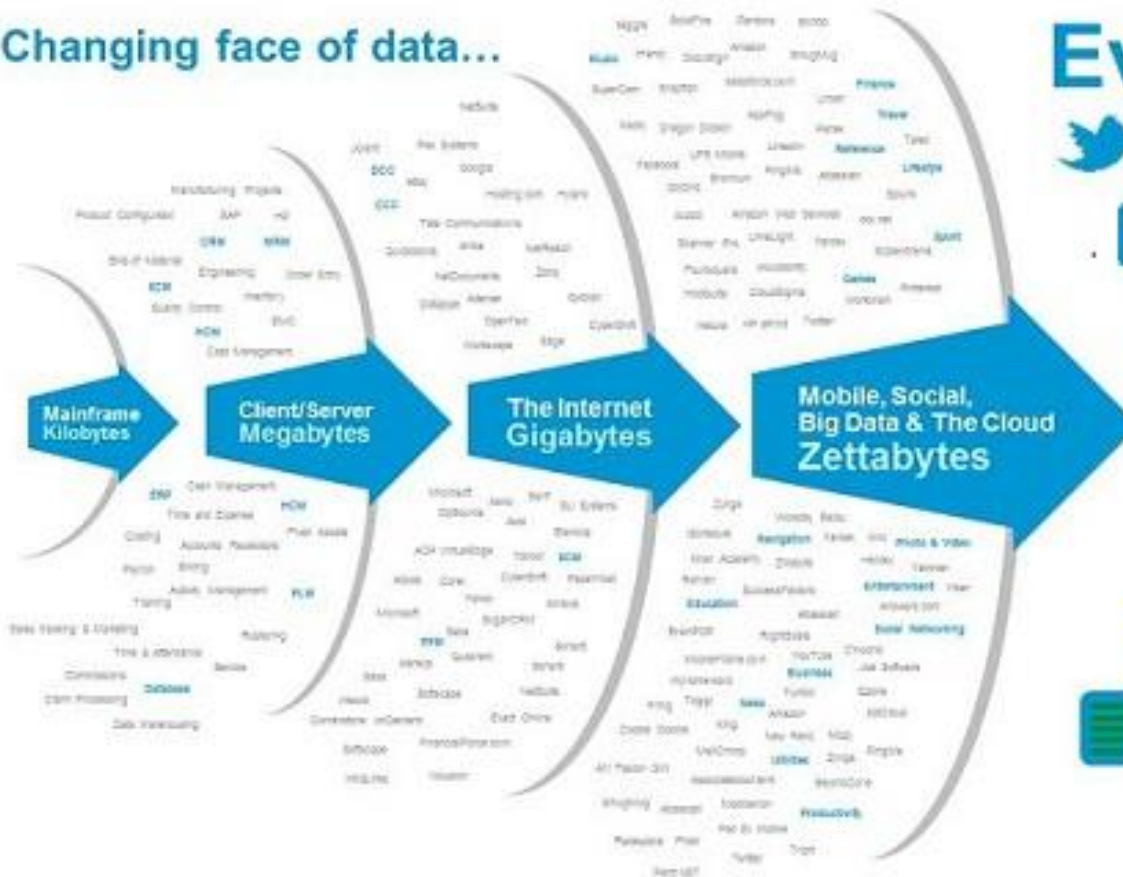
Every 60 seconds

- 98,000+ tweets
- 695,000 status updates
- 11million instant messages
- 698,445 Google searches
- 168 million+ emails sent
- 1,820TB of data created
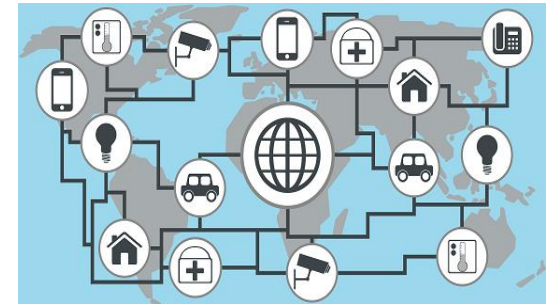- 217 new mobile web users

Yottabytes
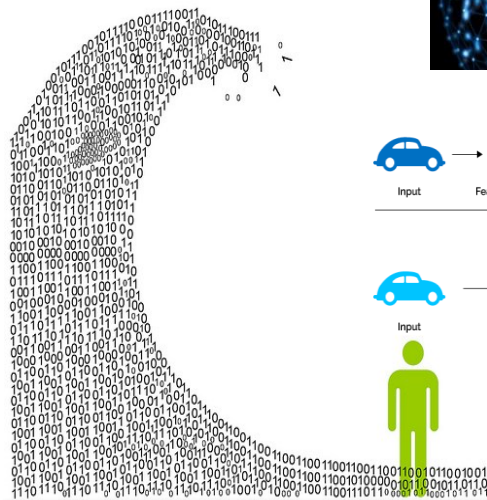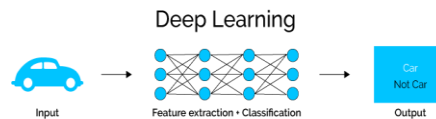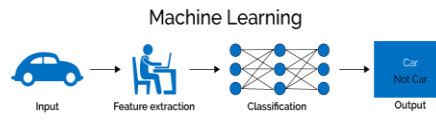
Digital Economy Ingredients

People

Intelligence

Connected Devices

(Overload) of data

Autonomous

Robotics

3D PRINTING

Implications of Digital Economy

- Jobs Displaced
- Industries Disrupted
  - Uber, Manufacturing – 3D Printing

- Opportunities
  - Make use of connected society

Taiwan: DIGI+

From child prodigy to tech minister, Audrey Tang dares Taiwan's startups to fail

Audrey Tang, the child prodigy who taught herself computer programming at the age of 8, now wants to bring her entrepreneurship to nurture Taiwan's startups.

PUBLISHED : Friday, 28 April, 2017, 8:18am
UPDATED : Friday, 28 April, 2017, 1:48pm

COMMENTS: 2

Source: South China Morning Post

DIGI+

Taiwan's Digital Nation and Innovative Economic Development Plan (2017-2025), has been carefully designed to reinvigorate and expand Taiwan's digital economy.

Source: https://www.enterpriseinnovation.net/article/egov-conversations-taiwans-digital-nation-plan-1872933308

Transformation to digital economy 'a top priority' for Singapore

Singapore's Plan: ICM 2025

Committee charting Singapore's economic future faces long and tough road ahead, say analysts, industry figures

Rachael Boon   ✉

SINGAPORE - Transforming Singapore to embrace innovation and become a digital economy should be among the committee's top priorities, but a long and tough road lies ahead.

Analysts, economists, industry players and MPs yesterday noted the challenges the new body will face, such as a maturing economy and finite resources.

These were among the reactions to the unveiling of the new 30-member Committee on the Future Economy - which includes government officials and business leaders - formed to draw up plans for the country's economic future.

1 Data

Data

- Collection / Sources of Data
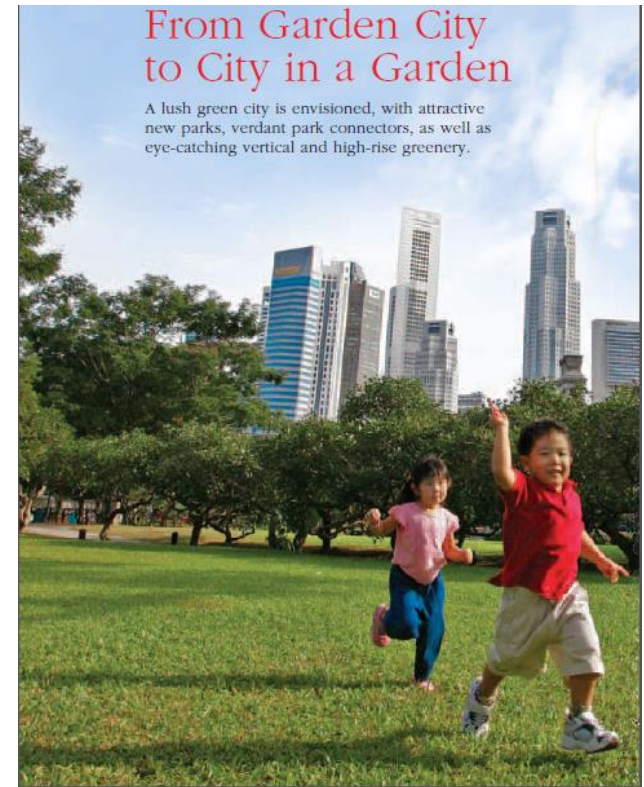- Open Government Data

2 Society

Inclusive, Caring Society

3 Sustainability

Sustainability

- Monitoring Environment using sensors
- Enabling Environment sustainability

From Garden City to City in a Garden

A lush green city is envisioned, with attractive new parks, verdant park connectors, as well as eye-catching vertical and high-rise greenery.

Source National Parks, Singapore

4 Mindset

Mindset

- Nudging people towards
  - use of shared resources,
  - optimizing limited resources

5 **Policies**
Adaptive

6

Experiment
New technologies

FINTECH Experiments

Source: MAS Singapore Home Page

Robots in Pharmacy

16-Sep-2014
Lianhe Zaobao

陈笃生医院自动配药更快捷 Tan Tock Seng Hospital's Automated Medication Dispensing System Improves Efficiency

(translation of relevant paragraphs)

Automated machines pick and pack medicines, which are conveyed in baskets and placed onto shelves by robotic armatures, for pharmacists at front counters to dispense to patients.

7 Skills

SkillsFuture

Your Skills. Your Asset. Your Future.

Programmes you can look forward to under SkillsFuture

EDUCATION AND CAREER GUIDANCE (ECG)
Counsellors to help students make well-informed decisions on education, training and careers.

ENHANCED INTERNSHIP
Structured programmes and enhanced internships will better support career exploration and workplace learning.

YOUNG TALENT PROGRAMME (YTP)
More overseas market immersion opportunities for ITE, polytechnic and university students.

INDIVIDUAL LEARNING PORTFOLIO
An online, one-stop education, training and career guidance portal for every Singaporean to plan their education, training and career path.

SKILLSFUTURE EARN AND LEARN PROGRAMME
Placement with structured on-the-job and institution-based training to give fresh ITE and polytechnic graduates a career headstart in chosen sectors.

SKILLSFUTURE CREDIT
Learning credits for all Singaporeans aged 25 years and above to pay for course fees for work-skills-related courses supported by public agencies.

SKILLS-FOCUSED MODULAR COURSES
Wider range and scale of short skills-focused modular courses relevant to industry needs.

SKILLSFUTURE STUDY AWARDS
Monetary awards to help individuals develop and deepen their skills in growth clusters.

SKILLSFUTURE MID-CAREER ENHANCED SUBSIDIES
All Singaporeans aged 40 years and above to receive a minimum of 90% course subsidy for MOE-funded and WDA-supported courses.

SKILLSFUTURE FELLOWSHIPS
Cash sponsorship for individuals with deep skills expertise to achieve mastery in their respective fields.

SECTORAL MANPOWER PLANS
Developing pipeline of skilled workers. Progression and development framework to provide every worker with career pathways based on skills.

SKILLSFUTURE LEADERSHIP DEVELOPMENT INITIATIVE
Funding to support increased collaboration with companies to develop and stretch high-potential talent.

SKILLSFUTURE MENTORS
SMEs can access pool of mentors with deep industry skills and experience to provide guidance in their implementation of skills deepening initiatives.

SKILLSFUTURE CREDIT
Regular top-ups in learning credits for all Singaporeans to support skills deepening.

In School

Starting Work

Growing your Career

STUDENTS, PARENTS & TEACHERS

INDIVIDUALS

EMPLOYEES

EMPLOYERS

GOVERNMENT

EDUCATION & TRAINING INSTITUTIONS

UNIONS & INDUSTRY ASSOCIATIONS

For more info, visit
www.skillsfuture.sg

Source: Skills Future

8   Innovation
     Nurturing

Made in Singapore
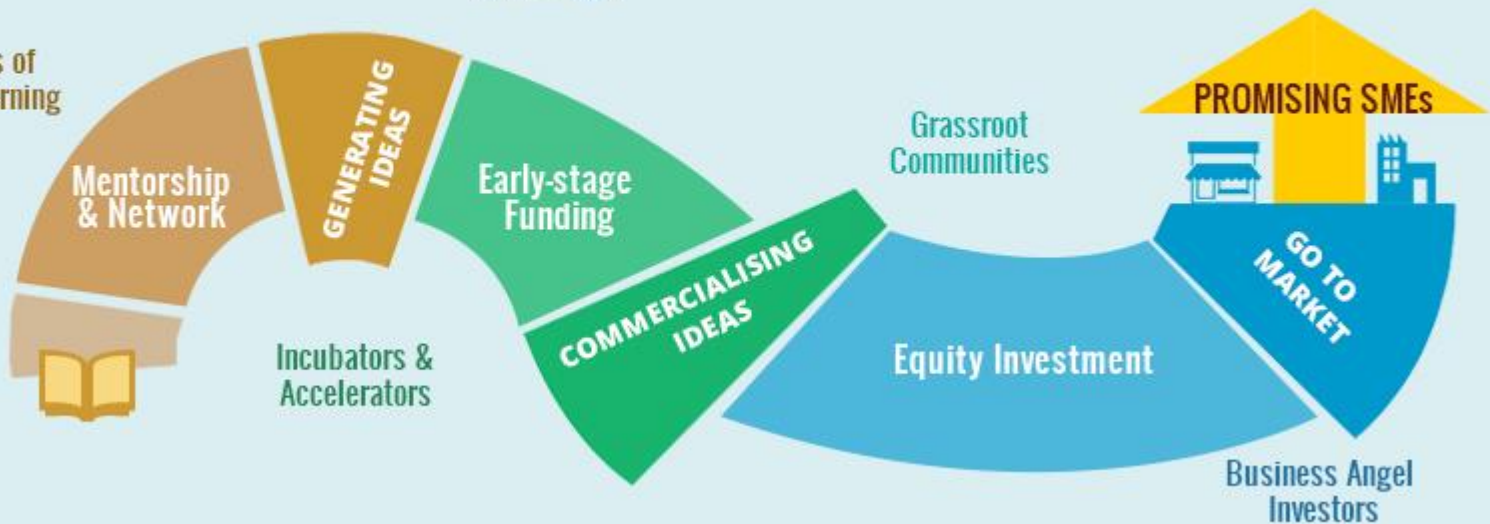
9 Saving Lives

MyResponder

Cybersecurity

The 'Wannacry' ransomware attack

The attack has hit more than 200,000 victims in at least 150 countries, says Europol

Source: Intel.malwaretech.com

© AFP

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Cybersecurity

Protecting Assets Digital & Critical Infrastructure

Data Driven Smart City is about

Data	Society	Sustainability	Mindset
Policies	Experiment	Skills	Innovation
	Saving Lives	Cybersecurity	

Thank You

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