

# CHAMPIONING MALAYSIA'S DIGITAL ECONOMY

DATO' YASMIN MAHMOOD , CEO  
MALAYSIA DIGITAL ECONOMY CORPORATION

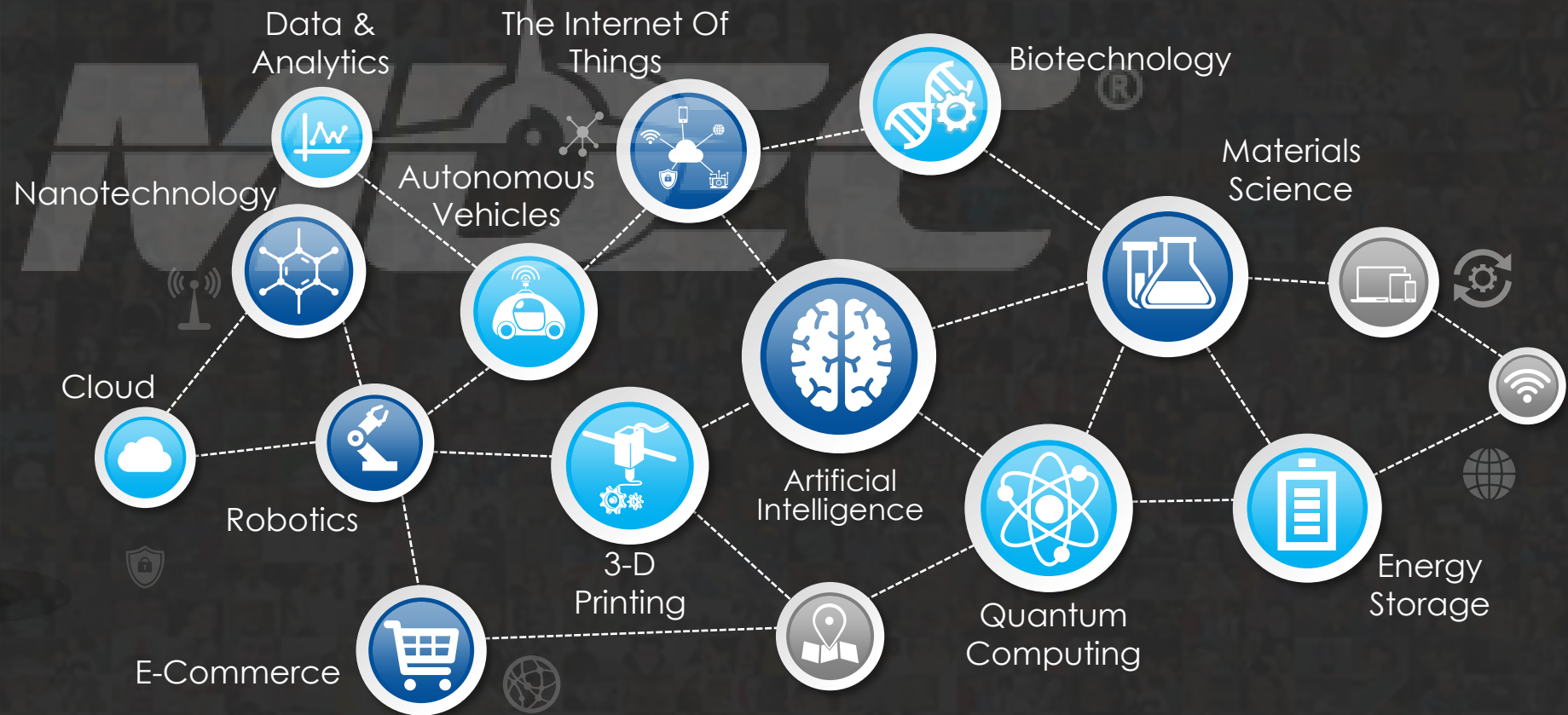
INTERNATIONAL SOCIAL SECURITY CONFERENCE 2017  
2<sup>ND</sup> AUGUST 2017

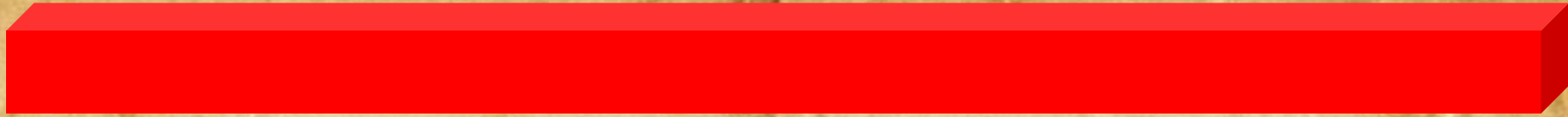


# A Hyperconnected World

*The possibilities of billions of people connected by mobile devices, with unprecedented processing power, storage capacity and access to knowledge, are unlimited.*

*These possibilities will be multiplied by emerging technology breakthroughs in a multitude of fields.*





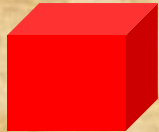
75 years



38 years



13 years



4 years



3.5 years



88 days

It took about 75 years for the telephone to connect 50 million people.



35 days

Today a simple app can reach that milestone in a matter of days. In the past 10 years the rate of adoption of new technologies has accelerated at a dizzying speed.

Reaching **50 Million** Users

# TODAY, THERE ARE 3.6 BILLION PEOPLE ONLINE ...

What Happens  
**online**  
In 60 Seconds ?



# Nations Living Virtually

As of June 2017

MILC



1. Facebook (2.0B active users)



2. China (1.39B)



3. India (1.34B)



4. WhatsApp (1.2B active users)



5. WeChat (889M active users)



6. Tencent QQ (868M active users)



7. United States (326M)



8. Twitter (319M active users)

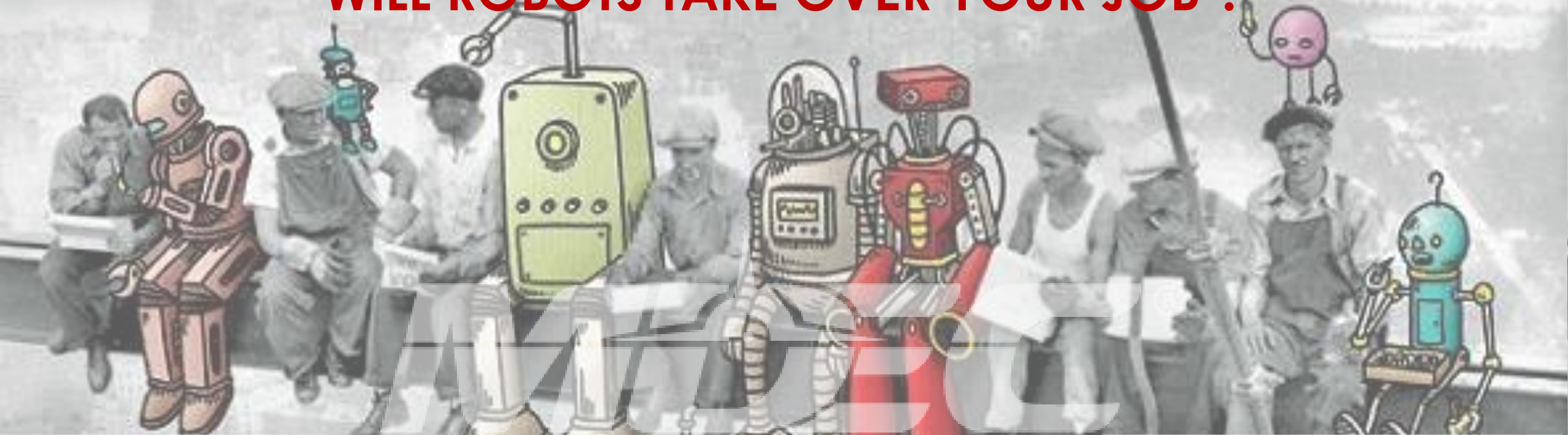


9. Indonesia (263M)



10. LinkedIn (106M active users)

# 2 BILLION JOBS TO DISSAPPEAR BY 2030: WILL ROBOTS TAKE OVER YOUR JOB ?



Robot Counselor

Tele-Surgeon

Drone Traffic Optimizers

Virtual Habitat Designer

Big Data Doctor

AI / Machine Learning Researcher

Cryptocurrency Banker

**Based on global estimates of 40% job loss across all industries ...  
It is predicted that by 2030, 1.54Billion human workforce will be replaced by automation.**

## Humans excel at:



Common Sense



Dilemmas



Morals



Compassion



Imagination



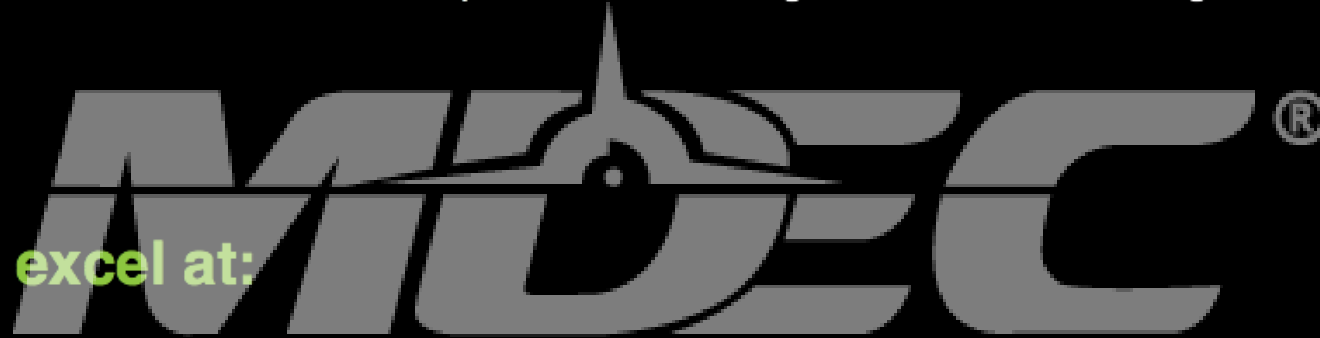
Dreaming



Abstraction



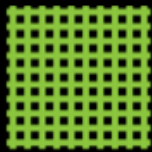
Generalization



## Cognitive systems excel at:



Natural Language



Pattern Identification



Locating Knowledge



Machine Learning



Eliminate Bias



Endless Capacity

# STARTUP ECOSYSTEM: THE NEW GENERATION OF ENTREPRENEURS



*“We recognise that entrepreneurs are key drivers of the nation’s economic and social progress, helping build new economies critical to sustainable development”*

**YAB NAJIB RAZAK**

Prime Minister Malaysia

NEWS | MALAYSIA

## Government declares 2017 as Startup and SME Promotion Year

Astro Awani | Translated by: Rosmanizam Dali  
October 21, 2016 21:53 MYT



**KUALA LUMPUR:** 2017 has been declared as the Startup and SME Promotion Year in line with the role of small and medium-sized enterprises in significantly contributing to the nation’s growth and labour market.

## PM: 2017 is year of Internet Economy

**IMPORTANT:**  
‘Digital Economy contributed 17.8pc to GDP last year’

**FAIRUZ MOHD SHAHAR  
AND FRANCIS DASS**  
PUTRAJAYA  
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**P**RIME Minister Datuk Seri Najib Razak yesterday an-

and unconventional office spaces in warehouses. To encourage the setting up of these hubs, we will ensure a simpler and faster approval process by the Communications and Multimedia Ministry,” he said after chairing the 28th Malaysia Super Corridor (MSC) Malaysia Implementation Council Meeting (ICM) here.

A new category under MSC Foreign Knowledge Worker would also be introduced, which would complement the establishment of Malaysia Digital Hubs, said Najib.

“The new category will be called the “Tech Foreign Knowledge En-

ment,” he said.

“We have also agreed that there will be allocation for Public Service Department scholarships for digital technology-related tertiary courses.

He said the greatest investment in the new age of industry would be to people.

Najib said he was impressed with the e-Usahawan and e-Rezeki programmes, which had empowered the people to increase their income and improve their quality of life.

He praised MDEC for the hard work it had put in to navigate the digital economy for a more product-



# MALAYSIA DIGITAL HUB



# ASEAN DATA ANALYTICS EXCHANGE (ADAX)

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

Tech Showcase

Data Sandboxing

## TALENT DEVELOPMENT



10 Data Scientists in Residence @ADAX

Startups

Public-Private Partnership Model: Located in Bangsar South, KL



SHOWCASE AREA

COMING SOON  
DATA EXCHANGE  
PLATFORM (DXP)

TALENT DEVELOPMENT  
SPACE

SANDBOXING  
ENVIRONMENT/STARTUP  
CO-LOCATION

BRIEFING/VISUALIZATION  
ARENA

# MALAYSIA TECH ENTREPRENEUR PROGRAMME

## WHAT IS MTEP?

Malaysia Tech Entrepreneur Programme (MTEP) is a pass that allows global tech entrepreneurs to kick start or expand their digital business in Malaysia



## WHO CAN APPLY?

### NEW ENTREPRENEUR

- individual with an idea but have no track record of established business
- 1 year (renewable)

### ESTABLISHED ENTREPRENEUR

- Individual with track record of established business
- Up to 5 years (renewable)

### APPLICATION REQUIREMENTS



Business Pitch Deck



Certificate of Good Conduct



Financial Track Records



Local Sponsor

# FREELANCERS WILL DOMINATE THE WORKFORCE BY 2020

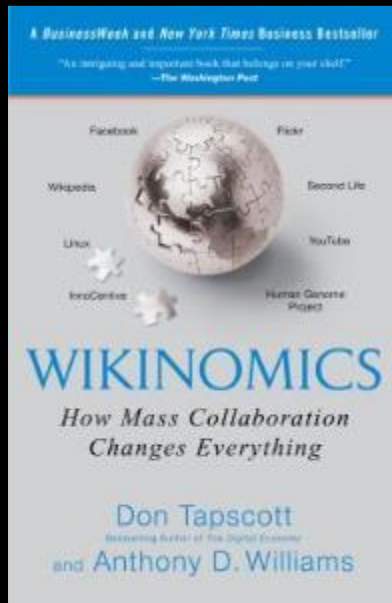
55 Mil US  
Citizens are  
Freelancers  
(2016)

USD 1  
trillion  
Freelancing  
Economy in  
US (2016)

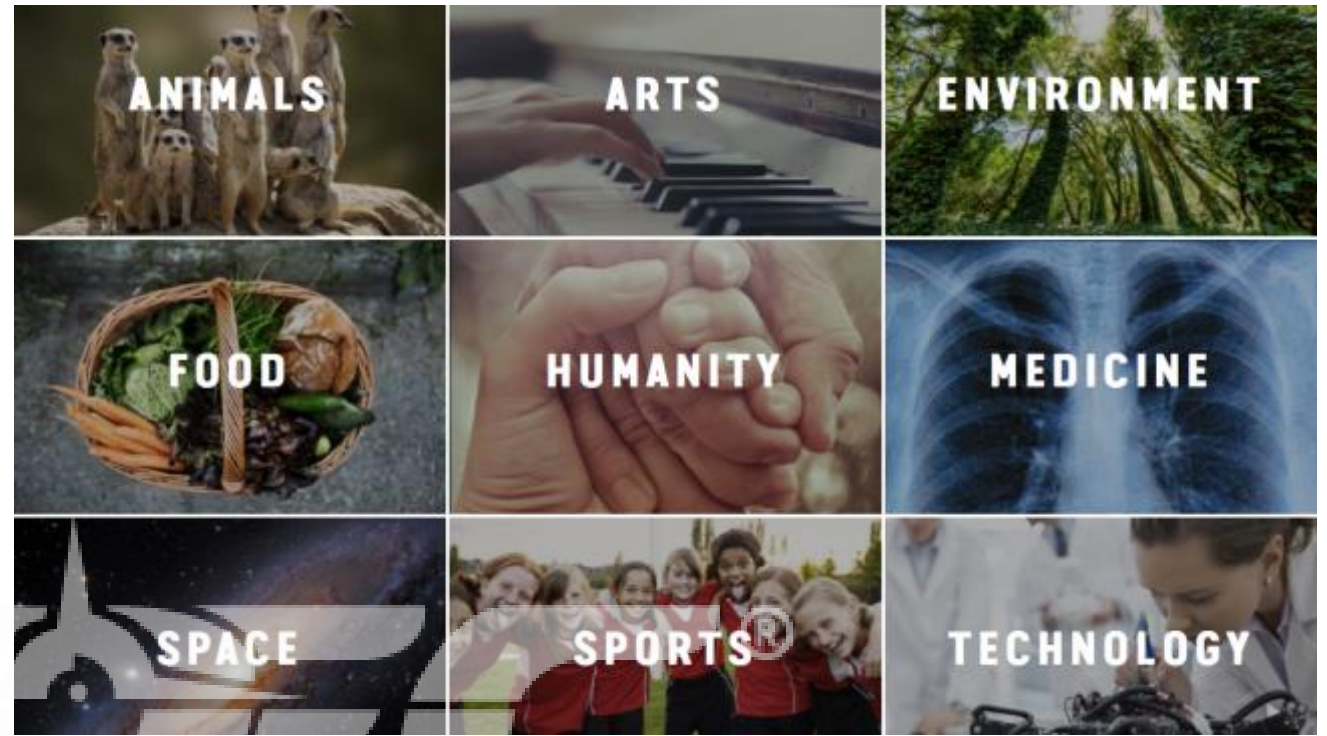
50% of US  
Workforce  
by 2020

21% of First  
Class Grads in  
UK choose  
Freelancing

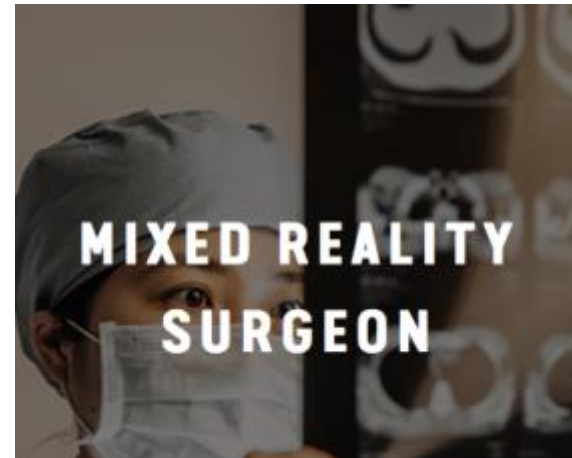
Fortune 500  
started  
adopting on-  
demand  
talent



***65% of Children in  
Schools Today Will  
End Up Working in  
Completely New Job  
Types That Don't Yet  
Exist***



**Combination:  
Medicine & Technology**



**Combination:  
Arts & Food**



# #mydigitalmaker: Building the Next Generation of Digital Innovators

## Coding for the future

Coding skills will be a huge asset for our schoolchildren when they enter the digital economy workforce. Coding is, after all, the basis for the creation of apps, software and websites. To equip them properly, the Education Ministry has trained 17,000 teachers to be coding-competent and the number is growing. Encouragingly, tests show there is no rural-urban gap or even a gender gap in digital capability among our students. > See Page 6 for reports by ADRIAN CHAN



New wave: Students will soon learn computational thinking in school thanks to a government initiative and modules developed with the help of the Malaysia Digital Economy Corporation.

## Nurturing logical thinking in schools

More than 17,000 qualified teachers to teach students skills required for coding

Reports by ADRIAN CHAN  
adrianchan@thestar.com.my

**KUALA LUMPUR:** The Education Ministry is making every effort to give all schoolchildren the problem-solving skills required for coding, in view of the vast opportunities offered by the digital economy.

Last year, as many as 8,000 teachers underwent training and will be fully equipped to teach computational thinking to students, according to Deputy Education Minister Datuk Chong Sin Woon.

Combined with those who received training this year, as many as 17,000 teachers have since attended the training, according to the Malaysia Digital Economy Corporation (MDEC).

"This special training is conducted with the help of 100 lecturers from teacher training institutes, ministry officers who are British Computer Society-certified master

trainers, as well as 90 lecturers from Institut Aminuddin Baki," Chong told *The Star* in an interview.

In January, computational thinking was made part of the reviewed Standard Curriculum for Primary Schools (KSSR) for Year One pupils – making Malaysia the first country in Asean to introduce it into the national syllabus.

Form One and Form Four students will also be allowed to take up Basic Computer Science and Computer Science respectively.

The move was implemented at 10,173 schools nationwide, covering 1.2 million students.

Chong explained that computational thinking and computer science would not be standalone subjects in primary schools but would instead be embedded into core subjects.

"Students will be learning in a fun and engaging way as coding knowledge will be imparted via logic-based games, where they will learn about problem-solving and

**It is not rocket science ... we are incorporating it into formal education to ensure our children are prepared.**

Datuk Chong Sin Woon

algorithms," he said.

"We do not want to burden students.

"We think coding is important because it is not only about computers, but also nurtures creativity and logical thinking.

"It is not rocket science ... we are incorporating it into formal education to ensure our children are prepared."

Chong added that coding was not

only a skill required in the technology sector, but also had opportunities in healthcare, transportation, finance and banking among others.

"These jobs require our children to have advanced digital competencies and technical skills, such as data analytics, machine learning and others.

"Teaching them computational thinking and coding languages will give them a good foundation in preparing for future digital economy jobs," he said.

Developed with the help of MDEC, the syllabus was benchmarked against courses offered by Britain's Computing at School as well as the United States' Computer Science Teachers Association.

According to MDEC vice-president for talent and digital entrepreneurship Sumitra Nair, students who take up Basic Computer Science or Computer Science in secondary school will gradually be introduced to coding languages,

including Scratch, Java and Python. Asked if the ambitious initiative may go the way of the earlier teaching of Science and Maths in English (PPSMI) policy, Chong said the programme was developed after a comprehensive survey of stakeholders, including parents and teachers.

"We have learnt a lesson from PPSMI," he said.

"A policy needs to reflect the people's needs and demands to be sustainable.

"We collected the views of various stakeholders before forming the policy.

"When it was drafted, we again brought it back to them to hear their responses. I am confident that the chances of it being rejected have been greatly reduced."

Watch the video  
thestartv.com



Genius at work: A file photo of Wern Jie showing his mother Jacqueline Tan one of his self-developed apps.



**THANK YOU**



**@YasminMDEC**



**@DatoYasminMahmood**