









29 Februari 1991
(PELAN 30 TAHUN)





Shahjalil A. Ruzaimi, Wawasan 2020

Shahjalil A. Ruzaimi, Wawasan 2020



9 CABARAN WAWASAN 2020



Wawasan 2020

- Diperkenalkan oleh YAB Dato Seri Dr Mahatir bin Muhammad sebagai Perdana Menteri Malaysia pada 29 Februari 1991, semasa cabaran utama ialah:
 - a) Cabaran 1 - membentuk sebuah negara bangsa yang berkeadilan, serta memajukan kesejahteraan yang dimiliki bersama
 - b) Cabaran 2 - melahirkan masyarakat yang berketuhanan, berkeadilan, berkeadilan, berkeadilan
 - c) Cabaran 3 - membentuk dan memperkembangkan sebuah masyarakat demokrasi yang matang
 - d) Cabaran 4 - membentuk masyarakat yang berkeadilan, berkeadilan, berkeadilan
 - e) Cabaran 5 - membentuk sebuah masyarakat matang yang berkeadilan, berkeadilan, berkeadilan
 - f) Cabaran 6 - membentuk sebuah masyarakat yang berkeadilan, berkeadilan, berkeadilan
 - g) Cabaran 7 - membentuk masyarakat yang berkeadilan, berkeadilan, berkeadilan
 - h) Cabaran 8 - membentuk sebuah masyarakat yang berkeadilan, berkeadilan, berkeadilan
 - i) Cabaran 9 - membentuk masyarakat yang berkeadilan, berkeadilan, berkeadilan

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Wawasan 2020





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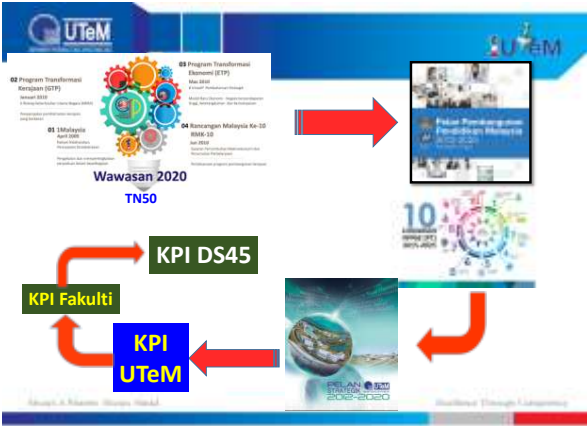
12 National Key Economic Areas

Focused Approach to Economic Growth

Resources and knowledge to competitive advantages for sustainable development and entry support beyond a limited number of key growth engines. Hence, the Government Transformation Programme focuses on 12 National Key Economic Areas (NKEAs) as discussed in the Tenth Malaysia Plan. These NKEAs will receive prioritised government support including funding, top-down and bottom-up approach.

The Government is committed to the growing support of growth in the non-NKEA sectors. However, the Government will focus its efforts on the NKEAs because of the significance of the 20% contribution that sustainability of the economy can drive.

Penawaran Program UTeM selari keperluan Negara



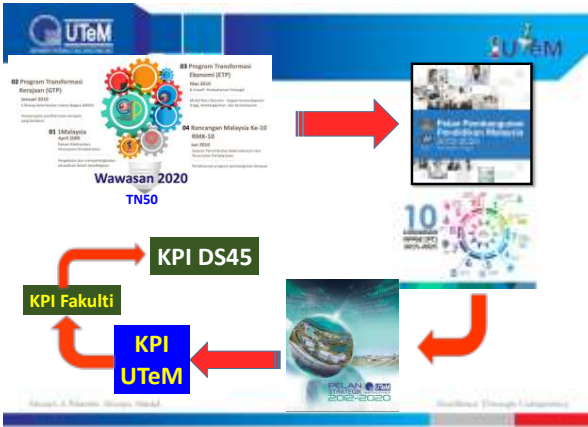
MTU Malaysia Education Blueprint 2015-2025 (Higher Education)

Shift to Quality TVET Graduates

Tracking Measures:

- Growth in number of post SPM students enrolled in TVET programmes;
- Growth in number of TVET programmes with international recognition or accreditation;
- Cost per student; and
- Completion rate (such as the percentage of students who complete TVET programmes).

Programme Expected Outcomes (Graduates Enrolled in Technology Programmes in MTUN %)	2015	2020	2025	2030
Number of Programmes	50	60	70	80
Number of Community Colleges	80	120	150	200

















01

AI is the continuation of a journey achieved through advances in science and technology

02

Each industrial revolution changes the way we live, work and interact with each other

03

AI - Rapid change. Evolving jobs

04

Humans emerge as champions

05

Education is key to face all challenges

HUMAN & MACHINE SYNERGY MODEL

Builds Through Competency





LEARNING & TEACHING 4.0



REDESIGNING LEARNING SPACES



FLUID & ORGANIC CURRICULUM



21ST CENTURY PEDAGOGY



LATEST ED TECH

HUMAN & MACHINE SYNERGY MODEL

Builds Through Competency





LEARNING & TEACHING 4.0

PROFESSIONAL DEVELOPMENT FOR LECTURERS



"Ok, so this is how our generation does homework"

HUMAN & MACHINE SYNERGY MODEL

Builds Through Competency

7



INDUSTRY & ACADEMIA ARE ONE

TVET 4.0 FRAMEWORK



Through A Network (Stages Model)

Readiness (Through Competency)



HUMANITY

*Emotional Intelligence & Love Quotient:
Equipping our students to face the challenges of 4IR*



Through A Network (Stages Model)

Readiness (Through Competency)



HUMANITY


Jack Ma's LQ – Love Quotient



"If you want to be successful, you should have Emotional Quotient (EQ) and Intelligence Quotient (IQ), but if you want to be respected, if you want to survive the next 30 years, you should teach our kids the "Q" of love, of care for others. This is love quotient".

Through A Network (Stages Model)

Readiness (Through Competency)





7 Trending Jobs of the Future

1 CYBER SECURITY SPECIALIST
With the rise of the digital economy, cyber attacks by hackers are a serious money maker.

2 DIGITAL MARKETING SUPER
With the rise of the digital economy, digital marketing is a serious money maker. SEO, SEM, SMM, and other digital marketing skills are highly sought after.

3 ROBOTICS ENGINEERS
With the rise of the digital economy, robotics engineers are a serious money maker. Robotics engineers are highly sought after.

4 AEROSPACE ENGINEERS
With the rise of the digital economy, aerospace engineers are a serious money maker. Aerospace engineers are highly sought after.


5 3D PRINTING SPECIALIST
With the rise of the digital economy, 3D printing specialists are a serious money maker. 3D printing specialists are highly sought after.


6 URBAN FARMERS
With the rise of the digital economy, urban farmers are a serious money maker. Urban farmers are highly sought after.

7 DATA SCIENTIST
With the rise of the digital economy, data scientists are a serious money maker. Data scientists are highly sought after.

Through A Network (Strategic Network)

Qualities Through A Competency





KEY TAKEAWAYS

Learning & Teaching 4.0

- Learning Spaces
- Pedagogy (Heutagogy, Paragogy, Cybergogy)
- Fluid & organic curriculum
- Technologies

Learning without lectures
Evaluation without examination
Knowledge without borders

New Jobs will be created
Industry and Academia are One
Ultimately it's meant for human beings

Through A Network (Strategic Network)

Qualities Through A Competency







Through A Network (Strategic Network)

Qualities Through A Competency





DUNIA DIGITAL

WORLD THROUGH DIGITAL
2015-2025
2016

"We're poised to experience more digital progress in the next ten years than we have in the last 50."

Denis O'Brien on the Fourth Industrial Revolution
Chairman of Digital

Through A Network (Through World)

Realities Through Convergence





INNOVATION

INNOVATION
= IDEA + CREATIVITY + TEAM + PLAN

Innovation is the only way to win.



Through A Network (Through World)

Realities Through Convergence





INSAN (HUMANE)

- Educating a kind and compassionate future generation

The greatness of humanity is not in being human, but in being humane.

— Mahatma Gandhi —



Through A Network (Through World)

Realities Through Convergence







6 Tema Pelan Strategik UTeM 2012 – 2020



UTeM
Universiti Teknologi Malaysia



UTeM
Universiti Teknologi Malaysia

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TEMA 4 :
MEMACU POTENSI
KOMUNITI - INDUSTRI

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Mr. Steven Ge
FTMK

Western Digital
Dataran Ayer
Hossein Bin-Said
FTK

LEARN FROM
THE PIONEER

Strategic & Business Strategy Model

Qualitative Through Competence



UTeM
Universiti Teknologi Malaysia



UTeM
Universiti Teknologi Malaysia

TEMA 5 :
Pengurusan Bakat

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RASIONALISASI
STRUKTUR
ORGANISASI

BUSINESS
PROCESS
SIMPLIFICATION

AUDIT
PERJAJARAN

PEMERIKSAAN
SASARAN KERJA
TAHAPAN (SKT)

DESKRIPSI
TUGAS

PP1A

Strategic & Business Strategy Model

Qualitative Through Competence



UTeM
Universiti Teknologi Malaysia



UTeM
Universiti Teknologi Malaysia

TEMA 6 :
KESTARIAN KEWANGAN

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Strategic & Business Strategy Model

Qualitative Through Competence



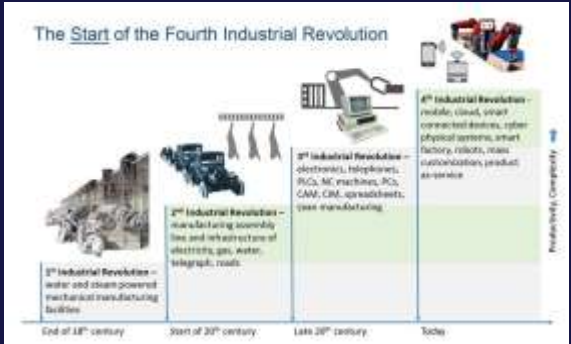
THE FOURTH INDUSTRIAL REVOLUTION

BRACE YOURSELF

FOURTH INDUSTRIAL REVOLUTION IS COMING

meme-generator.net

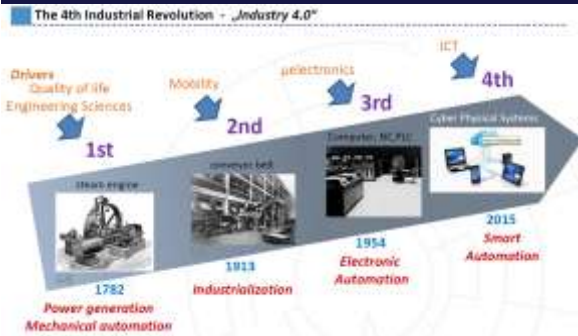
Fourth Industrial Revolution



Fourth Industrial Revolution



Fourth Industrial Revolution



Fourth Industrial Revolution



8.1 million employed in **renewable energy**, more than in oil and gas



- more money was invested worldwide into expanding renewable energy production than into oil and gas production.
- more people employed in renewable energy worldwide than there are in oil and gas.

A TRILLION DOLLAR **SENSOR** ECONOMY

- 100 billion connected devices linking people (and their emotions) with processes, places, and data
- 5 billion plus hyper-connected people
- Protect the vulnerable – Dutch police



Factory workers to **robots**

As Adidas announces a new robot shoe factory, an ILO report says up to 90% of workers in South-east Asia could face unemployment due to automation



The transition



- From ownership to mobility, ie a product to a shared service
- Major redesign of all cities (parking, the cbd, competitive advantage)

Many marries robot in China



Robot Priest - Germany



Fourth Industrial Revolution

Apakah peranan anda sebagai
pensyarah UTeM bagi
menghadapi Industrial 4.0 ?