

UTM Monthly Engagement (March 2015)

Wahid Omar

2 March 2015 / 11 Jamadil Awal 1436 H
UTM Johor Bahru



Bertemu mesra, berkongsi rasa, mencambah minda #3, 2015



The Agenda

- Success Stories
- New Appointments
- Update/ Events / Visits
- New looks of Research Alliances
- Super CoE
- Myra II Achievements
- 2015 Strategic Actions/ Desired State/ Strategic Map
- Concluding remarks

Congratulations!



MALAYSIA TECHNOLOGY EXPO 2015
THE LEADING INTERNATIONAL INVENTION & INNOVATION EXPO
12 - 14 FEBRUARY 2015 • PUTRA WORLD TRADE CENTRE • KUALA LUMPUR



- **BEST AWARD**

“Smart LTE-Wifi Mobile Hotspot”

Prof. Dr. Tharek bin Abd. Rahman

- **5 Gold**
- **1 Silver**
- **3 Bronze**

NEW

APPOINTMENTS



Prof. Dr. Norsarahaida Bt Saidina Amin
Dean, Faculty of Science



Prof. Dr. Mohd Fua'ad bin Hj. Rahmat
Dean, UTM SPACE



Prof. Dr. Khairul Anuar bin Kassim
Dean, Faculty of Civil Engineering

CONGRATULATIONS!

DEANS for NEWLY RESTRUCTURED RESEARCH ALLIANCES



Prof. Dr. Madzlan bin Aziz
Dean (Frontier Materials)



Prof. Dr. Rosli bin Md. Ilias
Dean(Health And Wellness)



Prof. Ir. Dr. Abu Sahmah Bin Supa'at
Dean (Innovative Engineering)



Prof. Dr. Zulkifli bin Yusop
Dean (Resource Sustainability)

CONGRATULATIONS!



APPOINTMENTS

Super COE Centre of Excellence



Prof. Dr. Muhd Zaimi bin Abd Majid
Senior Director **(ISIIC)**
Institute for Smart Infrastructure and
Innovative Construction



Prof. Abdull Rahim bin Mohd Yusoff
Senior Director **(RISE)**
Research Institute for Sustainable
Environment



Prof. Dr. Arshad bin Ahmad
Senior Director **(IFE)**
Institute of Future Energy

Prof. Dr. Mohamad Nazri bin Mohd Jaafar
Senior Director **(IVeSE)**
Institute for Vehicle
Systems and Engineering

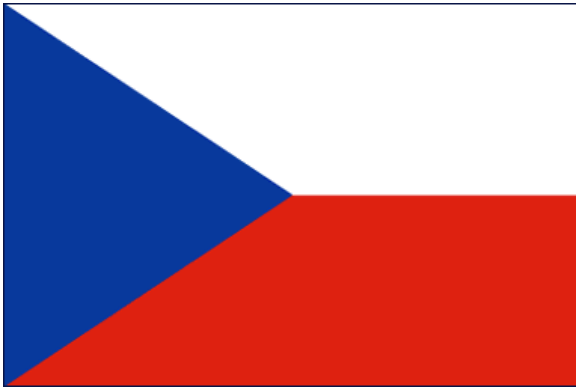


Prof. Dr. Abdul Hafidz bin Haji Omar
Senior Director **(IHCE)**
Institute Of Human Centered
Engineering



Prof. Dr. Mohd Marsin bin Sanagi
Senior Director
(IBNU SINA ISIR)
Institute for Scientific
& Industrial Research





**Visit by H.E Rudolf Hykl,
Ambassador of
the Czech Republic**





Visit to Indonesia



Universitas Pendidikan Indonesia



*Agency of Assessment and Application
of Technology (BPPT) Indonesia*



BINUS UNIVERSITY

People. Innovation. Excellence.



Institut Teknologi Bandung (ITB)

Engagement with UTM Alumni in Indonesia



ASEAN-NICT ICT Round Table 2015

25 – 26 February 2015

Bangkok, Thailand



- UTM and MIMOS Sdn Bhd representing Malaysia
- The future direction of ICT R&D of Japan-ASEAN
- Promotion of ICT R&D of invited institutions/agencies (including UTM)
- Collaborative strategy in establishing of the ASEAN -Japan ICT Virtual Institute
- MoU Exchanging between UTM-NICT

Happy - Healthy - Sustainable

Launching Ceremony of UTM Healthy Living Programme 2015



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“Keluarga Bahagia ,UTM Ceria”

#hcutm2015 #iloveutm

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UTM Alumni Gala Dinner 2015

14 February 2015
Dewan Merdeka, PWTC



Town Hall Meeting (Public Hearing Session)



Malaysia Education Blueprint 2015-2025 (HIGHER EDUCATION)



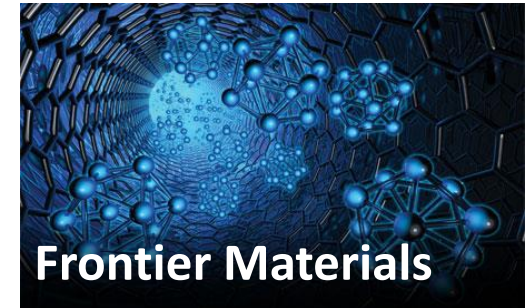
**PERCENTAGE OF APPRAISAL
 FIRST APPRAISAL OFFICER (PPP) 2014**

	PPP1	PPP2	PPP3
ELPPT (academic)	91.33 %	91.16 %	90.93 %
PURATA PPP	91.14%		

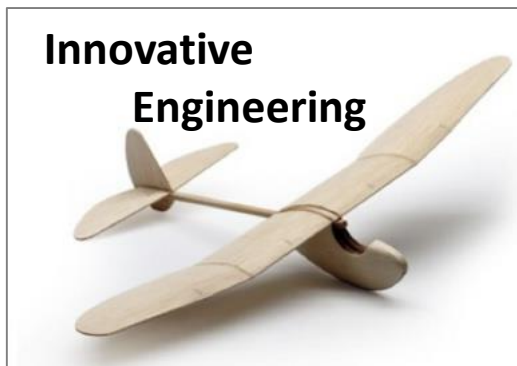
	PPP
ELNPT (non academic)	98.03%

Deadline for Second Appraisal Officer: 4 March 2015

Updated: 25 Feb 2015



Research Alliances



Resource Sustainability

6 New Institutes

-Super CoE-



(RISE)

Research Institute for
Sustainable Environment

(ISIIC)

Institute for Smart Infrastructures
and Innovative Construction

(IFE)

Institute of Future Energy

(IVeSE)

Institute for Vehicle Systems
and Engineering

(IBNU SINA ISIR)

Ibnu Sina Institute for Scientific
and Industrial Research

(IHCE)

Institute of Human Centred
Engineering

UTM TECHNOLOGY TRANSFER SHOWCASE (TTS)

**New
Initiative**

- Featuring latest UTM's R&D product for technology transfer and commercialization to potential industry partner.
- **First TTS , Theme: Biotechnology for Health & Wellness, venue: IBD on 14 Dec 2014.**
 - ✓ Attended by more than 20 companies (local/international)
 - ✓ Over 300 units of IBD products were sold on the day itself
 - ✓ Received a number of new business deals in various forms (i.e commercialization collaborations)



6 TTS for specific areas and target industry partners to be held in UTM Kuala Lumpur.

1. ICT For Community Excellent (3rd March 2015)
2. Water and Membrane Technology (April 2015)
3. Sustainable Construction (June 2015)
4. Green Energy and Biomass (August 2015)
5. Consumer Electronics (October 2015)
6. Automotive & Low Carbon Transportation (Dec 2015)



ESTABLISHMENT OF A HERBAL EXTRACTION CENTRE AT THE INSTITUTE OF BIOPRODUCT DEVELOPMENT (IBD)



HERBAL DEVELOPMENT DIVISION



RM9.34 MILLION IN GRANTS

Purchase of 5 QUALITY EQUIPMENT on Herbal Extract production

GRANT FROM NEW KEY ECONOMIC AREAS (NKEA)
– HIGH VALUE HERBAL PRODUCTS, OFFICE OF THE PRIME MINISTER



DIG-MAZ 100ExKA/2



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INTERNATIONAL COLLABORATION BETWEEN IBD UTM AND RESEARCH CENTRE FOR GREEN SCIENCE AND TECHNOLOGY, SHIZUOKA UNIVERSITY JAPAN

5 ACADEMICS LED BY REKNOWNED PROF. ENOCH PARK VISITED IBD TO INITIATE COLLABORATION IN :

- RESEARCH AREAS IN INDUSTRIAL BIOTECHNOLOGY, HERBAL TECHNOLOGY, RECOMBINANT PROTEIN PRODUCTION
- STAFF EXCHANGE TO TEACH SPECIFIC TOPICS AT POSTGRADUATE LEVEL
- POSTGRADUATE EXCHANGE AND INTERNSHIP
- DEVELOPING JOINT MSc/PhD DEGREE PROGRAMMES

FIRST 3 ACTIVITIES WILL START THIS YEAR AS PART OF THE JAPANESE GOVT INITIATIVES IN PROMOTING INTERNATIONALISATION OF THEIR UNIVERSITIES. FINAL DISCUSSION WILL BE DONE THIS MARCH DURING THE VISIT OF 4 IBD MEMBERS TO SHIZUOKA UNIVERSITY ALL PAID BY THEM.





MaGIC – Stanford Faculty Program

24 February 2015 – 7 March 2015

STVP Stanford University, California



1. PM. Dr. Mohd Shahrizal Sunar
2. PM. Dr. Kamariah Ismail
3. Dr. Mohd Zaidi Abd Rozan
4. Dr. Farhan Mohamed



PUSAT KERJAYA UTM - UTM CAREER CENTRE- (UTM CC)



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CENTRE FOR COMMUNITY AND INDUSTRY NETWORK (CCIN)



CENTRE FOR COMMUNITY AND INDUSTRY NETWORK (CCIN)



ACADEMIA

“Top Global 50 (S&T)”

“Leader in the development of human capital and innovative technologists”

Outstanding contribution to society

Strong and impactful national & international linkages

INDUSTRY

Function 1:

- Energizing High Impact Community-based Projects**
- CBPR
 - Service-Learning
 - Outreach

Function 2:

- Advise, Coordinate and Monitor**
- Collaborations of University-Industry-Community

Function 3:

- Invigorating Academia-Industry Collaboration Council - AICC**
- Prioritising on Economic Clusters (NKEA)

Function 4:

- Strengthening Academia-Community Ecosystem**
- UCTC
 - RTC/UTC
 - ICOE
 - PPRN

COMMUNITY

NEW ACADEMIA-INDUSTRY NETWORK (BLUE OCEAN STRATEGY) MOE

GOVERNMENT

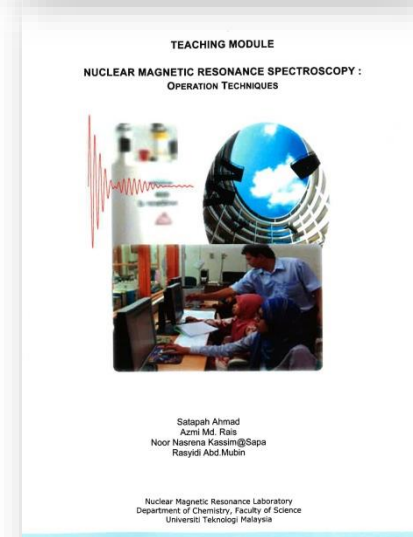
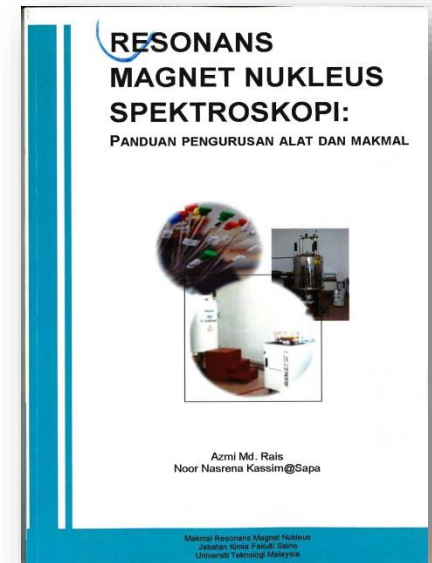


... global

Publication



AZMI MD. RAIS
PENOLONG PEGAWAI SAINS
UNIT PENGURUSAN MAKMAL UNIVERSITI
PEJABAT TNC (P&I) UTM



SUMMARY OF UTM 2014 ACHIEVEMENTS – MyRA II



No.	Section	Status	IPT Marks	Benchmark Scores	% ACHIEVEMENT
1	Section B: Quantity & Quality of Researchers	UNSATISFACTORY	<u>8.94</u>	15	60%
2	Section C: Quantity & Quality of Research	UNSATISFACTORY	<u>16.02</u>	35	46%
3	Section D: Quantity & Quality of Postgraduates	EXCELLENT	<u>11.99</u>	10	120%
4	Section E: Innovation	OK	<u>14.6</u>	15	97%
5	Section F: Professional Services and Gifts	UNSATISFACTORY	<u>6.96</u>	10	70%
6	Section G: Networking and Linkages	OK	<u>11.97</u>	12	100%
7	Section H: Support Facilities	EXCELLENT	<u>3</u>	3	100%
TOTAL		SORRY	73.48	100	

STATISTICS OF POSTGRADUATES

(25 FEB 2015)



Number of New Graduates: 958

Number According to Level of Study:

Masters - 741

PhD - 217

Number According to Citizenship:

International - 133

Local - 825

Total Enrollment: 10,793

Number According to Level of Study :

Masters - 5,978

PhD - 4,815

Number According to Citizenship :

International - 2,705

Local - 8,088

RMC Management Performance 2014

1728 grants applied

1054 approved

61 %
success
rate

26,972 application for payment
received for processing

25,084 processed
in 14 days

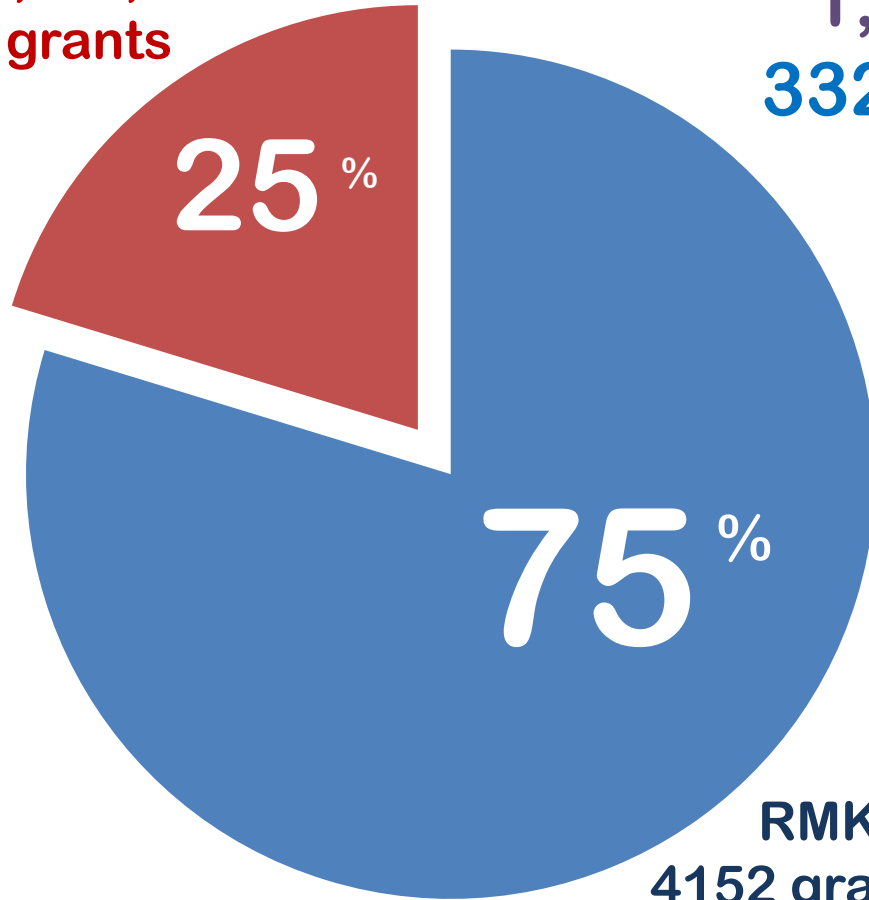
2090
per month

93 %
completed in 14 days

RMC Management Performance 2014



RM93,356,998
1257 grants



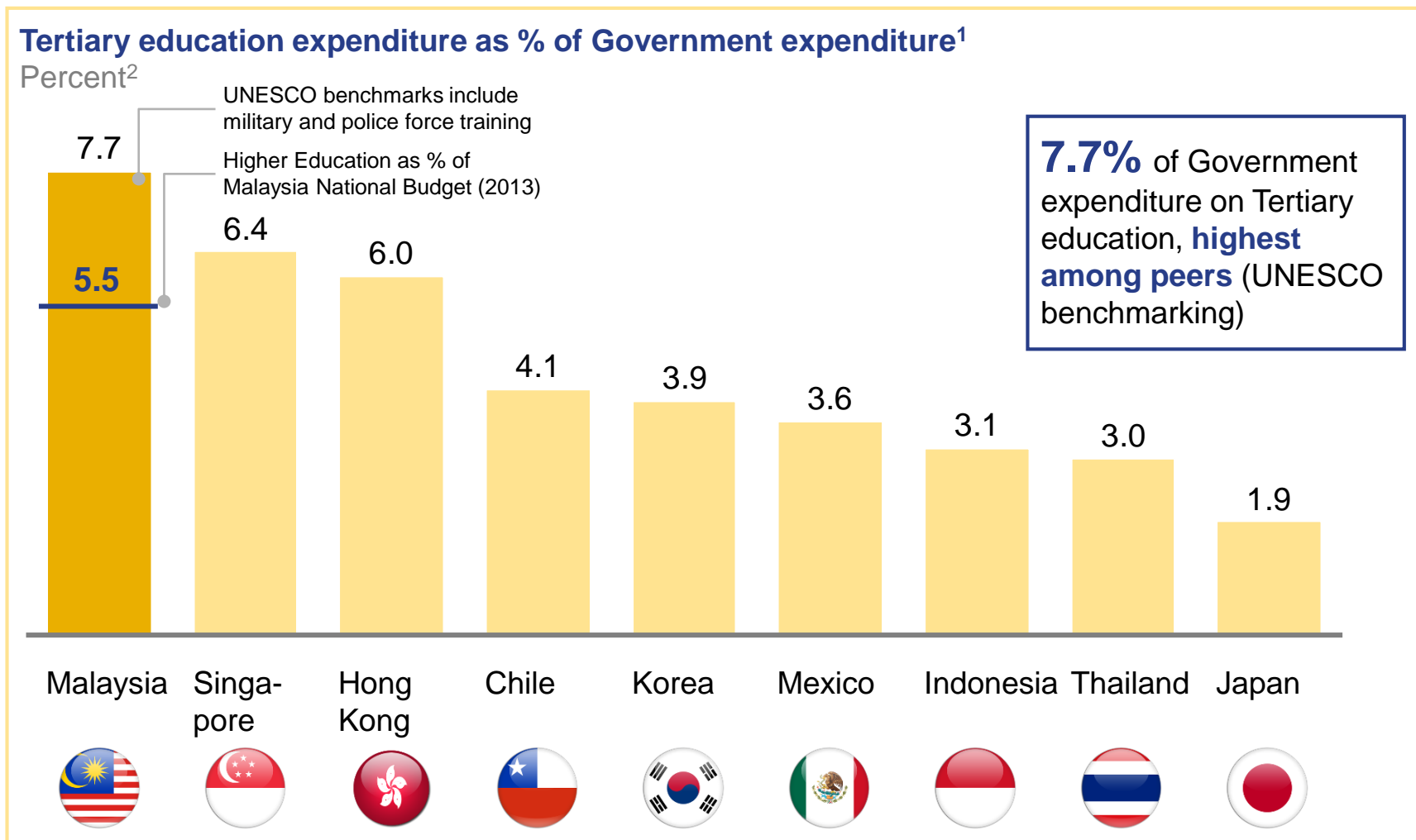
1,053 project leaders
3329 people employed
202 expatriates
281 postdocs

MOA/MOU
23 international
32 national

20,537
counter
visitors

RMK 10
4152 grants
RM367,075,187

The Government is deeply committed to Higher Education, as evidenced by its high investment relative to peers



1 Peer countries based on the following categorization: Asian Tigers (Hong Kong, Singapore, South Korea, Japan), SEA neighbours (Indonesia, Thailand, Singapore) and comparable GDP per capita (Chile, Mexico)

2 Latest data available: Singapore (2013), Chile, Hong Kong, Indonesia, Japan, Thailand (2012), Malaysia, Mexico, Korea (2011)

The Universitas 21 report provides an assessment of Higher Education in 50 countries across four dimensions

 Examples for investigation

Rank out of 50 countries

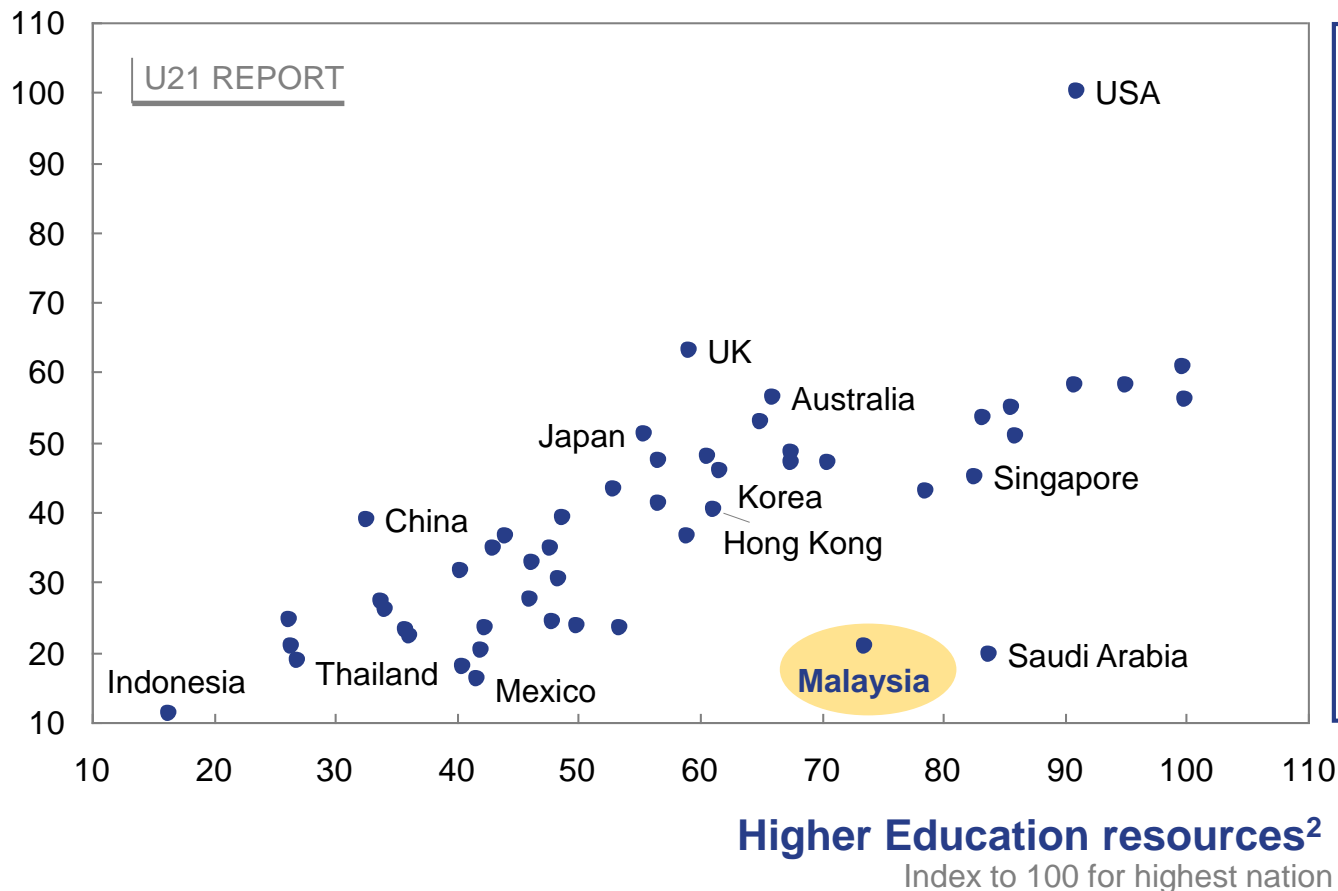
		1	2	3	4	
		RESOURCES	ENVIRONMENT	CONNECTIVITY	OUTPUT	OVERALL
Malaysia		12	26	35	44	28
Asian Neighbours	Singapore	9	11	5	19	10
	Thailand	47	30	30	47	42
	Indonesia	50	37	25	50	48
	Hong Kong	19	4	7	23	15
	South Korea	18	39	32	18	21
Global Benchmarks	USA	4	3	15	1	1
	UK	21	16	3	2	8
	Australia	16	8	8	6	9
TYPE OF METRICS USED	Government expenditure, investments, R&D	Qualitative assessment of policy and regulatory environment	<ul style="list-style-type: none"> Collaboration globally and with industry International student enrolment 	<ul style="list-style-type: none"> Research output Institution rankings Enrolment Employability 	Average score of the four categories	

U21 Report:
 "28th Rank is expected for Malaysia's income level"

The goal is to lift output and maximise return on investment as the nation continues its development trajectory

Higher Education outputs¹

Index to 100 for highest nation



- U21 report ranks Malaysia **12th** out of 50 for **resources committed** to Higher Education, and **1st** when adjusted for economic development
- However, Malaysia ranked **44th** out of 50 for **outputs** of Higher Education

1 **Output rating** according to Universitas 21 report methodology; Weighted average of university ranking measures, article publication measures, research excellence measures, enrollments as a % of eligible population, unemployment rates for tertiary qualified graduates

2 **Resources** is a weighted average of five measures: Government spend on tertiary education as a % of GDP, total spend on tertiary education as a % of GDP, annual expenditure per student by tertiary institutions, expenditure by tertiary institutions on R&D as a % of GDP, expenditure by tertiary institutions on R&D per head of population



1 Excellence in Learning & Teaching

2 Excellence in Research, Innovation and Commercialisation

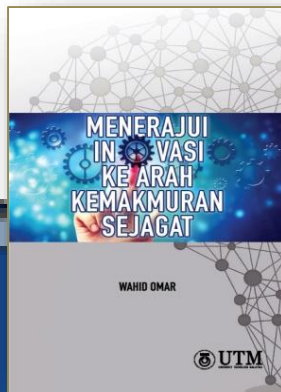
3 Sustainable Campus, Infrastructure, Information and Communications Technology (ICT) System, and Community Engagement & Industrial Network

4 Total Campus Experience

5 High Performance Delivery

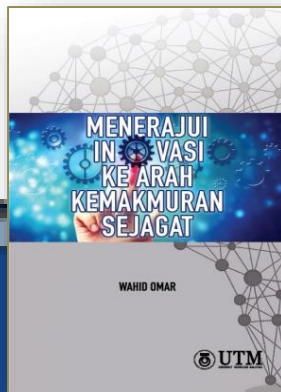
6 Financial Sustainability

7 Global Reputation



HOPES & ASPIRATIONS

- i. UTM sebagai sebuah institusi ilmu, pendidikan dan penyelidikan berperanan sebagai komponen yang sangat penting untuk kemajuan dan kemakmuran negara.
- ii. Ahli akademik perlu meningkatkan penghayatan terhadap Akademia Baru dan Jiwa Akademia, meliputi ilmu pendidikan, penyelidikan, pembentukan sendiri mahasiswa, keserjanaan dan penulisan berkualiti.
- iii. Peranan staf PPP perlu lebih jelas sebagai komponen penting dalam ekosistem kampus.
- iv. Sinergi antara PTJ dan di antara individu penting dalam membina rantai ekosistem yang meningkatkan kualiti mahasiswa.
- v. UTM sebagai institusi penerokaan, perkembangan dan penyebaran ilmu adalah pemangkin kepada perubahan sendiri, keluarga dan masyarakat.
- vi. Libat sama UTM dan komuniti berhampiran kampus dan masyarakat Negeri Johor perlu dipertingkatkan.
- vii. Setiap staf UTM perlu memikul amanah yang dipertanggungjawabkan oleh kerajaan dan rakyat Malaysia.



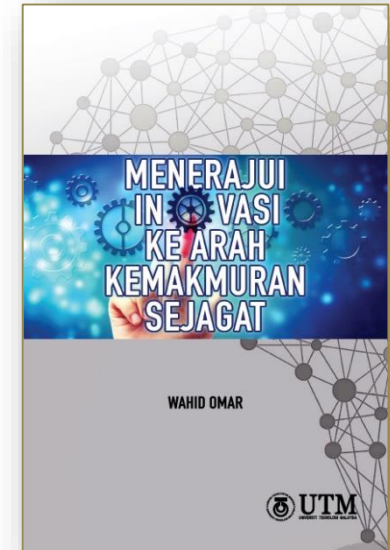
HOPES & ASPIRATIONS

- i. UTM as an institution of knowledge, education and research which serves as a significant component for the development and prosperity of the nation.
- ii. Academics need to increase appreciation of the New Academia and the Soul of Academia, encompassing knowledge, research, student development, scholarship and quality writing and publication
- iii. Roles of PPP staff needs to be clearer as an important component in the campus ecosystem.
- iv. Synergy between PTJs and individuals is imperative in constructing an ecosystem chain which enhances the quality of graduates.
- v. UTM as an institution which explores, develop and disseminate knowledge, acts as a catalyst for the transformation of self, the family and the society.
- vi. UTM's engagement with neighboring communities and the people of johor should be enhanced.
- vii. Every UTM staff needs to be ethical in shouldering the responsibility entrusted by the Government and Citizens of Malaysia.

KEYWORDS



- Amanah (trustworthiness)
- Hikmah (wisdom)
- Ihsan (perfection-or-excellence)

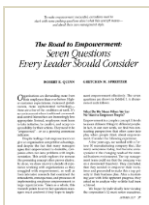




EMPOWERMENT

Having the sense of:

- Self determination
- Meaning
- Competence
- Impact



Source: Quinn, R. E., & Spreitzer, G. M. (1997). The road to empowerment: Seven questions every leader should consider. *Organizational Dynamics*, 26(2), 37-49.

誠
SINCERITY





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Go Beyond the Rhetoric

PAGE 12 | NEW SUNDAY TIMES

FEBRUARY 8, 2015

LEARNING CURVE PERSPECTIVE

IT is often said that a crisis presents two different dimensions: threat and opportunity. While the threats are rather obvious in many instances, the opportunities are less so.

There have been many crises of late and we need to make new inroads into creating new opportunities, not only to put things right but also make them better and more durable for the future, if not to prevent the crises from happening yet again.

This means that real brainwork needs to go into finding the best available or fashionable solution, given the urgency of the situation.



Dzulkipli Abdul Razak
 is an honorary professor at University of Nottingham

Go beyond the rhetoric

Filter Machine which produces clean water for flood victims. A praiseworthy alternative using the latest technology, it is developed by a group of researchers led by Associate Professor Ahmad Fauzi Ismail of the Engineering and Natural Resources Faculty, UTM. Flood victims housed at SK Perigi Acheh, Johor used the machine with the help of UTM working in close collaboration with the

of treatment systems, and energy. The and machine is with other and water. Mo — which was awarded a research grant by the government — is reportedly made of 100 per cent local materials. This makes it affordable to ensure that there apply during times of light. e recently, UTM has taken pro-active steps ing three innovations in home construction, sts of the Fast-Track System, Rapid Building-In-Box System (RaBIB) and Flood-Proof House. A prefabricat-

property can be minimised, saving millions of ringgit particularly during flash floods.

The device is designed to measure three levels of flood warnings, namely flood occurrence, alert and

“In this regard Universiti Teknologi Malaysia(UTM) – the latest research-intensive university-seems to be at the forefront by exhibiting more brain than brawn”

“This is where the UTM examples bring much hope that universities can remain relevant beyond the usual rhetoric”

The “house”, which is made of light materials, has two bedrooms and one bathroom, and takes only two weeks to complete. It will not be damaged when a flood occurs as it is able to float vertically and steadily when the water level rises.

There is still another invention by UTM, aptly named the Discovery University. It is a device called Automated Photonics Flood Warning System (Flood-Short Message System) that helps save lives once the water level starts to rise. With the device in place, damage to

these ideas are evident that the university is able to seize the opportunities presented by the tragic floods, as is expected from a “thinking” university that remains engaged with the community at large.

While a crisis takes a lot of manual effort to put right, it is the “brain” that will ensure how a disaster-prone future will be averted, if not minimised. This is where the UTM examples bring much hope that universities can remain relevant beyond the usual rhetoric.

Tan Sri Prof. Dzulkipli Abdul Razak, former USM Vice-Chancellor
 Learning Curve, New Sunday Times, 8 February 2015

Reputation

Research University status
THE rankings - BRICS and emerging economies: 93
QS rankings: 66 (AUR); 134 (E&T); 294 (WUR)
81.7% UG employability
'High performance culture'

Admission/Enrollment

Entry point: 3.72
Success rate: 3%
10,382 UG students
13,793 PG students
4,815 PhD students
4,119 International students
Stakeholders: Parents & students

Alumni

166,787

Cycle of Excellence

Student's Experience

New Academia
Excellent Track Programmes (5ETP)
Community engagement programmes
Global Outreach Programme (GOP)
Service learning
Student at the heart of the system

Industrial Linkages/Branding

1,213 industrial linkages (71 GLCs)
117 community engagement programs (RM2.1mil of collected funds)
RM345mil. of research funding
RM1.684mil. from commercialisation
3,081 publications in Scopus
Academia-industry partnerships: FC & MARA; FKE & Intel; FKA & JKR
Stakeholders: Industries & communities

**“ Sesungguhnya
Allah tidak akan
mengubah nasib
suatu kaum
kecuali kaum itu
sendiri yang
mengubah apa
apa yang pada
diri mereka ”**

QS 13:11





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Appreciations:

En Ahmad Hilman

Dr Narina

