

**KERATAN AKHBAR-AKHBAR TEMPATAN**  
**TARIKH: 2 MAC 2015 (ISNIN)**

<b>Bil</b>	<b>Tajuk</b>	<b>Akhbar</b>
1	Kesalahan internet meningkat	Utusan Malaysia
2	Utara semenanjung cecah 38 celsius	Harian Metro
3	Tourist urged to drink a lot of water to stay hydrated	The Star
4	Tapping the benefits of synthetic biology	New Straits Times
5	Innovation must become our central obsession	New Straits Times



DR. ABU BAKAR MOHAMAD DIAH melancarkan buku *Cyber Terrorist-Policy & Technical Perspective* sambil diperhatikan oleh Rabiah Ahmad (dua dari kanan), Dr. Zahri Yunus, (tiga dari kiri), Dr. Amirudin Abdul Wahab (kiri) dan Kolonel Wan Ghazali Wan Din dalam majlis perasmian program Sambutan Hari Internet Yang Lebih Selamat 2015 di ibu negara baru-baru ini

# Kesalahan internet meningkat

Penggunaan tanpa kawalan undang pelbagai ancaman siber

Oleh **AQILAH MIOR KAMARULBAID**  
aqilah.mks@gmail.com.



**T**ANPA disedari kehidupan seharian kita bergantung kepada akses dan penggunaan internet yang tanpa had sehingga menyebabkan internet itu menjadi 'nyawa' kepada kehidupan seharian.

Ledakan Internet dirasai oleh pelbagai lapisan masyarakat tanpa mengira golongan kanak-kanak mahupun dewasa serta tidak mengira latar belakang kehidupan.

Di negara ini, perkembangan bidang teknologi maklumat dan komunikasi (ICT) semakin pesat dan lebih agresif melalui perluasan infrastruktur jalur lebar.

Dalam masa yang sama, kerajaan juga berganding bahu dengan swasta untuk memperluaskan capaian internet ke seluruh negara dengan sasaran mewujudkan masyarakat celik IT.

Walaupun perkembangan ICT dan penggunaan internet membawa impak positif dalam aktiviti harian, namun penggunaan tanpa kawalan boleh mengundang pelbagai bentuk ancaman siber sehingga menyebabkan kadar kes salah laku meningkat dan membimbangkan.

Timbalan Menteri Sains, Teknologi dan Inovasi, Datuk Dr. Abu Bakar Mohamad Diah berkata, insiden siber pada tahun 2013 meningkat kepada 10,636 kes berbanding 9,986 kes pada tahun sebelumnya manakala sehingga September tahun lalu kes yang dicatatkan adalah sebanyak 8,140.

Menurutnya, jumlah tersebut agak membimbangkan tetapi negara mempunyai undang-undang siber dengan hukuman yang berat boleh dikenakan kepada penyalahguna.

Walaupun jumlah tersebut meningkat

## Fakta

- Berdasarkan statistik, sembilan kategori jenayah siber dilakukan pada tahun lalu iaitu:
  - Melibatkan penipuan - 4,477 kes
  - Spam - 3,650 kes
  - Percubaan untuk menceroboh - 1,302 kes
  - Menceroboh - 1,125 kes
  - Kod berbahaya - 716 kes
  - Gangguan siber - 550 kes.
- Jenayah siber melibatkan kandungan - 35 kes
- Jenayah ancaman - 34 laporan
- Gangguan perkhidmatan - 29 kes.

namun masih dalam keadaan terkawal dengan adanya usaha oleh Cybersecurity Malaysia, agensi Kementerian itu.

"Kita dapat tangani keselamatan data dengan baik kerana mempunyai pengetahuan teknikal selain sentiasa mendedahkan pegawai keselamatan siber dengan pengetahuan terkini di peringkat antarabangsa," katanya.

Beliau menyatakan demikian dalam sidang akhbar selepas merasmikan Sambutan Hari Internet Yang Lebih Selamat 2015 peringkat Kebangsaan ibu negara baru-baru ini.

Yang turut hadir Ketua Pegawai Eksekutif Cybersecurity Malaysia, Dr. Amiruddin Abdul Wahab dan Komandan Maktab Tentera Diraja (MTD), Kolonel Wan Ghazali Wan Din.

Dalam pada itu, sejak 2007 lagi Kementerian dan Cybersecurity Malaysia sentiasa berusaha untuk membina kesedaran keselamatan siber dalam kalangan komuniti digital Malaysia melalui pelaksanaan pelbagai program.

Antara program yang telah dilaksanakan adalah Program 'Cybersafe' atau Kesedaran Keselamatan Siber Untuk Semua bertujuan untuk menggalakkan penggunaan sains, teknologi dan inovasi dengan positif serta beretika.

Program tersebut selaras dengan satu daripada sembilan teras strategik Kementerian iaitu teras pertama, membangunkan modal insan dalam sains, teknologi dan inovasi ke arah menjana dan meningkatkan ekonomi berasaskan pengetahuan dan berpandukan model inovasi.

Pada tahun ini, kelainan pada sambutan Hari Internet Yang Lebih Selamat 2015 adalah menekankan kepada tiga elemen iaitu kata laluan, mengetahui tetapan privasi dan berhati-hari sebelum berkongsi.

Sebagai seorang pengguna internet yang bijak seharusnya sentiasa menjaga kata laluan dengan sebaik mungkin agar sistem komputer serta aplikasi yang digunakan tidak mudah diceroboh.

Sementara dalam keghairahan menggunakan media sosial, tetapan privasi merupakan sesuatu yang amat penting bagi setiap aplikasi yang digunakan bagi menghalang pihak yang tidak bertanggungjawab untuk memanipulasi maklumat serta gambar peribadi.

Dalam masa sama juga, pengguna internet perlu berhati-hati sebelum menghebahkan atau berkongsi maklumat dan informasi kerana dikhuatiri maklumat yang tidak tepat akan menimbulkan huru-hara serta panik dalam kalangan orang awam.

Justeru, sebagai seorang pengguna yang lebih bijak seharusnya membuat semakan terlebih dahulu untuk mengesahkan sesuatu maklumat sebelum dikongsi di alam maya.

Pada majlis tersebut beliau turut melancarkan buku *Cyber Terrorist-Policy & Technical Perspective* tulisan Prof. Madya Rabiah Ahmad.



## Utara Semenanjung cecah 38 Celsius

**Kuala Lumpur:** Purata suhu di kawasan utara Semenanjung dijangka mencecah sekitar 36 hingga 38 darjah celsius sepanjang minggu ini iaitu lebih panas berbanding purata suhu di kawasan lain yang dijangka mencecah sekitar 34 hingga 36 darjah celsius.

Timbalan Ketua Pengarah (Cuaca dan Iklim) Jabatan Meteorologi Malaysia ((Met-Malaysia) Alui Bahari berkata, purata suhu itu dilihat tidak banyak berbeza daripada apa yang direkodkan dalam tempoh sama tahun lalu dan cuaca masih dianggap normal.

Katanya, cuaca panas ketika ini akan berpanjangan sehingga penghujung Mac ini dan keadaan ribut petir pada sebelah petang akan bermula bulan depan.

"Memang setiap tahun cuaca akan panas pada setiap Mac dan kita jangkakan kawasan utara lebih panas iaitu di Perlis, Kedah dan Perak di mana purata suhu dijangka mencecah sekitar 36 hingga 38 darjah celsius.

"Selain daripada tiga negeri itu, purata suhu dijangka mencecah sekitar 34 hingga 36 darjah celsius. Jika dibandingkan dengan tahun lalu, keadaan agak sama namun taburan hujan pada tahun ini lebih banyak berbanding ta-

hun lalu," katanya ketika dihubungi Harian Metro, di sini, semalam.

Sementara itu, menurut laman web Lembaga Urus Air Selangor (LUAS) sehingga jam 5 petang semalam, Empangan Sungai Selangor mempunyai baki simpanan takungan sebanyak 77.15 peratus.

Empangan itu berupaya menampung isi padu semasa berjumlah 211.40 juta meter padu namun semalam ia menyusut 33.95 juta meter padu.

Empangan Sungai Selangor membekalkan kira-kira 60 peratus air terawat kepada lebih 50,000 akaun pengguna di kawasan Kuala Lumpur, Putrajaya dan Selangor.

Selain Empangan Sungai Selangor, tujuh lagi empangan di bawah pengurusan LUAS iaitu Empangan Batu, Langat, Semenyih, Klang Gates, Sungai Tinggi, Tasik Subang dan sebuah kolam takungan air di Sungai Labu, Sepang.

Empangan Batu mempunyai baki simpanan takungan sebanyak 90.62 peratus, Langat (96.35), Semenyih (95.72), Klang Gates (88.24), Sungai Tinggi (69.39), Tasik Subang (98.03) dan Sungai Labu (74.06).

## Tourists urged to drink a lot of water to stay hydrated

**MALACCA:** With the onset of the hot season, tourists visiting the historical city have been advised to drink a lot of water to stay hydrated.

State Health Director Dr Ghazali Othman said this was important to avoid heat stroke.

**Tourists and the public are also advised to reduce outdoor activities.**

— DR GHAZALI OTHMAN

"Besides bringing drinking water, tourists and the public are also advised to reduce outdoor activities. Those who are required to be outside in the hot sun should use an umbrella.

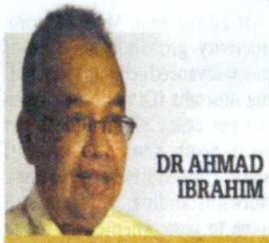
"For those who want to visit tourist areas and planning to do other outdoor activities, please do it late in the afternoon when weather is cooler," he told Bernama yesterday.

According to the Malaysian Meteorological Department, the current hot and dry spell was due to the end of the Northeast Monsoon season.



# Tapping the benefits of synthetic biology

**RE-ENGINEERING DNA:** While the science behind it offers much potential, there are also grave pitfalls if it falls in the wrong hands



DR AHMAD  
IBRAHIM

**S**CIENTIFIC knowledge is never static. It keeps adding new science. This explains why the world is constantly updated on new research on science. Science is about unravelling the truth.

During the golden years of scientific pursuits by Muslim scholars, the motivation for research was to better appreciate the teachings of the holy Quran.

Many such efforts have given rise to the scientific principles that

have become commonplace in the study of science today. Many are, of course, familiar with names like Ibnu Sina and others. Now more and more findings of science go to confirm what has long been described in the Quran.

In fact it has been reported that scientists now study the Quran to obtain the next lead to new scientific theories. The Academy of Sciences Malaysia has also embarked on such initiatives.

Recently, I came across an interesting article about the 12 ways the world could end. This was inspired by a new report from Oxford University's Future of Humanity Institute and the Global Challenges Foundation. They have come up with the first serious scientific assessment of the gravest risks we face.

The hope is to get the attention of policymakers so that some pre-

emptive actions can be taken. A few of the threats can arise from events beyond our control, such as a catastrophic impact from an asteroid. But most would emerge from human economic and technological development.

Three which stand out include synthetic biology, nanotechnology and artificial intelligence. All such technologies promise great benefits for society, including reducing the other risks such as climate change. But we cannot discount the fact that they can also go horribly wrong if not properly managed.

Take synthetic biology for example. Recent years have witnessed a growing interest in synthetic biology. This exciting field is evolving rapidly. It promises to revolutionise food production for the world.

What exactly is synthetic biol-

ogy? Admittedly there is no widely accepted definition. Many explain synthetic biology as the application of engineering principles to the fundamentals of biology.

Scientists have now concluded that all living organisms contain what they refer to as a set of instructions that determine what they look like and what they do. These are encoded in the organisms's DNA embedded in every living cell.

The organism's genetic code is also referred to as the genome. Men have, in fact, been altering the genetic code of plants and animals for ages. This was done by selectively breeding plants or even animals with desirable features.

As biotechnologists have learned more about how to read and manipulate this code, they have begun to take genetic information associated with the useful features from one organism, and added it into another one. This is the basis of genetic engineering, which has allowed researchers to speed up the process of developing new breeds of plants and animals.

More recent advances have enabled scientists to make new combinations of DNA from scratch. With the help of the principles of modern engineering, scientists can now use computers and laboratory chemicals to design organisms that do new things.

These include organisms which produce bio-fuels or secrete the compounds which can be turned into medical drugs. To many people, this is the essence of synthetic biology.

There is no doubt that genetic engineering of new super-organisms could be enormously beneficial for humanity. Imagine the possibility of designing new organisms which can produce palm oil in a factory. There would be no need to clear new land to plant oil palm. And the use of manual labour to harvest oil palm would be a thing of the past.

But it might also all go horribly destructive if the technology falls into the wrong hands.

For example, it can be used to design newly-engineered pathogens. This could be a new synthetic form of the Ebola virus which may be more virulent. They can then be used to target humans. Or even a crucial part of the ecosystem.

Any release, accidentally or through an act of war, of such an engineered pathogen could prove devastating. The impact could, in fact, be even worse than any conceivable natural pandemic. It is no different from the so called weapons of mass destruction.

The writer is a fellow of the Academy of Sciences Malaysia



# *Innovation must become our central obsession*

**COMPETITIVENESS:** An innovation-driven economy will grow faster and provide high wages to sustain higher standards of living



**PROF DATUK DR  
JOHN ANTONY  
XAVIER**

**I**T is this season of the year — the lunar new year — that prosperity and good fortune assumes a special significance to our Malaysian Chinese community. As a nation, too, we look forward to continued affluence. That is why we are motoring towards our vision of becoming a high-income nation by 2020. By then we should have a minimum per capita income of US\$15,000 (RM54,000).

This end-goal is predicated on an average annual economic growth of six per cent. While we did achieve such a growth rate last year, previous years' performances have not been up to the mark. And handsome growth in the future is suspect.

But where does growth and prosperity come from? Wealth comes from productivity growth. Productivity grows when a nation produces more and better quality products and services from the same amount of resources expended previously. Productivity growth drives production cost down while creating greater value to the consuming public. This in essence is competitiveness.

Productivity growth determines a nation's competitiveness and its living standards. This is the iron rule. If our workers are more productive, they will enjoy higher wages for their effort. If we use our capital more profitably, we shall obtain greater returns. Productivity growth makes exports competitive. Foreign direct investments (FDIs) will be attracted to nations that exhibit strong productivity growth, as is the case with China. FDIs create jobs. They bring in productivity-boosting technologies that can further propel us to our destination of a high-income nation.

Productivity growth and competitiveness are driven primarily at three levels. First, are endowments that a nation inherits — natural resources, location. A country such as Saudi Arabia that has abundant endowment of petroleum is naturally prosperous. But endow-

ments do not tell the whole story. More so, a wasting asset such as oil will not sustain competitiveness year after year. And not all nations have natural endowments. Switzerland is land-locked. Japan is bereft of natural resources. Yet, they are among the most competitive nations in the world.

We need the other two tiers to explain the true source of competitiveness.

The second layer is macro-economic conditions. This environment will include health, education, sound institutions, rule of law, business-friendly policies and governance including freedom from corruption. These factors offer an enabling environment for productivity growth.

The third layer is the efficiency of businesses. A nation can only be competitive to the extent that firms are efficient. A firm's efficiency does not depend on the positive business climate alone. It also depends on the skills of its workers and the technologies they work with — from assembly lines to information systems. Together, they enable innovation.

Innovation in the design and production of new or improved technology and products jacks up a firm's productivity. A firm's innovative capacity multiplies when the firm is co-located, within a particular geographical cluster, with other competitors — with whom it competes and collaborates — and its suppliers. It is in industrial clusters that a great majority of innovations takes place as clusters make for cheaper logistics, readier access to talent, supplies, information and ideas.

Italy remains competitive because of its innovation in high-value fashion and precision machine tools. Even during its recent economic downturn, Italy's position as the world's top ranking exporter in textiles, clothing, and leather goods was unsurpassed. And, Italy continues to be ranked second in the world, behind only Germany, for non-electronic machinery and manufactures. This competitiveness has come about because these industries, operating within their related clusters, have generated world-renowned innovation. So too, as a result of innovation, American oil and gas producers have enhanced the competitiveness of the US in hydraulic fracturing (or fracking) and hor-

izontal drilling for oil.

Most countries start their economic development with their natural endowments. To accelerate their development process these countries import innovation. As development progresses, countries develop their capacity to adapt innovations, developed elsewhere, to suit their economic structure and development needs. Eventually, economic transformation takes place when these countries create their own innovations — new products, new businesses, unique processes and technologies. Such an innovation-driven economy will cause the economy to grow faster and provide the high wages to sustain higher standards of living. This high-innovation economy requires three ingredients. The first is the existence of skilled manpower and advanced infrastructure. The second is the promotion of clusters. And the third is the building of new businesses based on the country's innovation output. The alchemy of these three ingredients results in the continued growth of a country's innovation capacity.

Malaysia is blessed with natural endowments — weather, resources and location. We have progressed much in our competitiveness to deserve the enviable 18th spot in the 2014 World Bank ranking on the ease of doing business. On this measure we are ahead of Taiwan (19th), Switzerland (20th), Thailand (26th), Netherlands (27th) and Japan (29th). Malaysia now ranks first among emerging East-Asian economies and second in Asean after Singapore in the ease of doing business. At the Asian level, Malaysia ranks fourth after Singapore, Hong Kong and South Korea.

At 2.3 per cent, Malaysia's productivity growth beats that of many advanced economies including Australia (1.4 per cent), Japan (1.3 per cent), Singapore (1.6 per cent), South Korea (1.7 per cent) and the United States (0.9 per cent). Notwithstanding, there is still room to grow when compared to China's productivity rate of 2.8 per cent. We can do that if we ratchet up our current 33rd position in the 2014 global innovation index (Singapore is 7th) through greater innovation.

We have some distance to go to boost our innovation economy for competitiveness. Innovation must become a central obsession if we are to move beyond our current position to become a high-income nation.

**The writer** is with the Graduate School of Business, Universiti Kebangsaan Malaysia