UICI 2022: SAINS, TEKNOLOGI DAN MANUSIA

TEKNOLOGI DALAM ISLAM

Akmaliza Abdullah

Maznah Ali

Buerah Tunggak

ETIMOLOGI

TECHNE
- Seni/kerjatangan/pembuatan

LOGOS
- Wacana/kata-kata sistematis

TEKNOLOGI
- Ilmu pengetahuan dan tidakan bersistem, biasanya dikaitkan dengan proses industri dan sains kejuruteraan (Hairudin Harun, 1992)
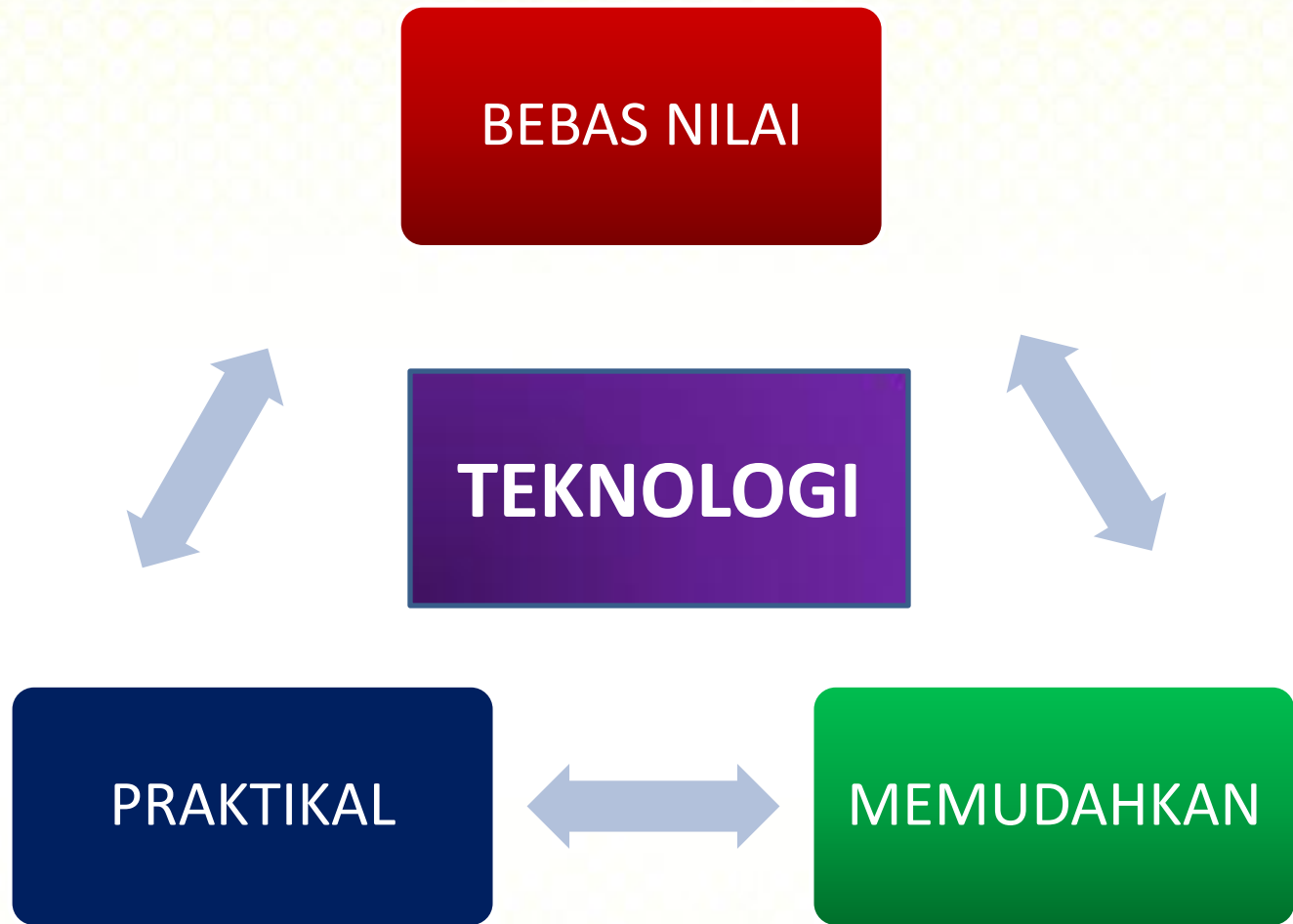
DEFINISI

Sidek Baba
- suatu aspek penghasilan sains yang sifatnya memudahkan sesuatu. Sekiranya ia dihasilkan dengan niat yang baik dan digunakan dengan betul maka ia boleh mensejahterakan hidup manusia.
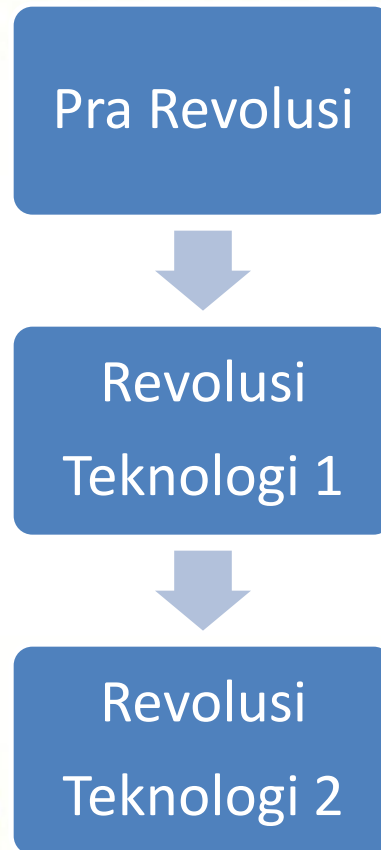
Galbraith
- penerapan yang teratur terhadap sains atau pengetahuan yang tersusun bagi tugas-tugas secara praktis

Mesthene
- alat-alat termasuk jentera, alat-alat intelektual seperti bahasa komputer dan teknik analisis dan yang memakai ilmu matematik

SEJARAH PERKEMBANGAN

Pra Revolusi

↓

Revolusi Teknologi 1

↓

Revolusi Teknologi 2

Teknologi sesuatu umat itu berubah:

1. Sedikit demi sedikit secara evolusi berasaskan teknologi asal/lama yang masih memenuhi keperluan umat tersebut

ATAU

2. Mendadak secara revolusi menghasilkan teknologi serba baru menggantikan teknologi asal/lama yang gagal memenuhi keperluan baru umat yang didasari perubahan paradigma dan juga pacuan kepenggunaan

PRA-REVOLUSI

Penyelesaian MASALAH ASAS kehidupan

REVOLUSI TEKNOLOGI 1

Penggabungan hasil idea yang statik menghasilkan teknologi baru yang lebih banyak manfaat

REVOLUSI TEKNOLOGI 2

Penciptaan yang lebih canggih

Pemilihan Teknologi Berasaskan Faham Etika Yang Dianut

- Aristotle : Hanya manusia berakhlak baik bertindak betul bagi menghasilkan kebaikan. Akhlak baik – ditengah antara 2 ekstrim – boleh ditemui melalui kebijaksanaan, keberanian dan kesederhanaan yang membawa kepada keadilan.

Pemilihan Teknologi Berasaskan Faham Etika Yang Dianut

- Selepas revolusi sains dan industri di Eropah, faham ini diganti dengan faham rasionalisme dan humanisme.
  - Immanuel Kant - Kantian ethics /Moral Duty: *an action is only good if performed out of duty, rather than out of practical need or desire*
  - Jeremy Bentham– Utiliti : 'it is the greatest happiness of the greatest number that is the measure of right and wrong'

Pemilihan Teknologi Berasaskan Faham Etika Yang Dianut

- Immanuel Kant - Kantian ethics /Moral Duty: *an action is only good if performed out of duty, rather than out of practical need or desire*

Kritikan: denying human nature & leading to immoral acts if moral good is done out of duty, rather than a desire to do good

- Bentham – A classic criticism by H. J. McCloskey: Possibly punish the innocent for greater goods

  - "Suppose that a sheriff were faced with the choice either of framing a Negro for a rape that had aroused hostility to the Negroes (a particular Negro generally being believed to be guilty but whom the sheriff knows not to be guilty)—and thus preventing serious anti-Negro riots which would probably lead to some loss of life and increased hatred of each other by whites and Negroes—or of hunting for the guilty person and thereby allowing the anti-Negro riots to occur, while doing the best he can to combat them. In such a case the sheriff, if he were an extreme utilitarian, would appear to be committed to framing the Negro."

Where is the WISDOM we have lost in KNOWLEDGE?
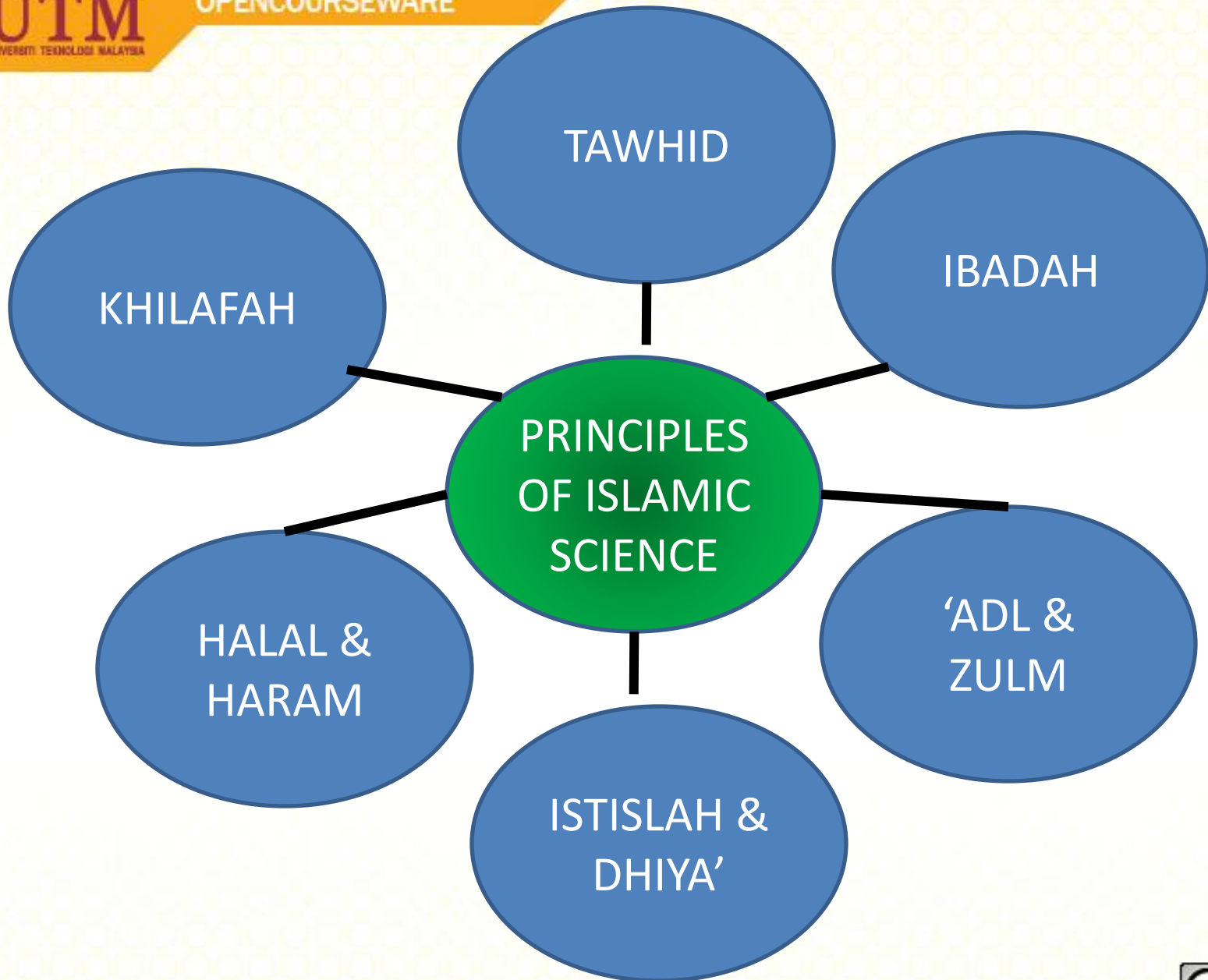Where is the KNOWLEDGE we have lost in INFORMATION?
Where is the INFORMATION we have lost in DATA?
Alas, Where is the LIFE we have lost in LIVING?
(T.S. Elliot)

"Allah telah menciptakan langit, bumi dan menurunkan air hujan dari langit, kemudian air hujan itu menumbuhkan berbagai-bagai buah-buahan menjadi rezeki untukmu, dan dia telah menundukkan bahtera bagimu supaya bahtera itu belayar di lautan dengan kehendakNya dan Dia telah menundukkan pula bagimu matahari dan bulan yang terus-menerus tersebar dalam orbit dan telah menundukkan bagimu malam dan siang. Dan Dia telah memberikan kepadamu (keperluanmu) daripada segala apa yang kamu mohonkan kepadaNya. Dan jika kamu menghitung nikmat Allah tidaklah kamu dapat menghitungnya, sesungguhnya manusia itu sangat zalim dan sangat mengingkari nikmat Allah".
(Ibrahim 14:70)

BASIC PRINCIPLES OF ISLAMIC SCIENCE

- TAWHID
  - Unity of God
  - God the one and only Creator who created the universe, human being etc.
  - Becomes an all-embracing value when this unity is asserted in the unity of mankind, unity of man and nature and the unity of knowledge and values

BASIC PRINCIPLES OF ISLAMIC SCIENCE

- ## KHILAFAH
  - Trusteeship
  - Vicegerent of God
  - Man is not independent of God but is responsible and accountable to God for his scientific and technological activities
  - Man has no exclusive right to do anything and that he is responsible for maintaining and preserving the integrity of the abode of his terrestrial journey

BASIC PRINCIPLES OF ISLAMIC SCIENCE

- IBADAH
  – Worshipping the one and only God with absolute obedience, submission and love
  – Man as a servant of God who is greatly indebted to God, does not own anything, not even his own existence
  – One of the manifestations of *ibadah* is the pursuit of knowledge
  – Knowledge is divided into two categories: revealed knowledge and acquired knowledge.

    The acquired knowledge is *fard kifayah* and thus considered *ibadah*
  – The pursuit of knowledge for the benefit of the individual or the community is *ibadah*

BASIC PRINCIPLES OF ISLAMIC SCIENCE

- HALAL
  - Halal – permitted
  - All that is beneficial for him as an individual, his society, and his environment
  - Brings all-round benefit

- HARAM
  - Haram- forbidden
  - Haram includes all that is destructive for man as an individual, his society, his immediate environment and the environment at large
  - The word destructive should be understood in its physical, mental and spiritual sense

BASIC PRINCIPLES OF ISLAMIC SCIENCE

- ADL
  - justice
  - Putting thing in its proper place
  - Scientific and technological activities that seek to promote adl is halal

- ZULM
  - Injustice
  - Putting thing in its improper place
  - Zulm is of 3 categories:
  1. Between man and God
  2. Between man and man
  3. Between man and nature

  Eg. science and tech that leads to the destruction of the environment

BASIC PRINCIPLES OF ISLAMIC SCIENCE

- ISTISLAH

  - Public interest

  - Scientific and technological activity that promotes adl-distributive technologies, science for people – draw their legitimacy from istislah (public interest) which is the chief supplementary source of Islamic law

- DHIYA

  - wasteful

  - Science and technology which has these major characteristics: destroy human, environmental and spiritual resources and generate waste is therefore categorized as dhiya

Rujukan

- Ahmad Baharuddin Abdullah. 2004. *Memperkenalkan Bidang Kejuruteraan Islam: Persepsi dan Sumbangan.* Kuantan: PTS Publications & Distributors Sdn Bhd.

- Endang Mohd Zain. 1989. *Sains, Falsafah dan Agama*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

- Mesthene E.G. 1971. *Technological Change Its Impact on Man and Society*. Cambridge Mass: Harvard University Press.

Rujukan

- Ramli Awang et al. 2001. *Falsafah Sains dan Teknologi Dari Perspektif Islam*. Skudai: Pusat Pengajian Islam dan Pembangunan Sosial (PPIPS)

- Shahrir Mohd Zain. 1989. *Pengenalan Tamadun Islam dalam Sains dan Teknologi*. Kuala Lumpur: Dawan Bahasa dan Pustaka.

- Ziauddin Sardar. (1977). *Science, Technology and Development in the Muslim World*. London: Croom Helm.