### SPECIAL SESSION in Collaboration with TEDxKL

Innovation Without Borders 3.0



The Drivers of Innovation

- According to Simon, to share ideas with people, the internet is not enough. Humans have to meet and trust
  each other The historical connectivity of Western Europe has allowed for strong knowledge exchanges over
  centuries, which has made Western Europe the best place to live in human history.
- Innovation is also driven by responses to human behaviour. For instance, Srikanth discussed how studies show that people are 40% more likely to buy ice cream in the store if ice-cream music is playing.

Technology to save the world

- Dr. Michel argued that fusion is the only hope to replace fossil fuels at scale. Every other renewable option, such as wind and solar, have limitations. Furthermore, progress in fusion is compatible to Moore's Law and at current trends, fusion will save the world.
- In terms of healthcare, according to Ambarish, AI can identify 15 patterns of abnormality when reading X-ray data, improving accuracy of diagnosis vis-à-vis human doctors.

The Future of Al

- Sumant argues that while AI is expanding rapidly, it is narrow AI that is growing; we are still very far away from General AI, which still remains in the domain of science fiction.
- However, M&A deals for AI have been increasing, with about 60 deals in the first half of 2017 alone, driven mostly by tech giants such as Alphabet, Facebook, Amazon, etc.

# Day 1 Reflections by Managing Director, Khazanah Nasional Berhad



I am tremendously pleased to be able to have a group of renowned thought-leaders present to debate, discuss and share insight into the various 'tensions' of this year's KMF theme, "Cerebrum X Algorithm: Building True Value in a Post-Truth World" — between Cerebrum and Algorithm, bad conflict and collision or good coalition and collusion and the complexity of Building True Value in a post-truth world.

Vivek set the stage for the two days in real style, introducing the topic of Artificial Intelligence ("AI") with great lucidity. In his Luncheon Address, Joe Tsai gave a succint discussion covering corporate strategy, corporate culture and even education. The conversation between Dr Ngozi Professor Jomo was special, discussing wide-ranging issues across development, leadership, steadfastness under duress and a really admirable anti-corruption stance.

As per KMF tradition, we also had the first two of our four core sessions. The first, Macro & Markets, is not naturally the most lively topic, but the panellists and moderator kept the conversation captivating throughout. Firms & Transformation was very sharp and poignant for corporate Malaysia, with great chemistry among the individuals. The Special Session on ASEAN was a heavyweight panel that deliberated issues on ASEAN and how the Belt Road Initiative would impact the future of ASEAN. Finally, the TEDxKL session on Innovation was interesting as always, introducing us to multiple dimensions of innovation in a very punchy manner.

Day 1 saw a record turnout of 1,362 participants, including all speakers. This sets up well for the artistic KMF Special Event on Fearless Design and Day 2 of KMF. Today's sessions brought to life the importance of technology, but pointed out very clearly that what we do with technology is what matters. Let us see what Day 2 brings us. Here's to an even more fruitful Day 2 of KMF 2017.

# MEGATRENDS

The Official Khazanah Megatrends Forum Magazine

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Mandarin Oriental Kuala Lumpur



CORE SESSION 1: Macro and Markets The Search for Alpha



CORE SESSION 2: Firms and Transformation A World Awash With Data



SPECIAL SESSION ASEAN X OBOR X The World



SPECIAL SESSION
in Collaboration with TEDxKL

## **SPECIAL ADDRESS**

'How Can We Solve the Grand Challenges of Humanity and Build New Trillion Dollar Industres'

By Vivek Wadhwa



The thirteenth edition of the Khazanah Megatrends Forum ("KMF"), themed "Cerebrum X Algorithm: Building True Value in a Post-Truth World" kicked off with a primer by technology guru Vivek Wadhwa on the "Algorithm". Vivek's fifty minute tour on the present and future state of technology, following Khazanah Nasional's Managing Director Tan Sri Azman Mokhtar's welcome remarks, was a fitting way to begin proceedings of KMF 2017.

To set everyone on the same page, Vivek differentiated between different forms of Artificial Intelligence ("AI"). The AI of the world today, enabled by deep learning neural networks, is known as "Narrow AI" which is roughly described as AI that can use massive amounts of data to keep learning and re-learning to provide

outputs. Next, there is "General AI" which is typically the realm of science fiction, where machines have become sentient and possess consciousness. Then, there is also "Super-Intelligence" which is the merging of man and machine into one being.

With those AI differentiations in mind, the essence of Vivek's special address can be essentially drilled down to the following conundrum – Technology, in all its various forms including AI, has the potential to create a "Mad Max" world – a form of dystopian future – but also the potential to create a "Star Trek" world – a form of utopian future. Whether our future will be that of the Mad Max world or that of the Star Trek world ultimately comes down to the choices we make.

 $\dots \ \textit{Continued on Pg 2}$ 

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The challenge, Vivek posits, is that the world we live in today is more akin to the Mad Max world, given "...the insanity of today's world." Indeed, today, the human race may be comfortable, particularly in the upper-middle income and high-income nations, but advancements in technology may lead to serious issues such as mass job displacement and loss of personal privacy.

However, in all this adversity lies opportunity. The exponential advancements in technology have the potential to alleviate many of today's social hardships. Vivek gives the example of HealthCube in India which attempts to make healthcare accessible to millions of underserved people in India, by providing affordable and convenient medical diagnostic tests which are not typically available to such demographics.

In essence, a key part of Vivek's thesis is that technology should not be used simply to create another app in Silicon Valley, but rather to solve the world's most pressing problems. Indeed, issues and challenges in fields such as healthcare, education, banking and, ultimately, poverty alleviation and economic development are now becoming more and more surmountable.

The caution and risk of all of this is that, as much as technology can giveth, it can also taketh away. It is therefore vital to ensure that every new technological creation is of the utmost imperative that benefits everyone equally as best as possible and allows for a sizeable share of prosperity among the masses. Hence, when innovating, inventors and entrepreneurs must first weigh both the risks and rewards that technology poses to the world and its inhabitants.

Finally, Vivek concludes that if harnessed in the right way, technology may beckon a Star Trek world for us, as long as we are careful to avoid the pitfalls that may lead us into a Mad Max world. Humanity may then boldly go where no humans have gone before, creating a great and bright future in which everyone may live long and prosper.

# **Special Address**

'In Conversation with Dr Ngozi Okonjo-Iweala' By Dr. Ngozi Okonjo-Iweala & Prof. Jomo K.S.



The 'Empire' Effect

- While many countries manage to diversify their growth, many others are still stuck due to the 'empire' effect – the effect from being part of a colony. As such, a large portion of Nigeria's infrastructure has been shaped to focus on activities centred around the interest of the 'empire' - the extraction of oil.
- To chart out the path to diversify growth, the way people perceive activities involving the agricultural sector, for example, has to be transformed from a purely development project to an actual business where technology can potentially change the sector's value-chain.

Future-Proofing Our Growth

- Over the years, Malaysia's relatively stable growth has been due to our strong diversification strategies that are crucial for any resource-based economy.
- However, the nation still faces an increasing difficulty of transitioning out of the middle-income trap. Malaysia has achieved much but it has still a lot to learn.
- There is a need to continually think and rethink our strategies for growth which may involve fundamental and structural changes not just at the economic level, but also with regards to the social compact of the people.

Governance and The Role of Technology

- A large proportion of global GDP is composed of government procurement. However, many countries struggle with high corruption rates in this area, costing billions of dollars in public funding.
- Technology played a part in circumventing such practices, with, for instance, in the case of Nigeria, the introduction of integrated databases on top of biometric systems enabled salaries to be credited directly to each account.
- Thus, a major way for governments to reap the benefits from technology is to channel technology towards the direction of preventing fraud and saving billions of dollars otherwise lost.

### **LUNCHEON ADDRESS**

By Joseph C. Tsai

Alibaba's 10-year business cycle

- The first three years of its business cycle focuses on getting the product right and acquiring as many end users as possible where obtaining a substantial market share is deemed as top priority.
- Years three to five then focus on monetisation whereas years five to seven concentrate on ensuing the venture breaks even. Finally, the last phase of the ten-year business cycle emphasises on harvesting ROI.
- Beyond the tenth year, Alibaba's various ventures aim to disrupt itself as an act of self-improvement. This ensures its company's continuous relevance and survival.



Alibaba puts people and culture before data

- Alibaba believes strongly in the power of the human mind and its limitless capabilities. Its overall mantra on employment is "Give three people the job of five, while paying them the salary of four".
- Production efficiency requires a company culture that motivates workers. Such a company needs inspirational leaders that are admired and respected to achieve this goal.
- Alibaba's ambitions to help small businesses level the playing field, allowing people to conduct business from wherever they are, thereby empowering consumers and SMEs around the globe.

The importance of personal development

- As part of Alibaba's leadership team, he firmly believes in its maxim "Work happily, live seriously". He posits that everyone should approach work passionately, while maintaining a proper work life balance.
- The importance of education is critical to individual success. As such, education systems in both the East and West should learn and emulate each other's best traits; Western education systems emphasise collective success while Eastern education systems encourage discipline and hard work on a more individual level.



# SPECIAL SESSION: ASEAN X OBOR X The World

The Rise of Corporate Economic Soft Power

Strategic views on Belt & Road Initiative (BRI)

- China's BRI differs from US' Marshall Plan as it was intended to help Europe "get back to its feet". The countries along the BRI, however, do not require rescuing but rather support in filling up infrastructure gaps and addressing funding difficulties.
- In turn, this will facilitate trade between nations over the next twenty to fifty years while injecting fresh impetus on tourism, cross-border trade and investments.
- While ASEAN welcomes Chinese capital and financing for the initiatives, nations should take a stance that the BRI should include collective leadership and not be exclusively China-led.

Dealing with challenges surrounding BRI

- Beyond infrastructure, the success of BRI is also dependent on the capacity for ASEAN to integrate
  and manage the impact of digitisation on domestic commerce and manufacturing.
- A serious risk of digitisation is employment risk in ASEAN, specifically the ability to upskill employees to adapt to the changing operating environment.
- Although the BRI initiative fits into the ASEAN plan for integration, underlying operational challenges in harmonising standards, reducing non-tariff trade barriers still needs to be ironed out.

E-commerce and digitisation to drive free trade of goods and services for SMEs

- Cross-border effort requires complementary regulatory efforts such as in the case of the Digital Free Trade Zone ("DFTZ") venture between Alibaba and Malaysia.
- SMEs in the region should adopt a mindset shift to move up the value chain from pure original equipment manufacturer to owners of product designs of high end manufactured goods

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Special Event MEGATRENDS | 2<sup>nd</sup> October 2017

# KMF2017 Special Event: Fearless Design

Perspectives in Form, Function and Future











In the established tradition of KMF, last night we held the Special Event -- an opportunity to both relax and to shift perspective away from business and global socio-economics towards art and creativity.

With Datin Saidah Rastam as Creative Director, the KMF 2017 Special Event was entitled "Fearless Design -- Perspectives in Form, Function and the Future." It featured a number of individuals each showcasing their talent under the broad umbrella of 'Design'.

After a relaxed dinner in the adjoining hall, everyone moved into the auditorium through a mysterious dark passageway which was a portent of what was to come. The auditorium featured a beautiful expansive screen and a delightful, small, offset circular stage.

Datin Saidah said a few words to express her appreciation for the opportunity to curate such a unique event, and then the performances got underway. Ben Evans described his experience as Director of the London Design Festival, pushing the boundaries of Design and treating it as an important economic sector for London. Izmir Yamin astounded everyone with his story of remarkable achievements in assisting Man's excursion into space, and even the possibility of Malaysia becoming a launch services provider. An entrancing and unexpected dance interlude was provided by Suhaili Micheline, who utterly captivated the audience. Acclaimed architect Amanda Levete passionately argued that robots can never replace human architects. Finally, Lynette Wallworth – who made such an impression at KMF 2016 – once again deeply moved the audience with her authentic and rawly human discourse on the impact of digital enablers on our ability to tell stories, and whether humanity has evolved enough spiritually to properly use the powerful new technologies.

Everyone was invited back on stage together, to rapturous applause. The emcee mentioned that Lynette's VR film "Collisions" is nominated for an Emmy award and the ceremony will be in New York on Thursday. The audience applauded to wish her the best of luck!

Afterwards, there was a huge, lingering buzz as people enjoyed Teh Tarik and snacks back in the dining area, chatting excitedly with the performers.











Day 1 Sessions Summaries MEGATRENDS | 2nd October 2017

### CORE SESSION 1: MACRO AND MARKETS

The Search for *Alpha*: Can Algorithm Trump Cerebrum?



The Case for Algorithm

- It is getting more difficult to search for alpha and to justify high active management fees. With ample amount of liquidity in the markets, more investors are going into alternative assets, leading to valuations rising beyond what is fundamentally justified. There has been a huge shift from actively-managed funds to passive funds in the past 5 years.
- Automated asset management would lead to greater financialisation and efficiency. Efficiency
  seeking automation using strategies such as passive replication of index and active execution of
  block trade would lead to more efficient capturing of returns and lowering of costs.
- Automation is also demand driven and consumer centric. As more consumers are demanding time saving interactions and automated processes (e.g. online banking, automated micro financing); there is a rising shift towards digitisation of financial services.

The Case for Cerebrum

- While passive strategy that tracks the index has outperformed active funds, active management is needed for corporate governance and stewardship.
- Passive investment needs active investment to drive price discovery. If there is too much passive investment, efficiency of the market will be undermined.
- Profit-seeking automation in passive funds using such strategies as smart beta, momentumchasing, or arbitrage, has bigger, controversial implications: the more capital shifts into such automated investing, the more capital shifts into short-term-oriented trading rather than longterm real investment. Active management is needed as a counterbalance.

Unemployment, Societal Preparedness for Algorithm

- The key for society's preparedness for AI is how well educated and flexible the workforce is.
- While a significant number of operational jobs are vulnerable to automation, relationship based jobs, however, will be more difficult to be replaced by automation.
- Basic universal income could be a solution for job displacement, but brings issues of rising inequality of income and the importance of having a role to play in society.

### CORE SESSION 2: FIRMS AND TRANSFORMATION

A World Awash with Data: What is the Role of the Algorithm in Enhancing Corporate Performnace?



Challenges to CEOs are multi-varied

- CEOs often face very difficult and often contrasting demands from shareholders and board members with regards to innovation. On the one hand, there is the need to generate short-term quarterly returns, but at the same time, to also invest capital for the future, reducing short-term returns.
- Furthermore, as CEOs are focused on disrupting other firms and industries, they need to also be
  wary of disruption from other players as well. It is not easy to both disrupt and manage disruption
  at the same time.
- Therefore, with regards to undertaking innovation and transformation in companies, there is almost certainly going to be a J-curve.

Avoiding "Woo Woo" corporate practices

- "Woo Woo" can be broadly defined as decisions made at the corporate level that do not meet high standards of rigour. For instance, while companies may have very robust deals approvals processes, the same robustness is not typically applied to selection of CEOs and Management, with lower standards of rigour.
- The transformation of corporate culture is easy to say, but not so easy to do. It requires tenacity and hard work, and buy-in at all levels. One way that DBS has attempted to generate an innovation culture is to send half of its workforce into innovation programmes on a regular basis.
- If CEO selection is the most important part of any deal, then the allocation of attention to human capital must be just as important as the allocation of attention to financial capital.

Al and Decision-Making

- Companies need longer investment horizons for AI, but are constantly being asked by stakeholders to provide short term financial returns. Management needs the freedom to embrace disruptive innovation and not be judged solely on financial returns.
- Legacy companies have the scale, customers and branding, but tend to shy away from disruptive innovation and experimentation. Start-ups on the other hand, thrive on bold innovations but lack the necessary resources and past experiences to scale-up.

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