



FROM THE PAST TO THE FUTURE

# BUILDING OUR COLLECTIVE BRAIN

**DAY 2** SESSION SUMMARIES

# CORE SESSION 3: GROWTH AND DEVELOPMENT

I Am Because We Are – Ensuring Equal Access to our Collective Brain

**The world is too complex to be left to either the Market or the State to drive growth and development.**

**Growth and development cannot be left completely to the Market.**

Rational markets have short-term interests that can run contrary to long-term collective interests.

**The role of State as a market facilitator has been increasingly challenged.**

State can be empowered to drive certain economic outcomes in line with long-term collective interests.

**Nevertheless, it is important to recognise the limits of any policy solution.**

A silver bullet does not exist. All policies entail costs and benefits, with winners and losers.

**Policy making can benefit from enlarging our policy toolbox.**

**The existing dogma on fiscal consolidation limits potential policy solutions.**

Empirical evidence suggests expansionary fiscal policies can have strong multiplier effects on aggregate demand.

**Fiscal policy can be used to change incentive structures.**

This can affect factor allocation in the market, resulting in more equitable and effective outcomes.

**Fiscal spending in itself is not fiscal stimulus. It is not what you do, but how you do it.**

**The context of implementation is just as important as the size of the policy.**

Efficiency and appropriateness of fiscal policy are dependent on local context.

**Spending for spending's sake is not enough.**

It is also important to consider how public spending can be used to not only affect aggregate demand but also the structure of supply.

# SPECIAL ADDRESS

## What the Collective Brain teaches us about Economic Policy

**Inclusivity is a key determinant for the proliferation of innovation in a society.**

**Innovation stems from increased knowledge growth in society.**

Knowledge growth in a society is a function of population size, inclusivity and cohesiveness. The larger the population, the more innovative they are.

**Inclusivity, or equitable access to the Collective Brain, matters for diffusion of knowledge and innovation.**

Innovative societies tend to have higher access to role models which is crucial for encouraging innovation. Exclusion of certain parts of the population from the Collective Brain has real long-term costs to a country.

**Inclusion can be imperfect.**

Inclusion is imperfect along many dimensions due to socioeconomic class, gender, ethnicity and immigration status or country of birth. Deeply engrained stereotypes along gender or racial lines can also become a deterrent of innovation.

**Trust and greater cohesion within society are essential for innovation and economic growth**

**Trust is important as all economic interactions require some form of trust.**

There is a strong positive relationship between trust and national income level. Countries with a higher level of trust tend to have higher income per capita.

**If trust is important, why don't all countries trust more?**

This could be attributed to adverse historical shocks, a distrust trap (self-perpetuating distrust between groups), or a discrepancy between the optimal level of trust at a society-level versus the individual-level.

**Well-designed policies can help close the trust gap in a country.**

Trust and cohesion can be increased with policies that encourage integration and shared experiences of different groups of society. Trust can also be built among Firms via policies that facilitate an open and competitive environment.

**The mobility of population via migration is beneficial for all involved.**

**Migration increases the rate of innovation and productivity of the population.**

We often focus on the short-term cost of a growing immigrant population while ignoring the benefits that tend to be reaped further down in the future.

**'Brain Drain' should not be negatively perceived.**

Countries with higher immigrant population have historically been more innovative and hence, wealthier. Immigrants tend to spur innovation in their country of residence, while benefiting their home countries by building networks and maintaining relationships.

## SPECIAL ADDRESS

The Technology Trap: Capital, Labor and Power in the Age of Automation

**Technological progress leads to better utility in the long-term but may be painful in the short-term.**

**Technological progress is good for consumers.**

It allows people to enjoy goods that are otherwise non-existent. Now, we can produce 40x more output per worker as compared to the pre-industrialised era of the 1750s.

**Technological progress also has positive impact to labour.**

From the past industrial revolution, mechanisation has replaced child labourers with machines. New technology creates better jobs with better working conditions.

**But automation comes with creative destruction in employment, sometimes lasting decades.**

Examples of resistance in history are plenty. Much of the public commentary focuses on the Luddites but there was resistance across Europe as well.

**Jobs of the future that are least vulnerable require creativity and personal connection.**

**Which jobs are most at risk? Production, transportation, retail and construction are most vulnerable.**

Even fashion models are exposed to automation. Dior recently used a computer-generated model for their latest ads.

## **Jobs that require creativity, perception and social intelligence are harder to replace.**

For instance, classical music created by machines use a music combination from existing database, but music composers that draw upon the insights from all walks of life cannot be replicated by machines.

## **Jobs of the future require ecosystem changes and a personal touch.**

The creation of autonomous vehicles would not just replace drivers – it would require a new ecosystem. Roads, infrastructure and new places of work must be re-imagined. People cannot imagine future demands yet, but future jobs that are guaranteed to be in demand will require personal touch.

## **Technological innovation is deeply unnatural.**

## **Ultimately, in our modern society, technological progress only happens if people allow for it.**

The Industrial Revolution happened in Britain in part because the British government sided with the merchants and the industrialists amidst growing international competition for trade and commerce.

## **But we cannot take technological progress for granted.**

Policy makers need to use the Collective Brain to come up with solutions that ensure inclusive gains in the short-run and a smooth transition to the next phase of tech adoption.

# **SPECIAL ADDRESS**

## **Building a Nation's Collective Brain**

## **Inclusivity matters for the Collective Brain of the nation – this ranges from product innovation to education**

### **Product innovation must be of significance to the Masses.**

New products that appeal to all segments of society rather than just the inventors themselves are more likely to have a positive reception.

### **Education systems that meet the needs of the most disadvantaged children would meet the needs of all children.**

Innovation in education has been relatively slow as the system still emphasises a narrow set of skills such as rote memorisation. Given the importance of talent in the digital economy, innovation in education should aim to equip students with skills relevant for their future, especially coding and programming.

**Engaging with all aspects of community is necessary to grow the Collective Brain.**

**Community engagement is crucial in accelerating tech adoption.**

It is not enough to only target the early adopters—to keep moving innovation forward, we must also target the masses and the laggards.

**Community engagement also helps to weave together the rich and diverse history of society.**

For example, the “Melaka In Fact” project engages with locals in the villages of Melaka to bring together perspectives that capture the richness of Melaka’s history, allowing people to take ownership of their own narrative.

**Innovation in any field requires ‘X-factors’ such as trust, self-confidence and gut instinct.**

**A strong cohesive team requires trust among its members.**

Teams are more likely to innovate when they know they have other teammates to support them through the process.

**Fostering self-confidence in students is key to their progress.**

Children must be given the tools to learn independently and with confidence. To motivate them to innovate, students must understand the real-world applications of their education syllabus.

**Courage and gut instinct make a difference in product innovation.**

It is not just understanding the product—it is also about understanding the end-user of the product. This requires innovators to have courage and gut instinct.

## **SPECIAL ADDRESS**

Finding my larger Collective

**How does one find his or her larger Collective?**

**Living in different places can equip us with different lenses through which we perceive our environment.**

After working in the US for almost half his life, Ronnie made a two-month long visit to South East Asia last year to research new movie ideas. He is now able to have a new perspective on the ASEAN region and a fresh take on his memories.

**To fully understand the local context, travel with an open-mind and live like the locals do.**

In his journey, Ronnie experienced different cultures by trying their food, taking in the sceneries and sounds of their day-to-day activities and environment. Ronnie connected to these communities—noting that he looked like them and was able to understand them, even if they are of different nationalities.

**Record what you find in your own creative manner.**

Throughout his trip, Ronnie journaled extensively to record his observations of the local sights and sounds.

**South East Asia has a rich collection of shared historical roots that we must preserve.**

**History must be preserved for future generations.**

While visiting ancient architecture in the region, Ronnie found that the historical knowledge of the place has not been fully inherited from the past. The local communities were not able to remember all the legacy and history behind the historical architecture.

**South East Asia should view itself as a collective, and not just focus on competition between individual member countries.**

The entire region shares similar roots in cultures and practices, ranging from religious influence, language to art. Ronnie hopes that this region would find themselves in each other, despite their differences in nationalities, language, and ideologies.

## SPECIAL ADDRESS

### Social Glue and the Collective Brain

**Rites can produce different intensities of “Social Glue” depending on their frequency and emotionality.**

**Catalyst for unity was not driven by technology, but by rituals and codification.**

During his return to New Guinea, Whitehouse found that most of the population had now adopted a new religion called the Kivung, which united them with other tribes on the island as they shared the new rituals and practices.

## **Imagistic rituals form the Social Glue of societies which bond groups together into tight-knit units.**

These rituals are infrequent and are intense emotionally. They are designed to create cohesion within relation groups and is found to be useful in high-risk pursuits.

## **Cohesion within a larger population requires a standardized ritualistic belief system.**

The doctrinal rituals differ from imagistic rituals in which they happen more frequently, allowing for deviations to be readily detected and for authoritative doctrine standardization. These doctrines are typically codified in oratory or text, which allows for fast and efficient spread.

## **Identity fusion is a form of alignment with groups involving the union of personal and social identity.**

### **Fusion is characterized by abnormal relationship between personal and social selves.**

When a fused group is attacked, highly fused individuals feel that these attacks are personal in nature and hence, rally to defend one another. This was observed during the 2011 Libyan Revolution where many people were willing to lay down their lives for the benefit of the collective group.

### **Identity fusion can be reinforced by a shared traumatic experience within a group.**

A study conducted during the Libyan Revolution showed that front-line fighters were more likely to identify and fuse with other front-line fighters who shared the same trauma received during battle.

## **We need to harness our cooperative instincts to build a fully functional Collective Brain.**

### **A universal moral compass acts as a guide.**

A key to this is to unite the world under a universal moral compass that everyone can abide by. There are seven key traits – help your group, help your family, return favours, be brave, defer to superiors, divide resources fairly, respect others' property.

### **The Collective Brain has the potential to be detrimental.**

Cooperation has historically been used to instigate conflict between societies and build industries that pollute the planet and deplete the world's resources.

### **The power of shared experiences can potentially unite Malaysians.**

This common experience is the core of the fusion process within a group. Whitehouse recommends that we focus on strengthening this shared experience, and to look beyond national boundaries.

# CORE SESSION 4: PEOPLE AND LEADERSHIP

## To Fracture or to Heal – Making Choices for our Collective Brain

**Trust, beliefs, and identity are among forces that are fundamental to the functioning of a society.**

**The forces fundamental to the functioning of a society and its economy tend to lack visibility and are hard to measure.**

Performance of economic and financial indicators as well as government policy – while visible and easily measured – do not give a full picture of how a society and its economy function. More fundamental forces such as trust, beliefs, and identity tend to be less visible and harder to measure.

**Belonging in a group can be paradoxical as it may result in low relational mobility.**

Being part of a group can, at times, be paradoxical in nature. Humans are hardwired to desire to belong in a group but in some societies (e.g. Indonesia, Malaysia, and Japan), people tend to remain in the groups that they are initially born into and do not mix around much (i.e. low relational mobility).

**Subconscious cues related to cultural learning can be harnessed to reduce conformism bias.**

Humans are also subject to conformism bias which may inhibit learning and creativity. However, humans are also evolved cultural learners that subconsciously use cues to decide who we will learn from (e.g. we prefer to learn from those that have prestige or are of the same gender), which can overcome that bias.

**When facts cannot change minds, shared realities and knowledge give a voice for change.**

**Culture and beliefs shape the economy and public policy.**

After Iranian Revolution in 1979, religion escalated to be central in the public policy space in Malaysia. Consequently, interpretations of religion into law have disadvantaged certain segments of society (i.e. women) and continue to do so. Moreover, research has also found that obedient cultures are supportive for low-end manufacturing but not for high-end and dynamic manufacturing.

**When facts cannot change minds, lived realities do.**

Sometimes, facts aren't enough to stifle cultural norms. However, shared lived realities can turn this around. For example, the "Me Too" movement quickly gained traction globally because women who can relate are now given opportunities to speak out, leading to cultural change in the workplace.

### **Transmission of knowledge gives voice for change.**

Central to creating change is knowledge. Through transmission of knowledge, especially to those who are disadvantaged, individuals are given the courage to speak up.

### **One does not necessarily have to trade between ethnic and national identities; if anything, universal morals can bridge these two.**

### **It is not necessarily the case that people trade between ethnic and national identities.**

Empirical evidence suggests that integration between groups of different identities have shown to boost affinity towards one's national identity. When groups are under threat, their sense of tribalism may increase which magnifies their sense of national identity.

### **There is evidence to support the existence of a universal morality.**

Typically, there are two types of moral systems. Firstly, there's communal morality which emphasises care for those within the community rather than outside of it. Secondly, there's universal morality that stresses all people should be accorded the same treatment.

### **Universally shared morals can bring diverse groups together.**

Given the existence of evidence for some universally shared morals, it can be used as a basis to bring diverse groups of people together and give rise to a "global citizen" type of mindset.