



BETTER THAN A CRYSTAL BALL: TEN USES OF THE FUTURE

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Better than a crystal ball: In Egypt, co-creating futures through strategic foresight

Written by [Katarina Kuai](#), [Arun Jacob](#) | 23 February 2021



Still looking for someone else to approve you

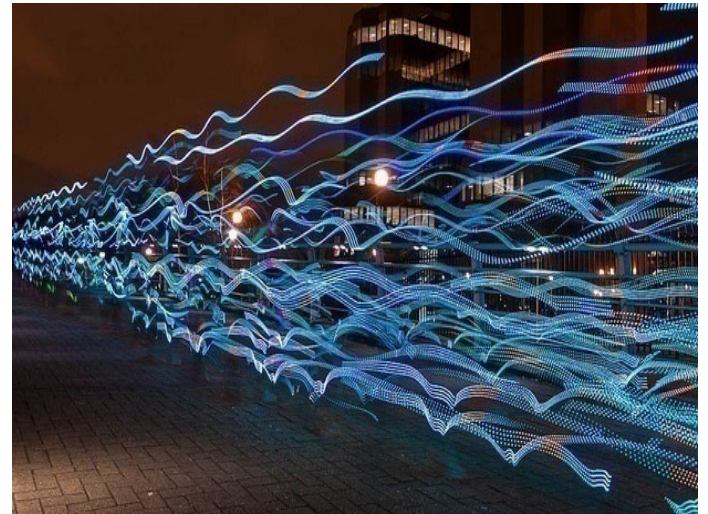
Does not develop your capability - You didn't make the crystal ball

Not about your life journey

You may have asked the wrong question i.e. the used future

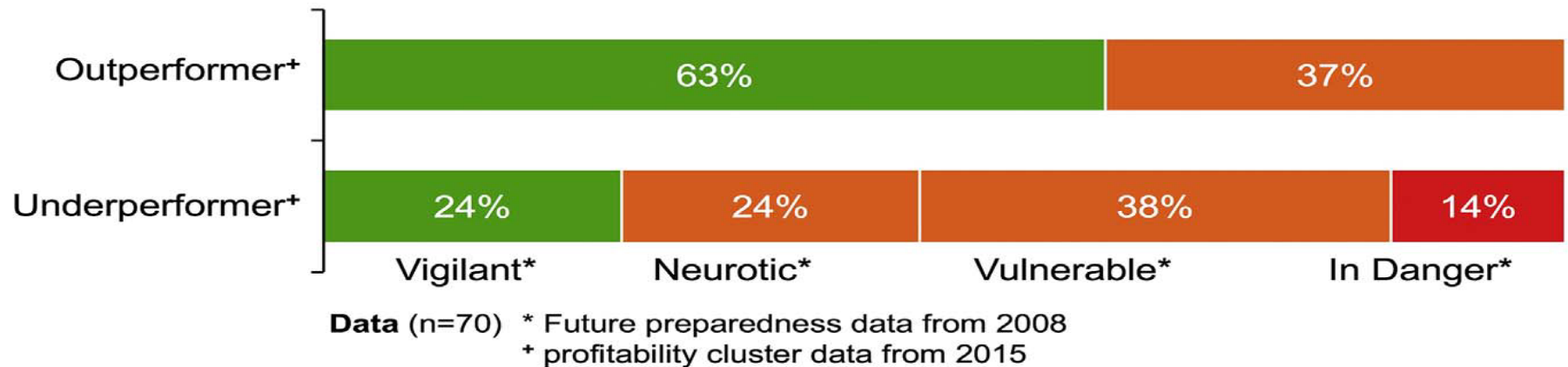
P.R. SARKAR

- You have entered a period of *galloping time*
- Heterogeneous realities – living in different times, wealth spaces, and consciousness
- Exponential influence and impact



FUTURES PREPAREDNESS AND PERFORMANCE

- Future preparedness a powerful predictor for becoming an outperformer in the industry
- For attaining superior profitability (plus 33%)
- For gaining superior market capitalization growth (plus 200%)



FUTURES LITERACY

Dean Kuo-Hua Chen

- Trans-disciplinary thinking (T = 5.73)
- Openness to alternatives (T = 4.74)
- More optimistic about the future
- “Boat in a large ocean” – choices and agency (19.1 %, highest rank)



Futures Mindedness – Betterup Research

- However, when individuals effectively tap into future-minded leadership, there are positive shifts in anxiety and depression symptoms. Future-minded leaders report 34% less anxiety and 35% less depression and are more optimistic about the future, more productive, and have greater life satisfaction than those low in pragmatic optimism.

Future-Minded Leaders have *higher performing teams*

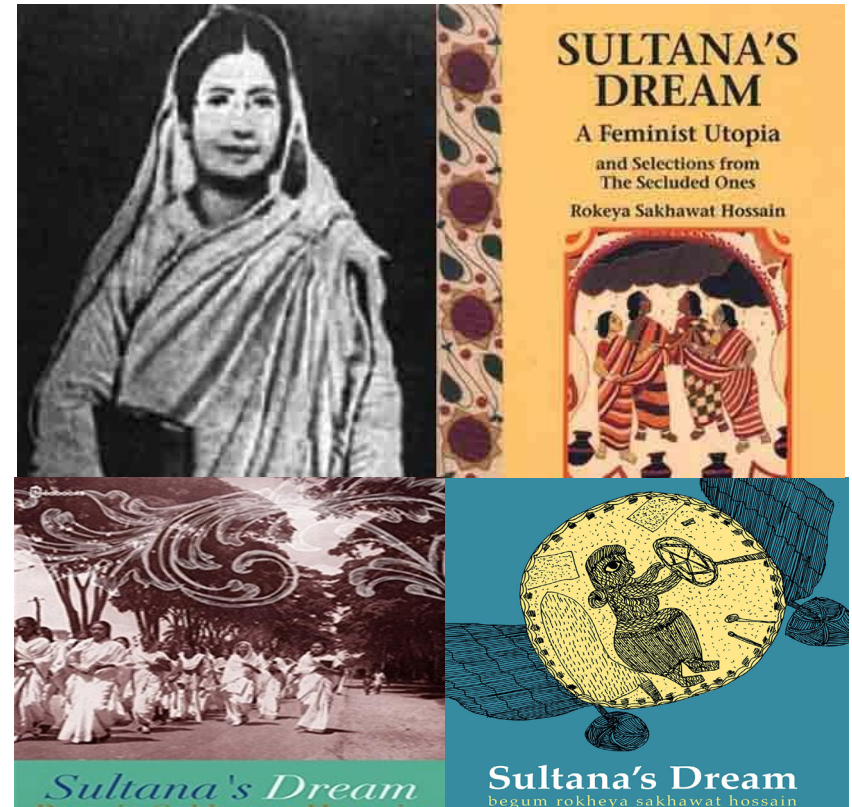


1 AS A WAY TO IMAGINE A DIFFERENT FUTURE – TO MAKE THE PRESENT REMARKABLE

Rokeya Hossain, 1905.

We do not covet other people's land, we do not fight for a piece of diamond though it may be a thousand-fold brighter than the Koh-i-Noor, nor do we grudge a ruler his Peacock Throne. We dive deep into the ocean of knowledge and try to find out the precious gems, which nature has kept in store for us.

Women rule the world as society lives peacefully and prospers through their inventions of solar ovens, flying cars, and cloud condenser, which offer abundant, clean water to the population of “Ladyland.”



brisbane**news**

MAY 19 - 25, 2004

ISSUE 491

www.brisbanenews.com.au

WIN

A BREAK FOR TWO AT
SIROCCO RESORT,
MOOLOOLABA



SUPER CITY

HOW WE WILL BE LIVING 100 YEARS FROM NOW

ASHLEIGH, 2001 (11 YEARS OF AGE)



2 AS AN EARLY WARNING SYSTEM

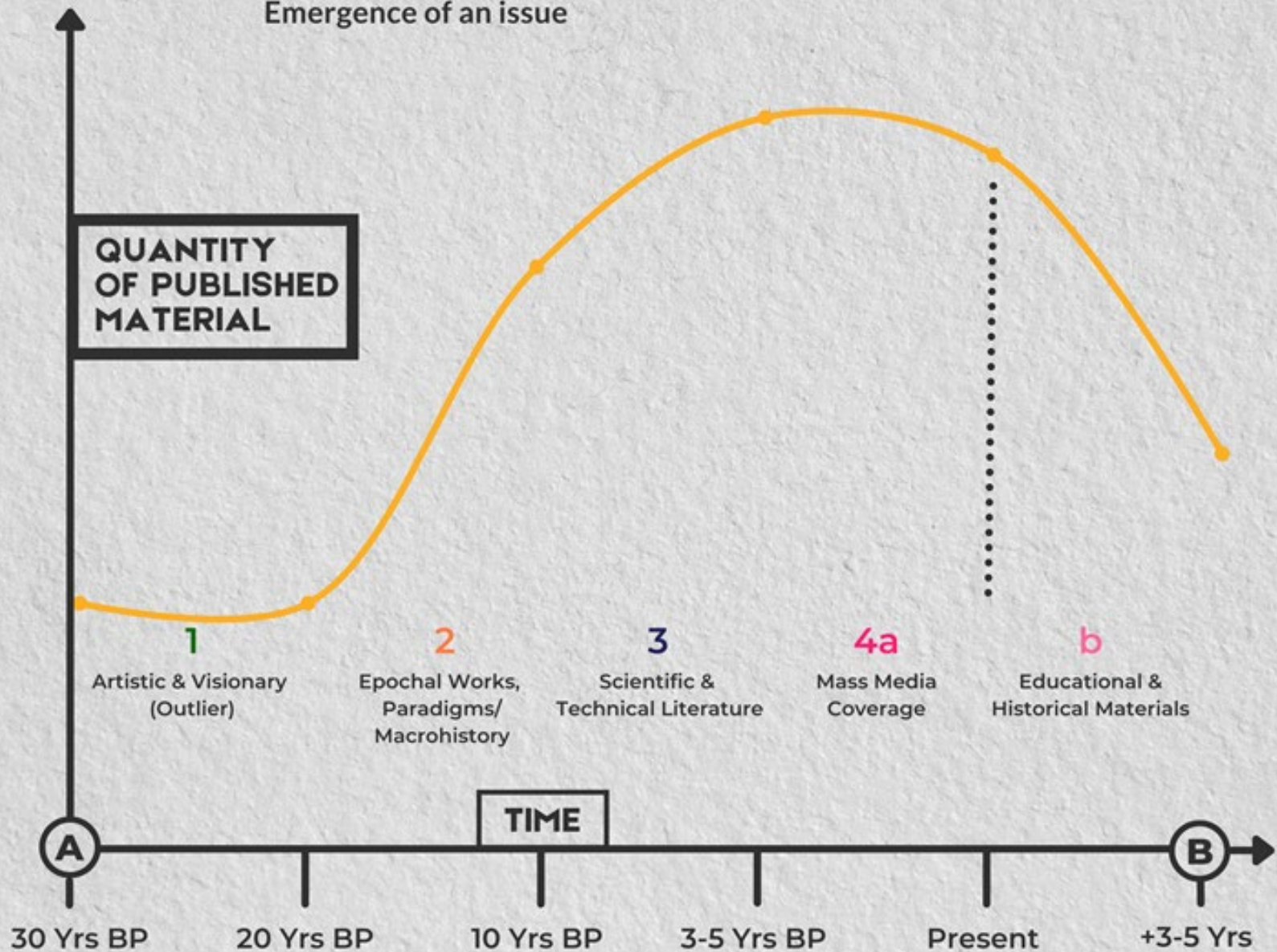
- Futures literacy as a national competitive advantage
- Early warning system
- “Nice to have” to “A capability one must have.”
- “We are always catching up”
Ron Brown (former secretary general of Interpol)



General Anita Hazenburg, Head of Strategy,



Emerging Issue Analysis (EIA) Emergence of an issue



- DRONES AND THE PUBLIC
- CYBER SAFETY – AI
- NEURO-TECH SECURITY
- SPRAY ON SMART WATER (forensically marked)
- INTERPOL TO EARTHPOL TO THE CONNECTOR OF GLOBAL SECURITY AGENCIES



INTERPOL



3 AS A WAY TO CREATE OPPORTUNITIES – LOUVRE MUSEUM

The Living Mirror

entering the
metaverse



THE ENERGY INDUSTRY

- HOME SOLAR
- BLOCK CHAIN
- THE GENIE – REAL TIME PERSONALIZED ENERGY INFORMATION

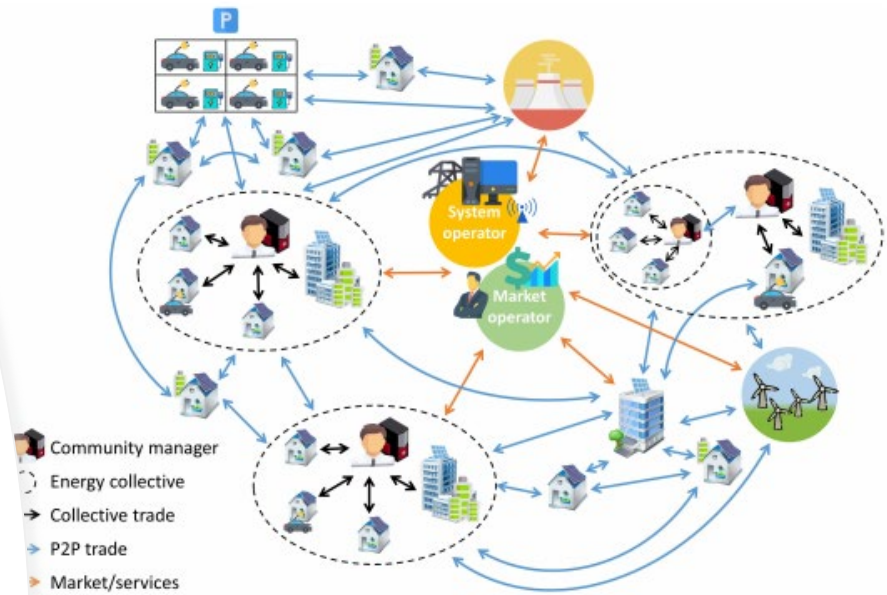


Figure 5: Hybrid P2P market design.



WHO AND FAO

The End of the Cow And Other Emerging Issues



This book takes us into the future.

We explore five emerging issues that have the potential to dramatically impact wellbeing, food systems, climate change, gender equity, the family, and how we learn.

We ask:

- Will the city of the future be preventive, able to provide early indicators of illness and wellbeing?
- Will the likely transition from meat to cellular agriculture transform the global food supply chain, shifting how we produce food and what we eat?
- Will women lead the way and create a partnership society or will their – our – dreams be shattered?
- Will the family, stable for generations, if not hundreds of years, transform, becoming more diversified and inclusive of social and technological changes?
- Will learning transform, moving from the factory model to alternative paradigms such as the ecological or the digital? Will we be able to learn anytime, anywhere, from anyone?

The book answers these questions by exploring the contradictions between emerging futures and tired pasts. Join us on this disruptive journey.

By: Sohail Inayatullah and Ivana Milojević
Metafuture.org
2022

Prepared by:
Sohail Inayatullah
Hafeez Zainal



18 EMERGING ISSUES



PERSONALIZED NUTRITION

Personalized nutrition becomes the norm in wealthy nations by 2041.



FOOD WASTE

Dramatic reduction in food waste/loss because of tech innovations.



CELLULAR AGRICULTURE

40-50% of all protein comes from in-vitro meat especially in the Asia-Pacific region.



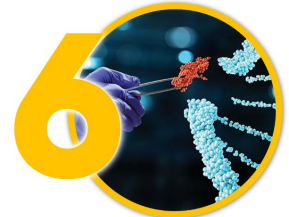
INTERNET OF THINGS AND FOOD

Full planetary internet of food and systems by 2071, in connected wealthy regions by 2050.



ADDITIVE MANUFACTURING (3D PRINTING OF FOOD)

3D food printers become the norm in wealthy households by 2041 and the norm in communities in less developed nations.



GENE EDITING

Gene editing is used all over the world – become the new norm in many places by 2042.



BIG DATA – FOOD AS SOFTWARE

By 2041, food as software competes with other agri-food systems, becoming dominant in advanced economies.



BLOCKCHAIN

All food will be required to be on the Blockchain by 2041



ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Agri-tech funding leads all startups in Africa by 2041.



CHINA ISSUES DIGITAL CURRENCY

- Can be programmed only for the purchase of a certain commodity
- Can have an expiration date
- Can be directly send to citizens
- Entry and transactions costs are zero
- Brings the unbanked into the financial system
- Challenges dollar-based systems i.e. France and China have already agreed for cross-border settlement and investment

4 AS A WAY TO CHANGE PURPOSE

- We still have time, if we take the time, to design the sustainable future we want
- Infrastructure Bank to a knowledge Bank; however,
- We must shift from “knowledge on a leash” to “knowledge with wings”



Dr. Susann Roth



The development and strengthening of knowledge-based economies (KBEs) is both an imperative and an opportunity for developing Asia to sustain high rates of growth in the future and avoid the middle-income trap.

WHAT ARE KNOWLEDGE ECONOMIES?

Knowledge economies are those which use resources such as information and communication technologies, innovation and research, and skills to create, disseminate, and apply knowledge and information for growth.



- Economic incentive and institutional regime
- Education and training
- Innovation and technological adoption
- Information and communication technology

4 PILLARS OF KNOWLEDGE ECONOMY

WHY ASIA NEEDS KNOWLEDGE-BASED ECONOMIES

The region's comparative advantages in labor and manufacturing are now fading, and KBEs are vital in the transition to growth based on increased productivity

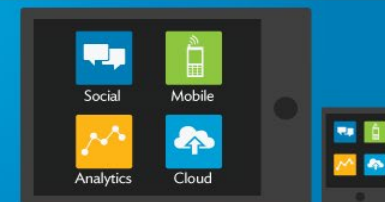
Increasing stress on resources like water and energy are creating challenges

A shift to innovation-led growth would ensure countries avoid the middle-income trap

PROMISING AREAS THAT CAN HELP DEVELOPING ASIA TO JUMP AHEAD

- establishing centers of excellence in R&D and world standard tertiary institutions
- setting up innovation clusters with industry-university partnerships
- extending universal and affordable high-speed broadband connectivity

TECHNOLOGIES ASIA CAN QUICKLY BUILD ON



CHARTING A COURSE FOR KNOWLEDGE-BASED ECONOMY DEVELOPMENT

Actions to promote knowledge-based economies will differ by country, but there are **three general ways** in which emerging economies of Asia and the Pacific can pursue in the current times.

1. LEARN



Learning from advanced economies and making appropriate investments to catch up on lags and gaps

{ example }



Middle-income countries should consider increasing R&D/GDP ratio to 1.5% or greater

2. EXPLOIT



Exploiting the unique strengths and advantages of the region by pursuing strategies that amplify such strengths

{ example }



Support start-up entrepreneurial firms for digital enterprises, e-commerce, and IT-enabled services sectors

3. LEVERAGE



Leveraging game-changing trends in technology and business processes to possibly leapfrog development cycles

{ example }



Innovation super clusters in industries like biotech, nanotechnology, advanced genomics, and advanced materials

SOURCE

• Asian Development Bank. *Innovative Asia: Advancing the Knowledge-based Economy*

BECOME A KNOWLEDGE BANK

FUND THE DISRUPTIONS

SOLAR, GENDER EQUITY, PEER TO PEER

AIRPORT TO RETAIL TO 3D PRINTING AND THE AIRPORT AS A LIVING POLICY LAB

Aviation sector unveils masterplan to improve efficiency and productivity amid intensifying competition

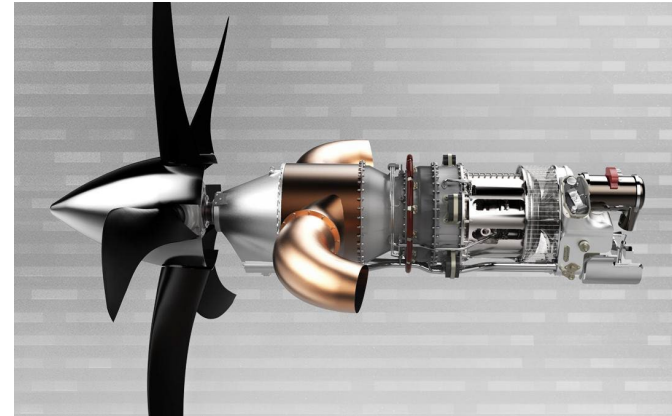
HERE ARE SOME OF THE INITIATIVES BEING EXPLORED

*An automated system, which uses precision lasers and cameras with smart algorithms, to dock aerobridges to aircraft could be operational in about six years. It will also be designed for use in harsh weather conditions. The system will cut manpower and enhance safety by removing the risk of bridges hitting planes.

* Changi Airport Group launched a \$50-million Living Lab Programme to provide for collaborations with start-ups, to develop and demonstrate new technology, in a live airport environment. One project being worked on is the use of analytics to provide passengers with estimated waiting times for taxis.

* CAAS plans to collaborate with end-users and drone companies to test out more innovative uses for drones to enhance productivity and improve processes.

* SIA Engineering is 3D printing aircraft parts for repairs and maintenance. The first batch was installed in a Singapore Airlines aircraft in January. The technology saves on transportation time, storage space for spares and time taken for aircraft servicing.



5. AS A WAY TO CREATE ALTERNATIVE FUTURES – UNESCAP 2040

IDEAL - GREEN ANTHROPOCENE



RIVERS RUN DRY – THE
CURRENT TRAJECTORY



OUTLIER – TOTAL COLLAPSE



INTEGRATED:
DOLPHINS RETURN TO THE YANGTZE





BIGGER AND BOLDER



TAILORED PER THE BUYER



GREEN, DRIVERLESS, PODS



BEYOND THE CAR - MOBILITY

NO CHANGE

TRADITIONAL BRICK & MORTAR UNIVERSITY

Universities choose to engage in “business as usual” mode in delivery of education and dependency on the government for financial assistance. The traditional brick and mortar university may have the tendency of not responding to the demands of 4IR. However, it will undergo minimal changes in order to remain relevant and sustainable. Innovative approaches to partnership and collaboration between universities and industries will materialise but will less likely be sustainable in the long run.

MARGINAL CHANGE

JUKEBOX UNIVERSITY



The model allows students to select courses and educational programmes from various institutions using a concept similar to a musical ‘jukebox’. The certification is awarded by the universities that have mutual recognitions on the programmes offered.

ADAPTIVE CHANGE

UBERISED UNIVERSITY

This type of university model provides cost-effective education through learning platforms. This model mimics the Uber urban transportation service concept whereby education is demand-driven, self-tailored, hassle free, highly accessible and convenient. The focus of this model is flexible education which promotes access to lifelong learning.



FUTURE UNIVERSITY MODEL

RADICAL CHANGE

NANO/MICRO CERTIFICATION

Nano/Micro certification model is a non-traditional certification programme offered by organisations/individuals that is recognised by the industry. It uses modular concept where certifications and credentials are stackable. These industry-driven certifications are capturing the interest of the digital natives.



Alternative Futures of Food and Agri-food Systems 2042-2052



No-change scenario: The great imbalance continues

New technologies and social innovation enhance inequality and centralize food system so only the wealthy gain.



Marginal-change scenario: The rise of the corporate food giants

New technologies and social innovation lead to greater regeneration and biodiversity but ultimately the impact of new technologies such as cellular agriculture and big data less to further centralization.



Adaptive-change scenario: Connecting the dots

In this future, a global commons is created. Cellular agriculture and the internet of food change the game. Solutions to climate change are co-created with farmers, indeed, they are amiable toward smallholders.



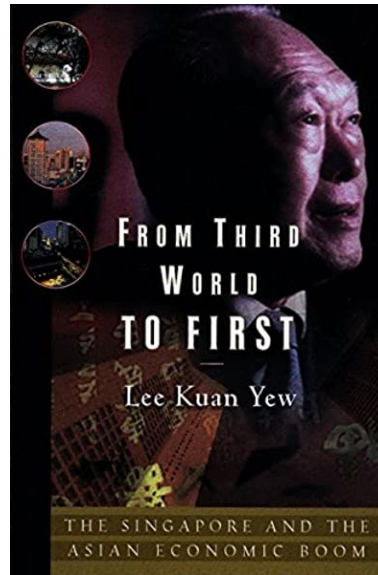
Radical-change scenario: No one is left behind

Emerging technologies and social innovations become critical drivers to enhance food systems and reduce inequality. Waste is dramatically eliminated creating radical circularity. Power asymmetries in the agriculture sector are dramatically. Personalized nutrition is a critical part of the new paradigm. Diversity rules the day. The new technologies help create a world where no one is left behind.

6 AS A WAY TO LEAD - BECOMING NUMBER ONE WEE SHANN LAM



SEEING IS BELIEVING



BELIEVING IS
SEEING

BRAC BANGLADESH



CHANGE...

Ego-leadership

Me & mine (Metaphor)

Linear macrohistory (Theory)

END...

GDP

Unregulated international system

Patriarchy

Humans over nature

LESS...

Religious-isms &
Nationalism

Meat based

Tech for the few

Individualism

Materialism

SOFTER...

Nation-states

FEWER...

Hours worked

FAR LESS...

Inequality

TO...

Balanced leadership,
protects serves, innovates, & keeps money flowing

The collective journey, where no one is left behind

Spiral macrohistory

TOWARD...

5P bottom line – Prosperity, People,
Planet, Purpose and Partnership

BEGINNING...

Global governance

Gender cooperation

Partnership with nature

MORE...

Neo-humanism

Plant-based

Tech for all

Social equity

Spiritual perspectives

STRONGER...

Regionalism & confederations

MORE...

Time spent on spiritual & social service activities

MORE...

Maxi-mini equity

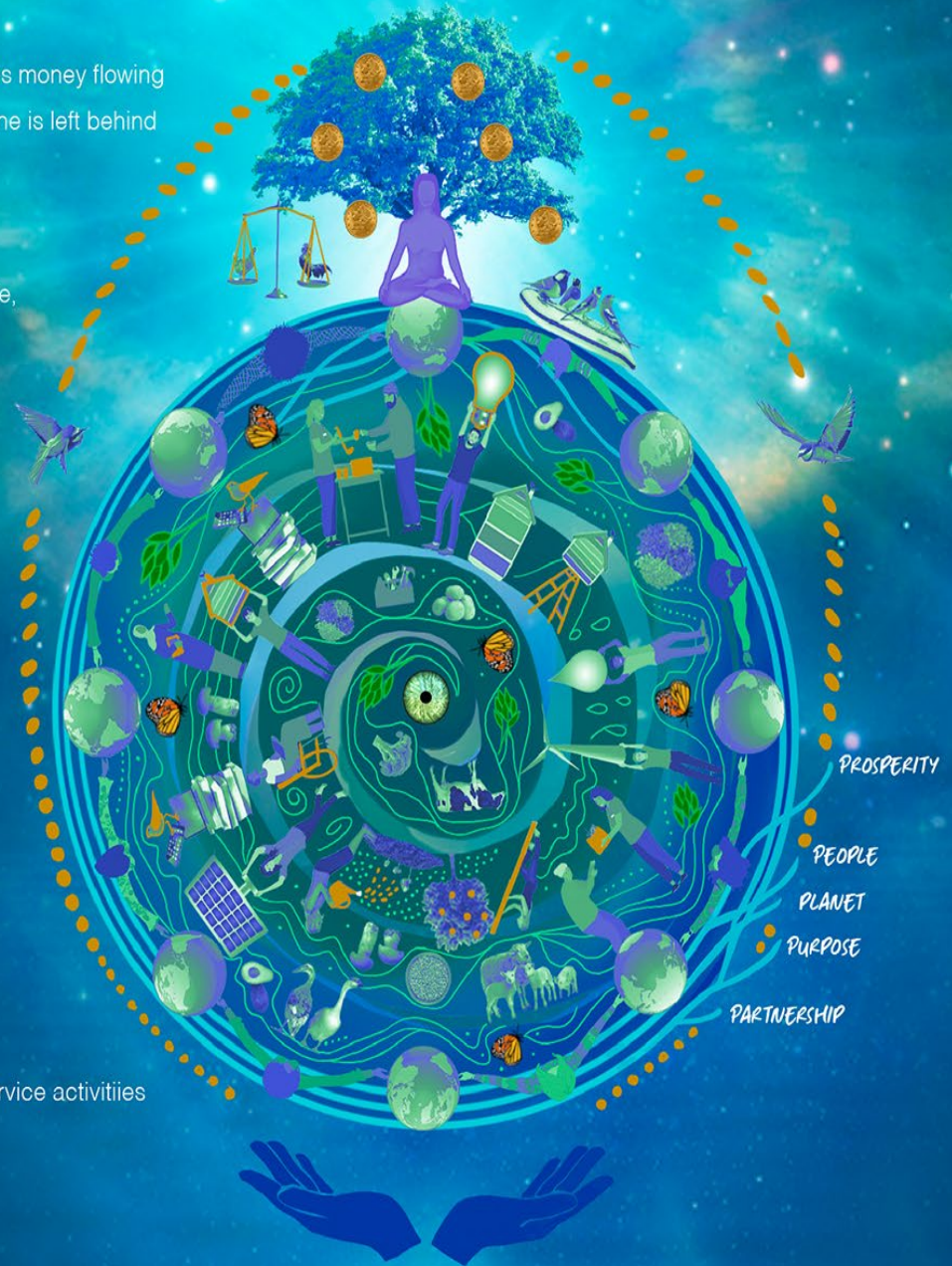
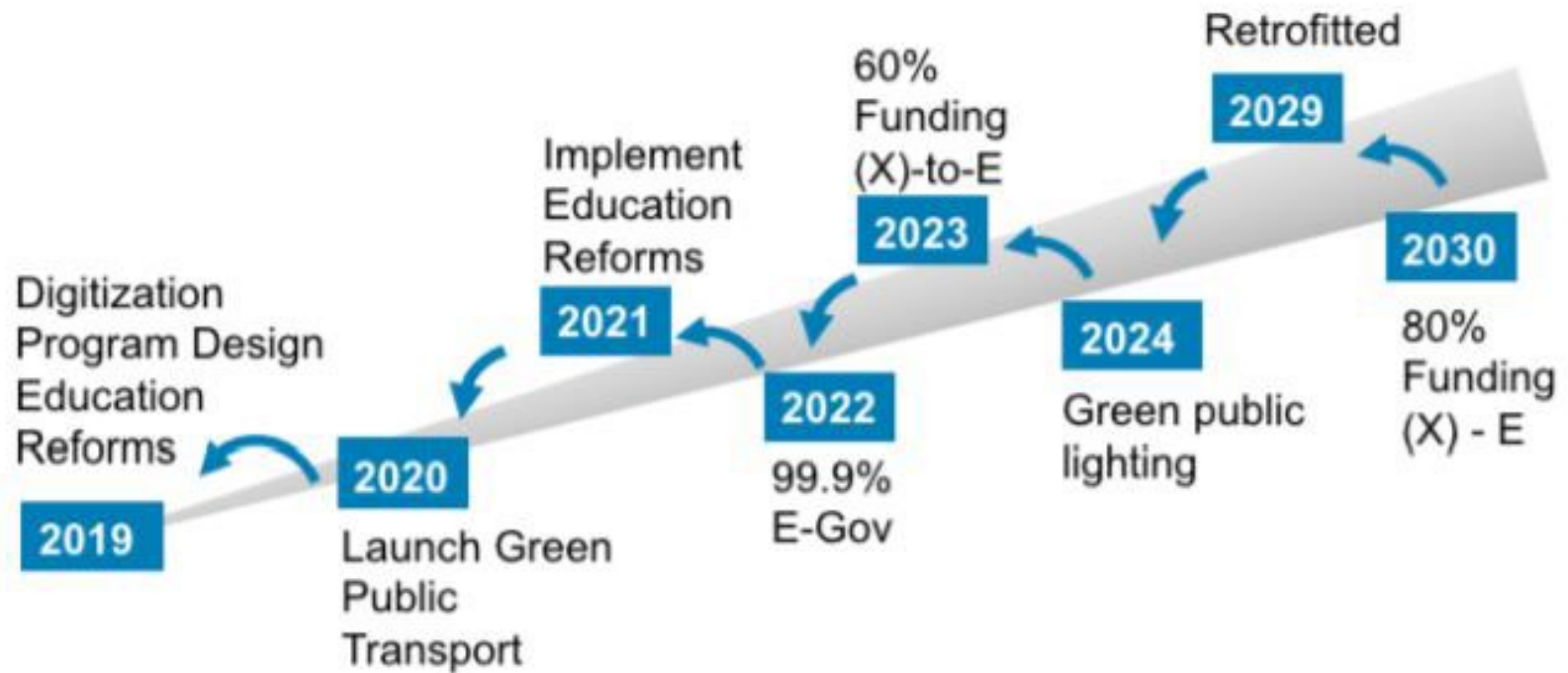


Figure 2. Back-casting by Participants in Armenia



7 AS A WAY TO MAKE THE VISION REAL
ARMENIA INFRASTRUCTURE BACKCAST

Adrian Crothers: Disability futures

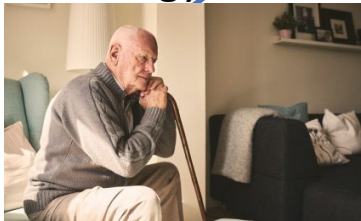
2025. Massive government funded rollout of technology and continuation of high speed internet coupled with a massive training campaign to ensure people and their carers are familiar with this new technology



2030:

Regional aged care / disability clients have the technology and the confidence to organize all of their supports, able to select their staff according to similar needs and goals. Able to access their own medical appointments, banking, shopping, online communities to target loneliness. Ability to maintain their own packages and 24 hour support live online from support coordinators, carers. A virtual community to supplement their face to face care. Interactive care

2020: Socially isolated, difficulty connecting, loneliness, lack of choice in support, difficulty accessing the basics, exorbitant prices, lack of ability or access to technology.



EMBODIED BACKCASTING – GOVERNMENT OF CAMBODIA





Mauri Ora ki Mua
**VISIONS OF WELLBEING FOR
AOTEAROA NEW ZEALAND**

8 AS A WAY TO PREPARE FOR THE LONG TERM
GDP TO WELL-BEING, GOVT OF NEW ZEALAND

THE NEW WELLBEING AND SHARING ECONOMY

ADAPTIVE CHANGE

– metaphorically ‘sharing is winning’

In this future, Aotearoa New Zealand is recognised globally for having created a system to ‘future proof’

its wealth and wellbeing.

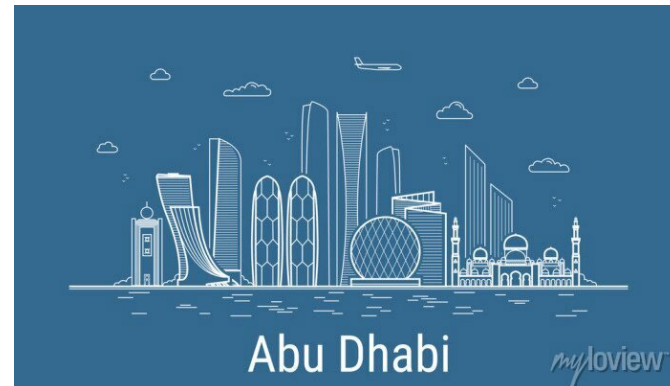
Adaptive change results in deep policy shifts, developed through inclusive engagement with stakeholders.

For example, a shift toward renewables, self-sustaining cities, reduced physical consumption, smart spatial planning and decentralised decision-making i.e. a flatter, greener, smarter, more equitable Aotearoa New Zealand.



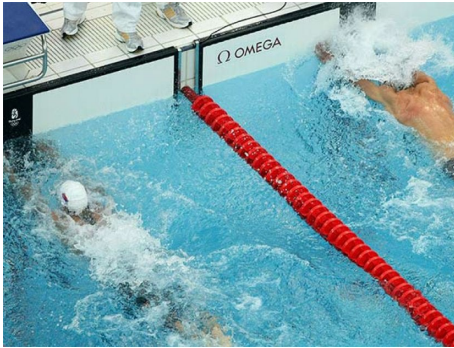
ABU DHABI – DCT 2070 THE WONDERLAND

“Abu Dhabi has built a world leading diverse event portfolio, combining technologies like holograms, 6G, VR/AR/MR with outstanding IPs to offer a full immersive experience. All events are ‘phygital’, as locally held events are also shown worldwide in VR/AR pods for people to buy tickets and travel to Abu Dhabi virtually.



9 AS A WAY TO SHIFT NARRATIVES - OLYMPIC SWIMMING

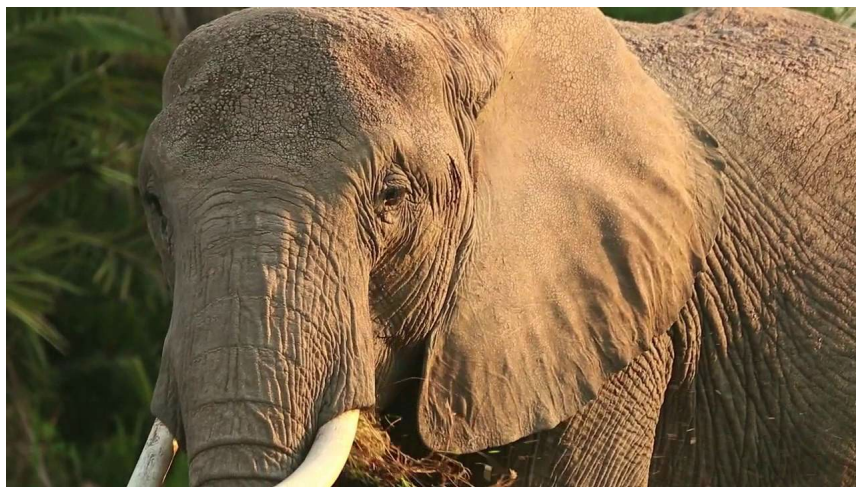
- The last second – the golden second
- After the Pool, after the Olympics



GOLDEN LIFE – THE WATER PARK

Life skills, emotional intelligence, respect for others, and, financial literacy





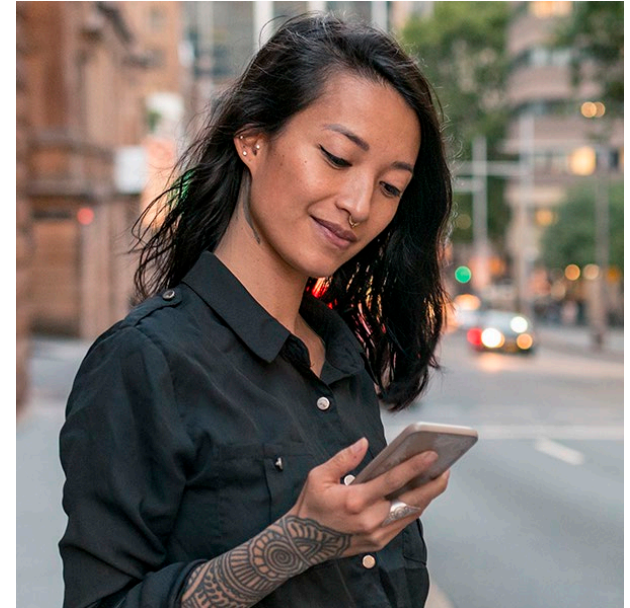
Blind
Slow
No longer
relevant



Smart
Fast
Complex
Change shape

FROM THE QUEEN ELIZABETH - DIFFICULT TO TURN SHIP - TO TUG BOATS





Meet Australia's first homegrown, poo-loving superbugs that are cleaning Brisbane's sewage

By [Jessica Rendall](#)

Posted Tue 2 Mar 2021 at 6:06am



METAPHORS AND CRIME

Crime data presented remains the same with each metaphor



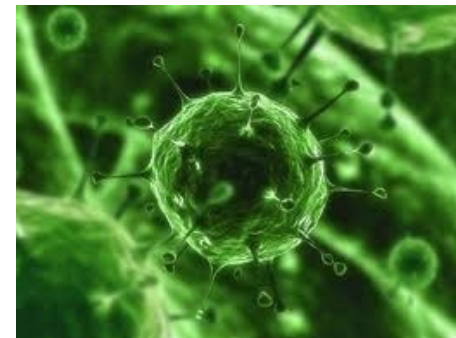
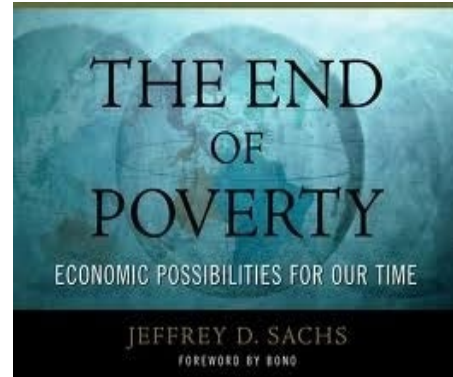
Catching and jailing criminals



Crime as a beast



Education and ending poverty



Crime as a virus

AND YET:

- When the 485 participants in that study were asked to highlight what they thought was the most influential part of the report, only 15 identified the metaphor, while almost everyone else said it was the statistics that swayed their decisions on how to curb crime.

NARRATIVE AND POLICY

- *In American surveys about government's role in poverty the mere word, "welfare" act like a **poison pill**. Questions that mention welfare reduce support for such programs by almost 40% compared with questions that use the phrases "assistance to the poor" or "caring for the poor."*



TAKE CHARGE OR ...

- "For the Leave campaign, I think it is much more about emotional arguments, about the politics of the situation, about this very British notion of fairness. That it is somehow not fair that other people should tell us how to run our lives."
- "The free movement of terrorists, of criminal gangs and of Kalashnikovs".





DISABILITY AND FUTURES

CLA	2020	2030
The Headline	Alone with no support	Full access and support
The System	Technology that does not work and unaffordable prices	Access to technology, carers, support coordinators. Can select care.
Worldview	Disconnected	Seamless Integration
Metaphor	Isolated Stars	Connected Constellation

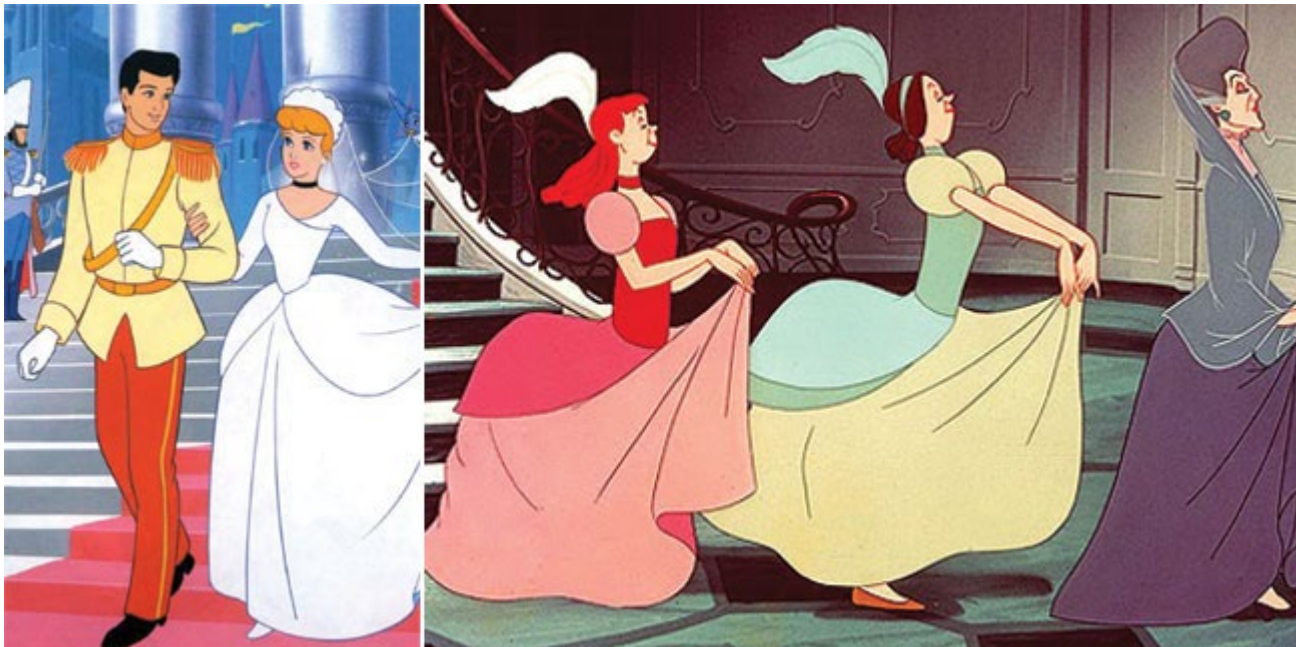
BRUNEI

TODAY	TRANSFORMED
Leader in Obesity in ASEAN	Healthiest nation in ASEAN
Fast Food Dormant Subsidized white rice	Grow your own food Tax junk food – sugar Reduce rice subsidies
Rice culture plus high standard of wealth	Plant based plus health centric culture
Live to eat	Eat to live



	Current	Transformed
Litany	3 million people die yearly from alcohol induced. Disease, injury	Only a few die from alcohol induced health issues
Systemic Causes and solutions	weak regulation, not implemented Very cheap – policies ensure availability Promoted, glorified	Effective policies – taxation Ban on marketing not easily available Alcohol free spaces – city and social design Linked and partners with other NCD strategies Industry to be held accountable
Worldview	Alcohol is us, if any issues, it is personal responsibility All can deal but a few fail	Alcohol is a drug Social responsibility – We are all responsible Industry to be held responsible
Myth & Metaphor	We live to drink 	Like smoking a pipe (what they used to do) 

10 AS A WAY TO TRANSFORM PERSONAL FUTURES



FROM CHASING TO BECOMING THE WHITE RABBIT

- Chasing the white rabbit



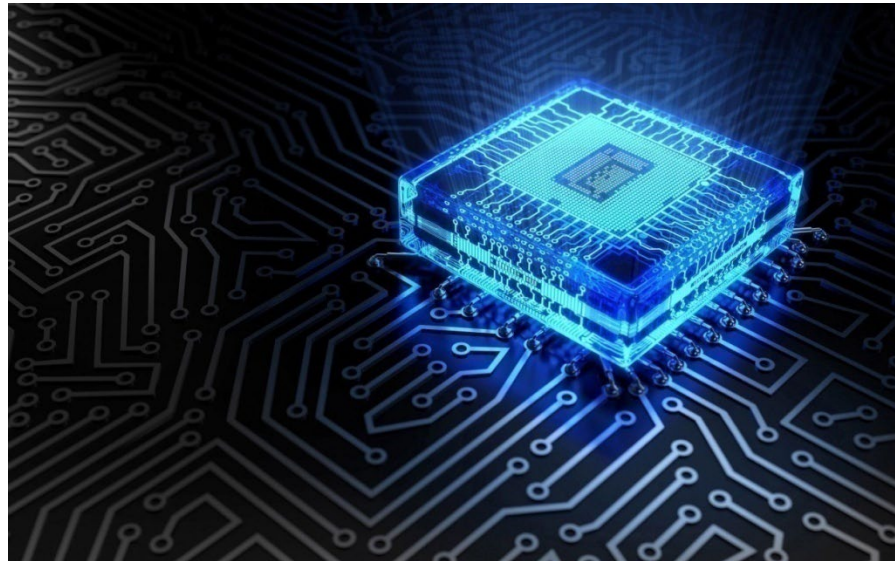
Becoming the white rabbit



I-PHONE IN A ROOM FULL OF NOKIAS



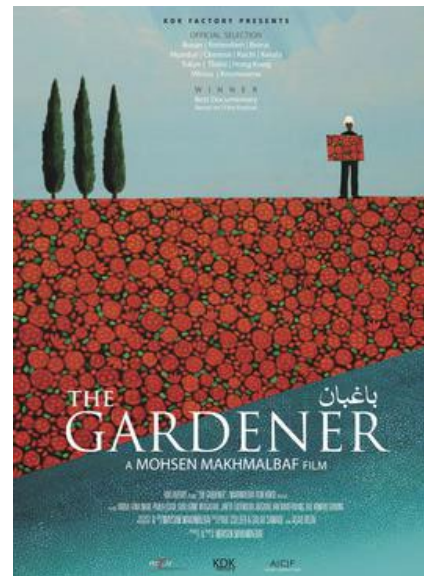
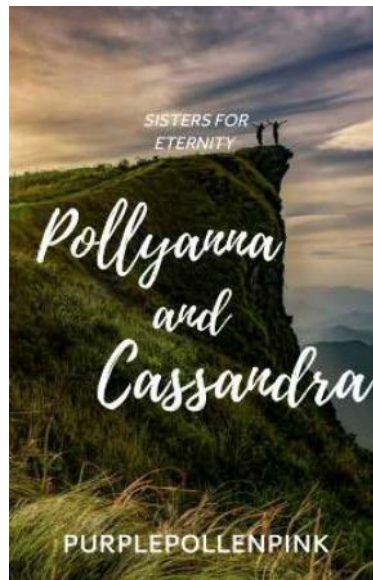
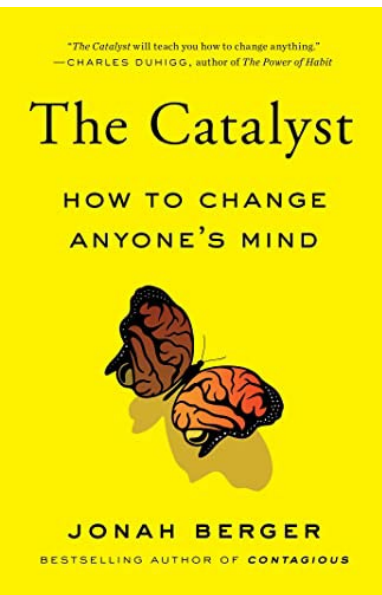
CO-CREATED CHIP-MAKER



WARM SUN



YOUR METAPHOR IN THE NEW FUTURE



LESSONS LEARNED

LESSONS – LINK LONG TERM TO MEDIUM AND SHORT WHILE KEEPING TIME MYSTERIOUS

STAY FOCUSED ON VISION EVEN THOUGH POLITICS ABOUNDS

USE NARRATIVE TO STAY TRANSFORM – IE STORY DRIVES THE FUTURE.

FIND YOUR PERSONAL LIFE AND WORK METAPHOR TO ENSURE THERE IS MEANING AND PURPOSE

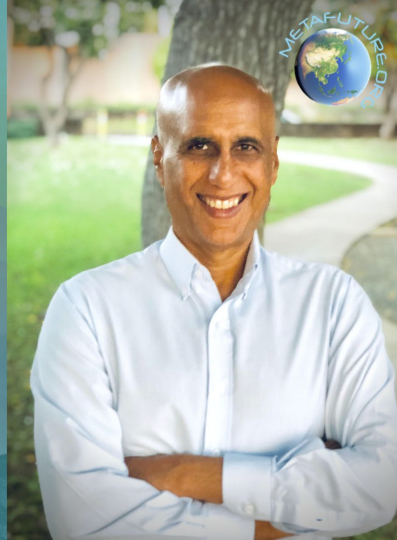
THE FUTURE IS MESSY ENOUGH, FIND ONE'S ZONE OF CONTROL – THE MANDATE ONE HAS



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CONFLICT TRANSFORMATION

Futures methods to resolve
inner and outer conflicts

with
Ivana Milojević



**Personal Futures
Masterclass**

With Sohail Inayatullah

CLA 3.0 - Thirty Years of Transformative Research



Sohail Inayatullah, Ralph Mercer, Ivana Milojević & John A. Sweeney (Eds.)

Tamkang University Press

WHAT IS THE CLA? PUT IT ALL TOGETHER

	Current	Transformed
Litany		
Systemic Causes and solutions		
Worldview		
Myth & Metaphor		