



FutureTales LAB™



ABOUT

FutureTales LAB by MQDC

FutureTales LAB (FTL) is a transdisciplinary futurology centre set up by Magnolia Quality Development Corporation Limited (MQDC), a leading property developer in Thailand.

The purpose of the lab is to gather, analyse, and interpret key data for strategic choices to better inform and equip decision-makers.

FTL utilises an array of foresight methodologies and tools to explore the futures of living, work, learning, leisure, mobility, and sustainability on a global, regional, and local scale.

FOREWORD

It is with great anticipation that I invite you to delve into the thought provoking and deep insights in the pages of FutureTales LAB's latest compendium, "Future Tales". This collection, encompassing the pivotal years from 2030 to 2060, provides a profound exploration of the trajectories that can shape the very fabric of our society. From the evolution of mental health paradigms to the expansive potential of immersive experiences, the metamorphosis of urban landscapes, and the bold strides in space movement, each report is a mosaic of visionary insights and strategic foresight.

In endorsing this endeavor, I am reminded of the critical importance of foresight in our increasingly complex world. It is a tool that enables us to navigate the uncertainties of the future with informed confidence, crafting pathways that lead to resilience and flourishing communities. By engaging with these futures, readers are not merely absorbing information; they are participating in a dialogue with tomorrow.

The work of FutureTales LAB is a beacon that illuminates the possibilities that lie ahead, empowering us to act with purpose and foresight. I commend the talented team for their dedication to exploring these vast and varied horizons and urge readers to immerse themselves in these pages. As we stand on the cusp of transformation, let us embrace the power of foresight to envisage and shape a future that reflects our highest aspirations.



Stephen Ibaraki

Chairman and Managing General Partner, REDDS Capital
Founder of UN ITU, AI FOR GOOD
Founding member of WFP Innovation Accelerator advisory council
Founder of Fintech Ideas Festival, Technology Advisory Council
Founding chair YPO Impact Advisory Board
and YPO EU Impact Summit Advisory Board
Recipient of 21 Microsoft Global Awards



2023 has been a most eventful year. Looking back on our 3-year journey as FutureTales LAB, the team and I are filled with gratitude and encouragement. Being the first private futurology centre in Thailand has not only been a badge of honour, but one of responsibility and accountability. We share our accomplishments with all of you and look forward to many more years of horizon scanning and future-mining.



As an expression of thanks, we have taken the opportunity to showcase a selection of our reports from the past 3 years in this publication aptly titled 'Future Tales'. I am delighted to welcome you on a journey that transcends the boundaries of "future" as most of us label it, and venture into the realm of "futures".

The reports within these pages are narratives into intriguing vistas, each of which explores a facet of the evolving tapestry of our existence. From the intricacies of mental health, the possibilities of immersive experiences, the realities of urbanisation to the infinite expanse of space, we welcome you to dive into these futures with an open mind and a suspension of schema.

Thank you for joining us on this expedition into the unknown, we hope that you continue to be our fellow pilots for as long as we continue to venture. May Future Tales be a source of inspiration, curiosity, and a catalyst for your own exploration of what lies beyond the horizon.

Happy reading!

Dr Karndee Leopaibote, PhD

Chief Foresight & Digital Asset Officer C-Cell
FutureTales LAB by MQDC

Futures anticipation has become an existential imperative for organisations. Although we cannot precisely predict the future, having the ability to imagine possible futures allows us to actively make preparations, and cognitive and behavioural modifications. Learning about the futures requires significant effort in organising and interpreting layers of multi-interaction among myriad webs of factors that cause diverse change of events and are influenced by encircled context.

FutureTales LAB (FTL) was set up by MQDC to help generate future scenarios that situate global movements within the context of Asia, especially Thailand. This approach has allowed a more fruitful comparative futures discussions with an indigenous and local touch. For the past three years, the research team at FTL has worked to simplify complex future scenarios and share their knowledge with diverse audiences.

It is my great pleasure to invite you to explore a collection of creative future research topics envisioning evolutionary futures from 2030 to 2060. These reports cover key critical global concerns from changing patterns of mental health environments to living paradigm shifts in urbanisation, potential lifestyles with immersive technologies and the plausibilities for humankind in space movement. Having had worked with the team, I am confident that the readers will find 'Future Tales' interesting. The distinctive approach to foresight interpretation, combining global dynamics and local perspectives is sure to intrigue curiosity and challenge the general view on what the futures might look like.

Dr Poomporn Thamsatitdej, PhD

Assistant Professor in Digital Innovation, Thammasat University
Director of Artificial Intelligence Center, Thammasat University
Advisor to FutureTales LAB
Advisor to National Innovation Agency (Public Organisation)
Founder of Anakata Strategic Innovation and Design



FUTURE



TRAIL'S



What we know of the world, in essence, is the product of storytelling.

Our collective knowledge is rooted in stories –
from our first memories to the founding pillars of our beliefs.

Stories are not merely narratives; they are interpretive lenses through
which we make sense of reality. They frame our experiences, assign
meaning to events, and shape our understanding of the world.

Through stories, we interpret the past, navigate the present,
and envision the futures.

Future Tales is the first annual catalogue of stories by FutureTales LAB.


This collection consists of four foresight reports inclusive of
commentary and think pieces from our stakeholders
and spanning the futures of 2030 through 2060.

For us, this is not just a collection of research reports;
it is a chronicle of plausible, possible, and probable futures.

In your expedition through the terrains of our work, our sincerest hope
is that your discovery sets you on the path of your preferred futures.

2030
2060

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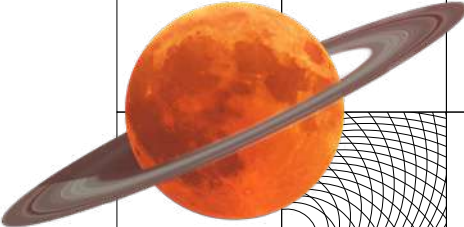


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FUTURES OF MENTAL HEALTH





'Futures of mental health' is a comprehensive, highly informative, and well-illustrated study. It is based on a thorough foresight process where over 100 signals of change were first identified and clustered into STEEPV categories. These were then merged into seven key megatrends and six mega-driving forces that were used in a morphological analysis to create five future scenarios for the futures of mental health.

Each scenario is presented as a narrative but also from the point of view of five personas written to live through each alternative future. The report also has a well-elaborated analysis of the current mental health care situation in Thailand, and a valuable guide to action for the public and private sector, communities and citizens based on the differences and similarities found in the scenarios. This report is invaluable for anyone working within the mental health sphere, whether in planning or practice, and for people interested in the topic.



Dr Tuomo Kuosa

Content Director, Lead Futurist, Futures Platform
Adjunct professor in Finnish Defence University





The topic of mental health is a complex one. It elicits diverse and divergent views, challenges long-held beliefs to consider alternative truths, and encourages a nuanced understanding of the intricate interplay between biological, psychological, and societal factors that shape mental well-being.

Contextualising mental health as “multifaceted” allows us to think beyond the traditional dichotomy of “normal” and “abnormal”, and to acknowledge the myriad spectrum of human experiences and emotions.

In today’s world, a fact that we can all agree on is that mental health is no longer taboo, and is talked about more openly and frequently, especially amongst the younger generation. There is a newfound openness bolstered by the use of social media and personal storytelling that has paved the way for important conversations, challenging preconceptions and fostering empathy.

In tomorrow’s world, we hope that mental health and physical health are no longer considered in plurality, but that they are a singular component of an individual’s well-being.

Our report, “Futures of Mental Health in Thailand 2033” investigates the intricacies of the mental health landscape in Thailand. This comprehensive study conducted by FutureTales LAB by MQDC in collaboration with the Department of Mental Health - Ministry of Public Health (Thailand), National Innovation Agency (Thailand), and Electronic Transactions Development Agency (Thailand) takes into account the stark reality of ‘now’ in anticipation of what the futures might look like.

The Now: Mental Health in Thailand

From 2015 to 2021, there was a surge in individuals seeking psychiatric care in Thailand, soaring from 1.3 to 2.3 million cases. This spike not only mirrors a growing awareness of mental health, but also signals a demand for services that should no longer be ignored.

Suicide is the third leading cause of death among Thai youths, with a staggering 17% wrestling with suicidal thoughts. Equally sobering is the acknowledgment that 90% of the elderly facing memory malfunctions also report simultaneous mental health challenges. This is a poignant reminder that mental health concerns transcend age, necessitating nuanced and comprehensive interventions.

A striking intersection of mental health and the criminal justice system comes to light as nearly 4,000 individuals with mental disorders were diagnosed among criminals in just one year. This revelation adds a complex layer to the ongoing conversation about the nexus between mental well-being and societal structures.

Amidst these challenges, a critical shortage of mental health professionals poses a formidable obstacle. With only 1.25 mental health professionals per 100,000 population – falling below the World Health Organisation’s baseline. The resulting fivefold increase in burnout among mental health professionals from 2020 to 2022 underscores the urgency for strategic planning and systemic changes.

As we delve into the future, the call for sustainable solutions and a reimagined mental health landscape in Thailand becomes more resounding than ever.





The Futures: Signals of Change

Signals of change are indicators that suggest shifts, emerging trends, or significant developments in various aspects of society, technology, economy, environment, policies, and value domains. The following signals are early signs or markers that impact the futures of mental health in Thailand.

Vital Sign of the Planet

Each Celsius degree increase correlates with a 2.2% rise in suicides among psychiatric patients.

AI Mindfulness

The rise of technologies and digital platforms in mental health pre-screening and self-care is contributing to telemental health and wellness, with a projected 32.3% CAGR from 2022 to 2028.

Mental Health in All Policies

Strengthening the roles of organisations and governments in addressing mental health in governance **For All Well-being**.

Overwhelming Disinformation

Thais reported encountering fake news a staggering 20.3 million times within two years, leading to mental distress during the pandemic.

Passion Economy

Despite 58% of the population feeling economic pressure to seek additional income sources, individuals tend to monetise their hobbies and passions.

Diversity, Equity, Inclusion, and Belonging (DEI&B)

Prioritising social inclusivity in organisations and cities to promote productivity alongside people's happiness.

This research not only highlights the current facts and challenges but also advocates for a paradigm shift towards Thailand's mental health futures.

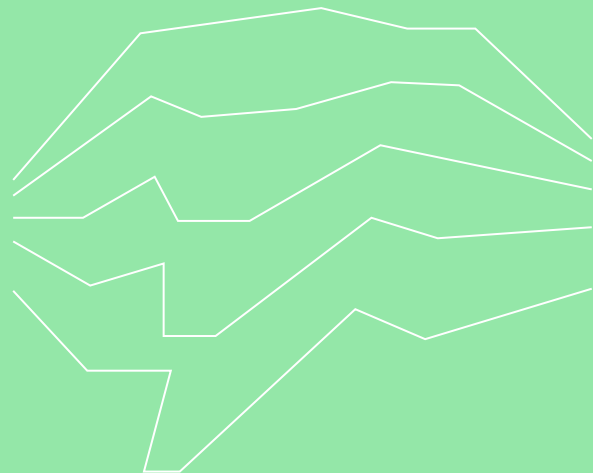
We invite you to uncover untold stories, explore future plausibilities, and play a part in promoting mentally healthy futures for Thailand through the actionable guide for each stakeholder in the full report.



FUTURE SCENARIOS







To alter the trajectory of these scenarios,
a holistic approach is essential.

As an NGO, we can leverage our direct experience with affected individuals and the valuable data we collect to advocate for change. However,
this effort must be synergistic,
involving the government,
the private sector, NGOs, and civilians.

Amornthep Sachamuneewongse

Founder - CEO

MSc Psychology & Neuroscience of Mental Health,
King's College London



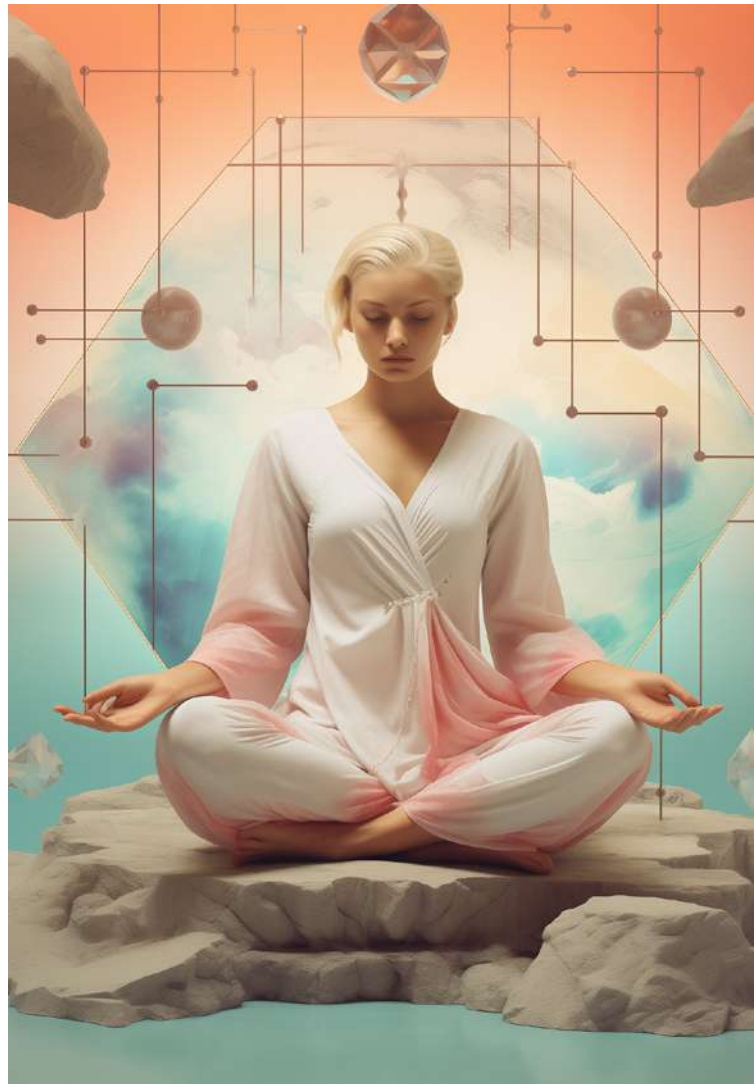
Amornthep Sachamuneewongse

Founder and CEO, Sati App

In analyzing the five scenarios presented around mental health, two stand out as particularly pertinent given current trends: the rise in **'Terror Outburst'** and the burgeoning sense of a **'Pack of Lone Wolves.'**

Terror Outburst: Unfortunately, this scenario is increasingly likely. The prevalence of terror and aggressive behavior in society has escalated without a commensurate policy response to address the root causes. The inundation of media reports on such events has begun to desensitize the public. This desensitization can lead to a feeling of helplessness and a belief that the power to change is beyond the average person's grasp.

Pack of Lone Wolves: In urban settings, notably Bangkok, the paradox of higher loneliness despite greater population density is evident. The shift toward digital socialization reduces physical community interactions, contributing to isolation. The current urban design does not prioritize communal spaces that encourage in-person interaction and mental relaxation, exacerbating the issue. Both scenarios are not mere predictions; they reflect ongoing trends that, if left unaddressed, are poised to worsen.





What might we (any of the following perspectives: individuals/societies, public/private sectors, academia) do to cultivate or mitigate such a scenario?

To alter the trajectory of these scenarios, a holistic approach is essential. As an NGO, we can leverage our direct experience with affected individuals and the valuable data we collect to advocate for change. However, this effort must be synergistic, involving the government, the private sector, NGOs, and civilians

Specifically, for Terror Outburst, prevention strategies could include:

- **Policy Advocacy:** Lobby for comprehensive policies that address the root causes of aggression and terror in society, focusing on education, social services, and community support.
- **Awareness Campaigns:** Implement educational campaigns to destigmatize mental health and promote understanding of the signs of escalating behavior.
- **Crisis Intervention Training:** Equip law enforcement and public safety officials with the tools to de-escalate situations before they result in outbursts.

For the Pack of Lone Wolves, suggested actions involve:

- **Urban Design:** Collaborate with city planners to create community-centric spaces that encourage face-to-face interactions and communal activities.
- **Digital Literacy:** Promote digital literacy programs that educate on the importance of balancing online and offline social interactions.
- **Community Programs:** Invest in local initiatives that foster community bonding and support networks, particularly in highly urbanized areas.

The concept of Decentralization of Mental Well-being is a key element in our strategy. It calls for an integrated approach across all sectors, recognizing that mental health is not only a health issue but intersects with education, human rights, finance, and even climate change. This decentralized approach requires a dismantling of silos and the creation of a collaborative, multi-sector framework where mental health is a shared responsibility. Policies must be designed with the people at their heart, ensuring sustainability and long-term impact.



Dr Jennifer Chavanovanich, PhD

Associate Dean, Faculty of Psychology, Chulalongkorn University
 Director of East-West Psychological Research Center
 Head of Industrial/Organizational Psychology



Of all the scenarios, which one do you think is the most plausible and why?

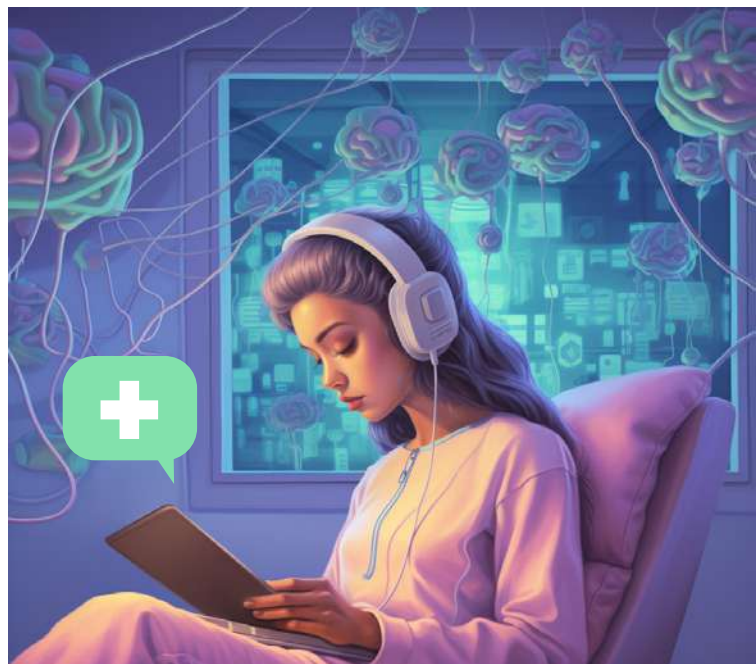
Scenario 3 (Packs of Lone Wolves)

might most likely happen as technology seems to be advancing more rapidly than mental health literacy and social equality in various areas. As societies are pushing for innovation, mental health services and interventions/ programs might be integrated into technological platforms such as videocall conference counseling services and AI mental health assessment platforms. Accessibility to technological mental health services may encourage people to seek these services rather than face-to-face social support. Busy schedules and fast-paced lifestyle of people, especially those in cities, may drive pack of lone wolves to occur.



What might we (any of the following perspectives: individuals/societies, public/private sectors, academia) do to cultivate or mitigate such a scenario?

Mental health services and programs need to be intergrated into different levels (e.g., educational, work, policy, and health-care system) more rapidly in order to wider scopes of programs and services. There needs to be stronger drives for mental health promotion and preventions systems at different levels. For instance, at a workplace level, mental health-related strategies at work such as the right to disconnect or employee assistance program (EAP) may become policies whereby companies are encouraged to endorse them. These strategies should be perceived as necessities rather than extra benefits used to attract people into the workplace. Last, there needs to be an ecosystem for mental health- people (mental health professionals), knowledge, policy, and innovation (to disseminate knowledge to all groups of people).





Balancing Act: The dual influence of digital technology on mental well-being in Thailand

by **Dr. Tyn Tawitaranond**

Deputy Executive Director, Electronic Transactions Development Agency

The integration of digital technology into daily life has significantly impacted Thai lifestyles and mental health. In 2022, 85.3% of Thais had internet access, ranking Thailand second globally in online news consumption. According to the **Electronic Transactions Development Agency (ETDA)** of the Ministry of Digital Economy and Society, Thais spent an average of 7 hours and 4 minutes daily on the internet, with Generation Y leading at 8 hours and 55 minutes, followed by Generation Z with 8 hours and 24 minutes. The primary internet objectives included accessing medical services (86.16%), communication (65.70%), and enjoying entertainment media (41.51%).

Social media plays a pivotal role in how digital lifestyles influence Thai mental health, serving as an influential channel for news consumption and a gateway to information that can impact mental well-being. In 2022, Thailand ranked 33rd out of 63 countries in digital capabilities, facing challenges such as the sharing of fake news over 20.3 million times and a prevalent issue of cyberbullying. Bullying, often in the form of sarcastic, insulting, or humiliating messages, affects 29.6% of high-school students and 39.6% of undergraduates, frequently accompanied by verbal and sexual bullying in real life. In 2018, 87.42% of LGBT youths in Thailand experienced harassment. Various forms of bullying have long-term psychological effects, including stress, social anxiety, depression, and an increased risk of drug use. However, digital technology also brings mental health benefits to Thais. Innovations in mental health services alleviate the burden on healthcare professionals, enhancing service efficiency, and improving accessibility for those in need of mental health support.



Two crucial driving forces are shaping the future of mental health for Thais. Firstly, **the readiness for the digital age** has transformed lifestyles, offering both positive and negative impacts on mental health. While technology provides access to mental health information and support networks, excessive social media use can lead to isolation, anxiety, and depression. Information overload can heighten stress and expose users to fake news, online bullying, and data theft. Preparing for digital transformation and using technology wisely is essential, involving setting limits on online activity, taking screen breaks, and seeking help when needed. Cultivating a supportive environment that prioritizes mental health is crucial for people of all ages during Thailand's transition into the digital society.

Secondly, **mental health technology** harnesses innovation and digital tools to enhance the accessibility and efficiency of mental health care. It addresses common issues in traditional services, such as staff shortages, limited treatment frequency, high travel costs, and limited availability. By utilizing smartphones, computers, AI, wearables, and virtual technology, it offers services like initial screening, mental health advice, online therapy, tele-mental health consultations, virtual reality therapy, and mental health tracking. This technology streamlines treatment, providing convenience, saving time, and catering to those who prefer anonymity. It also changes attitudes toward mental health care, particularly benefiting individuals in remote areas or facing barriers to traditional services.

To address the key factors affecting mental health in Thailand, ETDA plays a crucial role in supporting digital technology use among the Thai population, especially for those in underserved communities. We believe that several approaches related to digital promotion can help safeguard the mental health of Thais. These approaches include **enhancing digital literacy**, empowering individuals with the social and emotional skills to navigate digital technologies safely, bridging the gap between their digital and real lives and reducing the risk of mental health issues related to technology misuse. **Fostering open communication between parents and children** is equally important in the digital age, with parents and educators playing an essential role in helping young individuals develop positive online experiences, raising awareness of potential issues, and nurturing informed and resilient digital technology users from a young age. Additionally, tech companies hold a pivotal role in emphasizing **digital well-being through platform design**, encouraging 'effective self-control' among young users, and promoting alignment of digital device usage with personal values and long-term aspirations, thereby significantly contributing to the mental well-being of Thais.


ETDA has proactively acknowledged the profound impact of digital technology on the mental health of Thai individuals. In response, we have actively engaged with various stakeholders to craft **comprehensive guidelines** aimed at addressing and preventing mental health issues arising from the use of digital technologies. These guidelines encompass critical areas such as Digital Well-being, Digital Service Design, and Digital Platform Usage, all of which play vital roles in promoting a healthier relationship with technology. Moreover, our commitment extends to ongoing monitoring of potential challenges associated with digital consumption among the Thai population. We conduct **an annual nationwide survey** to gauge the state of digital well-being, enabling us to stay attuned to evolving issues and trends.

The collaborative effort embodied in the “Futures of Mental Health in Thailand 2033” report, jointly undertaken by ETDA, the National Innovation Agency (NIA), FutureTales LAB by MQDC (FTL), and the Department of Mental Health (DMH), is poised to be a valuable resource for the people of Thailand, particularly those navigating the complexities of digital technology adoption. We remain dedicated to ensuring the well-being and mental health of our citizens in an increasingly digital world.

2035

FUTURES OF
**IMMERSIVE
EXPERIENCES**





‘Futures of Immersive Experiences’ is an experiential and innovative probe into alternative tech-driven futures. The report presents four vastly different scenarios for the year 2035 that are all written in a first-person storyline format. The narrative building is based on systematic foresight research. Nearly 200 change factors were first classified into STEEPV framework, which was further divided into categories of persistent, strengthening, weakening, and emerging changes. A synthesis of these was then converted into a scenario framework that led to presentations of the alternative paths that our tech-driven futures may take. Reading this report is very much both beneficial and enjoyable.



Dr Tuomo Kuosa

Content Director, Lead Futurist, Futures Platform
Adjunct professor in Finnish Defence University





In the context of today's world, immersive experiences have the tendency to connote visions of advanced technology and an intricate interplay between imagination and accelerated innovation.

In the past, immersion was the secret spice of art and theatre – forms of storytelling that captivated and enthralled audiences.

In the futures, immersive experiences will be what and how we design them to be. Of course, this is if our research assumptions hold true – and the spectrum of both fidelity and involvement are loosely defined, not confined to our current limitations.

“Futures of Immersive Experiences” is an experimental and imaginative take on what tech-driven and -enabled futures might look like. The four resulting scenarios are not your typical narratives, but somewhat psychedelic tales of what life and living might be like in the futures. There is something for most everybody.

Imagination for the dreamers, information for the pragmatists, and foresight for the futurists.

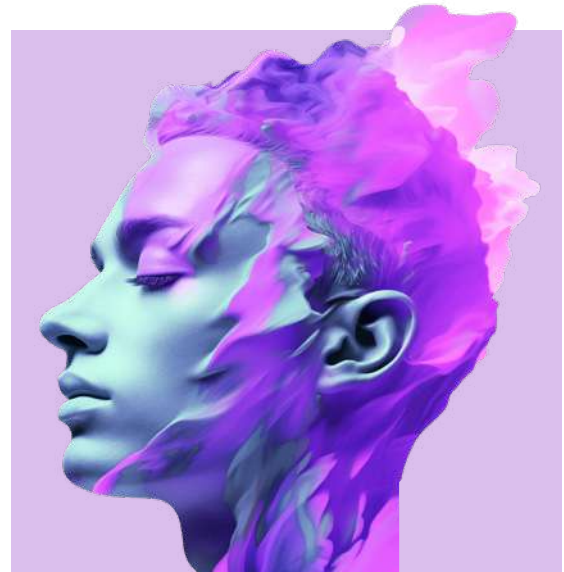


Why scenarios?

A valid question that we often get asked and also ask ourselves is – why scenarios?

One rationale we offer up in the report is that scenarios offer a strategic approach when contextualising the futures becomes challenging. They provide nuanced visions of potential futures, skirting extremes, and instilling a sense of autonomy.

The four scenarios in “Futures of Immersive Experiences” are conveyed in the first-person perspective. This non-traditional approach of writing (for foresight scenarios) was intentional and meant to immerse the readers in an experience not unlike their own – a fevered dream.



Each scenario offers a glimpse into plausible futures of immersive experiences.

We invite you to consider the impact on agency, authorship, and fidelity within these speculative realms; engage in discussions, share insights, and contribute to the ongoing dialogue about the potential of immersive technologies.

We would like to remind you that – we collectively shape the discourse through our storytelling and influence the trajectory of the futures we envision.

Hyper-real

is a future tale of life-like generated “reality” where the individual has agency and authorship over their high-fidelity way of life.

Frack-ture

is a future tale of a fragmented “reality” where the individual’s agency and ownership enable them to pursue an alternative to their extant low-fidelity options.

Low-res

is a future tale of a low-fidelity reality bereft of authorship and agency, but replete with interactions and bonds grounded in “non-virtuality”.

Wrap-ture

is a future tale of a high-fidelity reality that flirts with the uncanny valley given that the individual is not an active author of their experience.



FUTURE SCENARIOS



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Type a user name and password to log in.

User name:

Password:

OK Cancel

System Error

System Error

OK

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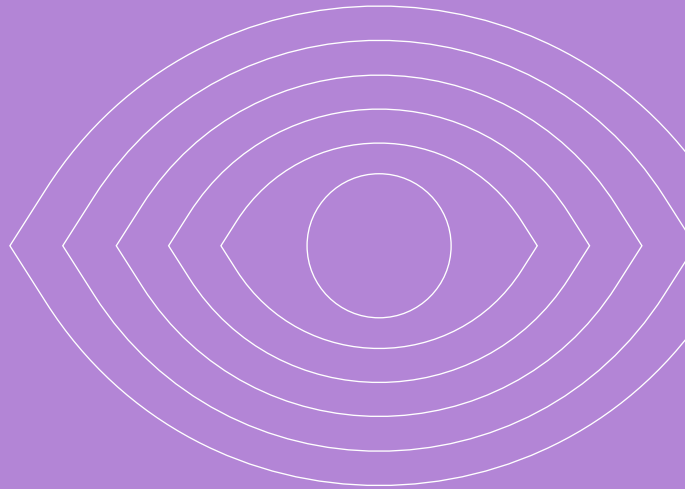
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    "thumbUp", "keyWords"
  ];
}

```



Globally, I believe
the technology **will be possible**
and the Hyper-Real scenario
in mixed reality is likely plausible.

If you can do hyper-real,
limited graphical or stylized content
is nothing to worry about.

Dr. Surapong Lertsithichai

Chief Design Officer
MQDC Idyllias



Dr Surapong Lertsithichai

Chief Design Officer
MQDC Idyllias



To your knowledge and understanding of the scenarios, which is most plausible? What are the factors leading to your conclusion?

Judging from the speed of development in high quality visual representation with AI just in the past year, it would take less than 10 years for AI to develop hyper-realistic experiences without any human prompts or intervention. AI will be at the center of all immersive experience devices (mobile computers/phones/tablets) and AI will be capable of displaying information in a hyper realistic virtuality. Globally, I believe the technology will be possible and the Hyper-Real scenario in mixed reality is likely plausible. If you can do hyper-real, limited graphical or stylized content is nothing to worry about.

The reason for this, is the development of AI at its current speed and the bandwidth or internet penetration around the world that makes data transfers seamless to all, would be able to enable streaming of high-quality content to all in a condensed format. In 10 years, AI would have learned so much from people already and can gain access to vast databases of content as needed. AI will help filter or customize how content is experienced on behalf of users based on their set of preferences and behavioral analysis. Whether or not this is ethical or has wide adoption could be debated as we may not know how such content will affect users and society in the long run (privacy, fatigue, etc.). But I don't believe this immersive experience would be totally automated as it should require some user customizations to make them meaningful and memorable.



In 10 years, AI would have learned so much from people already and can gain access to vast databases of content as needed.





What might we (any of the following perspectives: individuals/societies, public/private sectors, academia) do to cultivate or mitigate such a scenario?

Individuals may need to eventually forgo privacy and intellectual property rights to gain access to this experience for this scenario (constant scanning of full body, face, gestures, tracking user behavior, etc.). Identity verification and protection may become more valuable to people in the future as well, including secure data deletion of experiences. This sounds very much like a Black Mirror episode but the problem of privacy could also deter people from using immersive experiences.

Public/private sectors should plan for the transition carefully with slow implementation steps while evaluating the affect of immersive experiences throughout its development. It is inevitable that consumers will drive the change as equity to information becomes a norm but government should still be the party to balance policies of restrictions and freedom.

Academia can benefit from a learning experience that is more engaging and meaningful to students by studying user preferences and catering content to suit their learning needs and methods. In this haven, more content explorations and user generated content should be encouraged and welcome by anyone in the open academia sector.





Pongsiri Hetrakul

Festival Director
Time Out Bangkok



To your knowledge and understanding of the scenarios, which is most plausible? What are the factors leading to your conclusion?

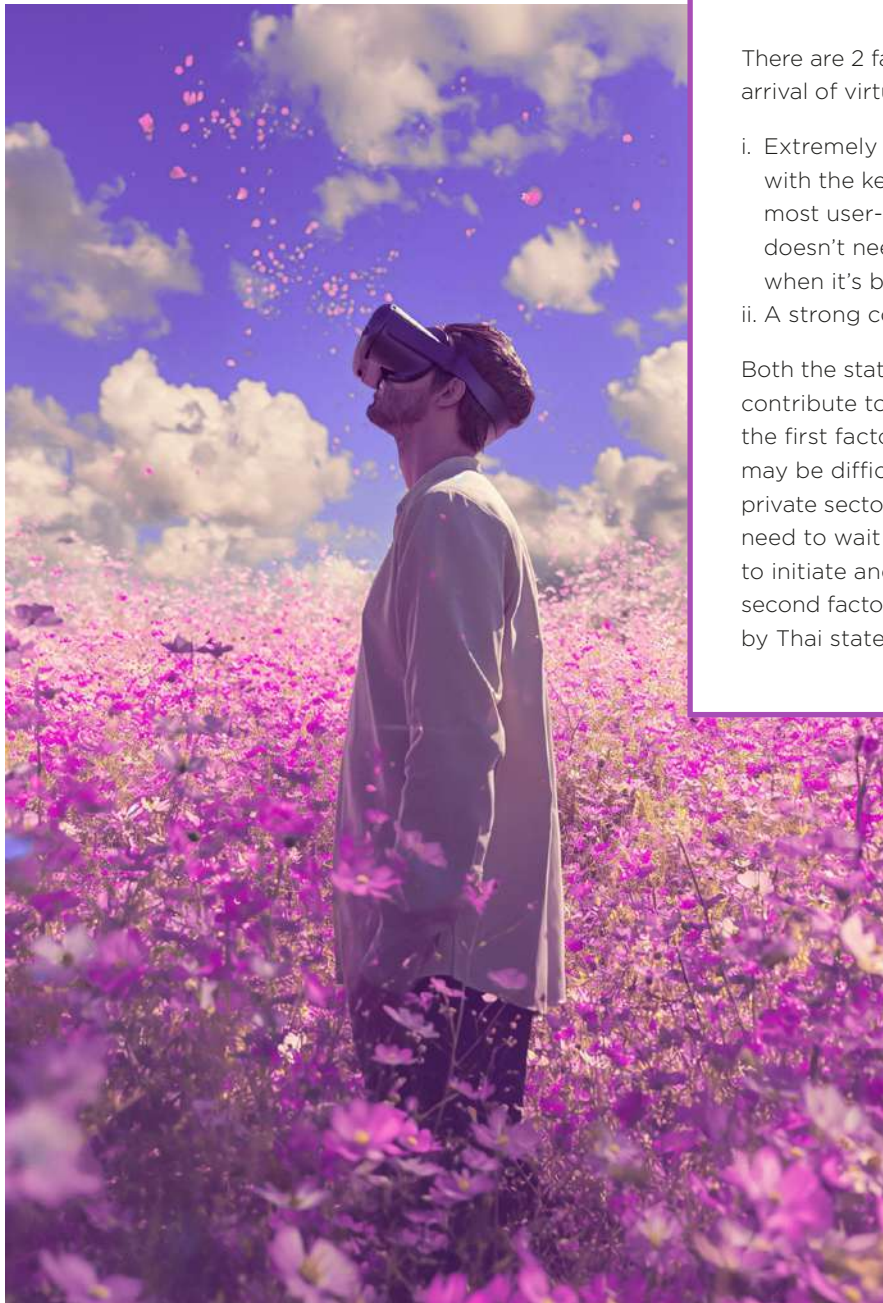
Looking from the axes of involvement and fidelity; I believe that in terms of involvement, there will always be both active and passive forms occurring interchangeably, depending on the situation. For instance, AI suggesting editing directions for movies that editors would like is passive, but if editors continuously feed in their preferred storytelling directions, it becomes active. This will in turn help AI to learn more and make passive interaction more defined.



In terms of fidelity, I believe the realism will be at a high level. For example, AI will interact with humans in a very realistic manner, having creativity, humor, and emotional responses based on what it has learned. Although AI might not have real emotions, it can respond emotionally because it has learned how to.

In terms of data rendering, in the next 5-7 years, there will be widespread use of virtual tech, with AR being used the most due to its technological readiness in terms of both the device itself and the ecosystem. VR will follow closely, just waiting for the readiness of devices and the ecosystem.

An example of “Futures of Immersive Experiences 2035” is a football match where audiences enter wearing a convenient, wearable blended device that integrates seamlessly into daily life (likely glasses that look and weigh the same as normal sunglasses, or if technology advances further, possibly contact lenses). As we travel to watch football, stepping off the train, we see ads on screens through AR glasses that display based on our preferences, for example, if we like Harry Potter, it will show Harry Potter-related products. In contrast, your friend will see different ads on the same screen based on their interest. When entering the stadium, we can look at our seats through AR glasses, AR arrows will indicate and let us know where to sit. To upgrade seats, we can tap the glasses twice to pay with a credit card. During the match, we see various symbols on players just like in ‘Winning Eleven’ (video game), showing statistics of players from both past and current games, expert analysis, and predictions. Half-time ads on the field also appear on each audience member’s AR glasses differently.



What might we (any of the following perspectives: individuals/societies, public/private sectors, academia) do to cultivate or mitigate such a scenario?

There are 2 factors that will hasten the arrival of virtual/immersive technology:

- i. Extremely user-friendly devices, with the key principle being that the most user-friendly device is one that doesn't need to be worn, or isn't felt when it's being worn at all
- ii. A strong content ecosystem

Both the state and private sectors can contribute to both aspects. However, the first factor (user-friendly device) may be difficult for Thai state and private sectors to develop, and we may need to wait for trendsetter countries to initiate and then adopt it, but the second factor can always be developed by Thai state and private sectors.



Natsakon Kiatsuranon

Venture Builder
King Power



To your knowledge and understanding of the scenarios, which is most plausible? What are the factors leading to your conclusion?

Personally, I think every scenario is possible, it just depends on the timing and whether it will happen sooner or later, this just follows the usual innovation adoption curve.



What might we (any of the following perspectives: individuals/societies, public/private sectors, academia) do to cultivate or mitigate such a scenario?

Personally, I think the private sector should gradually experiment with test and learn model, and then adjust the use case to fit their own businesses. Starting from Frack-Ture, applying it to various IoTs that are already in the market, and then gradually enhancing technology and experiences to go from Low-Res ➔ Hyper-Real ➔ Wrap-Ture in sequence.





The Future of Cities - 2035

by **Cecilia Tham**
 and **Mark Dixon Bünger**
 CEO, CTO, and Cofounders, Futurity Systems



Brilliant Cities

Smart cities are digital megaprojects that have been spreading around the globe for almost 20 years, with mixed success at best. They usually struggle because technology changes fast - a smartphone from 2009 is no longer very smart, but cities need to plan for years, decades, centuries.

In the future, cities will become self-aware and self-improving to start smart and stay smart - by learning. Infrastructure will learn about how it is being used, how that information can be applied and to improve. Large language models embedded in government services will self-adapt to citizens' needs, explaining city processes in a dialogue they can understand, and getting to know them as neighbors. For a city to truly learn and evolve into a "smart" city, it will have modular, adaptable systems that it can rapidly prototype, test, and integrate new solutions on its own. We call a city that can learn in this way a "Brilliant City" that is self-improving by design.

By 2035, cities will leverage technology to become more adaptive and responsive. With advanced sensors and 6G networks feeding real-time data into AI systems, cities will apply "digital twin" models to run simulations and analyze trends. This will enable nimble policymaking and infrastructure that can change based on emerging needs. Cities are already using GenAI with citizen participation (like the project by UrbanistAI), for urban planning. Public spaces may shift configurations in response to crowds, and traffic signals will automatically optimize flow.

Brilliant cities will be built with not just a virtual layer that can be customized and can provide real-time exchanges through citizens' devices and activities. Our physical environment will be responsive as well. If the last twenty years have been about making software that can accurately model a city, the next twenty will be about making the physical city - its transportation, parks, housing, etc - adapt and improve as quickly as software.





Autonomous Cities

Cities today are crammed with cars – most of them creeping along in slow traffic, or taking up massive amounts of space in garages and lots. The rise of autonomous technologies will shift our urban fabric significantly in the future, with fleets of self-driving delivery vehicles that flow through city streets, underground infrastructure and even in the air, allowing for faster, smaller units, and more targeted distribution of goods. These autonomous bots will transact with other smart devices to unlock doors, lockers, home appliances and furnishings, smart homes and stores, and coordinate deliveries and services as well as outgoing waste, recycling, containers, laundry and such. These frictionless autonomous systems will reduce emissions, packaging, and especially time. They will save families many hours every week spent on errands, letting them shift that time into more productive, enriching, and fun time.



Regenerative Cities

Until now, cities have aimed for “sustainability,” but we actually need to go beyond sustaining, to regenerating what we destroyed in the past. Transitioning from sustainability to regeneration, will require many much-needed transformations: Homes built using organic materials that absorb carbon dioxide. Shops and businesses powered by renewable energy like solar and wind, and even thermal – and generating enough extra to power vertical farms. Food production increasingly utilizing cellular agriculture to grow meat, dairy, and other products in labs rather than in fields. Schools that teach skills for the future – especially human-centric ones that can’t be replaced by robots or AI. Hospitals utilizing regenerative medicine and biofabrication to regrow damaged tissues and organs. This shift towards regeneration rather than sustainability will bring profound changes as resources are renewed rather than just conserved. In 2035, our cities will differ greatly from the past as infrastructure stops merely sustaining, or constantly pushing for growth. It will be regenerative by design with the goal of practicing preventive health for people and the planet.



Metabolic Cities

We’ve tended to think of cities as machines; something we know how to design and control. But with citizens, businesses, and policymakers collaborating, the cities of the future could function more like living organisms that actively sense, analyze, and respond to benefit society.

Cities around the world have become complex, but hopefully will become efficient ecosystems that circulate resources in closed loops that turn waste into resources, thanks to advances in renewable energy, smart infrastructure, and urban agriculture. The “metabolic cities,” these urban areas will optimize the flow of food, water, energy, goods, people and data from individual consumption up to citywide scales. Once reliant on external inputs and linear “take-make-waste” models, cities will function more like bodies, taking cues from natural systems and working together like living ecosystems. This fundamental redesign will enable cities to support growing populations with minimal environmental impact, and build thriving communities focused on quality of life.

2050

FUTURE OF URBANISATION



“Future of Urbanisation”, a collaborative foresight research between Arup and FutureTales LAB is a constructive investigation of the futures of Greater Bangkok. The report presents five plausible scenarios for the city in 2050. The work is based on systematic foresight research that began with horizon scanning, where the high-impact trends were first discovered and merged into seven key megatrends and further into key factors shaping the city. What is really beneficial in the research is the analysis of each scenario’s outcomes and the actions needed to make the most out of it and to mitigate potential pitfalls. Reading this report is very much recommendable for anyone interested in urban development.



Dr Tuomo Kuosa

Content Director, Lead Futurist, Futures Platform
Adjunct professor in Finnish Defence University



A message from the future: Greater Bangkok 2050

Greater Bangkok is a city experiencing change. One of the world's 34 megacities, Bangkok has doubled its population to over 10.5m in just 35 years and staked its claim as one of the great 21st century urban landscapes.

Yet even for a city used to blending progress with tradition, tackling rapid urbanisation in a time of climate, social and technological change is no small feat. As Thailand stands at the crossroads of transformative development, now is the time to collectively envision what scenarios could shape its urban landscape.

Working through the increasing – and increasingly visible – trade-offs mean setting our minds to not only probable for Greater Bangkok but what might be possible and preferable. That's where foresight comes in. A futures mindset combined with a foresight skillsets and toolkit enables us to have honest, deep, and strategic conversation about change.

Prototyping tomorrow

Arup partnered with Magnolia Quality Development Corporation (MDQC) on a foresight-led project to explore what opportunities and choices could lead towards a Greater Bangkok that thrives socially, ecologically, and economically in 2050.

We started by better understanding Greater Bangkok's socio-demographic, technological, environmental, economic, and political trends. From an aging population to mass transit and biodiversity, we combined this data with a little imagination to analyse how these might unfold and combine over time into mega trends.

Mega trends are important to watch because they often point to sources of disruption and transformational change that will – or already are – shaping our collective futures.

Next step, 2050

by **Dr Bree Trevena**

Australasia Foresight Leader, Arup

Five possible scenarios emerged from our work. Rather than predications, scenarios are designed to help us navigate different possible trajectories and discuss possible trade-offs.



Technotopia

a city prioritising efficiency and high-tech solutions above all else, fosters connectivity and a stable economy but falling short on environmental and social health.

Decentralised resilience

a divided society where those who can afford it living in planned, sustainable communities on high ground - unfortunately, communities who could not afford to move remain in flood prone districts.

Transforming lifestyles

working towards Thailand as a top drawcard for long-term global travellers as well as a local destination for mind-body balance, ecotourism, and training for jobs of the future.

Urban playgrounds

a tactical approach where citizen and local businesses lead a sustainable innovation and shape a network of lush, unplanned green and play spaces to promote physical activity, mental

Accelerated generations

fully engaging our elderly population to leverage their expertise for an innovation region built on multigenerational mixed-use and traditional Thai values.



FUTURE SCENARIOS





A preferable future for me would be a combination of **Urban Playgrounds** and **Transforming Lifestyles** scenarios because of their shared focus on the importance of community, the diversity of skills, and environmental awareness.

Thanapon Wongsaguan

MA Architecture, Columbia University
Columbia GSAPP Fellow





Thanapon Wongsaguan

MA Architecture, Columbia University
Columbia GSAPP Fellow

“

Bangkok could potentially witness a combination of Technotopia, Urban Playgrounds, or other elements, depending on the evolution of policies, technologies, and societal preferences over time.

”



To your knowledge and understanding of the scenarios, which is most plausible? What are the factors leading to your conclusion?

The uncertainty of some global trends, such as political and technological disruptions and the more gradual, societal shifts, must be taken into account when imagining Bangkok in 2050. Given this, it seems likely that the future will be complex, shaped by competing and even opposing forces. For example, the combination of an aging population and increasingly sophisticated technologies calls for an acceptance of human beings' physical, mental, and spiritual limitations, highlighting the importance of finding a middle ground between the unending march of technology and the inevitable end of human life. Transparency, accountability, and inclusive governance will be vital in managing potential disparities in access to these transformative technologies.

Moreover, the future may be a blend of different influences, making it challenging to pinpoint a single plausible scenario. Bangkok could potentially witness a combination of Technotopia, Urban Playgrounds, or other elements, depending on the evolution of policies, technologies, and societal preferences over time. The dynamics of a city are complex, and various aspects from different scenarios might converge. In reality, the future is often a blend of different influences.

However, a preferable future for me would be a combination of Urban Playgrounds and Transforming Lifestyles scenarios because of their shared focus on the importance of community, the diversity of skills, and environmental awareness. It mitigates risks associated with overreliance on specific industries or technological advancements, ensuring a resilient and adaptable city. In the face of rising physical and mental health concerns globally, fostering alternative lifestyles is not merely a choice but a necessity. The imperative to address the climate crisis also further amplifies the need for sustainable and adaptable urban planning.





What might we (individuals/societies, public/private sectors, academia) do to cultivate or mitigate such scenarios?

There are a number of strategic steps that governments, businesses, and individuals can take to make these scenarios a reality that is both feasible and desirable. Thailand should implement more policies fostering collaboration between tech companies, educational institutions, and environmental organisations. Public-private partnerships, coupled with strategic investments in research and development, will be crucial for tangible progress by 2030. Cultivating a well-balanced lifestyle that integrates the best aspects of various scenarios will be the challenge and opportunity.

By 2050, Bangkok will have become a model of an inclusive and sustainable future. This involves implementing policies that prioritise collaboration and innovation, investing in green infrastructure, and promoting responsible governance. The challenges lie in finding the equilibrium that harnesses the benefits of a tech-driven future while safeguarding inclusivity, sustainability, and the overall well-being of the population. In keeping with post-anthropocene humanism, the ideal future will be one in which nature, technology, and individual freedom all flourish together. Because of this synthesis, which is in line with our species' most fundamental needs and values, we can move forward in a way that is both sustainable and harmonious. The city's growth must be resilient and adaptable in the face of environmental challenges, so addressing the climate crisis must also be a central part of these plans.



Pilynn Indara

Director & General Manager
Nikken Sekkei (Thailand) Ltd.

? *To your knowledge and understanding of the scenarios, which is most plausible? What are the factors leading to your conclusion?*

I think both scenarios, “Urban Playgrounds” and “Decentralised Resilience,” are possible. “Urban Playgrounds” is a result of people recognising the importance of and desire to maintain good health. It is a trend where people, especially adults, are increasingly health-conscious, not wanting to burden their descendants in case of illness. This aligns with policies to increase green spaces, which aid in exercise and reducing pollution, like PM2.5 and urban heat islands. Moreover, there is the “15-minute park” pilot project by Governor Chadchart Sittipunt, which if continually driven, could become a sustainable and realistic initiative.

Another plausible scenario is “Decentralised Resilience”. Bangkok’s frequent flooding is well-known, but the fact that makes this plausible is that Bangkok’s soil is soft and subsiding, which requires longer piles for buildings (longer than required in other areas). Every year, the water levels rise due to global warming. Thus, cities near the water like Bangkok, with locations such as Klong Toey Port and the Chao Phraya River, will likely be affected to some extent.



? *What might we (individuals/ societies, public/private sectors, academia) do to cultivate or mitigate such scenarios?*

For the “Urban Playgrounds” scenario, I think both the private sector and people have the desire and readiness to make it happen. However, to actually implement it, main cooperation from the government is necessary, especially in terms of legal aspects to ensure practical implementation and realisation. For example, currently, when constructing buildings, there are regulations on FAR (floor area ratio), OSR (open space ratio), and how much green space is required. Therefore, I believe the government should stick to this rule and further develop it to align with policies that increase areas for exercise and health maintenance.



Turning Foresight into Actions Through Innovation Process

by **Dr Chaivatorn Limapornvanich, PhD**

Director, Innovation Strategy Department, and Innovation Foresight Institute (IFI)
National Innovation Agency (NIA)

Under the complex circumstances we face nowadays, more decision-makers and policymakers are looking further into the future than they commonly do. Foresight is a long-view approach to broadening our views toward futures, beyond day-to-day and medium-term priorities. Although foresight thinking enhances our capabilities to identify, anticipate, and describe new challenges and opportunities before they materialise, turning insights of futures into a clearer view of implications and aligning substantial actions is complicated.

To ensure that our foresight journey will create tangible impact and real-world changes, shaping preferred futures and designing a clear purpose is essential for advancing further. A vision of the direction and clarity about strategic actions must be narrated and communicated. This allows people and stakeholders to engage and align themselves with a longer-term view - which, in turn, helps to produce bolder ideas and gain advocacy.





As foresight practitioners, we must go further than just doing research. Interactive and collaborative actions must be placed with young “Dreamers and Doers” to build strong connections and commitments, inspire changes, and develop creative strategies toward tangible outcomes. This intervention can take many forms, and one practical form is “innovation process”. An innovation process is a set of steps that takes us from the idea’s conception to the idea’s implementation. Through the process, vision and goals must be communicated, collaborators must be engaged, and creative ideas must be designed and exercised.

The innovation process is crucial in guiding a community toward learning about transformations and engaging them through interactive and collaborative actions. Stakeholders can be part of the transformative process, which encourages them to embrace transformative solutions. Ultimately, the process assists us in turning insights of futures into possible outcomes and how to scale up.

2060

FUTURES OF
**SPACE
MOVEMENT**





This research report is an excellent compilation of factors that enable the emerging era of humanity's advanced space explorations. It discusses the history, thematic aspects, signals of change, trends, critical uncertainties, and other preconditions of space explorations in a highly professional way and brings the reader to see the four plausible ways the development may play out. The scenarios for the Space Movement in the year 2060 are not only exciting but very realistic alternatives, helping the reader to prepare for the future that is about to unfold. Anyone interested in long-term space explorations, utilization of space, or colonization of space should read this report.



Dr Tuomo Kuosa

Content Director, Lead Futurist, Futures Platform
Adjunct professor in Finnish Defence University





Imagine a future in which space isn't just a faraway destination for astronauts and satellites, but an exciting hub of activity for scientists, entrepreneurs, tourists, and interplanetary species.

"Futures of Space Movement 2060" is an explorative foresight research report conducted by FutureTales LAB by MQDC in collaboration with Spaceth.co which dives into the rapidly evolving landscape of the space industry and its implications on the future of what space might mean to all of us. This report gives a glimpse of the potential trajectories of human activities in space by 2060, covering various aspects ranging from societal, technological, environmental, economic, geopolitical, and changes in values that might influence the dynamic shift to the commercialisation and democratisation of space.

At the heart of this report is the recognition of space exploration as a continually expanding field, not just confined to the realms of scientific discovery but also encompassing art, popular culture, related industries, technologies, and many more that benefit humankind. It articulates a vision where space movement is not an isolated endeavour but an integral part of human progress and societal development.

The report begins by contextualising the history of space exploration, from early astronomy to modern-day missions, illustrating how our understanding of the universe has shaped technological advancements on Earth. It then transitions into exploring current trends and signals of change in space movement, identifying key megatrends and critical uncertainties that will likely shape the development of future scenarios for space movement by 2060.

In its development of future scenarios, the report crafts four distinct plausible narratives, and each one is analysed based on different combinations of critical uncertainties namely resource dependency and the space industry's dominant players. These scenarios range from government-focused projects with military and science bases on the moon and Mars to private sector-led space commercialisation. The scenarios also explore the key uncertainties of future space projects' reliance on Earth for resources, and the monumental task of creating sustainable, ethical space practices. Each scenario is written in detail, providing insights into potential developments in space infrastructure, geopolitical dynamics, technological advancements, and the societal implications of an increasingly space-oriented human civilisation.



One of the report's explorative contributions is its detailed examination of the growth of space economy and the democratisation of space exploration. It highlights the importance of private companies and individuals in space activities, moving beyond the traditional government-dominated space programs. This shift is driving the space industry towards more inclusive and diverse participation and breaking down barriers that once made space seem unreachable for the average citizen.

The report also discusses recent and upcoming missions, such as the deployment of next-generation Mars rovers and landers, the launch of the James Webb Space Telescope, and initiatives such as the DART asteroid redirection mission. These advancements not only demonstrate technological capability but also point to the possibility of important breakthroughs in our understanding of the universe.

Furthermore, the report offers a guide to action, providing recommendations for citizens, private and public sectors to navigate and shape the future of space movement. These recommendations underline the need for multi-dimensional approaches to the future of space movement and space-related activities, incorporating technological, social, cultural, and policy aspects.

This report aims to provide significant value for policymakers, strategists, changemakers, and anyone interested in space and its implications for humanity. It serves as a rough roadmap inspiring innovation and collaboration towards a future where space movement benefits all. At its core, it is a testament to human curiosity and a tribute to the limitless mysteries of the universe yet to be discovered.



FUTURE SCENARIOS.



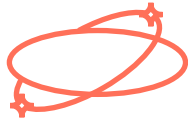




In the future,
the younger generation will have
the opportunity to engage with
and work on space technology.
This stems from **the democratization
of access to space.**

Paritat Theanthong

Project Manager for Space Education Program
National Science and Technology Development Agency



In seeking to elucidate the prospective trajectories of the evolving space movement, various perspectives are considered, drawing insights from stakeholders deeply engaged in the realm of space exploration.



Paritat Theanthong

Project Manager for Space Education Program
National Science and Technology Development Agency

currently serves as the project manager for the space education program at the National Science and Technology Development Agency. Given that a significant aspect of his role involves promoting education, he holds the belief that the future of the space industry depends on engaging new participants. To achieve this, he emphasises the importance of inspiring younger generations. However, he underscores that inspiration alone is insufficient; there is a need for the state to invest in ensuring that necessary resources are readily accessible to those who seek them. “In the future, the younger generation will have the opportunity to engage with and work on space technology. This stems from the democratisation of access to space.” Paritat also recognises the impact of government regulation in the space sector, ensuring the availability of crucial resources for everyone.





Wasanchai Vongsantivanich

CEO
DELV Aerospace

serves as the CEO of DELV Aerospace and oversees relations between international space organizations. He firmly believes that "Space will be predominantly driven by private organizations in the future." Wasanchai has made a noteworthy suggestion regarding research studies, emphasizing the need to gain insights into the diverse array of players and parties involved. He highlights the complexity of relationships in the space industry, citing the intricate dynamics between entities such as NASA and SpaceX, which influence each other in nuanced ways. Wasanchai notes that the traditional dichotomy between business and government may not be directly polarized, as discussed in the context of critical uncertainties.



Potiwat Ngamkajornwiwat

Lecturer & Researcher
Panyapiwat Institute of Management

a lecturer and researcher at Panyapiwat Institute of Management, underscores his passion for comprehending the current context. Having spent numerous years working and conducting research abroad, particularly in China, where space engagement is robust, he expresses his aspiration for Thailand to actively participate in the global space arena. "Understanding the present situation gives us a glimpse of what we can do." He referred to the four scenarios from the study as "Impactful", saying all can be possible within the next decades.



Sailing the Cosmos: Future Tales of Humanity Among the Stars

by **Nattanon Dungsunenarn**
and **Chayapat Archiwaraguprok**
Editors-in-chief, Spaceth.co



Space exploration has been a driving force in shaping the course of human history. While advancements in cryptocurrency, artificial intelligence, and medical technology are transformative, space stands out as the ultimate frontier for change.

Throughout history, humanity has gazed at the sky, imbuing it with cultural and mystical significance. Ancient civilizations, though diverse, shared common celestial themes, attributing divine qualities to the Sun, Moon, and planets. The observation of celestial bodies influenced practices like astrology, revealing a connection between the movements of the stars and earthly phenomena.



From the ancient greek

Ancient Greek philosophers, including Plato and Aristotle, elevated our understanding of nature through a combination of theory and experimentation. Despite misconceptions, ancient civilizations accurately calculated the Earth's radius, using star movements for agriculture, migration, and navigation. The challenge arose in reconciling celestial principles with earthly ones, a puzzle addressed by scientists like Copernicus, Kepler, Newton, and Galileo.

The 20th century marked a pivotal shift with rocket scientist Robert Goddard's practical treatise on liquid-fuel rockets in 1919. World War II accelerated rocket technology, leading to the development of the V2 rocket by Wernher von Braun. Post-war, the Space Race ensued, culminating in the Soviet Union's Sputnik in 1959 and the U.S. moon landing in 1969, a watershed moment that spawned technological innovations like integrated circuits, WiFi, and computer programming.

While the space race propelled human exploration, the subsequent decades saw a focus on robotic spacecraft and space stations. The 1980s revealed two perspectives: human space exploration and front-tier space exploration. The iconic "Pale Blue Dot" image in 1990 underscored humanity's interconnectedness and prompted a philosophical shift toward space as our final frontier.

The International Space Station (ISS) in 1998 symbolized international collaboration, with NASA, Roscosmos, ESA, and JAXA leading space exploration. Presently, space technology encompasses diverse domains like launching, landing, robotics, communication, materials science, and health support, with the space economy reaching \$469 billion in 2021.



Here we are among the stars

The 2020s will witness an array of missions, from Mars rovers to the James Webb Space Telescope and asteroid redirection. The retirement of the ISS paves the way for commercialized space stations. Space democratization gains momentum, with civilian space travelers and student programs becoming commonplace.

International collaboration defines space activities, with NASA and organizations like ISECG selecting humanity's next destination. The moon, with newfound water-ice resources, is a focal point, as seen in NASA's Artemis program aiming for a lunar landing. Geopolitics also plays a role, evident in China's independent space initiatives and Russia's collaboration with CNSA in the International Lunar Research Station.

In contrast to the Apollo era, current goals involve returning to the moon, embarking on the first Mars mission, sustaining long-term space travel, and advancing our understanding of the universe's frontiers. Achieving these objectives necessitates significant technological advancements.



The Future Quest of Humanity

Now, humanity is focusing on In-Situ Resource Utilization emerging as a linchpin, highlighting the imperative to harness resources in space for sustained exploration. This paradigm shift reduces reliance on Earth's resources and transforms our approach to long-term space missions.

Anticipating a clash between powerful states, notably the United States and China, echoing geopolitical tensions on Earth. This geopolitical dimension adds a layer of complexity to the collaborative nature of space exploration, emphasizing the need for diplomatic resolutions in the pursuit of shared cosmic goals.

Central to the discourse is the fundamental question of reliance on Earth's resources versus establishing a new home among the stars. The study prompts contemplation on humanity's role in space, pondering whether we are destined to become an interstellar species or remain tethered to our home planet.

Amidst these considerations, the impact of space commercialization looms large. Balancing commercial interests with the broader goals of exploration becomes paramount, requiring a delicate equilibrium to ensure both progress and ethical stewardship of celestial frontiers. The voyage ahead demands unity, innovation, and a collective vision for a future where humanity not only explores the cosmos but shapes it. Let our cosmic journey be a testament to our resilience, curiosity, and commitment to a destiny that extends beyond our blue planet. The stars await, and our story among them is yet to be written.

FUTURE REFLECTIONS

The process of issuing a catalogue of reports is not an easy one. We would like to thank each and every individual that has been part of this journey. Without our circle of friends and network of support and wisdom – this would have been a very lonely and exhausting endeavour. Thank you.



We find communion in shared experiences and stories of what has been.

Future Tales are stories of what might be – and in them, we hope that you find what you dream.

Austina Karma Gurung

Foresight Research Associate Director, FutureTales LAB by MQDC
Chief Editor, Future Tales



There's a saying that the most reliable way to 'predict' the future is to create it.

To create is to let go – let go of our old ways of thinking. We hope that Future Tales has been a handy resource in helping you find paths of creation towards your preferred future.

Sunatta Pongcharoen (Pam)

Foresight Research Director, FutureTales LAB by MQDC



Futures may seem daunting, but remember, hope is a renewable resource.

Let it fuel your curiosity, stoke your imagination, and guide your actions. You have the power to create a future worth thriving in.

Nuttawut Kulkaew (Nat)

Foresight Research Associate, FutureTales LAB by MQDC



The future equals the destination; in order to reach it, you need to take steps today.

Wipattra Totemchokchaikarn (Noey)

Senior Foresight Researcher, FutureTales LAB by MQDC

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Futures of Mental Health in Thailand 2033

Research team

- กรมสุขภาพจิต กระทรวงสาธารณสุข**
ดร.भव.วรงค์ โชติพิทยสุนนท์
พญ.วรินทร์ พิพัฒน์เจริญชัย
พรพินล นางอ่อน
- สำนักงานนวัตกรรมแห่งชาติ (NIA)**
ดร.ชัยธร ลิมากรณวัฒน์ชัย
ดร.กุลิสรา บุตรพุด
- สำนักงานพัฒนาธุรกิจทางอิเล็กทรอนิกส์ (ETDA)**
ศุภกานา สุนทรรัตน์
เอมวดี เทียงธรรม
- FutureTales LAB**
วิพัตรา โตเต็มโชคชัยการ
ณัฐวดี กุลแก้ว
น.ปิยะฤทธิ์ อัครชัยวงศ์

Research team

- กรมสุขภาพจิต กระทรวงสาธารณสุข**
พญ.อัมพร เบลยอพลพิทักษ์
พญ.พรรณพิมล วิบุลากร
พญ.อุษฎิ จิงศิริกุลวิทย์
บพ.บุรินทร์ สุรอรุณสิบลฤกษ์
- สำนักงานนวัตกรรมแห่งชาติ (NIA)**
ดร.พันธุ์อาจ ชัยรัตน์
ธีรสา มีทวพันธ์
- สำนักงานพัฒนาธุรกิจทางอิเล็กทรอนิกส์ (ETDA)**
ดร.ชัยชนะ มีตรพันธ์
ดร.ตฤณ ทวีธาณนท์
- FutureTales LAB**
ดร.การดี เลียวไพโรจน์
สุนัฏฐา พงษ์เจริญ

Support Team

- กรมสุขภาพจิต กระทรวงสาธารณสุข**
ดร.มรกต ทองเปลียน
อัญชลี ตู่ทอง
อภิเชษฐ์ คำจินดา
สุดดี เสมทอง
กวิณพัฒน์ สมมงคลธีรัตน์
- สำนักงานนวัตกรรมแห่งชาติ (NIA)**
อาศยา ศิริเอาทารย์
ภกพรธณ วรสิทธิ์
ดุจรพี เขวอนปรีชา
แพรวา อุ่มหมัดสอียด
- สำนักงานพัฒนาธุรกิจทางอิเล็กทรอนิกส์ (ETDA)**
ณัฐพงศ์ วรพิวุฒิ
ภกตล อุษณบุญศิริ
รัตนากรณี ทานน้ำ
พิมพ์ชนก เกสพานิช
- FutureTales LAB**
วิทยา วงศ์หล่อ
เดือนเฉลิม เขียวพันธ์
Piers Grimley Evans

Research Contributors

พญ.กัญจน์ภัสสร สุริยาแสงเพ็ชร์
กมลนลิน กมลนาวิณ
ดร.กมลกรณ์ วงศ์ภาคีทะเล
ดร.เจนนิเฟอร์ ชวโนวานิช
ชนิดา คล้ายพันธ์
ชาติวุฒิ วัฒน
ทิพฟ้าณี เข
ณัฐธิดา ศรธานี
ณัฐกฤษ ติณจรรย์กรณ
ดาเรศย์ อมลิษเชียร
ธนิธ ธิษสรวิษกรกุล
ธีร สิริบุญสุข
ดร.ธีรพัฒน์ อังศุชวา
ประวิทย์ คงขวัญรัตน์

ปราชญา ศิริมหาอารียะโพธิ์ญา
พญ.ฝนทิพย์ วัชรารณ
ดร.พนิตา เสือวรรณศรี
ผศ.ดร.พัฒนกิจ ชอนทำกิจ
พันธุ์ทิพา สุขสิริสรณ
รักษัพล สุระขัน
ว่าน อินทวิลาสงวงศ์
ดร.ศีกดิ์ เสกขุนทด
ดร.สฤกกา พงษ์สุวรรณ
เหิร ประสานเกลียว
อมรเทพ สิงจะบุณวงศ์
Austina Karma Gurung

Futures of Immersive Experiences 2035

Author

Austina Karma Gurung

Advisors

Dr. Karndee Leopairote
Dr. Poomporn Thamsatitdej



Future of Urbanisation 2050

Authors

Arup
George Quezada
Anne Kovachevich
James Macken

Design

Kathie Wallace

Research Contributors

FutureTales LAB
Karndee Leopairote
Pannin Sumanasrethakul
Wipattra Totemchokchaikarn
Deunchalerm Khiewpun

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Arup
Magnolia Quality Development Corporation Limited
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Bangkok Metropolitan Administration

Former BMA Governor
Faculty of Architecture, Chulalongkorn University
Faculty of Architecture, Thammasat University
Faculty of Architecture, Bangkok University
Creative Economy Agency (Public Organisation)
Geo-Informatics and Space Technology Development Agency (GISTDA)

Futures of Space Movement 2060

Project Supervisors

Dr. Karndee Leopairote
Dr. Poomporn Thamsatitdej

Research Team

- **FutureTales LAB**
Sunatta Pongcharoen
Wipattra Totemchokchaikarn
Nuttawut Kulkaew
- **Spaceth.co**
Nattanong Dungsunenarn
Chottiwatt Jitprasong
Chayapatr Archiwaranguprok
Chinapong Lienpanich
Kornmada Piriyaikiartsakul
Nithiwat Siwattanasin
Rattiyakorn Rattanasai
Nueaprae Doungsri
Poonyapa Vitoorapakorn

Research Contributors

National Astronomical Research Institute of Thailand
Kornthong Wiriyasawetkul
Paritat Tienthong
Potiwat Ngamkajornwiwat
Asst. Prof. Sukrit Sucharitakul
Suparek Aukkaravittayapun
Tawon Uthaicharoenpong
Dr. Uroschanit Yodprasit
Dr. Wares Chancharoen
Wasanchai Vongsantivanich
Asst. Prof. Dr. Wiphu Rujopakorn

Support Team

- **FutureTales LAB**
Deunchalerm Khiewpun
Manasnund Arjchinda
Siree Sirimontri
Alin Paratasilpin
Piers Grimley Evans



FutureTales LAB

BY

