**What Young Minds Need
in a Screen-Filled World**
**A Conversation with a Child Psychologist,
Dr Cheung Hoi Shan**

**Technologies of the Soul:
Rethinking the Sacred
in a HyperConnected World**
An Interview with Prof Ian McGonigle

**From Platform to Public Square:
Rethinking Digital Engagement**
Ellis Ng

THINK

SCREENS BETWEEN US

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Editorial

The small screens in our hands are shaping how we shop, work, connect, play, and even pray. They connect us across continents in seconds, yet can leave us feeling worlds apart from those beside us. In this issue of THINK, we explore the promise and the price of living in an attention economy — an age where every moment of focus has value, and every view, whether visual or intellectual, can be bought and sold.

Social media and mobile devices have become powerful forces shaping our choices, behaviours, and identities. **Prof Tang Mui Joo** and **Tan Eang Teng** reveal how influencers skilfully harness trust, relatability, and constant engagement into buying power, reminding us that digital-age consumption is as much emotional as it is practical. **Stephanie Galera** brings this perspective into the workplace, showing how the "always-on" culture that fuels connectivity also drives burnout — prompting organisations to rethink recruitment, performance measurement, and employee wellbeing. In an interview with **Prof Ian McGonigle**, we extend the conversation into the spiritual realm, where digital platforms, artificial intelligence, and even robot monks are reshaping rituals, leadership, and the very nature of religion. Together, these insights paint a multi-dimensional picture of a world where our digital and physical lives are deeply interwoven into how we consume, connect, work, and even seek meaning.

Art, too, is being transformed. **Stella Lai** shows how The Wrong Biennale — one of the world's largest online art events — pushes creativity beyond museums and galleries into digital "pavilions" open to anyone, anywhere. While this challenges traditional notions of craftsmanship and curation, it also reflects the shifting realities of how art is experienced by a growing audience for whom the digital realm has become the primary space for artistic engagement.

Our dependence on constant connectivity carries hidden costs. **Dr Jayamalathi Jayabalan** details the environmental and human toll: energy-hungry data centres, surging e-waste from discarded devices, and the exploitative mineral sourcing for our gadgets. **Dr Kuek Thiam Yong**, **Dr Choong Yuen Onn**, and **Dr Khor Saw Chin** examine the psychological price, showing how gamification exploits our cognitive

biases to keep us hooked, often at the expense of focus, mental wellbeing, and authentic relationships. Yet, as **Liang Yi Bin** reminds us, we are not powerless. By reclaiming leisure from monetisation and resisting the commodification of our downtime, we can take small but meaningful steps individually to safeguard our emotional and psychological health.

Parenting in the digital age is also a balancing act between opportunity and risk. We interviewed **Dr Cheung Hoi Shan**, who explained how mobile devices and social media can distract from imaginative play, weaken conflict-resolution skills, and replace face-to-face interactions with curated digital rewards. She advocates gradual mediation, collaborative rule-setting, and secure attachments to help children internalise healthy habits. **Dr Jean Liu** and **Euclea Tan** use vivid metaphors to illustrate how parents can prepare children for online challenges, much like they would for offline dangers. Both perspectives underscore that digital literacy is about raising children who can navigate technology with resilience, discernment, and a strong sense of self.

Social media and mobile devices can also be powerful tools for empowerment and inclusion. **Ellis Ng** shows how they give voice to the underrepresented, fuelling civic movements and enabling marginalised communities to be heard in ways once impossible. In education, **Dr Geetha Shantha Ram** and **Soofrina Binte Mubarak** share how, for children with learning differences, mobile devices can be transformative, offering personalised tools, supporting emotional regulation, and strengthening home-school connections. **Prof Julien Cayla** takes us to rural India, where farmers are using social media to share agricultural know-how, crowdsource solutions, and build market access collectively. These perspectives reveal that the same technologies, often blamed for distraction and division, can also amplify unheard voices and create new channels for learning, collaboration, and social change.

In the attention economy, the question is no longer whether we should engage with our devices, but how — so that what we gain in return is truly worth what we give away. We hope you agree.

CD Liang
Chief Editor
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DR JAYAMALATHI JAYABALAN

The Environmental and Psychological Costs of Hyperconnectivity

A Malaysian Perspective on Frugal Digital Innovation

In this era of hyperconnectivity, the "always-on" culture — driven by round-the-clock social media activity, continuous digital engagement, and incessant mobile phone notifications — has resulted in significant mental and environmental costs. Environmentally, the impact stems from energy-intensive data centres, growing electronic waste (e-waste) from rapidly obsolete smartphones, and the hidden carbon footprint of online platforms. Psychologically, the toll includes mobile addiction, emotional distress, and depression related to social media — issues especially prevalent in Malaysia, where 88% of the population is online. Frugal innovation, with its emphasis on efficiency and sustainability through "doing more with less," offers a way forward. It encourages the development of longer-lasting mobile devices, less addictive algorithm designs, and greener digital infrastructure, paving the way for a more sustainable, people-centric digital future.

THE ENVIRONMENTAL IMPACT OF DIGITAL INFRASTRUCTURE

The exponential growth of digital technologies has led to higher energy consumption and generated more e-waste. Data centres alone consume about 1% of global electricity — a figure expected to rise further with the growing demands of online streaming, blockchain, and artificial intelligence.[1] In Malaysia, the rapid adoption of digital services and smartphones has further accelerated e-waste generation, with an underdeveloped recycling infrastructure worsening the problem.[2]

The manufacturing of digital technology is heavily dependent upon conflict minerals like cobalt, lithium, and rare earth elements, which are often extracted from regions plagued by human rights violations and environmental degradation.[3,4] Current research indicates that unless sustainable material substitutes and more responsible sourcing practices are developed, both the environmental and humanitarian costs of global digital consumption will continue to rise.[5,6]

Green light, red lines
Johor, Southeast Asia's leading data centre market, is taking a measured approach to rapid expansion. In 2024, the state rejected nearly 30% of new applications over water and energy concerns — a clear shift toward stricter sustainability standards. As hyperscale demand grows, Johor's selective stance sets a regional precedent for balancing digital growth with environmental limits.
Photo: Unsplash / Afifi Zulkifle

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BRAZIL
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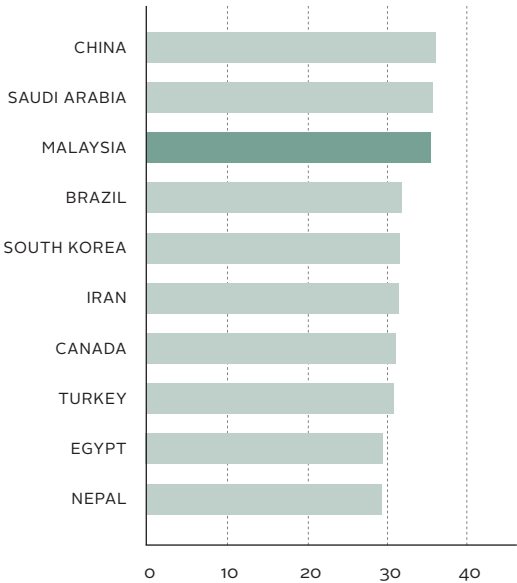
Malaysia among top 3 in problematic smartphone use

Problematic smartphone use (PSU) — excessive, compulsive use disrupting daily life — is a growing global concern. A McGill University meta-analysis (2014–2020) using the Smartphone Addiction Scale ranked Malaysia third (35.43/60) among 24 countries, after China and Saudi Arabia. This highlights Malaysia's high smartphone dependence and its potential impact on mental health, sleep, and social well-being.

Source: McGill University meta-analysis (2014–2020), via Demandsage

Research has shown a staggering 93% increase in social media use in Malaysia, with users spending between 5 and 12 hours online each day being more prone to loneliness, low self-esteem, and online bullying.

THE PSYCHOLOGICAL IMPACT OF DIGITAL ADDICTION ON MALAYSIAN YOUTH

The psychological impact of digital overuse is particularly evident among university students. Studies show that over 80% of secondary school students exhibit signs of mobile phone overuse, such as anxiety, sleep deprivation, and a decline in academic performance.[7] Late-night screen time further disrupts sleep patterns, with many students sacrificing rest to continue scrolling through social media.[8]

Research has shown a staggering 93% increase in social media use in Malaysia, with users spending between 5 and 12 hours online each day being more prone to loneliness, low self-esteem, and online bullying.[9] This surge in usage was most pronounced during the COVID-19 pandemic, when social media became an essential tool for communication and information sharing.[10] A tragic incident in Sarawak, where a 14-year-old girl took her own life after engaging in an Instagram poll, highlights the potentially devastating consequences of unregulated digital spaces.[11]

FRUGAL DIGITAL INNOVATION: A SUSTAINABLE PATHWAY FORWARD

In response to the ethical, environmental, and psychological challenges posed by excessive digital consumption, Malaysia must adopt a frugal digital sustainability plan — an integrated approach that aligns technological advancements with resource conservation, ethical manufacturing, and psychological well-being. The following provides an outline of key strategies based on current knowledge and observations:

1. Digital Literacy and Well-being Education

Empower students and the broader public with critical awareness of their digital consumption habits.

Universities and teacher training institutions should incorporate media literacy into their curricula, equipping students to recognise algorithmic manipulation, addictive design features — such as infinite scrolling and push notifications — and misinformation.[12] Currently, few adults fully understand how social media algorithms exploit psychological vulnerabilities. Workshops can help parents and teachers guide younger users towards healthier digital behaviours. NGOs and government agencies should

also run sustained public awareness campaigns (eg, Malaysia's "Kempen Bijak Internet") to promote responsible technology usage. A digitally literate population will be better protected against disinformation, compulsive usage, and the mental health risks associated with social media.

2. Modular and Durable Device Design

Reduce e-waste by shifting away from disposable gadgets toward repairable, upgradeable, and durable devices.

Right-to-Repair Policies can encourage or mandate technology companies to design modular phones and computers with replaceable batteries, screens, and components.[2] Partnerships with manufacturers (eg, Samsung, Xiaomi) could support trade-in rebate programmes for used devices and provide incentives for responsible e-waste recycling. The government should also promote local repair ecosystems by supporting small businesses and repair shops that extend the lifespan of electronic devices. This initiative would reduce the number of prematurely discarded devices and help lower Malaysia's contribution to the 53.6 million metric tonnes of annual global e-waste.[2]

Right-to-Repair Policies can encourage or mandate technology companies to design modular phones and computers with replaceable batteries, screens, and components.

Closing the last mile

JENDELA tackles Malaysia's "last mile" challenge — the final, often most difficult and costly step in delivering reliable internet to home in rural and remote areas. Phase 1 expanded 4G coverage to 96.92% of populated areas and upgraded 3.8 million premises with fibre access. By focusing on underserved communities, the initiative ensures digital inclusion is a right for every Malaysian.

Photo: iStock / Alex Liew

The ethicist who took on big tech
The Center for Humane Technology, co-founded by former Google ethicist Tristan Harris, has been challenging the attention-driven design models of major platforms. Its advocacy, widely recognised through the documentary *The Social Dilemma,* pushed companies like Apple and Google to introduce features that promote mindful usage and spark a global rethinking of ethical tech design.

Source: Wikimedia Commons

3. Energy-Efficient and Low-Bandwidth Solutions

Ensure that rural and low-income communities can access digital services without incurring prohibitively high energy or data costs.

Developers should be encouraged to create low-data-usage versions of essential apps (eg, those for banking, education) for areas with limited connectivity. They should also adopt Offline-First App Design, where applications function without constant internet access by offering features like downloadable learning content and offline transaction capabilities. In addition, Malaysia's technology parks should transition to renewable-powered servers to minimise energy consumption through green data centres.[1] These efforts will help narrow the digital divide while lowering the carbon footprint associated with data transfer.

4. Ethical Digital Interface Design

Curb social networking addiction by prioritising individual well-being over corporate profits.

Tech companies should adopt Human-Centred Design principles that remove manipulative features (eg, infinite feeds, auto-play videos) and instead incorporate usage dashboards, mandatory breaks, and notification limits.[13] The Malaysian Communications and Multimedia Commission (MCMC) can introduce regulations requiring platforms like Facebook and TikTok to disclose their engagement tactics and provide "minimalist mode" options. Additionally, the government should support ethical alternatives and promote local apps that prioritise privacy, mental health, and mindful digital use.

Tech companies should adopt Human-Centred Design principles that remove manipulative features and instead incorporate usage dashboards, mandatory breaks, and notification limits.

CONCLUSION: MOVING TOWARDS A HUMANE DIGITAL FUTURE

The real cost of staying connected goes far beyond electricity bills and the price tags on our devices. It includes environmental degradation, compromised mental well-being, exploitative labour practices, and the erosion of genuine social connections. As we accelerate towards an increasingly digitised future, we must pause and ask: What are we sacrificing in our pursuit of constant connectivity?

Through frugal sustainability, we can reimagine a digitally connected world that uplifts rather than exploits, includes rather than excludes, and empowers rather than consumes. The goal is not to disengage from technology, but to engage with it thoughtfully, placing dignity, responsibility, and sustainability at the core. Reducing the human toll of constant connection is essential. Frugal sustainability also requires rethinking how individuals interact with technology. "Digital minimalism," proposed by Newport, advocates for the intentional and selective use of digital tools in alignment with human values.[13] Frugal

innovation offers a compelling response — not by rejecting technology or promoting its unchecked consumption, but by reframing it to operate within ecological limits and in service of human well-being.

By adopting frugal strategies — such as energy-efficient infrastructure, minimalist app design, repairable products, and mindful user engagement — we can build a digital ecosystem that regenerates rather than depletes. After all, the true cost of connection is not measured in gigabytes, but in carbon emissions, lost human potential, and psychological strain. Technology can be intentionally designed to support healthier habits. Apps like Forest, which reward users for staying off their screens, and operating systems with built-in digital well-being tools, demonstrate how frugal thinking can reshape technology to serve human needs — not just corporate profits.

The environmental and psychological costs of hyperconnectivity call for a shift towards more frugal and sustainable digital innovation. By embracing sustainable design principles, promoting ethical labour practices, and prioritising digital well-being, Malaysia can cultivate a more thoughtful and responsible digital landscape. The goal is not to reject technology, but to reassess its purpose, ensuring that progress does not come at the expense of environmental integrity or human dignity. ∞

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The true cost of connection is not measured in gigabytes, but in carbon emissions, lost human potential and psychological strain.

Teen activist pushing for digital detox
A growing youth-led movement is reshaping digital wellness in Malaysia. Leading the way is 18-year-old Liew Li Xuan, co-founder of LifeUp and Youth Ambassador for World Digital Detox Day (WDDD). Drawing from her own struggles with digital overload, she empowers peers through campaigns and workshops to adopt mindful technology use and healthier screen habits.

Source: Facebook @LifeUp Organisation

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PROF JULIEN CAYLA

Scroll, Plant, Share

Innovation Lessons from India's Rural Farmers

Under the right conditions, social media can empower marginalised communities to access information, build confidence, and reshape their participation in the market.

Every few weeks, we are reminded of social media's toxicity. In Singapore, studies increasingly link heavy social media use to poor sleep quality, high rates of depression, and anxiety among young people.[1] Globally, researchers such as Jonathan Haidt[2] have argued that social media is rewiring adolescence, dramatically affecting mental health, educational outcomes, and human development.

As a father of two teens myself, I am aware of these issues. The impact of social media on my children and their friends gives me a fair amount of anxiety. Back in the classrooms where I teach, I see students who cannot concentrate for more than 10 minutes at a time and feel lost without their mobile phones. We are only beginning to understand the long-term impact of social media.

At the same time, in a recent project I conducted in rural India, I discovered a much more positive side of this story. As part of a research team at the Consumer Culture Lab,[3] we examined how farmers in remote parts of India use social media, especially YouTube and Instagram. In this context, these digital platforms are not simply sources of distraction or harm but are emerging infrastructures for knowledge sharing, peer learning, and market transformation. We argue that under the right conditions, social media can empower marginalised communities to access information, build confidence, and reshape their participation in the market.

Rural signal, digital shift
In rural India today, over 425 million villagers are active internet users — making up more than half of the country's digital population. With mobile networks reaching 95% of rural areas, connectivity is no longer a privilege. Among youth aged 15 to 29, 95% own smartphones and 93% go online monthly, quietly reshaping daily life across the heartland.

Photo: iStock / pixelfusion3d

FARMERS AS INFLUENCERS: A QUIET REVOLUTION IN RURAL INDIA

For decades, India's 120 million smallholder farmers — most of whom cultivate plots under two hectares — have struggled with limited access to reliable, timely information. Agricultural extension systems often failed to reach remote villages, leaving farmers dependent on local shopkeepers or informal networks for advice.

But today, rural India is one of the fastest-changing regions in the world. The most significant driver of change is the rise of mobile technology. With over 700 million smartphone users in India and rural penetration exceeding 50%,[4] combined with some of the world's lowest mobile data prices, farmers can now access a digital world that was out of reach until recently.

Our research shines a light on a very different kind of farmer: those who become social media influencers. These are farmers who discover new farming methods and want to share their insights with their peers. While their initial motivation is often to help other farmers, successful influencers quickly realise how they can supplement their income. Some of the influencers we met were able to double the farm's monthly revenues through their social media activities. Several influencers we met receive regular payments from Google for their growing YouTube views and proudly share pictures of their YouTube awards.

Some farmer-influencers have already built massive audiences, reaching numbers rivalling or surpassing mainstream social media stars. For example, YouTube channels like *Indian Farmer*[5] (4.9 million subscribers), *Farming Leader*[6] (6.5 million subscribers), and *Indian Farm Rover*[7] (557,000 subscribers) have become essential sources of practical knowledge for millions of smallholder farmers.

Farming's digital pioneer
From the fields to screens across India, Santosh Jadhav co-founded *Indian Farmer* — a multimedia agritech movement spanning YouTube, Instagram, and online courses. Through real-farm videos on irrigation, crop planning, pest control, and entrepreneurship, he empowers a new generation of digital-age farmers.

Source: Instagram @indianfarmer

From viewer to mentor
A young farmer from Rajasthan, Arjun Jatt began his journey by learning farming through YouTube videos. Now, he runs his own channel, sharing techniques, insights, and hands-on knowledge to guide and inspire the next generation of farmers.

Source: Prof Julien Cayla & Sayantan Dey

These farmer-influencers produce highly targeted, actionable content: how to prevent crop diseases, adopt cost-effective irrigation systems, optimise fertiliser use, select seeds, or navigate the maze of government subsidies.

But unlike influencers who dominate conversations in Singapore or the West, these creators do not promote luxury brands, fashion, or entertainment. We are far from the glamour of social media influencers usually featured in the news. Instead, these farmer-influencers produce highly targeted, actionable content: how to prevent crop diseases, adopt cost-effective irrigation systems, optimise fertiliser use, select seeds, or navigate the maze of government subsidies.

Consider Arjun Jatt, a young farmer from Rajasthan. Arjun inherited his family's farm when his father passed away, but he knew little about managing it. "I didn't even know how to spray pesticides on my first soybean crop," he recalls. Desperate to learn, Arjun turned to YouTube. Searching for "how to spray in the field." Little by little, he began to educate himself — first on basic tasks, then on more advanced farming techniques. Over time, this habit of digital learning transformed him from an inexperienced farmer into a confident practitioner of what he calls *technical farming* — farming that combines modern tools, data, and efficient practices.

Over time, Arjun's relationship with digital content shifted from consumption to creation. In 2023, he launched his own YouTube channel, sharing firsthand farming experiences — from drip irrigation to experimenting with early-season vegetable production. His often simple but highly practical videos have reached thousands of viewers across India, inspiring other farmers to try new techniques.

A NEW KIND OF KNOWLEDGE WORKER

Picture this: a farmer in his field, headphones on, listening to a YouTube video about farming. Today's Indian farmers are digitally connected knowledge workers trying to learn about more profitable crops, new technologies, and other ways to make a better living. When we hear the term *knowledge workers,* we often picture professionals in urban offices — bankers, consultants, or software engineers making big decisions from glass towers. However, our research suggests that knowledge work is also flourishing in far less expected places.

Tech roots in rural soil
Peer-shared knowledge through smartphones and social media has created fertile ground for startups like Niqo Robotics. Its AI spot-spraying robots retrofit existing sprayers, enabling digitally connected farmers to adopt precision farming. Built on this grassroots momentum, Niqo now operates across multiple states and is backed by leading global investors.

Source: Niqo Robotics

This grassroots circulation of knowledge transforms rural India into a more tech-savvy, innovative environment. Start-ups like Carnot (IoT solutions for tractor rental monitoring) or Niqo (AI-powered pesticide optimisation) have gained traction partly because digitally connected farmers, empowered by peer-shared knowledge, are better positioned to assess, adopt, or reject new technologies. In Singapore, innovation is often associated with AI advances or financial sector shifts. Yet, it is rural India that may be experiencing the most transformative wave of innovation in Asia.

Kenya's crop detectives in action
Across Kenya, farmers are using WhatsApp groups and the AI-powered PlantVillage app to snap a leaf and get instant diagnoses for pests and diseases. With over 10,000 users reporting average yield increases of 40%, these grassroots tech tools rooted in peer networks are revolutionising crop health and transforming rural markets from the ground up.

Source: PlantVillage

by farmers who understand the needs and anxieties of other farmers. Rather than being pushed from the top, knowledge is being created from the ground up. Farmers can watch videos on YouTube that feel relevant, immediate, and credible.

A new wave of social farming is on the rise, not only in India, but worldwide: a form of agriculture where farmers use the power of social media and community to drive innovation and increase income. In Kenya, for example, farmers use Facebook groups and WhatsApp channels as essential sources of advice, product sourcing, market price updates and even peer-generated credit scores. In Ghana and Nigeria, social media platforms are playing a growing role in transforming agricultural value chains and creating new connections between farmers, processors, traders, and end consumers. In all these contexts, we see the organic growth of peer learning systems geared towards meeting the daily needs of working farmers.

At home, I still ponder what will happen to my kids and how they will cope with the power of social media. I wonder what the internet is doing to their ability to focus, do deep work, and succeed. Like other parents, I worry about the toxicity of social media and its impact on mental health.

At the same time, we must remember that for many communities in the Global South, social media is the first time they have the tools to create and circulate relevant knowledge. For policymakers in Asia, the question is how to create an environment that allows such a bottom-up digital ecosystem to thrive. ∞

There is power in peer-driven knowledge because it is knowledge created by farmers who understand the needs and anxieties of other farmers. Rather than being pushed from the top, knowledge is being created from the ground up.

In rural India, social media is not simply a source of distraction. Under the right conditions, it serves as a platform for farmers to become active knowledge producers and consumers, testing new techniques, sharing localised expertise, and exchanging critical market information. The community also helps regulate the kind of information that circulates. Farmer-influencers openly review products, demonstrate technologies in real-world conditions, and warn peers against predatory actors. In doing so, they build peer-based systems of trust and accountability that bypass traditional information bottlenecks.

When connectivity pays
Across Southeast Asia, digital tools and peer-shared knowledge are driving smarter decisions, better yields, and higher farm incomes. In Indonesia (2022), internet-using farmers earn 29.6% more, especially in horticulture and livestock. In Vietnam (2023), connectivity raises crop revenue by 14% per hectare and 20% per labour hour.

Photo: iStock / Thirawatana Phaisalratana

LESSONS FOR SOUTHEAST ASIA

Our research in rural India holds powerful lessons for other parts of Asia. Farmers often face similar challenges across countries like Indonesia, Vietnam, Thailand, and the Philippines: fragmented supply chains, limited government extension services, underdeveloped rural credit systems, and persistent information gaps.

Governments and international agencies have historically sought to address these deficits through top-down interventions — expert-led training programs, centralised advisory portals, or large-scale digital platforms designed and managed by public institutions. A prominent example is ITC's *e-Choupal* initiative in India, which aimed to empower farmers by installing internet kiosks in rural areas to provide access to market prices, weather forecasts, and best farming practices. However, the kiosks were frequently repurposed for entertainment rather than entrepreneurial or educational uses, highlighting the limitations of such expert-driven, centralised interventions.

In contrast, what is powerful with social media is how bottom-up knowledge creation can lead to market transformation. There is power in peer-driven knowledge because it is knowledge created

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Too much too soon?

The World Health Organization's 24-hour movement guidelines recommend limiting screen time to no more than one hour per day for children aged 2 to 5. However, studies across Southeast Asia suggest that most children exceed this limit.

Photo: Unsplash / Pan Xiaozhen

IN FOCUS

Dr Cheung Hoi Shan is an Assistant Professor at the National Institute of Education, Nanyang Technological University. A developmental psychologist by training, her research aims to inform culturally grounded approaches to parenting, education, and child adjustment in contemporary society.

What Young Minds Need in a Screen-Filled World

A Conversation with a Child Psychologist, Dr Cheung Hoi Shan

From bedtime routines interrupted by YouTube videos to classroom attention diverted by WhatsApp chats among classmates, mobile devices and social media are profoundly influencing childhood. To understand the psychological impact of this digital immersion, we spoke with Dr Cheung Hoi Shan, a child psychologist who works closely with families and educators to understand children's behaviours. With warmth and candour, she shares her insights on what's happening to our children — and how we might begin to respond.

To what extent are mobile devices and social media affecting the development of confidence, creativity, and self-regulation in young children?

We're definitely seeing some very real shifts. One of the biggest concerns is that children today are losing out on face-to-face interaction. Mobile devices offer an easy escape — if a child is bored or uncomfortable in a group setting, it's so tempting to retreat into a screen. That means they miss chances to navigate things like boredom, conflict, and turn-taking, which are all crucial for developing social skills and emotional resilience.

Preschool teachers have told me they're noticing more children who struggle with conflict resolution — children who lack the skills in negotiating with their peers or engage in give-and-take. And that's not just a post-pandemic issue; it seems tied to the way digital devices are now constantly available.

This is very much an issue of opportunity cost. When children spend hours passively swiping or watching videos, that's time not spent in imaginative play — building with blocks, role-playing, inventing games. These activities are how children learn to problem-solve, express themselves, and regulate their emotions. Screens offer fast, predictable rewards, but they don't teach the value of delayed gratification or self-discipline, which are core skills in regulating impulses. These are essential concepts cultivated through play and real-world challenges in children's upbringing.

And finally, I worry about how digital life is eroding healthy social scripts. Real-life experiences teach us how to behave in public, how to read body language, how to test and set boundaries. All of us carry mental scripts learned from our experiences with people about handling various social situations, such as how to order food from a waiter in a restaurant or interact with colleagues at work. A screen doesn't provide the social experiences needed to build those scripts. On top of that, children may be over-exposed to curated content on social media — perfect holidays, polished selfies, luxury lifestyles — which can lead to unrealistic comparisons and lower self-esteem.

*Real-life experiences teach us how to behave in public, how to read body language, how to test and set boundaries. **All of us carry mental scripts learned from our experiences with people about handling various social situations.***

Given these developmental concerns, how is excessive screen time — by both children and parents — affecting parenting as a whole in today's society?

I think we need to acknowledge that for many families, screens became a lifeline during the COVID-19 pandemic. Parents were juggling work, stress, caregiving — all under one roof. It was incredibly hard, and screens became a convenient way to keep children occupied. The problem is, those habits have stuck, and some parents have simply forgotten how else to keep their children engaged.

Many parents now tell me they feel guilty but helpless. They often say, "I know it's not ideal, but what else can I do?" and this mindset can really get in the way of exploring alternatives.

Also, we cannot overlook the importance of modelling. Children imitate what they see. If a parent is constantly on their phone, the child will perceive this as normal. Research consistently shows that higher parental screen time correlates with increased child screen time. It's not just what we allow — it's about what we do.

Even the mere presence of devices can change things. When a phone is within reach, it becomes the default choice — for managing a tantrum, passing time, or even filling in silences. Over time, that reliance chips away at opportunities for connection, conversation, and play. It's subtle, but powerful.

*Without consistent limits at home, **children are not able to rely on internal boundaries they'll need to navigate screens responsibly later on.***

Asian parents are known for having a distinctive parenting style. How do cultural norms in Asia, especially in Singapore, influence how parents approach screen time and how children are affected as a result? Are there unique challenges involved?

In many ways, the digital challenges are surprisingly similar across cultures. A meta-analysis that my collaborators and I have recently conducted shows a clear impact of cyberbullying on Asian youths' de-

From tiger moms to gentle parents

Many Southeast Asian parents raised with authoritarian discipline are now embracing gentle parenting, but not without internal friction. A recent study found over one-third of self-identified gentle parents struggle with intense self-critique and reduced confidence.

Photo: Unsplash / Frank Ching

pression and anxiety, which is a similar trend that we see in the West. These issues do transcend cultural boundaries, considering the high internet penetration rate in many Asian societies.

That said, there are local nuances. In Singapore and much of Asia, we're seeing a rise in what's called "gentle" or respectful parenting — an approach that emphasises empathy, non-punitive discipline, and emotional connection. At the same time, parents often grapple with setting boundaries — they want to be warm and respectful, but they're unsure how to maintain authority, especially when their child pushes back.

Another challenge is peer pressure. Children will say, "Everyone else has a phone," and often they're right. That can make it incredibly difficult for parents to

An empowering framework for growing well

A national initiative in Singapore, Grow Well SG, was launched in 2025 to provide evidence-based guidance and tools that support families in building healthy habits in the digital age. It promotes purposeful screen use, balanced routines, stronger family relationships, and includes personalised health plans with updated screen time recommendations.

Photo: Unsplash / Getty Images

hold the line. No parent wants their child to be left out. But without consistent limits at home, children are not able to rely on internal boundaries they'll need to navigate screens responsibly later on.

In your opinion, and based on your experience as a parent, what are some practical strategies that work well for managing screen time without sacrificing emotional warmth or authoritative control?

I usually talk about two main approaches: restrictive mediation and active mediation.

For younger children in the pre-adolescence stage, restrictive mediation is really important. That means setting clear, firm boundaries: no YouTube, only two hours a day, screens off by 8 pm, that kind of thing. At this age, children actually feel safer with predictable routines and a clear structure. When the rules are consistent, tantrums decrease, because the children learn that these rules are non-negotiable.

As children grow into adolescence — from age 12 or so onwards — it's time to gradually shift into active mediation. That involves engaging them in conversations about best practices on the internet that will keep them safe. Explain why certain boundaries exist, and the dangers of disclosing too much information about themselves online. Discuss with the children the sites they are visiting, and how those experiences make them feel. Work together to negotiate sensible expectations. Importantly, such conversations serve to let children know that parents can continue to be depended on as a good source of support should they encounter issues online, such as in the case of cyberbullying.

This isn't just about control — it's about trust. When children feel heard, they are more likely to internalise values and make good decisions on their own. And all of this works best if there's a strong foundation of a secure attachment that the child feels toward the parent or a caregiver. When a child grows up feeling loved and supported, they are much more likely to see boundaries as protective rather than punitive.

The silence around cyberbullying

Many young cyberbullying victims choose to remain silent. Studies highlight a common tendency to ignore or internalise harm rather than seek help. Cultural norms around shame, emotional restraint, and conflict avoidance often discourage open reporting, leaving many to cope alone without adult intervention or peer support.

Illustration: iStock / DrAfter123

Unlike playground teasing, which stops when the school bell rings, **hurtful messages online can be forwarded, screenshot, and viewed again and again.**

We often hear about cyberbullying and the social pressure children face online. How does early screen exposure affect children's ability to build real-world friendships or handle peer conflicts?

This is an area where we need to be especially vigilant. Children who spend a lot of time online may struggle to read social cues, navigate disagreements, or handle rejection in real life.

Cyberbullying, in particular, has distinct harms. Unlike playground teasing, which stops when the school bell rings, hurtful messages online can be forwarded, screenshot, and viewed again and again. Children rely on social media for interaction, but such platforms can be a source of pain when they are victims of cyberbullying, making them feel trapped. We observe links between cyberbullying and reactive aggression, anxiety, depression, and even school refusal.

When children feel unsafe online, they may start avoiding social interactions. To some parents, this can appear as "good behaviour"— the child stays home, reads quietly, and doesn't complain. But beneath the surface, there could be serious social anxiety or trauma.

The worrying part is that the line between online and offline is blurry for children. What happens in a WhatsApp chat or other online exchanges extends beyond cyberspace. It shapes how young people feel about themselves and how they interact with others in the real world.

Besides the social withdrawal behaviour you mentioned earlier, what other early signs should parents or educators watch for that might indicate a child's screen use is becoming unhealthy?

Some of the signs are subtle, while others are more obvious. One common red flag is aggression. If a child becomes easily frustrated or lashes out physically — say, pushing another child on the playground or snapping over small things — that may point to poor emotion regulation, which is often linked to excessive screen exposure.

Another one I'd flag is school refusal. If a child starts resisting going to school, it's worth digging deeper. It could be anxiety, bullying, or simply feeling overwhelmed by the digital overload that has seeped into school life through WhatsApp groups, gaming chats, or social media.

Again, withdrawal can also be a warning sign. A child who prefers to be alone, consistently chooses screen time over social play, and rarely engages with others might appear "well-behaved" on the surface — but that could hide loneliness, anxiety, or difficulty socialising with peers.

The key is to remain curious. Don't assume that silence means everything is fine. Watch for changes in behaviour, mood, and interaction — and don't hesitate to ask questions gently and without passing judgment.

Parents and their children are part of the wider society, where excessive screen time and obsession with social media have become social challenges. From a public policy perspective, what measures should governments take to support parents and educators in managing screen time among children?

First, we need clear, evidence-based guidelines. Parents seek guidance, and actionable recommendations — such as daily screen time limits — which can be a helpful starting point. However, these shouldn't be fear-based or guilt-inducing. They should come with supportive messaging that explains the "why," not just the "what." Supporting parents in this journey, rather than penalising them, is important.

Second, public awareness campaigns are key. We need to talk more openly about the developmental trade-offs of excessive screen use. This involves reaching not just parents but also educators, caregivers, and even children themselves. It is interesting to note that the child's perspective is often lacking in advocacy efforts on issues that directly concern them.

Third, platform accountability. Policymakers should consider making it mandatory for platform providers to include features such as default time-outs for minors or screen-time nudges built into apps. Hardware and platform providers should also be required to offer more user-friendly parental control and monitoring features with their products in exchange for market access. These should not replace parental responsibility, but they can help support parents in structuring their child's screen use and cultivating good habits.

Finally, I'd love to see parent engagement programmes rolled out through schools. Empower parents with tools, workshops, and peer networks so they don't feel like they are struggling alone. This needs to be a collective effort, not a blame game.

When home and school are on the same page, children are far more likely to thrive because they receive a consistent message across the school and home contexts.

Most children spend a significant amount of their time at school, and many bring their mobile phones with them. Furthermore, children in secondary schools in Singapore learn and complete much of their homework on their notebook computers, or personal learning devices (PLDs), issued by the Ministry of Education. Considering such increased access to digital devices by young children, what role should schools play in managing children's screen time and digital habits?

TikTok's teen time limit: Does it work?

In 2023, TikTok became the first major social media app to impose default daily screen-time limits for users under 18. Internal tests showed a 234% increase in the use of screen-time tools, but external investigations in 2024 found the actual time spent on the app dropped by only about one minute on average.

Photo: Shutterstock / mentatdgt

Schools have a huge part to play. They're on the frontlines of children's digital lives, whether we like it or not.

First, there's the device policy itself. Some schools have put in place a "handphone hotel", where the students' mobile phones are kept locked away in the school's general office until the end of the school day. Others allow limited, supervised use of interactive apps for learning. There's no one-size-fits-all solution, but what's important is that schools are deliberate and consistent in limiting screen time as much as possible.

Continuity of care is also important — especially during transitions. If a preschool child is identified as having issues with screen dependency or social withdrawal, that information may be carried through to primary school, if necessary, so that early support can continue to be rendered.

Finally, schools should work closely with parents to align expectations. Hosting parent workshops on screen time, social media, and emotional development can go a long way in building a united front. When home and school are on the same page, children are far more likely to thrive because they receive a consistent message across the school and home contexts.

Young children are easily attracted to the instant gratification, sensory stimulation, and intuitive interactions provided by

the audiovisual interfaces on their digital devices. Are there particular offline activities or parenting strategies that can effectively rival the appeal of screens?

Yes — and the good news is, many of them are simple, accessible, and even enjoyable for parents, too.

Outdoor time is one of the most effective remedies for excessive screen use. Parks, cycling, nature walks — even in a dense urban place like Singapore — there are wonderful green corridors and community spaces where children can explore, move, and unwind. Movement is incredibly important for emotion regulation and sensory integration.

Helping children cultivate a hobby in the arts, sports, or music can also help, as they offer structured engagement that builds focus, discipline, and confidence. These activities create a sense of progress and mastery — something that passive screen use rarely provides.

And finally, family-based routines are hugely underrated. Simple activities like cooking a meal together, playing a board game, or having device-free meal times give children the social scripts they need for real-life interactions. These moments build secure child-parent attachment, communication skills, and emotional resilience. It's not about being "screen-free"— it's about being "screen-wise."

Despite all the concerns, are there any positive trends or practices you've seen that give you hope?

Absolutely. I think it's important to remember that this generation of parents is more informed, reflective, and engaged than ever before. Many are actively trying to break cycles, parent with empathy, and be deliberate about their children's digital habits.

Nature's fix for digital overload

A University of Michigan study found that community programmes to reduce children's screen time are more effective in neighbourhoods with accessible green spaces. Where parks and safe outdoor areas are lacking, results are weaker. Researchers say equitable investment in green space is vital to support healthy screen-use habits in children.

Photo: Unsplash / Getty Images

Your relationship with your child will always matter more than any rule or app. **When that relationship is strong, everything else becomes easier to navigate.**

One practice I find especially promising is early mediation. Studies show that children who grow up with structured, age-appropriate screen time rules — starting in early childhood — tend to require fewer restrictions later on. They are more likely to internalise healthy habits and transition smoothly into responsible digital citizenship as teenagers.

I've also seen the power of secure attachment scripts. When children grow up in environments where they feel genuinely seen, safe, and loved, they become much more receptive to parental guidance. They realise that rules aren't punishments — they are care in action.

And finally, I think we're starting to see more thoughtful, collaborative use of technology. In classrooms, when teachers use digital tools for interactive learning — not passive viewing — it's remarkable what children can achieve. Within families, activities like video calls with relatives or co-watching documentaries can turn screens into bridges rather than barriers.

So yes, I'm hopeful. The challenge is big, but so is the potential. By combining awareness, boundaries, empathy, and support, we can raise a generation of children who not only survive the digital age but thrive in it.

If you could leave parents with one takeaway, what would it be?

Don't aim for perfection — aim for connection. It's not about removing screens or always getting it right. It's about staying present, asking questions, being curious, and modelling the balance you hope to see in your child.

Your relationship with your child will always matter more than any rule or app. When that relationship is strong, everything else becomes easier to navigate. ∞

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DR GEETHA SHANTHA RAM & SOOFRINA MUBARAK

Managing Minds and Mobiles

Parents, Screen Time, and the Child Who Learns Differently

We have both sat across from parents near tears — not because their child was failing in school, but because their child could not seem to lift their eyes from a screen. The struggle is familiar. A 2024 survey,[1] jointly conducted by CNA and the Institute of Policy Studies, revealed that Singaporeans aged between 13 and 19 spend an average of almost 8.5 hours daily on devices, with under three hours spent on education-related activities. As educators and therapists, we understand the fear parents feel about the growing presence of mobile devices in their children's lives, and this fear is not unfounded.

The critical neurological development that occurs between 12 and 13 years of age can be hampered by limited exposure to diverse experiences, which can stunt social, psychological, mental and emotional growth. This in turn affects the ability to develop crucial life skills for the future. The impact on well-being and readiness to manage future life stages and their ensuing demands is widely acknowledged.

Ironically, excessive social media use, despite its name, is increasingly associated with isolation and anti-social behaviours.

These concerns become more complex when the child is neurodivergent. In an age where children's attention is deliberately monetised by design, managing device use goes beyond parenting; it becomes a daily negotiation in the attention economy. Apps and platforms are designed to compete for our attention, often prioritising rapid engagement over deep, reflective thinking.

At the Dyslexia Association of Singapore (DAS), our work involves daily contact with families managing the tension between wanting to limit screen time and recognising its supportive role. Yet the mobile device is not just a source of entertainment or distraction. For many of our learners, it is also a tool for regulation, communication, and sometimes even survival in a demanding academic environment.

MORE THAN JUST DISTRACTION: THE SCIENCE OF SCREENS

There is no shortage of research on how excessive screen time affects attention spans, sleep patterns, and emotional regulation. Studies have found that prolonged exposure to fast-paced or highly stimulating content may reduce sustained attention and executive function in children. Children with the longest screen time exposure were 7.7 times more likely to meet the criteria for an ADHD diagnosis[2] according to recent research. Between 18% and 42% of people with dyslexia also have ADHD,[3] making this population particularly vulnerable to screen-related attention issues. For neurodivergent learners, including those with ADHD or dyslexia, these effects can be more pronounced due to underlying differences in cognitive processing.

The solution isn't just about managing children's screen time, but also about examining family-wide digital habits. Essentially, the device is not the enemy; it is the manner and content of use that requires refinement.

However, research also supports the use of digital tools to help children with learning difficulties. Text-to-speech applications, phonics games, and visual schedules can scaffold attention and reduce cognitive load. After all, 65% of students with reading and writing disabilities continued using tablets with educational apps,[4] suggesting sustained benefit from assistive technology. Text-to-speech software improves reading comprehension and fluency by helping students decode words and understand texts better.[5]

The key, we believe, lies in intention.

A FAMILY'S DILEMMA

One of our students, let us call him Adam, struggled with reading. His parents were concerned that he spent too much time watching YouTube. However, upon further investigation, we found that Adam was watching videos with subtitles, picking up new vocabulary, and using YouTube's pause and rewind functions to learn at his own pace. Research shows that combining auditory and visual learning helps improve focus, reading comprehension, and memory retention.[6] Text-to-speech allows students with dyslexia to see how words are spelt by reading them out loud,[7] supporting Adam's vocabulary development through captioned videos.

For learners with dyslexia, combining audio with visual text, such as listening to narration while reading captions, enhances word recognition, decoding, and retention by engaging multiple pathways in the brain. This dual-modality approach is a fundamental element in many assistive technologies used in dyslexia intervention.

A 2021 study in Singapore examined parental attitudes and concerns about technology use, collecting 3,413 responses. To no one's surprise, it found that parents rated knowledge development and skills as the most important uses of technology, although in terms of hours spent, their children primarily used technology for entertainment.

Interestingly, the study also found a high correlation between parent and child technology use, indicating that if parents predominantly use technology for entertainment, their children are likely to do the same. Hence, the "learning potential of technology and digital media as a leveraging tool greatly depends on how it is being used" (Lee et al., 2021, p15),[8] and the study recommends that parents model technology use for educational purposes to influence their preschoolers and reinforce its educational benefits.

It suggests that the solution isn't just about managing children's screen time, but also about examining family-wide digital habits. Essentially, the device is not the enemy; it is the manner and content of use that requires refinement.

SUPPORTING FAMILIES, NOT POLICING THEM

We often begin by validating parents' frustrations. After all, studies have shown that people with ADHD may face a higher risk of screen-related addiction, and that, in turn, excessive screen time may exacerbate ADHD symptoms.[9]

Setting screen time boundaries can be challenging, especially when mobile devices are deeply embedded in modern childhood. We encourage families to consider not only "how long" but also "what for." Is the child using the device to escape, connect, or learn? Is the app designed for active engagement or passive consumption? For instance, speech-to-text software bypasses handwriting and spelling tasks, allowing the student to concentrate on developing ideas and planning their work.[10] We advise parents to reflect on their technology usage and demonstrate appropriate and intentional behaviour for personal growth.

A common concern we hear from parents is: "My child becomes upset when the screen is taken away, even if it's an educational app." We normalise this reaction, especially for children who use screens to regulate. Instead of abrupt removal, we suggest transitional routines, for instance, using a timer, a visual countdown, or a verbal script ("After this video, we'll move to your reading spot"). These may seem like small steps, but they provide the child with predictability and help to reduce anxiety during transitions.

Our educators share with families the importance of establishing tech routines, including scheduled breaks, shared screen time, using assistive apps,

Is the child using the device to escape, connect, or learn? Is the app designed for active engagement or passive consumption?

and setting up device-free zones for sleep and meals. It is not about removing the device entirely. It is about creating an environment of thoughtful use.

EDUCATORS AS PARTNERS

Our role as educators extends beyond the classroom. We work with parents to design learning environments that bridge school and home. In one instance, a parent was advised to use a visual calendar app on their tablet to help their daughter manage homework and breaks. In this case, the screen served as a visual anchor rather than a source of conflict.

Likewise, assistive technologies such as word prediction software, combined with text-to-speech tools, have proven effective in improving spelling accuracy and writing skills.[5] With the growing availability of these tools online,[11] families now have better access to learning support.

Our educators are trained to evaluate educational apps, integrate technology mindfully into lessons, and guide parents in developing screen habits. We do not aim to ban screens, but to use them responsibly. When educators and parents collaborate with openness and shared intent,

mobile devices become less of a battleground and more of a bridge between home and school.

As we continue navigating the evolving digital landscape, our professional development efforts at DAS have also expanded in scope and depth. Beyond managing apps or devices, we focus on cultivating intentionality in digital decision-making, particularly through the lens of neurodiversity. Our training emphasises the importance of distinguishing between active engagement and passive consumption and encourages asking not only what the tool can do but also how it aligns with each learner's cognitive profile and emotional regulation needs. Educators are also guided to consider the emotional context in which technology is introduced, whether the child feels in control, overwhelmed, or empowered. In this way, teacher preparedness becomes more pronounced in developing the judgement to match the tools meaningfully to individual learners. We believe this thoughtful, child-centred approach is what transforms screen use from generic instruction into truly inclusive support.

When educators and parents collaborate with openness and shared intent, mobile devices become less of a battleground and more of a bridge between home and school.

REFRAMING THE NARRATIVE

In a world where our children's attention is constantly bought and sold by algorithms, reframing screen use is not just about moderation; it is about reclaiming control in the attention economy. It is time to move beyond the notion that screen time is inherently harmful. For children who learn differently, mobile devices can offer empowerment. They provide access to alternative modes of learning, enable repetition without shame, and support emotional regulation through calming visuals or familiar routines. The attention economy thrives on distraction, but thoughtful, intentional technology use helps neurodivergent learners focus, flourish, and participate meaningfully in their learning journey.

That said, moderation remains essential. Research shows that children with Autism and ADHD are exposed to significantly more screen time by 18 months than their neurotypical peers, highlighting the need for early awareness and guidance. We do not support unrestricted access to technology. Its educational potential lies in intentional, thoughtful engagement rather than blanket restrictions. We advocate for purposeful, guided, and child-centred digital engagement.

Instead of fixating on hours spent on devices, we often ask parents and educators to consider three aspects: purpose, content, and context. Is the technology being used to create, consume, connect, or calm? Is the content appropriate,

"Reaching for the Star" by Tang Jia Rui, then an 11-year-old DAS beneficiary, was projected onto the ArtScience Museum in December 2019. Her artwork tells a story of resilience and hope.

Source: littledayout.com

engaging, and aligned with the learner's needs? And is the context one of stress, boredom, learning, or regulation? By shifting the conversation from time limits to quality and purpose, we empower families to make more balanced decisions.

In Singapore, these concerns are increasingly recognised at the national level. The recently launched Grow Well SG initiative, introduced by the Ministry of Health in collaboration with the Ministry of Education and other community partners, focuses on encouraging balanced routines, strengthening digital well-being, and promoting positive parent-child relationships. Through structured health education and practical guidance on screen use, the initiative echoes what we at DAS have long believed: supporting children's development in today's digital world involves not just schools and parents, but also the wider community working together.

**CONCLUSION:
UNDERSTANDING BEFORE JUDGEMENT**

Managing screen time is not just about setting timers. It is about understanding the child behind the screen. When we take the time to examine how and why mobile devices are used, we discover opportunities to connect, teach, and empower. There has never been a better time to benefit from assistive technology, with prices decreasing significantly and greater acceptance of its use.[12]

Our hope is that families and educators can work more closely together, shifting from a mindset of guilt or control to one of curiosity and cooperation. Mobile devices are part of our children's world. It is not just about making them future-ready; it is about making them independent and critical users of the technology that is already shaping our society and education. The challenge and opportunity before us is to guide them in using these tools wisely, compassionately, and confidently. ∞

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DR JEAN LIU & EUCLEA TAN

Smart Nation, Anxious Parents

How to Raise Screen-Ready Children?

Children engage with interactive exhibits and multimedia displays at the Singapore City Gallery, which showcases the nation's urban evolution and future development plans.

Source: Urban Redevelopment Authority (URA)

For the curious onlooker, a natural conclusion would be that digital technologies and devices are celebrated in Singapore and that children would embrace them from a young age.

Let's indulge in a thought experiment. An alien lands in Singapore on a mission: to understand the rules of how children and adolescents interact with digital devices. Very quickly, our extraterrestrial visitor might grow perplexed.

On the one hand, Singapore has an unmistakable narrative of technological advancement. The country describes itself as a "Smart Nation" where digital tools are deployed as part of public policy. Singapore also aspires to be Asia's Silicon Valley, frequently recounting success stories of homegrown technological companies such as Razer, Grab, Shopee, or Secretlab.

Echoing these ambitions, it is common for parents to enrol their children in coding or robotics courses even before they start formal schooling. Each year, more than 2,000 students participate in the National Robotics Competition, with categories open to children as young as five.

For the curious onlooker, a natural conclusion would be that digital technologies and devices are celebrated in Singapore and that children would embrace them from a young age. On the other hand, a contrasting narrative quickly emerges — one that advises children and adolescents to hold back from device use.

In 2025, the Ministry of Health announced screen use guidelines for children aged 0 to 12. This guidance recommends no screen time for infants under 18 months, less than an hour daily for preschoolers, and under two hours for those in primary school.

This year, parliamentary debates also focused on whether social media should be banned in Singapore — echoing Australia's recent restrictions for persons under 16. The Singapore government responded that it was in discussions with Australian counterparts and was considering the merits of a ban.

From this second set of initiatives, the onlooker would be forgiven for thinking that Singaporeans are seeking to manage or avoid the use of digital devices among children and adolescents.

Caught between the conflicting narratives of embracing or avoiding digital devices, every Singaporean family must make real-life decisions on whether and how to introduce these devices to their children.

And two common metaphors often emerge from this dilemma.

Smart Nation PlayScape, a permanent exhibition at Science Centre Singapore, explores emerging tech like AI, robotics, and blockchain through hands-on zones for visitors aged 10 and up.

Source: Smart Nation

The reality is that isolating ourselves from the digital world is not easy. Banning children from devices does little to prepare them for this eventual reality.

OPENING PANDORA'S BOX

Some parents perceive the online world as a Pandora's Box. It is full of peril that, once uncovered, will wreak havoc impossible to contain.

Parents who hold this view perceive the online world as rife with disinformation and disturbing content. They warn of how device use negatively affects mental health and blame youth struggles on constant device usage.

After all, the online world is the venue where cyberbullying takes place. It is a platform where adolescents share their lives publicly and measure themselves against others. A place where they feel inadequate and their insecurities magnified. In the Singaporean context, devices are also seen as distractions, pulling young students away from the productivity our local education system expects.

These worries about digital devices are best encapsulated in popular books such as Jonathan Haidt's *The Anxious Generation* and, most recently, the psychological crime drama *Adolescence.* They remind parents that when children are left to their own digital devices, they are not safe.

However, this analogy falls short in two ways. First, while scientific research shows how digital devices can indeed have negative effects, these impacts are less significant than developmental factors such as warm parental relationships or effective conflict management. Many challenges we pin to digital devices — such as bullying or 'time wastage'— also existed before the internet. These are struggles that parents of every generation have grappled with, and blaming digital devices can lead us to overlook the more complex tasks of nurturing family dynamics and managing lifestyle factors.

Second, our children will eventually become adults who regularly use digital devices in everyday life. In Singapore, the average adult is likely to use their phone to navigate, tap themselves in and out of the bus, use PayNow to buy lunch, and rely on computer software for work. The reality is that isolating ourselves from the digital world is not easy. Banning children from devices does little to prepare them for this eventual reality.

A digital device is not a Tamagotchi. It is not passive and self-contained but instead provides a portal to a vast online world.

OFFERING A TOY TAMAGOTCHI

An alternative view comes from parents who treat devices as if they were benign toys — akin to a Tamagotchi given as a reward. We often tell our children, "You'll get a phone for your birthday," or more commonly, "Work hard for the PSLE and you'll get a phone."

Beneath this approach lies an acknowledgement that phones now play a key role in children's socialisation and development. With many school children owning a phone, those who do not may feel excluded.

Digital devices thus become gifts offered as children grow up. Once given, children are also expected to manage them independently — like a pet Tamagotchi.

But a digital device is not a Tamagotchi. It is not passive and self-contained but instead provides a portal to a vast online world. Even if we do not unleash Pandora's Box, there remain real dangers that require preparation and vigilance.

LEARNING TO CROSS THE ROAD FOR THE FIRST TIME

As an alternative analogy, we suggest that acquiring a phone should be framed as a rite of passage — similar to how we navigate the offline world. It is a journey every child must undertake, but one where guidance is essential.

Do you remember when you were first allowed to cross the road or take public transport independently? Did you walk out of the door unprepared, or did you progress in stages? Did you start your journey at the same time as your peers?

The questions surrounding device ownership should mirror everyday parenting dilemmas: when to let children cross the road, hang from monkey bars unsupported, or participate in playground negotiations. Parents view these milestones not as intrusions into their children's lives that must be postponed indefinitely, but as essential parts of growing up, where scaffolding is required.

In the offline world, parents teach road safety step-by-step: first talking about dangers and road-crossing procedures, then guiding children while holding hands, before eventually watching from a distance. Their approach varies depending on circumstances — a child in a quiet neighbourhood has more leeway than one on a busy road.

In a similar vein, our children must show readiness and responsibility before being granted digital freedom. Rather than pinpointing an exact numerical age for phone ownership, we might ask ourselves: how can we help our children prepare, build resilience, and acquire digital literacy to be ready for the digital world?

The questions surrounding device ownership should mirror everyday parenting dilemmas: when to let children cross the road, hang from monkey bars unsupported, or participate in playground negotiations.

Even when children seem prepared, the work is not done. We mustn't send them into the online world alone; instead, we should guide their entry; first with close supervision and then from a distance — always remaining available should dangers arise.

Just as we alert our children to rare but dangerous encounters in the offline world, we should also warn them about potentially dangerous encounters online. And then, with guidance and support, we must allow them to venture forth — free to explore, make mistakes, and ultimately, to thrive in the online world.

As the poet E E Cummings reminds us, "It takes courage to grow up and become who you really are." In this digital age, preparing our children with the right skills will give them the courage to discover their authentic selves and take flight. ∞

PRACTICAL TIPS

Just like how we teach our children to cross the road, we should introduce them to devices in steady steps.

Stage	Navigating the *offline* world: **LEARNING TO CROSS THE ROAD**	Navigating the *online* world: **ACQUIRING A PHONE**
PREPARATION FROM AN EARLY AGE	Educate your child on road safety, including: • the purpose of traffic lights and crossings, • how to read signs, • good practices as a pedestrian, and • possible dangers.	Educate your child on digital safety and good practices, including: • how to set time limits on device use; • how to steer away from online dangers (eg, bad actors, scams); • being mindful of what we share online and how to interact with others respectfully; and • being mindful of how online content might affect us (eg, affecting our moods or opinions, fear of missing out, or following dangerous viral trends).
ASSESSING READINESS	Consider whether your child is ready to cross the road. This includes: • an assessment of your environment (eg, are there highways to cross?), • an assessment of your ability to supervise, and • an assessment of your child (eg, is your child likely to run away from you?).	Consider whether your child is ready for the digital world. This includes: • an assessment of the situation (eg, is a phone needed?), • an assessment of your ability to supervise your child's digital activities, and • an assessment of your child (eg, is your child generally coping alright, can your child manage emotions, can your child follow online safety rules?).

Stage	Navigating the *offline* world: **LEARNING TO CROSS THE ROAD**	Navigating the *online* world: **ACQUIRING A PHONE**
SETTING OFF WITH CLOSE SUPERVISION	Early in the journey, scaffold your child's road-crossing in stages. For example, you may: • start by holding your child's hand while crossing the road; • walk by your child's side; and then • watch from a distance. Monitor your child's progress closely, and praise your child when they show responsibility.	Scaffold your child's introduction to the digital world in stages. For example, you may: • start by co-viewing content with your child and having active discussions with your child on content viewed; and then • allow independent phone use with close monitoring (eg, through parental controls). At the early stage, it is important to set up restrictions (eg, time restrictions, spending restrictions, privacy restrictions) and to monitor closely. Again, remember to praise your child when they show responsible phone use.
STAYING AVAILABLE	If your child is ready to cross the road alone, send them off while making sure they know you're at hand should dangers arise.	When your child can use a phone independently, you can slowly ease off the restrictions while making sure they know they can turn to you if they encounter online harms or if they struggle with their phone use.

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KUEK THIAM YONG, DR CHOONG YUEN ONN & DR KHOR SAW CHIN

WINNING AT WHAT COST?

The Psychology of Gamification and The Fight for Our Focus

In an era where smartphones and ceaseless digital interaction dominate our lives, our daily experiences have been subtly transformed into a game. Simple acts such as sharing a photo, completing a task, or maintaining a conversation now often come with points, badges, or streaks — rewards that subtly push our behaviour. This phenomenon is known as gamification. Gamification involves applying game concepts in non-game contexts to motivate and encourage users to perform certain actions or steps. Although a "like" or a "streak" may seem insignificant, they are precisely designed to capture our attention, change how we understand and engage with ourselves and others, and often keep us glued to our screens. Since technology companies use human attention as a resource to generate revenue, gamification plays an essential role in their business strategies. It turns digital engagement into competitions and rewards, using psychological stimuli to encourage users to become overly attached to the platform. But how does all this affect us, and what can we do to regain meaningful human relationships?

"Your followers haven't seen you in a while. Say hello?"

"This sound is blowing up right now — you're early!"

"You're on a 21-day streak! Don't let it end now."

"You beat your weekly average. Keep it up and set a new record!"

"You haven't posted in a while. Your followers miss you!"

*Simple acts of sharing a photo, completing a task, or maintaining a conversation now often come with points, badges, or streaks — **rewards given to us that subtly push our behaviours.***

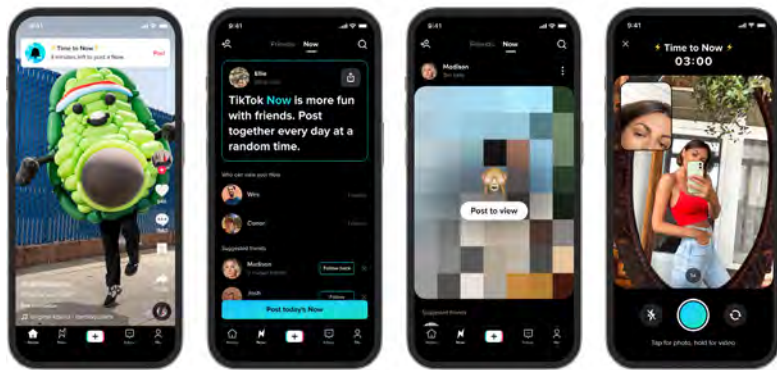"Your friend just passed you — can you beat them?"

LEVEL UP

*This uncertainty — **Will I get likes? Did someone respond?** — creates psychological tension that we constantly try to resolve by checking our devices repeatedly.*

THE MECHANICS OF GAMIFICATION

Gamification uses features like points, levels, rewards, leaderboards, and feedback loops derived from games and applies them to online activities. For example, TikTok flash trends and seasonal effects prompt users to join quickly to stay relevant; Instagram shows how popular someone is by counting likes; and Duolingo encourages users to practise every day with badges and an experience (XP) system.

These features influence users through the well-known psychological concept of operant conditioning, first introduced by BF Skinner. When we receive a reward (such as a like, badge, or congratulatory message), dopamine — the 'feel good' hormone — is released by our brain, which encourages us to repeat the behaviour.[1] In time, we might find ourselves seeking rewards, mainly to feel validated and happy. This compulsion creates a loop: the behaviour leads to a reward, which motivates the individual to repeat the same behaviour.

Duolingo's owl, Duo, began as a friendly learning mascot but became a symbol of streak anxiety. Through playful yet persistent notifications, Duo reminds users to complete daily lessons—often with guilt-inducing messages and sad animations. In 2025, Duolingo satirised this pressure by staging Duo's dramatic "death," turning user guilt into a viral marketing campaign.

*Social media gives the impression that the number of likes and shares a person receives reflects how much others approve of them, which can **significantly impact younger people's sense of self-worth and identity.***

By prompting users to post within a randomly assigned daily time limit, TikTok Now introduces a sense of urgency that gamifies spontaneity. This blend of time pressure, social comparison, and habitual engagement creates a subtle reward loop. Though framed as a tool for authentic sharing, it subtly encourages compulsive behaviour, transforming everyday moments into performative rituals shaped more by timing than meaning.

This process doesn't stop here. In fact, it is meant to be repeated over and over again. Apps often use variable reward schedules, keeping the user in suspense; they never know when they will get a reward. This uncertainty — *Will I get likes? Did someone respond?* — creates psychological tension that we constantly try to resolve by checking our devices repeatedly.

### SHAPING BEHAVIOUR AND CREATING HABITS

Gamification encourages people to develop new habits. Most apps and platforms are designed to keep users engaged by prompting them to repeat specific actions. For instance:

- **TikTok** gamifies engagement through personalised feeds, viral challenges, and creator incentives that reward consistent activity and interaction.

- **Instagram** notifications prompt users to check likes and comments, fostering a cycle of posting, waiting, and validation.

- **Fitness apps** offer daily step goals, badges, and challenges to encourage regular activity and foster accountability through metrics.

- **Language apps** like *Duolingo* send reminders, award progress badges, and highlight streaks to ensure users don't miss a day.

These systems operate based on behavioural economics theory — the nudge theory — which states that subtle design changes can significantly affect people's behaviour.[2] When goals, progress bars, and social comparisons are used, gamified systems motivate users to log in more often, spend more time, share more, and see how they compare to others — behaviours they might not exhibit otherwise.

Over time, users might shift their priorities, prioritising earning rewards over the main purpose of the app. For instance, the focus of learning a language shifts from developing a communication skill to maintaining a learning streak. A desire for validation replaces social connection.

*Research found that a user's constant interaction with apps that send notifications can **increase their stress levels, decrease sleep quality, and impair memory capacity.***
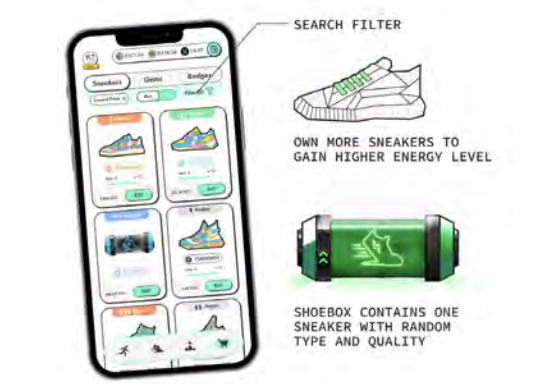
STEPN gamifies fitness by turning walking into a reward loop driven by NFT sneakers and crypto tokens. While it encourages physical activity, its play-to-earn mechanics blur lines between motivation and speculation, replacing intrinsic goals with market-driven incentives and exposing users to financial risk disguised as healthy habit formation.

SOCIAL VALIDATION AND THE COST OF CONSTANT PERFORMANCE

Gamification is not only about engaging people; it also treats engagement as a commodity. For instance, social media gives the impression that the number of likes and shares a person receives reflects how much others approve of them, which can significantly impact younger people's sense of self-worth and identity.[3] If an uploaded photo doesn't receive enough likes in an hour, a teenager may decide to delete it. Such behaviour demonstrates that the desire to earn points or badges overrides a person's true motivations and self-expression.

Because of this, individuals may develop an alternate self to attract more attention rather than remaining authentic online. Over time, this could create a disconnection or identity crisis between their online persona and their true self.

Moreover, gamified systems can encourage people to remain digitally active throughout the day. Users often experience internal pressure, such as the urge to maintain their streaks, reply to messages right away, or check their notifications constantly. Because of this digital distraction, people find it difficult to engage with others face-to-face, become more anxious, and have a shortened attention span in the real world.[4]

Research found that a user's constant interaction with apps that send notifications can increase their stress levels,[5] decrease sleep quality,[6] and impair memory capacity.[7] This is due to the fear of missing out (FOMO) phenomenon, where users are never totally disconnected from the digital world.

When play becomes pressure
From streaks to push alerts, dark gamification turns digital life into a relentless performance loop. A 2025 global survey found that 40% of teens are now voluntarily limiting smartphone use to protect their mental health, citing anxiety, FOMO, and burnout driven by apps that reward attention and punish absence.

Photo: iStock / Edwin Tan

THE HUMAN COST: DISCONNECTION, BURNOUT, AND SURVEILLANCE

Despite its perceived fun and entertainment value, gamification presents serious issues. As user engagement intensifies, the boundary between voluntary play and compulsive behaviour becomes increasingly blurred. This trend is most noticeable when "dark gamification" manifests, where design pushes users to use the app more than they should, negatively affecting their well-being.[8]

Some of the human costs due to this occurrence involve:

- *Mental fatigue and burnout*
  Users are always expected to check, respond, and stay continuously engaged.

- *Social comparison and reduced self-esteem*
  Frequent comparison of oneself with others can lead to self-doubt, especially on platforms that showcase only the best aspects of people's lives.

- *Eroded attention spans*
  Users tend to look for fast rewards instead of sustained focus due to the app's design.

- *Surveillance capitalism*
  Tech companies track, examine, and monetise the data generated by every tap, like, and scroll of users.

In summary, these tools serve a dual purpose: they aim to foster connections with our thoughts and meaningful face-to-face relationships, but they also frequently detach us from reality.

RECLAIMING CONNECTION IN THE DIGITAL AGE

If gamification exploits our psychological weaknesses to keep us engaged, what can we do to avoid it, or can tech companies redesign their systems to allow users to pursue emotionally meaningful interactions in society?

1. Design for Well-being

Tech companies must ensure they act ethically. It would be better for their platforms to measure user satisfaction, mental well-being, and real social connections instead of merely focusing on screen time.[9] On a positive note, several platforms are experimenting with features like hiding likes, sending reminders about excessive screen time, or encouraging users to check their mood to promote wiser and healthier usage.

2. Digital Literacy and Awareness

It is important for users to understand how gamification works. More importantly, they should be aware of technology's influence on their behaviour and learn how to set boundaries around its use. When people understand the psychological

triggers — such as the reason behind endless scrolling — they are better equipped to manage their time and engage with digital platforms more intentionally.

3. Redefining Metrics of Success

Not relying solely on the number of likes and followers as a measure of success, for example, can help users interact online in a more authentic manner. BeReal[10] is an example of a platform that promotes genuine sharing by prohibiting the use of filters and likes. We ought to focus on expressing our values rather than trying to garner as many likes as possible. The aim is simply to be yourself in the digital world, just as you are in the real world.

Australia draws the line
In a world of likes and loops, Australia is taking a hard stance by banning children under 16 from joining social media starting December 2025. With no parental consent allowed and fines of up to 50 million Australian dollars, it is the world's strictest move to protect teens from algorithmic harm.

Photo: iStock / pixdeluxe

3 minutes left to post a now

"Your comment is blowing up! Come back and engage."

"Your Snapstreak with Alex is about to end. Send a Snap to keep it going!"

"Missed a day? Save your streak with a freeze"

"Close your rings! You're so close to your daily goal."

"Your post is gaining traction. Boost it before it cools down"

We must remain aware of our digital actions, *occasionally step back from the constant urge to seek digital rewards, and demand that technology companies practice techno-ethics.*

4. Rebuilding Offline Spaces

Implement real-world practices that existed long before the emergence of digital tools, such as sharing meals without consistently looking at mobile devices, organising tech-free weekends, and immersing oneself in personal hobbies, which can help rebuild human connection. Similarly, community meetups, group physical exercise, and other types of analogue activities provide opportunities for deep, meaningful presence without digital metrics.

5. Mindful Technology Use

Practising digital minimalism, mindfulness, and time-boxing consistently can help users take charge of their online activities. Picking the right moments and understanding the specific reasons why a user wishes to use the app can help avoid addiction and ensure they adhere to their intended usage. In addition, certain apps like Freedom[11] and Forest[12] help users by blocking distractions and disabling gamification features.

Unlike most gamified platforms that reward constant use, Forest flips the model and turns non-engagement into the goal. While your focus timer runs, Forest blocks or discourages access to apps you've marked as distractions. If you stay focused and avoid switching apps, your virtual tree grows and becomes part of your forest.

CONCLUSION

Gamification plays a prominent role in today's attention economy. It affects our actions, changes habits, and frequently keeps us from connecting with ourselves and others. Even though it can be used positively, such as helping people learn or increasing work productivity, it primarily serves the interests of tech companies, which seek to capture more of their users' time, turning it into more data and, ultimately, more revenue. If we want to reconnect in this digital age, we need to understand these gamification mechanisms and work to overcome them thoroughly. This means we must remain aware of our digital actions, occasionally step back from the constant urge to seek digital rewards, and demand that technology companies practice techno-ethics. Only then can we strive to rebuild genuine, powerful, and meaningful relationships in a world filled with streaks, badges, and endless scrolling. ∞

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LIANG YI BIN

My Leisure Is Not Your Capital

I am Yi Bin, a person trying to live life on my own terms. I went to the Rhode Island School of Design to learn how to make pictures, and the North Bennet Street School to learn how to make books. Because of that, I think a lot about why we make things (not just objects but systems, choices, and organisations too), and how they should be made. I am currently employed at the Harvard Art Museums as a matting and framing technician, but I consider my true work to be cooking and feeding my friends, and bringing people together. In my spare time, I'm probably reading or gaming.

Last week, I hosted some Singaporean friends for hot pot and board games, eight people squeezed around a single electric stove. We pulled out an extra folding table, but it still wasn't enough space for all the food people brought — napa, winter melon, tofu skin rolls, slices of pork, lamb and beef, etc. We'd met completely by chance, a group of strangers that happened to sit at the same table at a Chinese New Year banquet for Singaporeans in Boston. As we made our introductions, someone commented on how hard it was to make friends as transplants to a new city, and so our WhatsApp group was formed. I've seen this happen enough times, where interest peters out as soon as people return to their regular, everyday lives, the spark of new connections forgotten. So, I made sure to pin down a concrete time and place for a first casual hangout — dinner and drinks in my tiny apartment. Now we meet every month at my place, with each gathering larger than before, as people ask if they can bring their other Singaporean friends. I start with this anecdote because I want to ground this article in what real connection looks like, and how I am choosing to redirect the attention that I reclaim from social media.

But the more I scrolled, the more frustrated I felt by the unfulfilled promise of connection. Instead of my friend's posts, I found my feed filled with sponsored content I couldn't turn off.

Clockwise from above: Gathering for hot pot with my new Singaporean friends in Boston; An invitation for a TTRPG (tabletop roleplaying game party) where we roleplayed as bears attempting to steal honey from unsuspecting humans; An invitation to a St Patrick's Day / Pi Day party for which I made seven different pies


I wavered on quitting social media for a long time. Living overseas in America, Facebook and Instagram were my main ways to keep in touch with friends and family back in Singapore. Cutting off those connections felt like social suicide. But the more I scrolled, the more frustrated I felt by the unfulfilled promise of connection. Instead of my friend's posts, I found my feed filled with sponsored content I couldn't turn off, and suggested posts that I could only temporarily snooze. My private messages kept getting filled up with bots and ads.

By the time we realise they're no longer incentivised to provide a good experience for users, we're too trapped by all the communities and systems we've built using their platforms to leave.

Are you seeing these fake AI birthday cake posts all over Facebook? Who is even generating them, and why? Losing my mind over all these people interacting with them like they're real.
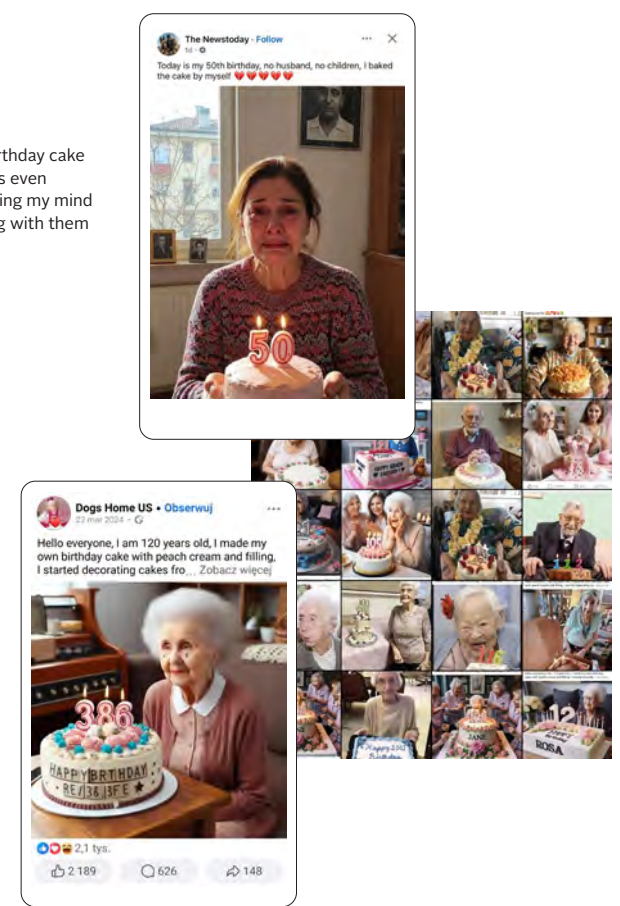
I had to actively seek out my friend's profile pages, and it felt like social media was working against its original purpose. Even then, interactions felt shallow and transactional, consisting of exchanging likes and comments without any real or meaningful conversation. All of this intensified during my brief stint as a freelance artist, when I was relying on social media for self-promotion and networking. It felt like I was being used by the platform, instead of being the user. The major platforms have all followed a similar pattern: providing value to free users to grow their networks, then shifting their focus to generate value for advertisers, finally exploiting both users and advertisers to generate value for shareholders. By the time we realise they're no longer incentivised to provide a good experience for users, we're too trapped by all the communities and systems we've built using their platforms to leave. (Case in point: it would be so easy for Instagram to allow embedded links in posts, but they don't because that would divert users away from the platform.)

Savanna: I made a cleaned up house! A lot of trash and recycling piles

Yi Bin Liang: Watercolor painting of a cat in Taiwan 🎨

Yuko: Had my students draw food, how the food tastes, and what they see around them during a picnic. I was hoping we would go outside for the picnic but most of them had really bad allergies and stayed back. But it was fun and nice to be outside for a few people!

By default, the Letterloop format starts with three questions or prompts, but you can add any custom sections you like. My friends and I all have art backgrounds, so we have a section for everyone to share something they've made.

When one of my best friends announced that she was moving out of state, I knew I had to find a better way to stay in touch. Together with a third friend, we started writing a sort of 'newsletter' together through an app called Letterloop, sending each other updates, thoughts and questions every two weeks. The private nature of this form of communication allowed us to share more deeply, and we became closer friends despite being physically apart. The longer, spaced-out timeframe encourages more introspective and thoughtful responses. I think it took all of us some time to learn how to articulate the nuances of our daily lives, but that same process taught us to examine how we live and why. We've helped each other through major life upheavals (divorce, career changes, family crises), but also mundane annoyances like paperwork and travel planning. We're on our 105th newsletter now, and no one has missed replying even once.

Bolstered by the success of our early foray into Letterloop, I started looking for other ways to recreate that same warmth and intimacy with larger groups of people. During the pandemic, Discord servers gained traction as a way for friend groups to hang out together online. In case you haven't heard of them before, they're invite-only chat rooms where you can create text channels for specific conversation topics, run voice or video calls with screen sharing capabilities, like Slack for video gamers. Most guilds in an MMORPG (massively multiplayer online role-playing game) will have one, and many game studios create official servers for players to share feedback and compare strategies. I started one for my friends who used to come over to play board games and watch anime together, and it was a pretty seamless transition to continuing our weekly gatherings online. Besides the robust technical features, the most attractive feature of Discord is the platform's lack of paid ads and its skew towards invite-only communities. Non gamers have gotten in on the action — I'm currently part of a server for my local neighbourhood where people talk about local politics or ask to borrow tools from each other, another one for readers of the same newsletter, and yet another one for queer people who play *Magic: The Gathering* (the original trading card game). Despite being in over 30 groups, the highly specific notification settings prevent it from feeling overwhelming. Being able to control exactly what you see feels like such a breath of fresh air after the frustration of the big platforms.

Being able to control exactly what you see feels like such a breath of fresh air after the frustration of the big platforms.

Cooking corn over a campfire while on a camping trip with my coworkers. The next morning we got up at 4am for a sunrise viewing of a James Turrell installation at the Massachusetts Museum of Contemporary Art.

> Social media is really just a crutch — we hold within our very selves everything needed to connect and communicate with the people around us.

Toasting marshmallows for smores and chatting late into the night.

I did finally delete Instagram and Facebook from my phone a couple of months ago, partly because of Zuckerberg's support of Trump, and Meta's annoying pushiness around AI pushing me over the edge. I thought it would take a while to detox, but was surprised by how quickly my scrolling instinct faded, as I learned to identify what needs I was really feeling and reaching for better ways to meet them. If I'm feeling lonely, I text my friends directly. If I'm bored, I reach for a book. If I want to know what's happening in my community, I go to the bulletin board (virtual and IRL — in real life). Now I only log in to Facebook when I'm looking for something specific on Facebook Marketplace or my local Buy Nothing group. I was also prepared to feel cut off from the world, no longer updated on my friends' lives. However, it turns out that I already have more than enough friends in real life, and cutting out the noise allows me to devote more attention and effort to those interactions. I was also reassured by bumping into an old junior college classmate at a wedding during a recent trip home to Singapore — even though we'd had zero contact since graduation, we still decided

to catch up over dinner and spend hours just talking. Social media is really just a crutch — we hold within our very selves everything needed to connect and communicate with the people around us.

An unexpected side effect of leaving social media has been reconnecting with myself, free from the sway of others. Distancing myself from all the influencers and advertisers is not only saving me a lot of money, but is also giving me the space to consider what I really want in my life, what I want to eat, how I want to dress, and what I want to do this weekend. Do you remember what it felt like, before all our opinions were aired publicly and all our doings had a permanent record, to say something

you weren't sure about, or that you might change your mind about later? The freedom of being able to try out a new persona or play with an idea without having to commit to it? The ability to continually redefine yourself without being beholden to hashtags and brand identities and 'For You' content? The price for the convenience of curated feeds is not just the much-discussed segregation of different demographics into their own bubbles, but also the deterioration of our curiosity, the narrowing of our attention span, and the erosion of our capacity to think critically. I am still relearning that, giving myself permission to be inconsistent, to be interested in different things, different ideas, different people every day. Will you join me in becoming human again? ∞

FURTHER READING ON VARIOUS IDEAS I TOUCHED ON ABOVE:

How to Do Nothing
BY JENNY ODELL

A deeper exploration of how the problems of social media are a reflection of our current society's impulse towards endless growth and exploitation. Discusses how we can expand our attention and refocus on the real world of living beings around us, and what we stand to gain from doing so.

The Art of Gathering
BY PRIYA PARKER

A guide to bringing people together, whether in social or professional settings, that urges us to examine our reasons for gathering, and what meaningful connection looks like.

The Good Life: Lessons from the World's Longest Scientific Study of Happiness
BY ROBERT WALDINGER, M D AND MARC SCHULZ, PH D

Results and analysis from the longest scientific study on happiness reveal what actually makes a good life for humans (spoiler alert: the answer is a strong network of community and healthy relationships).

Social Quitting
BY CORY DOCTOROW

A blog post on how and why social media platforms deprioritise their users over time, where the term enshittification was first coined.

The Web Revival Manifesto

A vision of what technology and the Internet could be if they were driven by joy, curiosity, and humanity instead of corporate interest. Links to many more (free) resources!

In this issue, *THINK's* Chief Editor spoke with filmmaker and anthropologist Ian McGonigle about his award-winning documentary *Technologies for the Soul.* The film examines how technologies — from smartphones and AI-powered chatbots to robot monks and digital rituals — are transforming spiritual life. Filmed in Singapore across multiple faith communities, the documentary investigates how traditional beliefs are adapting in response to digital disruption, and whether machines can ever mediate, perform, or even embody the sacred.

TECHNOLOGIES OF THE SOUL

RETHINKING THE SACRED IN A HYPERCONNECTED WORLD

An interview with **Prof Ian McGonigle**

Prof Ian McGonigle is an Assistant Professor of Anthropology at Maynooth University. Previously, he was a Nanyang Assistant Professor at Nanyang Technological University, where he founded and directed a Science, Technology, and Society research laboratory. He earned a PhD in Middle Eastern Studies and Anthropology from Harvard University, as well as a PhD in Molecular Neurobiology from the University of Cambridge. His work in the anthropological study of science examines the role of science and technology in identity formation and nation-building. His book, *Genomic Citizenship* (MIT Press 2021), explores the relationship between science and identity in the contemporary Middle East. He also co-edited with Rachel Feldman, *Settler-Indigeneity in the West Bank* (McGill-Queen's University Press). In recent years, he has produced two multi-award-winning documentary films about science, identity, and religion. Ian is currently interested in the relationship between artificial intelligence and religious practices.

What inspired you to create *Technologies of the Soul,* and how did Singapore's unique religious landscape influence your approach?

The inspiration came during the pandemic, when our lives became increasingly virtual. I noticed an intense and pronounced shift in how we interacted with technology—with more meetings going online and with many more hours per day in front of screens—and I became curious about how this affected spiritual life and traditional forms of community gathering and interaction. At the same time, I was realising that Singapore is perhaps the most religiously diverse place on the planet, with ten officially recognised religions. It is also a technological world leader, the 'Smart Nation,' so it's a place where deep tradition and rapid change coexist, making it an ideal site for exploring how religious communities respond to technological change.

In the documentary, religious leaders you interviewed expressed differing views on technology and social media, ranging from distractions to neutral tools to something that facilitates spiritual connections. What tensions or contradictions did you observe in how religious communities navigate the promises and risks of social media and mobile technologies?

There was certainly a wide spectrum of views. Some interviewees saw technology as a neutral tool—the example used to illustrate this point was that a knife could be used for violence or for preparing food for a guest—while others were more cautious, concerned about doomscrolling, digital distraction, and pushing

our bodies out of their natural rhythms and harmony with nature. There was no clear consensus across the ten religions, nor was there a sense of alarm or outright rejection of technology. If we focus on religious education, then we can clearly recognise the power of digital media to transmit information more efficiently, but if we think of the more predatory and pernicious forms of social media, we can see how our attributes of envy, greed, and status seeking may be nourished. My view is that both aspects can coexist and that we can be ambivalent about digital technologies since they pull us in both directions. Different religious groups will ultimately develop in their teachings good guidance on how to extend the pursuit of an ethical life into online spaces.

A synagogue in the cloud
Built by Chabad-Lubavitch on the Decentraland metaverse platform, the MANA Jewish Center blends immersive technology with traditional outreach. Modeled after the movement's Brooklyn headquarters, the virtual synagogue hosts Torah study, events, and social gatherings — extending Jewish life into digital realms while remaining rooted in real-world practice.

Source: MANA Jewish Center

Balancing religious harmony and digital challenges
Positioned as a Smart Nation with ten official religions, Singapore faces ongoing challenges in preserving interfaith harmony amid rising digital connectivity. The Maintenance of Religious Harmony Act (MRHA), first enacted in 1990, has expanded over time to address online discourse and foreign influence, reflecting a broader shift toward tighter regulatory oversight in safeguarding social cohesion.

Photo: Unsplash / Cole Keister

While conventional face-to-face leadership and pastoral life are as important as ever for individuals to experience community support, **online spaces add another dimension to contemporary religious life, particularly educationally.**

In the documentary, you show how digital platforms help extend spiritual practice beyond traditional spaces. From your perspective, do you see this expansion as transforming the very nature of religious authority or leadership? Who is shaping spiritual narratives now in these online environments?

Absolutely. I believe that when the metaverse was initially launched, one of the most popular hangouts was the digital Chabad house, which is a meeting place for Orthodox Jews. So, there is no doubt that the online world has become a legitimate mode of assembly for ultra-traditional faith groups. I am not sure if religious authority itself is being challenged in a unipolar way. It seems to me that many charismatic religious leaders are now extending their teachings online, on YouTube or TikTok, for example, and developing larger followings. So, if in the past we lived

in scattered, unconnected communities, each led by its own community leader, it may be that we are entering a more competitive era where the more successful preachers can command a massive following online. Just think how many people a traditional sermon might reach in its congregation, perhaps a few hundred. Now, a popular preacher can reach millions of viewers within minutes, so the positive potential for spreading good messages is immense.

While conventional face-to-face leadership and pastoral life are as important as ever for individuals to experience community support, online spaces add another dimension to contemporary religious life, particularly educationally. This democratisation can be empowering, no doubt, but it also raises questions about whether there is a danger of loss of community or solidarity at the local level. It's perhaps a shift from a hierarchical form of organisation to more globally networked and extended forms of spiritual engagement.

With religious leaders now competing for attention in the online world, how do you think this shift affects the depth and quality of spiritual guidance? Do online religious activities dilute or enhance spiritual authority?

We can clearly see the trend towards social mediation of religious content as democratising and creating avenues for the most popular or persuasive voices to command a massive following, bypassing traditional gatekeepers and institutional authorities. This includes preachers on YouTube or TikTok who

AI Jesus confessional

At St Peter's Chapel, the oldest church in Lucerne, Switzerland, a computer now hears confessions in place of a priest. Dubbed *Deus in Machina* ("God from the Machine"), the AI-generated Jesus, trained on biblical texts, responds to visitors in over 100 languages. Visitors are advised not to disclose personal information — an ironic note in a booth once meant for the soul's most intimate revelations, now becoming a symbol of faith mediated by code.

Source: The Catholic Church of the City of Lucerne

ical commentaries on these sacred texts over hundreds and thousands of years. Revolutions in textual transmission practices, especially the invention of the printing press, and the translation of these texts from their Semitic originals in Hebrew, Aramaic, and Arabic to local vernaculars have precipitated schism and social reform, including the European reformation of Christianity, the reform movement in Judaism, and Islamic modernism. In a dialectical move to negate these movements, the Abrahamic faiths have also seen anti-modern retrograde moves to return to orthodoxy, with Christian fundamentalism, Hasidic Judaism, and Salafi Islam.

The point that technological rupture can engender theological revolution and societal upheaval is well taken. Today, we are at a profound junction in the history of religious life, as digital media has made avail-

Faith goes viral at Vatican

The Vatican inaugurated its first Jubilee dedicated to digital missionaries and Catholic influencers on 29 July 2025, gathering over 1,700 Catholic creators from 75 nations in Rome. Recognising social media as a powerful platform for spiritual unity, Pope Leo XIV encouraged them to transcend mere content creation and authentically "go and mend the net"— a clear acknowledgment that the internet has become a vital terrain for evangelisation.

Photo: REUTERS / Remo Casilli

are commanding millions of followers. On the one hand, this ought to allow the brightest and best to maximise their positive influence. On the other hand, we also know that negativity and extremism can also flourish online—for example, on Twitter, or X now— and conflict and bigotry can command much attention. There is an open question about how to regulate and control what kinds of messages are permitted and which are clearly harmful to social harmony and community solidarity. That is to say, how do we calibrate and get the right balance between protecting individual liberties and protecting social cohesion? So there is a two-way potential for massive positive influence as well as catastrophic social harm. This also raises a huge question about defining the borders of free expression and criticism online and how we can balance this freedom in relation to the integrity of the community, especially in diverse societies like Singapore.

Throughout history, every major communication breakthrough—from the printing press to radio and television—has transformed religious life, often prompting both institutional and grassroots adaptations. In your view, how does today's digital transformation compare to those past shifts, and do current responses within religious communities feel more driven from the top down or bottom up?

According to the Abrahamic traditions, God spoke directly to Abraham, Moses, Jesus, and Mohammed, imparting divine instructions on how to live an ethical life and establish moral societies. These principles are codified in the Torah, New Testament, Qur'an, and in cler-

able massive volumes of esoteric and sacred texts that for millennia were the privilege of elite scholars to study and critically engage. Suddenly, the scriptures are available for instant translation and penetrating exposition, accessible to all with an internet connection. Moreover, with the addition of large language models, esoteric texts are now available to engage with through real-time chatbots that can parse, summarise, and critically analyse in ways that surpass all but the most erudite experts.

Indeed. The film highlights how access to sacred texts is now widespread and instantaneous. Do you think this democratisation changes the role of religious scholarship? Could it risk oversimplification or misinterpretation?

Fabulous question! This is one of the avenues my research has taken me recently, and we will have to closely follow how the emergent technologies will reconfigure different religious groups over time. For the religions that are intensely text-based and where scholarly competence is highly valued, the impact may be more intense. In religious groups that more proportionately emphasise individual piety and self-discipline, the consequences of information access may be less. The dynamics will also likely be very different in different parts of the world, so this is definitely an empirical question for social science researchers to follow up on.

But yes, I do think there is the potential for misinterpretation, blasphemy, as well as completely novel and deep interpretations of ancient scriptures, which could lead to new faith group formations. After all, the printing press engendered the European reformation of Christianity. We can hardly imagine what AI will do to the world's religions in the years to come.

*Today, we are at a profound junction in the history of religious life, **as digital media has made available massive volumes of esoteric and sacred texts that for millennia were the privilege of elite scholars to study and critically engage.***

When divinity is just a swipe away

AI apps like Text with Jesus turn the Holy Family, apostles, prophets — and even Satan — into chatbots offering instant spiritual advice on demand. Marketed as tools for connection, they risk flattening rich theological traditions into scripted simulations, blurring the boundaries between faith, entertainment, and algorithmic authority.

Source: Text with Jesus website

Some religious rituals are deeply embodied and sensory, requiring physical presence, space, and community. How are these ideas of 'sacred time' and 'sacred space' being challenged or reinterpreted in the era of virtual gatherings and online worship?

Virtual worship or prayer services have really blurred the boundaries of sacred time and space. Rituals once tied to physical locations are now accessible from anywhere, even across different time zones. While this increases accessibility and can be more inclusive, it also raises questions about the depth and importance of communal and embodied experience. Take singing in Church, for example. Can a participant have the same sense of group harmony and individual transcendence online? I don't think so. Many

traditions are embracing this flexibility with online participation, and clearly, there are benefits, but there is a cost that may erode the normative expectations of what it means to be a community member. How that balance is calibrated and enforced is another question, but we could start by educating people about the well-being benefits of having a rich community life.

You touched on the risk of losing community and solidarity at the local level. Have you seen any successful models where online and offline religious life complement rather than displace each other?

The pandemic was a remarkable example of how traditional religious life went online in an unprecedented way, and many religious communities conducted their services online and in a hybrid fashion. The legacy of this shift is that some communities have retained a hybrid model, so that those who have difficulty getting to the physical gathering are still included, but this has also challenged the traditional notion of what it means to be in a community, not to mention the loss of the incidental interactions that go along with attending community gatherings.

In terms of the future, it is really hard to predict. When the metaverse was launched a couple of years ago with great hype, many people thought that this was the direction that community life was heading in, but it turned out to be a massive flop. I think we

*Many traditions are embracing this flexibility with online participation, and clearly, there are benefits, **but there is a cost that may erode the normative expectations of what it means to be a community member.***

The first monk of the machine age

Robot Monk Xian'er, unveiled in 2015 at Beijing's Longquan Temple, marked a pioneering moment in religious AI. With its cartoonish robes and Buddhist teachings, Xian'er offered scripted wisdom to visitors, blending ancient philosophy with emerging technology. As one of the first spiritual robots, it stands as a historical milestone in today's growing landscape of AI-powered monk figures.

Photo: Reuters / Kim Kyung-Hoon

*I was surprised by the openness of some very traditional movements to the idea that machines could have spiritual significance... **It raises the question of whether one might be able to upload their soul to a digital server!***

Hinduism and non-human consciousness

Hinduism's understanding of consciousness is expansive, recognising it as a universal, all-pervading reality (Brahman) present beyond individual beings. This worldview naturally accommodates the possibility of non-human or non-biological consciousness, making Hinduism philosophically receptive to discussions about AI and digital entities possessing forms of awareness or spiritual significance.

Photo: Unsplash / Dmitry Voronov

need to think in a more dialectical way about the relationship between online and offline: the more things go online, the more valuable and special it is to be physically present, so I don't see the relationship as one of displacement but rather one of a dynamic relationship that will change the meanings of online and offline over time. Both can thrive.

Have you observed generational differences in how religious practices adapt to digital life? How do younger people of faith navigate between ancient wisdom and constant connectivity?

Generally, we tend to think that the younger generations are more comfortable with digital tools, and there is an idea that Gen Z, the first digital natives, take much of this for granted. Whether this is a fixed characteristic of generations or whether, over time, we will see a reaction against a sense of mediated alienation and thirst for a traditional form of community is not clear. This film didn't really capture attitudes across age groups or across time, so I think that this is an important topic for further social research. Perhaps an upcoming scholar can do a PhD on the topic! There is plenty to investigate.

Did making this film change your own perspective on the evolving relationship between technology and spirituality, particularly in light of emerging tools like artificial intelligence and virtual influencers? What surprised you most about how traditional or modern faith communities are engaging with these new technologies?

I was surprised by the openness of some very traditional movements to the idea that machines could have spiritual significance, the idea that a robot could pray on behalf of a person, or light ritual candles and perform blessings in lieu of a person. It raises the question of whether one might be able to upload their soul to a digital server! Indeed, scholarly debates rage over whether AI can possess a soul. Some traditions, like Hinduism, are in fact more open to the idea of non-human consciousness, while other religions, particularly those with literalist interpretations of scripture, will resist such notions. This divergence reflects broader theological tensions about the nature of consciousness and divinity, and you can see this in the film.

In terms of what is coming next, AI is already reshaping religious life in profound ways. Over the past five years, large language models like Google's Gemini, OpenAI's ChatGPT, Microsoft's Copilot, Grok, and others have become widely and freely available.

Of the self, for the soul

Ancient religious rituals such as prayer, fasting, sabbath-keeping, and confession, can be seen as technologies of the self. These practices cultivate discipline, self-awareness, and ethical formation. Beyond tradition, they shape how individuals govern themselves spiritually and morally, offering structured ways to reflect, regulate desire, and connect beyond the self in a distracted digital age.

Photo: Unsplash / Ashley Batz

Subsequently, specialised online AI chatbots have included AI gurus and prophets, like AskBuddha, Rebbe.io, Jesus AI, or Muslim AI. Through these chatbots, users can have a direct dialogue with avatars that are programmed with the sacred scriptures. These new technologies foster novel ways of mediating between individuals, sacred texts, religious leaders, as well as with deities, prophets, angels, and divine emanations. Could it be that a new era of religious life is about to begin? I think this is a very exciting time for religion and technology, and it really challenges our ideas about what makes humans special.

*What I learned from the ten religions of Singapore is that traditional practices can comfortably coexist with significant technological change and that **what is important is that the moral values of the tradition remain alive and safeguarded online.***

Technologies of the Soul: Ancient Wisdom in the Smart Nation (*2023, Singapore, 60 min*) explores how Singapore's diverse religious communities are adapting age-old rituals to meet the challenges of hyperconnected digital life. Filmed during the pandemic, the documentary reflects on how ancient Asian traditions have reinterpreted rituals, sacrifices, prayers, sabbaticals, and other techniques of the self to carve out spaces outside of time, sustaining inner peace. *Now available to view via the QR code.*

In your view, what lessons can spiritual traditions offer to help society manage the challenges of digital overload and the attention economy?

When we browse or scroll mindlessly online, we are engaging in a kind of primitive data-hunting behaviour, constantly filtering for value, and our base desires for personal gain are unavoidably aroused. This couldn't be further from the kind of peaceful and focused mindset that many ancient spiritual traditions aim to inculcate through sacrifice, prayer, meditation, fasting, etc. I think that this imagined dichotomy motivated my project to seek out how religious groups navigate the challenge of cultivating a healthy relationship with technology. What I learned from the ten religions of Singapore is that traditional practices can comfortably coexist with significant technological change and that what is important is that the moral values of the tradition remain alive and safeguarded online. One can have a busy week working with technology, but it may be more important than ever to have a quiet, protected time and space for connecting with community members and with our spiritual traditions. The conceit of the film title, *Technologies of the Soul,* after all, is that the ancient practices are themselves too, indeed technologies, that can help us pursue self-development and wellbeing.

What advice would you give to religious leaders who are sceptical or reluctant to engage with digital tools, but worry about becoming irrelevant to younger generations?

One of the important findings in social studies of technology is that familiarity with new technologies tends to bring with it a more positive view of them. So, I'd encourage religious leaders to explore the potential of new tools before ruling them out. It may well be that certain technologies overall are harmful, but that is a judgment that requires careful examination, and may take time to arrive at. But religious leaders must lead, and they need to be confident in their traditions and values to be able to tell younger generations what digital tools are doing them harm or promoting bad attributes. After all, technology should simply be a tool that we use to promote our values and live the lives that we believe are in pursuit of the good life. ∞

FEATURE

ELLIS NG is a journalist and volunteer community advocate. Formerly a user-generated content producer at Reuters from 2018 to 2022, Ellis spent more than nine years with various Singaporean and global news outlets, including the *South China Morning Post, China Daily, Mothership.sg,* and *The Straits Times.*

ELLIS NG

From Platform to Public Square

Rethinking Digital Engagement

In Asia, the role of social media as the main catalyst for civic engagement is declining. What can community builders do to help people connect?

It appears 2011 was the last time people held hope about social media and its transformative impact. That year was a pivotal year for global social movements. Social media allowed revolutionary aspirations to resonate during the Arab Spring.[1] Egyptian protesters generated 230,000 tweets per day, setting up 32,000 Facebook groups and 14,000 Facebook pages in the two weeks leading up to the Tahrir Square protests in Cairo.

Twitter prided itself on being the public square for social conversations then, as it drove political discourse in countries all over the world. 1 in every 500 hashtags globally was related to Occupy Wall Street at its peak,[2] as Twitter functioned as a coordination hub.

Back home in Singapore, social media was lauded as the equaliser[3] that changed an election. That year, the Workers' Party wrested a group representation constituency (GRC) from the ruling PAP, marking a historic first in what analysts quickly dubbed the "Social Media Election." A brand-new electorate was now able to access and contribute to citizen journalism websites like *The Online Citizen,* interact with smaller opposition parties, and explore new ideas.

I was merely 18 then, watching the world around me change as a teenager, tweet by tweet, photo by photo, essay by essay. Images of crowds kept me enthralled as I stayed up late to prepare for my A Level exams; I would read about them as examples I could cite in my essays.

The digital front line

Social media played a critical role in Egypt's Arab Spring and Occupy Wall Street in 2011, enabling activists to mobilise protests and share uncensored information. Its influence persisted through Hong Kong's 2019 pro-democracy protests and continues today with Ukraine's war, despite increasing challenges as authorities censor platforms and use advanced tools to suppress digital dissent.

Photo: Alamy / SOPA Images

#ONLINE, STORIES ABOUT INEQUALITY AND OPPRESSION RALLIED PEOPLE TO THEIR CAUSE — A FIGHT TO BE FREE.

I learnt from my mentor back then that it was key to craft a good narrative. As he used to say, a good story would triumph.

Online, stories about inequality and oppression rallied people to their cause — a fight to be free. It was this spirit that led me into journalism. I joined *The Online Citizen* as a junior writer in 2012, engaging with people who felt ignored by the government and mainstream media.

THE DARKNESS AND THE NOISE

The world has changed since then.

The commercialisation of social media — a process that was arguably inevitable — has led to a gradual erosion of trust in society, as disinformation and misinformation are now rampant.

Twitter, now known as X, has seen its reputation as the world's town square crumble, as users pay for influence and artificially boost their tweets; its chairman, Elon Musk, has used the platform to spread misinformation, reinstating alt-right and neo-Nazi accounts[4] and allowing both X and its AI assistant Grok to amplify hard-right conservative views.[5]

#THE ANONYMITY OF THE INTERNET MEANS WE NO LONGER SEE OTHERS AS INDIVIDUALS BUT AS INTERCHANGEABLE MEMBERS OF 'TRIBES'.

Meta, which owns Facebook and Instagram, has not emerged from the shadow cast by the Cambridge Analytica scandal, following the revelation that a British consulting firm harvested personal data from 87 million Facebook users without their consent. Facebook has also faced content moderation issues, with an Amnesty International report[6] in 2022 finding that the platform amplified hate ahead of a 2017 massacre of Rohingya in Myanmar.

Social media has been accused[7] of amplifying political polarisation and hostility. The relative anonymity of the Internet has meant that we no longer see others as individuals but as interchangeable members of 'tribes' — Democrats, Republicans, anti-establishment, leftists, Nazis, you name it.

Algorithms and influence

Social media giants like Facebook, X, and TikTok play an increasingly prominent role in political discourse, shaping what content is seen, how far it spreads, and how users engage. Their impact on public opinion and elections has drawn criticism for enabling misinformation, deepening divisions, and amplifying polarising or extreme voices.

And then there are the authoritarians who have exploited social media's ability to spread misinformation. Bots have been used to spread falsehoods and discredit political opponents, as dictators use claims of 'fake news' to discredit the truth.

As governments deploy propaganda to manipulate narratives about their political enemies, block websites, and launch investigations on social media users while activists hide and journalists flee, I wonder what my role is as a journalist and as a citizen of the world.

SPEAK SOFTLY

As a child, I was told that being the loudest didn't guarantee I would win.

My father would tell you that I was a bratty, odd child — one who was quiet in school but always got into trouble at home. Having three sisters meant I constantly had to compete for my parents' attention, which, in turn, fed my loud and boisterous personality. I had difficulty speaking and communicating as a child, often stammering and stuttering during English lessons, and my thoughts were frequently disorganised and fragmented.

So, to be heard, I worked hard to learn how others communicated.

I practised speaking with anyone willing to listen — teachers, friends — and I read widely, learning to reason. I learnt to express sympathy and empathy, and to engage people on their level. I learnt to explain, to educate, and to understand my audience.

But, as I grew older, I also realised that the loudest people tend to win.

Trump's disinformation campaigns overwhelmed newspapers and fact-checkers, and even as

Tribes in the feed

Clashes between pro- and anti-Trump groups reflect America's growing political divide. As platforms reward outrage over dialogue, political differences harden, and online tribalism increasingly manifests as real-world confrontation and hostility.

Photo: Reuters / Patrick T Fallon

journalists tried to keep up, the US President often maintained full control of the narrative and the audience.

It's no surprise that, in the internet age, outrage now fuels our attention economy. The words 'wokeness' and 'cancel culture' are used to downplay demands for social justice and accountability. Polls suggest people are seemingly more polarised, and social media acts more as a distorting prism than a mirror, says political psychologist Antoine Marie.[7]

This led me to wonder: *how can we sustain a world we all share? How can we help people connect?*

THE PERSONAL

The attention economy, as defined by research fellow Matthew Crawford, sees human attention as a finite resource. Crawford theorises that an individual has only a limited amount of attention, yet we often overlook the need to claim our attentional resources for ourselves. We take our attention for granted, especially online, where we are continually bombarded with carefully crafted messaging and branding.

On social media platforms, clips that garner attention and generate engagement are rewarded and broadcast further to larger audiences. This demonstrates the attention economy in action: the more time we spend on social media, the more it offers us content that keeps us engaged.

All this doesn't mean that we no longer desire human connections. We humans still crave a sense of authenticity — the personal.

With the rapid democratisation of media and smartphones reducing the costs of content creation, community builders in the 21st century can now present themselves without needing to go through traditional gatekeepers. Meanwhile, as platforms consistently favour shorter video formats, community organisers are now compelled to create simple, genuine videos that feel authentic.

It's this authenticity that has made platforms like TikTok and Instagram some of the most influential for social change. TikTok creates micro-subcultures, allowing community builders to reach audiences they previously could not reach.

#ALL THIS DOESN'T MEAN THAT WE NO LONGER DESIRE HUMAN CONNECTIONS. WE HUMANS STILL CRAVE A SENSE OF AUTHENTICITY — THE PERSONAL.

In Asia, for instance, social media provides women with unique opportunities for self-expression despite cultural restrictions. Among them are advocates in Sri Lanka who have promoted meaningful representation of women in the media and public spaces through social media, using Instagram to challenge unattainable beauty standards.

Kalpanee Gunawardana, a business owner, consultant, and advocate who studied law in Bristol, has worked to oppose skin-lightening products, such as Fair and Lovely (now Glow and Lovely). These products have historically been linked to colourism and discrimination.

Gunawardana grew up during Sri Lanka's turbulent civil war and witnessed colourism both abroad and at home. To her, the issues Sri Lanka faces — from colourism to poverty — are deeply interconnected. "I had an academic background that allows me to discuss structural issues and point out that these things are interlinked. They don't exist in silos."

Being in a nexus of privilege — having worked on campaigns for Sunsilk and being exposed to modelling and evolving beauty standards during a time when conversations about diversity and inclusion were gaining prominence in the early 2000s — made her feel the need to speak out. Instagram has been the main platform through

Advocate Kalpanee Gunawardana uses Instagram to combat harmful beauty standards and colourism.
Source: Calvin Chinthaka

which she connects with communities beyond the silos and restrictions on other platforms.

"If somebody wants to be upwardly mobile in existing circumstances, the fairer you are, the better the job you're going to get. It was because of my education and experience that I had the language to say, 'Okay, this is not right.' I'd start a conversation, and people would write back," Gunawardana told me. "We have people writing in about their experiences, and that's sort of how we grew. We need to talk about power, but really looking at structures and not people, and move the conversation from there."

#SOCIAL MEDIA, LIKE ALL TECHNOLOGY, IS NOT A NEUTRAL TOOL BUT CAN EMBODY PARTICULAR FORMS OF POWER AND AUTHORITY.

Malala on activism that lasts
Education activist Malala Yousafzai acknowledges social media's powerful role in activism, highlighting its ability to raise awareness and build connections. But she stresses that genuine change requires committed offline efforts, urging activists to translate digital advocacy into real-world actions and meaningful policy outcomes.
Photo: Alamy / ZUMA Press Inc

THE POLITICAL

Despite the increasing number of content creators, advocates, and community organisers displaying their authentic selves on social media, we still see an alarming rise in misinformation across all platforms.

Part of this is due to the democratisation of media, making it cheaper and much more straightforward to spread misinformation on the internet. Misinformation and disinformation travel much faster and farther than the truth. Studies show that before people can muster the resources to debunk false information, significant damage can already have been done by the rapid spread of falsehoods.

A study of rumour cascades[8] on Twitter (now X) between 2006 and 2017 found that the top 1% of rumours reach between 1,000 and 100,000 people, whereas posts debunking these rumours rarely spread to more than 1,000. One can only imagine how quickly misinformation can spread today, given how X's owner, Elon Musk, has continually spread deceptive material on his platform[4] while dismantling efforts to moderate content on X.

Other platforms are not immune — TikTok,[9] Instagram[10] and Facebook[11] all face similar challenges, despite genuine efforts to fact-check.

The extent of polarisation we observe today has been made possible by technology, according to Shobha Avadhani, a senior lecturer at the Department of Communications and New Media at the National University of Singapore. She believes digital capitalism and the drive for clicks have led to increasingly provocative content, resulting in a fracturing of our online public sphere.

Disinformation exploits our emotions to persuade us to share and spread it, and in the absence of credible curation and editorial oversight, we end up relying on our emotions to drive our decisions. "There is a wider awareness of context needed before you can

determine whether something can actually be taken seriously, and also to consider the message itself rather than the feeling it evokes in you," Avadhani added.

We need to consider why things we see on social media affect us so deeply. And as marginalised communities seek recognition and rights, how we manage social cohesion and build a more equitable future will become increasingly important. This is where Diogenes' idea of cosmopolitanism — that we are all citizens of the world — could serve as a solution to our divided society. Meeting people from diverse groups in public spaces will help create this cohesion.

Our digital world is not designed to encourage this kind of cosmopolitanism, as researcher Alex Lambert and political theorist Langdon Winner posit. Social media often reinforces intimate "filter bubbles" rather than facilitating encounters with difference, argues Lambert, and these "filter bubbles" can lead to exclusion and xenophobia, ultimately dividing society.

To achieve a cosmopolitan intimacy that includes elements of the 'strange' and of societies that remain open to difference, these "filter bubbles"— echo chambers, closed circles, and intimate spheres — must be approached differently. We need to be open to others outside our circle, not just in one-off encounters, but through ongoing, sustained interactions, actively welcoming difference.

And, to build this cosmopolitan intimacy, we must examine the power structures embedded in today's digital technology, which has irreversibly shaped how we live our lives.

Langdon Winner's influential essay[12] argues that how we configure technology has lasting social consequences — social media, like all technology, is not a neutral tool but can embody particular forms of power and authority that shape human relationships and the world long after their design and implementation. Winner posits, "The issues that divide or unite people in society are settled not only in the institutions and practices of politics proper, but in tangible arrangements of steel and concrete, wires and transistors, nuts and bolts."

BUILDING BRIDGES

What, then, can we make of today's arrangements of algorithms and code, pixels and glyphs, chips and solder?

Social media has allowed some people to rewrite our futures, says Avadhani. "They have been able to fight back against powerful systems, have been able to organise, mobilise, and have been able to find their people."

Thirteen years after I became a junior writer at *The Online Citizen,* I am now working to build digital communities — and contributing to a cosmopolitan ideal, a society that embraces difference.

For Gunawardana, social media has enabled her to amplify her voice and share her lived experiences. Even as her health forces her to step back, Gunawardana finds joy in the fact that she has connected with people through social media and helped advance conversations about colourism, media representation, diversity, and accessibility in Sri Lanka and across the world. To this day, she still notices people discovering her videos — some six or seven years old — and commenting on them, sharing their own experiences with discrimination. "We have a way of leaving a footprint that doesn't need to stop," she says. "And for me, that's where the power lies." She believes that it's the little conversations that help push the needle on issues like colourism. "I think that's the beauty of it. You just need two or three people to connect, and maybe you do change something."

#DIALOGUE IS KEY TO STEMMING THE TIDE OF POLARISATION, STOPPING RADICALISATION, AND BRIDGING DIVIDES.

"I am not a leader. But I think of myself as a catalyst. As a journalist and communicator, I am a voice for the underserved. I am a platform for the leaders who seek to serve the communities I hold dear. I build bridges for society to come together. **I tell the stories that matter.**" – Ellis Ng, *ellis' island*

Photos: Ellis Ng, Hillary Tan

Dialogue is key to stemming the tide of polarisation, stopping radicalisation, and bridging divides. We should see each other as people, not as political opponents, anonymous usernames, or bylines.

The work — to build bridges, to seek dialogue — continues, both in the digital space and in person. I still have that inherent belief in stories, a lesson I learnt from my mentor when I was 18. I believe that a good story will triumph.

And as long as we tell good stories, we will, too. ∞

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Stephanie advocates for queer communities in the region as the Head of Southeast Asia for Open for Business, building the economic case for LGBTQ+ inclusion. Based in Asia as a consultant for Radius Networks, she supports employee resource groups across Asia and globally. Raised in the Philippines and now residing in Thailand, Stephanie is a proud Asian pansexual neurodivergent woman.

STEPHANIE GALERA

From Presence to Performance

Rethinking HR in the Always-On Workplace

Digital connectivity has fundamentally reshaped workplace expectations, contributed to widespread employee burnout, and challenged traditional human resources practices. Born in the early 1980s, I have witnessed technology's evolution from dial-up internet speeds of 28–56 kilobits per second to today's gigabit connections — a transformation that represents not merely technical progress but a fundamental shift in how we work, communicate, and manage professional boundaries.

While the COVID-19 pandemic accelerated technological adoption and demonstrated the viability of remote work, it also intensified an "always-on"- culture that blurs the distinction between professional and personal time. This technological revolution, though enabling unprecedented efficiency and global connectivity, has introduced new challenges for employee well-being and organisational management.

This article examines three critical dimensions of this transformation: how digital culture has reshaped workplace expectations, the mechanisms by which constant connectivity contributes to burnout and disengagement, and the implications for HR practices and workplace policies in addressing these emerging challenges.

> While the COVID-19 pandemic accelerated technological adoption and demonstrated the viability of remote work, it also intensified an "always-on" culture that blurs the distinction between professional and personal time.

HOW DIGITAL CULTURE RESHAPED EXPECTATIONS

The proliferation of social media platforms and instant communication tools has fundamentally altered professional expectations by creating curated images of success that bear little resemblance to the realities of the workplace. Originally designed to connect like-minded individuals and maintain relationships, these platforms have inadvertently established unrealistic benchmarks for professional achievement and work-life integration.

Social media's emphasis on showcasing idealised versions of ourselves — highlighting achievements, travels, and insights while concealing struggles and setbacks — has conditioned employees to expect similarly polished professional experiences. This phenomenon creates what researchers term "compare and despair" cycles,[1] where individuals measure their behind-the-scenes reality against others' highlight reels.

The psychological impact extends beyond individual self-perception. Employees increasingly expect their workplaces to provide the same seamless, immediately rewarding experiences they encounter on social media. When organisations fail to meet these digitally influenced expectations, it contributes to reduced motivation and engagement.

In recruitment and talent acquisition, this digital expectation inflation makes transparent communication more critical than ever. Candidates often arrive with preconceived notions shaped by online employer reviews, social media presence, and digitally mediated brand experiences. Organisations must proactively address the gap between digital perception and workplace reality during the hiring process.

> Asian workplace cultures, where declining requests or setting boundaries conflict with cultural norms around dedication and hierarchy, face particular challenges.

THE ROLE OF DIGITAL CONNECTIVITY IN BURNOUT AND DISENGAGEMENT

Remote work, initially championed for flexibility and better work-life balance, has inadvertently contributed to mental health deterioration by blurring natural work boundaries. The traditional 9-to-5 office routine, while rigid, provided a clear demarcation between work and personal life — a boundary that remote work and constant connectivity have gradually eroded.

Research demonstrates that social media platforms and constant information access are designed to be addictive,[2] creating dopamine-driven feedback loops that encourage compulsive engagement behaviours. This exact mechanism that drives social media addiction now permeates professional communication, making it increasingly difficult for employees to disconnect from work-related stimuli.

The absence of physical departure from the workplace — once a natural signal to transition into personal time — has removed what researchers call "recovery periods," which are essential for maintaining productivity and psychological wellbeing.[3] Studies consistently show that meaningful breaks are necessary for sustained performance,[4] yet the always-available nature of modern work tools has made such recovery increasingly rare.

Asian workplace cultures, where declining requests or setting boundaries conflict with cultural norms around dedication and hierarchy, face particular challenges. Countries like Japan and South Korea have implemented legal frameworks that limit overtime. Japan caps overtime at 45 hours per month,[5] while South Korea limits it to 12 hours per week[6] (48 hours per month for 4 weeks), recognising that regulatory intervention may be necessary where cultural norms fail to protect employee well-being.

The physiological and psychological toll of constant connectivity manifests in decreased focus, increased anxiety, and what organisational psychologists term "continuous partial attention" — a state where individuals never fully engage with any single task or environment.[7]

IMPLICATIONS FOR HR AND WORKPLACE POLICIES

Human resources departments must fundamentally reconceptualise their role in addressing technology-driven workplace challenges throughout the entire employee lifecycle.

Recruitment and Talent Acquisition

Transparent expectation-setting becomes crucial when digital platforms create inflated perceptions of organisational culture. HR practitioners must move beyond highlighting only positive aspects of their organisations, instead acknowledging challenges while articulating how the company addresses them. This approach builds trust and attracts candidates whose expectations align with organisational realities.

Performance-based evaluation should prioritise tangible outcomes over social media presence or online visibility. Broadening recruitment beyond digital channels — especially into communities less immersed in social media — can help tap into talent pools with different, and often healthier, relationships to constant connectivity.

> Instead of demanding physical presence, organisations should focus on creating compelling reasons for employees to choose in-person collaboration.

Policy Development and Benefits Structure

Organisations must implement formal digital boundary policies rather than leaving disconnection to individual discretion. While employees can access work communications through personal devices, providing clear guidelines on response expectations outside of work hours helps create the structure many individuals find difficult to establish on their own.

Comprehensive support systems, including employee assistance programmes, formal mentoring communities, and resilience training, must address the specific stressors associated with digital work environments. These programmes should promote awareness of early signs of burnout and encourage individuals to seek help without stigma.

Return-to-office strategies require a fundamental rethink. Instead of demanding physical presence, organisations should focus on creating compelling reasons for employees to choose in-person collaboration. This could include improved training opportunities, transport benefits, or workspace amenities that provide value not available in remote settings.

Rewarding efficiency and impact rather than hours logged or meeting attendance helps dismantle the perception that longer work hours indicate greater dedication or value.

Performance Management and Recognition

Performance evaluation systems should prioritise outcome measurement over time-based metrics or visibility indicators. Rewarding efficiency and impact rather than hours logged or meeting attendance helps dismantle the perception that longer work hours indicate greater dedication or value.

Recognition programmes should explicitly recognise employees who demonstrate healthy boundary-setting behaviours, modelling sustainable work practices for their colleagues. This cultural shift requires leadership commitment to avoid communications during off-hours and respect established personal time.

Clear, realistic performance standards should emphasise continuous improvement rather than perfection. Just as social media's emphasis on perfect ratings or universal approval creates unsustainable pressure, workplace performance systems that suggest flawless execution is achievable or expected contribute to employee stress and risk-aversion.

CONCLUSION

Creating healthier digital workplaces requires HR professionals to align organisational policies with the realities of contemporary digital life — redefining professional expectations, promoting mindful technology usage, and cultivating organisational cultures that prioritise sustainable work practices over constant availability.

Success in today's work environment requires navigating technological trends rather than resisting them, and embracing the efficiency of digital tools while implementing guardrails that protect employees' wellbeing.

The challenge extends beyond changing individual behaviour to include systemic organisational change. As new generations enter the workforce with different relationships to technology and varied expectations for work-life balance, HR practices must continuously adapt to emerging challenges while preserving the productivity benefits that digital connectivity provides.

Success in today's work environment requires navigating technological trends rather than resisting them, and embracing the efficiency of digital tools while implementing guardrails that protect employees' wellbeing. Organisations that master this balance will attract and retain talent, ensuring sustainable performance that benefits all stakeholders.

The future workplace will be defined not by the sophistication of its technology, but by the wisdom with which that technology is deployed to enhance, rather than diminish, human potential. ∞

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PROF TANG MUI JOO & CHAN EANG TENG

Clickbait *or* consumer guide?

How Influencers Drive Our Purchases

Consumers' purchasing behaviour varies depending on factors such as psychological state, socioeconomic conditions, cultural influences, and personal reasons. In the not-so-distant past, celebrity endorsements were the golden ticket to brand success. A famous face on a billboard or a 30-second TV advert could send sales soaring. Today, the landscape has shifted, as endorsers are no longer movie stars or pop icons, but social media influencers, or SMIs for short. Armed with smartphones and loyal followers, these digital trendsetters are reshaping how consumers, particularly younger ones, decide what to buy, wear, eat, and even believe.

THE RISE OF THE EVERYDAY INFLUENCER

Unlike traditional celebrities, social media influencers often begin as ordinary individuals who carve out a niche online, whether it is makeup tutorials, gaming streams, food reviews, or travel vlogs. This content is shared in various formats: blogs, vlogs, photos, videos (now commonly known as reels), TikToks, YouTube Shorts, and Spotlights, which are short-form videos or video clips. What makes them distinct is their ability to build trust and authenticity with their audience. In Malaysia, where 91.7% of the population were social media users as of 2022,[1] influencers are increasingly impacting how people shop and spend.

According to a study by researchers at Tunku Abdul Rahman University of Management and Technology (TAR UMT), a significant number of Malaysian youths (ages 18 to 24) actively follow at least three influencers and pay attention to their brand endorsements.[2] These followers do not just passively watch content; many base their purchasing decisions on what their favourite influencers recommend.
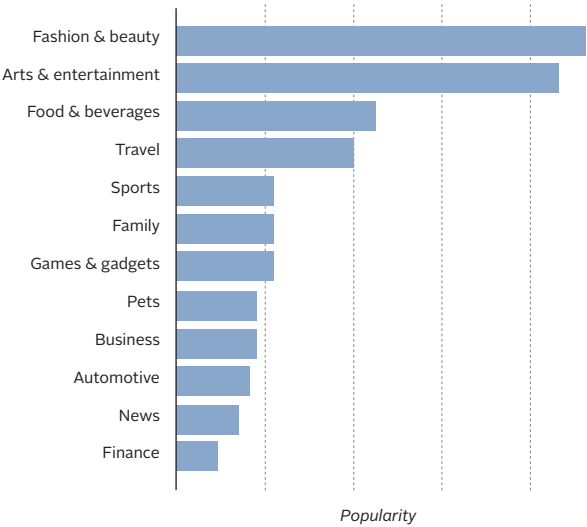
WHY WE TRUST THEM

So, what makes an influencer... influential?

It turns out it's less about their follower count and more about how trustworthy, credible, and knowledgeable they appear.[3] These three traits form the backbone of what makes an influencer persuasive.[4] If a food vlogger is constantly reviewing the latest cafés and restaurants and offers honest opinions, their audience is more likely to trust their judgment. Similarly, a fitness coach who regularly shares practical workout tips gains authority over time.

"Credibility is key." Consumers want to know they are getting honest, unbiased opinions and not just paid promotions. In fact, the moment an influencer appears inauthentic or overly commercial, they risk losing their persuasive power. Credibility serves as a way to endorse specific messages to followers, who perceive them as genuine, impartial, and

Most popular influencer content in Malaysia

Fashion & beauty
Arts & entertainment
Food & beverages
Travel
Sports
Family
Games & gadgets
Pets
Business
Automotive
News
Finance

Popularity

Malaysia's hottest niches

In Malaysia, fashion and beauty dominate the influencer sphere, followed closely by food, travel, and gaming content. These visually-driven niches resonate deeply with Malaysian audiences, offering brands a vibrant avenue to connect authentically through lifestyle and entertainment-focused creators.

Source: Anymind Group (2022)

Today, the landscape has shifted, as endorsers are no longer movie stars or pop icons, but social media influencers, or SMIs for short.

> The moment an influencer appears inauthentic or overly commercial, they risk losing their persuasive power.

factual.[5] Their relationship is developed through interaction on social media platforms such as likes, comments, and shares.

Nevertheless, the number of followers an influencer has still plays a role, mainly as a shortcut for perceived trustworthiness. A large following suggests social proof. If 100,000 people are listening to someone, the logic goes, they must be saying something worth hearing.
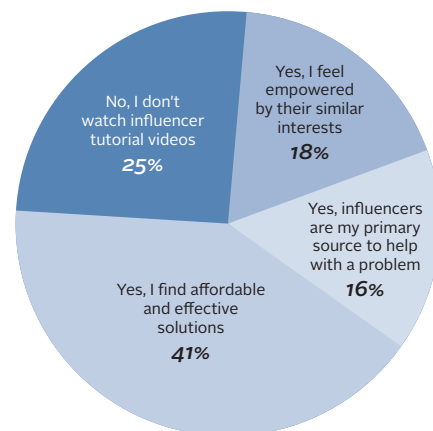
THE ACT OF INFLUENCING

One of the most effective strategies used by influencers is the age-old concept of word of mouth, now supercharged by the internet. Known as Electronic Word of Mouth (EWOM), this approach involves sharing experiences with products in a way that resembles a recommendation from a friend.[6] That is exactly how many followers see their favourite influencers: not as distant celebrities, but as relatable peers whose advice can be trusted because they are "near" and "similar" to us.

According to the TAR UMT study, 88% of respondents relied on product reviews, and 71% considered product ratings before making a purchase.[2] Nearly all of them also valued recommendations from friends and family. Influencers, in many cases, now occupy the same mental space as those trusted inner circles.

Communication theorists describe a scenario where the public is influenced by opinion leaders online as the "two-step flow," which explains how influence works in today's media landscape.[7] Instead of receiving information directly from brands or news outlets, consumers often get it from "opinion leaders" (today's influencers), who interpret and filter it before passing it on to their followers, much like a teenage girl's view on a fashion product based on the leader's opinion. Whether from new or traditional media, information may not always reach the general public; an influencer

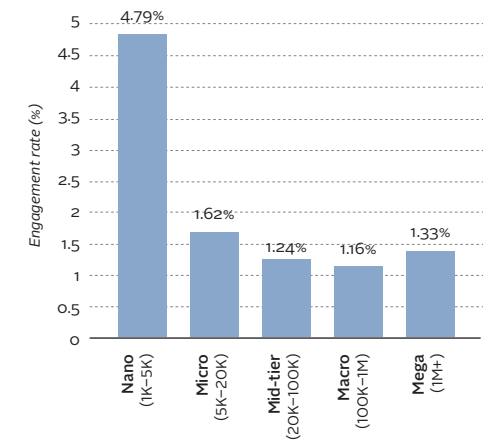*Do you watch influencers' tutorials for solutions?*

- No, I don't watch influencer tutorial videos **25%**
- Yes, I feel empowered by their similar interests **18%**
- Yes, influencers are my primary source to help with a problem **16%**
- Yes, I find affordable and effective solutions **41%**

as an opinion leader might interpret and decipher the media content before presenting it to their audience. Think of an influencer as a trend curator — a friend who has done the research for you and is offering a shortcut to a smarter purchase.

STRATEGIES BEHIND-THE-SCENE

But what exactly are influencers doing on social media that makes us click "add to cart"?

According to the study, certain types of posts are more effective than others. The most persuasive strategy? Short videos or "reels" where influencers share their experiences with a product that over 60% of respondents cited as a reason to consider buying.[2] Close behind are livestreams where influencers test products live, allowing followers to ask questions and observe real-time reactions. These online interactions are boosted when followers turn on notifications for influencers' posts, allowing them to stay up-to-date with the latest content.

Average Instagram engagement rate by influencer tiers in Malaysia

Tier	Engagement rate
Nano (1K–5K)	4.79%
Micro (5K–20K)	1.62%
Mid-tier (20K–100K)	1.24%
Macro (100K–1M)	1.16%
Mega (1M+)	1.33%

Influencer tier and the number of followers

> Think of an influencer as a trend curator — a friend who has done the research for you and is offering a shortcut to a smarter purchase.

Endorsements where influencers identify themselves as experts, like a "travel vlogger" or "makeup guru," also carry influence, especially when those identities closely align with the product being promoted. Giveaways and branded hashtags are less effective, but they still form part of the broader engagement strategy. In essence, it's not just what influencers say, but how they say it and how consistently they stay true to their personal brand.

Despite the sway of influencers, the study found that personal networks still matter. Recommendations from friends and family remain a major factor in purchasing decisions. As influencers engage with followers on platforms, they increasingly appear like someone we know.

The study also reveals that audiences are discerning; they follow, observe, and assess before they buy. Many consumers will only act on influencer advice if the content feels sincere and grounded in real-life experience.

A MARKETING REVOLUTION

From a business perspective, influencer marketing has become an essential part of modern branding.[8] Instead of spending on costly traditional advertising, brands now partner with influencers who can directly connect with niche audiences: beauty enthusiasts, fitness buffs, tech geeks, or environmentally-conscious shoppers. Being swift, affordable, and targeted, influencer marketing is a popular method for influencing consumers' purchasing decisions.

In fact, the influencer economy is booming globally, with businesses projected to spend over USD 20 billion on influencer marketing by 2025.[9] In Malaysia, where internet and social media penetration are high, the trend is already well established.

Malaysian influencer marketing ad spending (2017–2030)
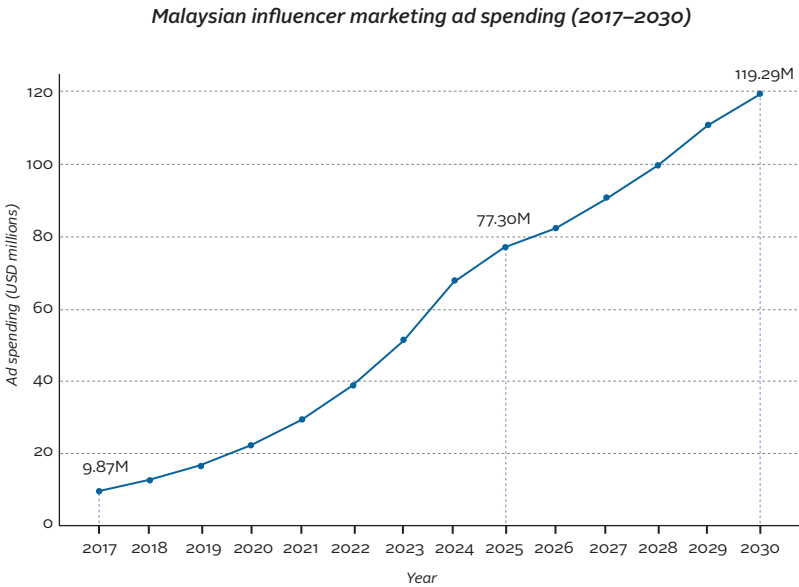
Influencer marketing surges in Malaysia

Malaysian brands are projected to spend USD 77.3 million on influencer marketing in 2025, marking nearly a 14% increase from the previous year. With an annual growth rate of approximately 10%, the market is expected to expand significantly, reaching USD 119.29 million by 2030. This rapid growth highlights influencer marketing's rising prominence in brand strategies and consumer engagement.

Source: INSG.CO (2025)

> The power of influencers lies in their ability to blend entertainment with persuasion, storytelling with sales.

FROM A CONSUMER, TO A CONSUMER

If you have ever bought a skincare product after watching a review or tried a new café because your favourite influencer raved about it, you are already part of this digital shift. The power of influencers lies in their ability to blend entertainment with persuasion, storytelling with sales.

For consumers, it is crucial to stay vigilant and informed. Just because an influencer is relatable does not mean they are always right. Sponsored content should be viewed with a critical eye, and it is definitely worth cross-checking reviews, reading labels, and consulting with real-life friends before making a purchase.

That said, SMIs are here to stay. As marketing strategies have moved online, they have transformed the advertising landscape and, for better or worse, changed how we discover, evaluate, and decide what to buy. As long as we continue to like, share, and follow, our shopping habits will keep scrolling right along with us. ∞

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THE WRONG ART

WAY TO LOOK AT

TO LOOK AT
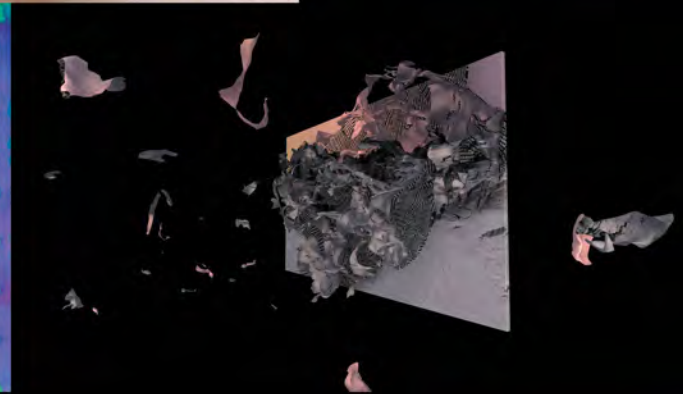
And Why It Might Be Right

STELLA LAI

Clayton Campbell

Paulo Aquarone

SÓL ID

Claudia Brăileanu

Maxwell Dewunmi

The Wrong Biennale is not a traditional art event. There are no museums, no galleries, and no opening night.

Instead, it lives entirely online.

It began in 2013 as a simple idea: What if anyone could create a digital art exhibition on the internet? No curators selecting who's in and who's out. No need for physical space, budgets, or permissions. Just creativity, access, and connection.

Today, The Wrong Biennale is one of the largest digital art events in the world, with thousands of artists and dozens of online exhibitions called "pavilions," created by independent curators around the globe. These pavilions are websites, digital environments, or interactive spaces filled with images, videos, texts, and experiments. Some are simple. Some are strange. Many are fun. All are part of a growing global art movement.

You have entered a portal.

Lucio Arese
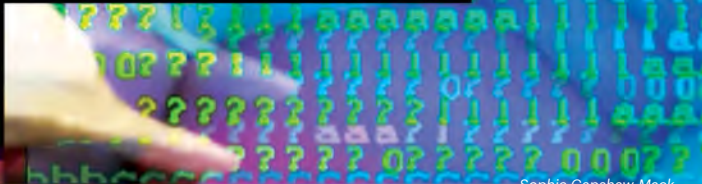
Sophie Capshaw-Mack

In 2013, Spanish new-media artist David Quiles Guilló set out to challenge the stereotyped and outdated ways of exhibiting art, especially in light of the rise of digital culture. He launched The Wrong Biennale with a clear mission: to break free from traditional gallery gatekeeping and make digital art accessible to a global audience.

The Wrong Biennale takes place every two years and is built around an open call. Artists and curators submit proposals to host or take part in independent exhibition spaces known as pavilions. These pavilions exist entirely online, most commonly as websites, though some unfold as social media threads, interactive platforms, or experimental web-based environments.

Mehryl Ferri Levisse

Iza Koczanowska

Each pavilion is self-directed. Curators and artists define their own themes, select the works, and determine the format of presentation. Artworks may include videos, animations, sound pieces, AI-generated imagery, short texts, or interactive digital tools. The variety of formats reflects the diversity of artistic approaches and intentions.

There is no fixed route or required entry point. Visitors navigate the Biennale through a central website, where active pavilions are listed. From there, they are free to click, scroll, follow links, or even drift into unexpected corners of the internet. In this way, The Wrong mimics the web itself: decentralised, fragmented, and full of accidental discoveries.

The event is defined by its openness, inclusivity, and experimental spirit. There are no physical venues, no central selection committees, and no overarching curatorial theme. Instead, improvisation, technical failure, and creative detours are welcomed. "Freedom in chaos," as Quiles Guilló once described it.

Aertime

Anne Horel

Mark Klink

Since its inception, The Wrong Biennale has featured over 10,405 artists, working with 843 curators, across 619 online pavilions, making it arguably the largest digital art biennale today. Participants include established names in digital art as well as students, independent creators, and hobbyists exploring the possibilities of online media. Each is given equal space to present their work.

Because of its open and decentralised model, The Wrong often anticipates emerging digital practices before they enter the mainstream. Early editions featured net art (art created specifically for and experienced through the internet), glitch aesthetics (visual styles that embrace digital errors and distortions), and GIF-based works. More recently, the focus has shifted toward AI-generated content, browser-based games, interactive storytelling, and collaborative digital platforms.

The upcoming 7th edition of The Wrong Biennale, scheduled to run from 1 November 2025 to 31 March 2026, reflects this ongoing evolution. It centres on the creative potential of AI in visual, sonic, textual, and audiovisual art, inviting artists to explore generative tools in new and personal ways. Importantly, this edition places emphasis not just on outcomes but on process. Artists are encouraged to document how their works are made — through prompts, sketches, iterations, and decision-making steps — revealing how human creativity interacts with machine systems. The result aims to open a conversation about agency, collaboration, and authorship in a hybrid creative future.

Daniel Jerome

Dilara Baskoylu

Kate Durbin

Pieter Jossa

Michael Borras a.k.a. Systaime

CapitArt

Get a sneak
peek into
**The Wrong
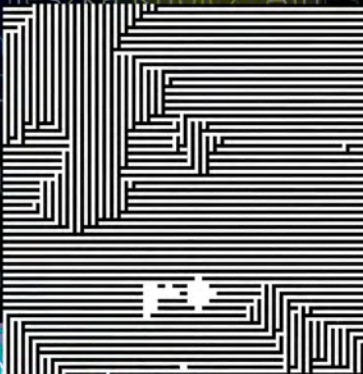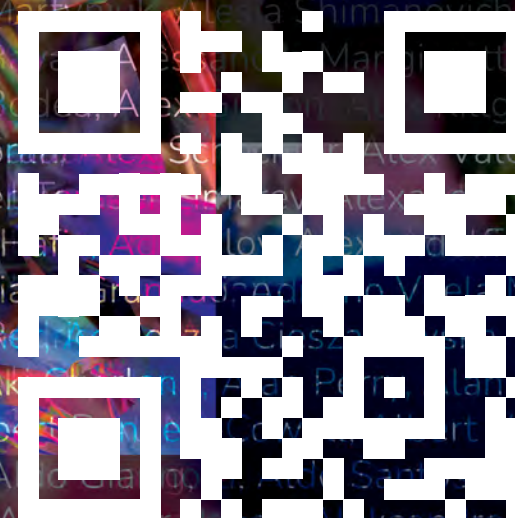Biennale**
before it goes
live again in Nov

As the artist Nam June Paik foresaw decades ago, the artist of the future would not merely produce static objects, but rather flows of information shaped by technology as the new sculptural materials. The Wrong Biennale doesn't present finished works to be contemplated in silence; it offers entry points into dynamic, unpredictable environments. It reflects how digital spectatorship works today — fragmented, fast, and networked — but it also shapes it by asking us to pay attention differently.

Digital artwork is, ultimately, not a product but a pathway. It is an informational structure designed to lead to an experience, or rather, to the aesthetic conditions in which experience can occur. In this way, The Wrong is not simply an escape from the mainstream frameworks of contemporary art — biennials, museums, institutions — but a reformatting of them. It mirrors the strategies of informational routing used in those settings, yet transforms them into something more open, unstable, and unfinished.

Like every rupture in art history, The Wrong unsettles older definitions. But that, too, is art's role: not only to reflect culture, but to question it. And In doing so, it helps us understand why, sometimes, looking at art the wrong way might just be right.

STELLA LAI is a designer drawn to misfits, detours, and new ways of seeing.

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Stefan Saalfeld

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