

Rethink unhealthy culture of frequent smartphone upgrades

Technology companies have not been glowing bastions of sustainability, particularly those in the smartphone industry.



Lim Sun Sun

It's been 50 years since the very first mobile phone call on April 3, 1973. On that momentous day, Motorola engineer Martin Cooper rang his rival, Dr Joel Engel of Bell Laboratories at AT&T, from a street in New York to declare that his Motorola team had devised a functional portable phone.

Since then, the mobile phone has become ubiquitous. The number of smartphone mobile network subscriptions worldwide reached almost 6.4 billion in 2022, or almost one for every man, woman and child on the planet, according to Statista.

Technology companies have not exactly been glowing bastions of sustainability. The smartphone industry in particular – driven by fierce competition and tight profit margins – has been running on the model of planned obsolescence.

Apple has just launched the iPhone 15, reminding us how since the advent of the mobile phone, new models with slightly improved features have flooded the market every year to entice consumers to replace their devices. Manufacturers make it difficult to repair or upgrade phones, forcing consumers into a never-ending cycle of purchasing new models. This relentless pursuit of the latest gadgets has

driven consumers to discard perfectly functional phones, contributing to mountains of electronic waste.

According to the Global E-waste Monitor 2020, the world generated approximately 53.6 million metric tonnes of electronic waste in 2019, with this number projected to increase in the years ahead. Mobile phones made up a significant portion of this waste, with each containing hazardous materials such as lead, mercury and cadmium that can seep into the soil and water if not disposed of properly.

Besides generating waste, the extraction of raw materials necessary for smartphone production, like rare earth metals, has led to habitat destruction and negative impacts on biodiversity. The carbon footprint of manufacturing and shipping these devices is also substantial, contributing to climate change.

A SHIFTING ZEITGEIST

Consumers have not been oblivious to the realisation that their purchase decisions can contribute to environmental havoc. Research by market intelligence company Mintel found that Gen Z consumers expect brands to improve their eco-credentials, with 34 per cent agreeing that brands should be boycotted if they do not act on social and environmental issues.

A report by McKinsey tracking the growth of the Asian consumer market found that the region's consumers are becoming more affluent and purchasing more online, but also have a rising awareness of sustainability.



The relentless pursuit of the latest gadgets has driven consumers to discard perfectly functional phones, contributing to mountains of electronic waste, says the writer. The world generated approximately 53.6 million metric tonnes of electronic waste in 2019. PHOTO: BLOOMBERG

Regulations worldwide have kept up with this shifting zeitgeist. The European Parliament passed a resolution in 2017 that called for increased durability and reparability of electronic devices. In June 2022, the European Commission also mandated that digital device manufacturers must equip their devices with a standard USB-C charging port by 2024 to avoid unnecessary waste and duplication.

At home, Singapore passed the Resource Sustainability Act in 2019 with its Extended Producer Responsibility approach that requires technology product manufacturers to collect and treat the e-waste their products generate at end-of-life.

Such regulations have shifted the onus for environmental sustainability towards tech companies, upping the ante for greater innovation in product design in manufacturing.

LET PEOPLE KEEP THEIR DEVICES FOR LONGER

Are shifting norms and new regulations moving the needle to jettison our throwaway culture? Perhaps. For one thing, companies seem to be transitioning towards design for durability, with industry leaders such as Apple and Samsung pledging to prioritise durability in their product innovation. Apple has committed to a goal of resource circularity, using only recycled and renewable materials over time.

Nevertheless, beyond these longer-term goals, there is more that tech companies can do. Besides building digital devices to

withstand greater wear and tear, they should adopt modular designs that come with easily replaceable parts that allow users to upgrade individual components, such as cameras or batteries.

Dutch company Fairphone has proven that such a manufacturing model is not only possible, but also viable. It produces an extensive range of spare parts that can be easily replaced by consumers themselves, making maintenance and repairs simple and cost-effective.

Indeed, manufacturers should make it easier for consumers to repair their devices, and legislation can play a critical role in mandating reparability standards.

Digital device makers must also commit to providing software updates and security patches for an extended period, to reduce the rate of device replacement. Many users upgrade their phones solely because of software obsolescence and lack of backend support for old software, even when the hardware remains functional.

At the end of a product life cycle, manufacturers should also take responsibility for recycling their products, and their consumers should be educated on the importance of recycling electronics. In Singapore, electronic waste bins are already conveniently located throughout the island, facilitating responsible disposal.

UNHEALTHY CONSUMER CULTURE

Consumers, however, are at the heart of an unhealthy culture of frequent device upgrades. We need to shift our mindset away

from the constant need for the latest gadget, and instead embrace a more conscious and responsible approach to technology consumption.

Consumers should prioritise durability and longevity when choosing a device, and select brands that demonstrate responsibility for environmental sustainability. We should also invest in protective cases and screen protectors to extend the lifespan of our phones by minimising damage from drops and accidents.

And instead of caving in to the urge to buy a shiny new gadget, we ought to explore options for our device's reparability and seek out repair services if needed.

Support initiatives such as Sustainable Living Lab's Repair Kopitiam, which advocates sustainable electronics and provides classes for device repairs.

If you must upgrade, consider repurposing or recycling your old phone instead of discarding it or stowing it away. Organisations like Bridge the Digital Divide and Transient Workers Count Too are working together to accept old phones for refurbishment and subsequent donation to migrant workers.

MOTHER EARTH CALLED

A recent Apple advertisement features Apple chief executive Tim Cook and his team on tenterhooks as they await the arrival of Mother Nature, in the flesh. When she appears, portrayed by Oscar-winning actress Octavia Spencer, she is disdainful and dripping with scorn.

"In 2020, you promised to bring Apple's entire carbon footprint to zero by 2030," Mother Nature says. "This is my third corporate responsibility gig today. So, who wants to disappoint me first?"

The ad highlights the importance of the tech industry making concrete steps towards environmental sustainability, but has also been labelled an exercise in greenwashing.

The need for more durable and sustainable digital devices is not merely a public relations exercise; it is a real and urgent imperative. As we grapple with the environmental challenges of our time, it is incumbent upon all of us to rethink our relationship with technology and demand more from the industry that feeds our digital urges.

Manufacturers must prioritise durability, reparability and environmental responsibility in their product development. Governments and international bodies must enact policies that penalise environmental damage and incentivise sustainable practices. Consumers can push for change through their purchasing decisions.

By collectively embracing a future where digital devices are built to last and designed with the environment in mind, we can mitigate the devastating effects of over-consumption and set a course towards a more sustainable digital future for all. Mother Nature deserves nothing less.

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