

# Conclusion

People are still overwhelmingly positive about the impact mobile connectivity has on their lives. The findings from this year's study point to the great potential this holds at an individual level, for businesses and for society at large.

Last year's study had a clear imprint from the pandemic, largely in the changed behaviours it pointed to. This year, the findings indicate how these changed behaviours and digital resilience are being built upon, and daily habits are being recalibrated.

So, how do this year's findings add up to a better digital life? People are using mobile technology to live better digital lives by learning new skills, improving relationships, creating new economic opportunities and living more sustainably. They are also taking steps to safeguard themselves, and vulnerable family members from online risks and harms.



**People are using their phones to live better digital lives by learning new skills, improving relationships, creating new economic opportunities, and living more sustainably.**



People's appetite to remain connected shows no sign of slowing down, and this year, a clearer picture emerges of the great opportunity this holds. To unlock the full potential of mobile, Telenor Asia has identified the following three areas for attention: first, promoting investment in connectivity networks; second, encouraging take-up of new technologies, and finally, a strong and continuous emphasis on digital skills.

## 1) Promoting investment in connectivity networks

As mobile becomes increasingly central to people's lives, continuous upgrading of networks is key to enabling next-generation digital life, work and business. Additionally, further investment in networks will be necessary to make them more secure and green. Governments should therefore prioritise investment in networks as a key policy outcome alongside traditional metrics such as competitive prices. Regulators should have a 'growth mandate' to promote industry growth alongside duty of care to consumers and the environment.

For example, spectrum management policies can be tuned towards encouraging network investment by lowering spectrum prices and introducing flexible payment schemes for spectrum fees. Furthermore, rationalising taxation policies, introducing measures that support cost-effective infrastructure deployment as well as fair and efficient use of universal service funds will drive greater internet adoption and boost the industry's capacity to reinvest into the sector. Ultimately, network investment will drive consumer and environmental outcomes but will require a reorientation of regulatory philosophy and approach.

## 2) Encourage take up of new technologies to advance digital societies

Our collective digital future will be shaped by emerging technologies, including 5G, AI and IoT, that will transform lives, modernise industries, and alter the course of

the global economy. It is imperative for policy makers, ecosystem players and other stakeholders to adopt and encourage adoption of these technologies in a safe, responsible and sustainable manner.

On 5G adoption, the lack of a 5G-capable device and not needing faster internet speeds are among the top reasons cited in our survey for not taking up 5G. This points to a priority for policy interventions to address 5G-device accessibility as well as relevant skills and locally relevant digital content and services to move the needle in 5G adoption. Improving the willingness to adopt 5G will in turn improve investment incentives of the industry to invest in 5G networks.

Rapid take up of generative AI such as ChatGPT has increased the impetus to update or introduce new policies and frameworks that ensure ethical, trustworthy and fair AI. Policy design for fast-evolving technology domains such as AI necessitates active collaboration among stakeholders, including policymakers, regulators, academia, and the private sector – to ensure accountable and equitable deployment, not just from a moral perspective but also as a business imperative. Where open data sets for AI and other emerging technologies are used, governments should consider a risk-based approach to ensure trustworthy use, protecting the data from both intentional tampering and unintentional inaccuracies while mitigating bias, data privacy and cybersecurity threats.

At the same time, Governments should ensure that policies and frameworks are pro-innovation. This calls for a 'Regulation 4.0' approach that promotes timely review and update of legacy frameworks in view of encouraging innovation; utilizing more flexible, light-touch co-regulatory approaches for new frameworks and allow regulatory sandboxes for experimentation.



### **3) A strong and continuous emphasis on digital skills**

A critical component of an inclusive digital nation is ensuring that no individual, community, or business is left behind, maximising digitalisation's social and economic benefits. Enhancing digital skills among citizens is an important step of narrowing the usage gap by making everyone comfortable with a digital-first approach, enabling them to participate as creators and consumers of digital content. Failing to address this will result in many not being equipped to deal with the risks that come with technological advances, such as privacy concerns, security, fraud and misinformation.

The survey results highlight online bullying, phishing and data theft as key areas where digital skills need to be inculcated and developed. There is an urgent need for a holistic approach, including embedding ICT training in national curricula, developing programs (in consultation with the private sector) for lifelong training in advanced technical skills, encouraging adoption of new technologies by businesses of all kinds and developing policies that accelerate digital entrepreneurship. Telecom and technology companies with direct touch points with customers can supplement with online safety content in a range of different formats, including short form via social media, interactive forms via online games, and together with Governments and civil society in physical and virtual classrooms.

Overall, safeguarding users and our digital space is a joint responsibility and requires a multi-stakeholder approach. We, as individuals have a key responsibility to continuously up-skill and be aware and wary of new threats. Parents need to impart age-appropriate digital skills and hygiene to their children and we as a society need to help our seniors and less digital literate use the internet safely. Government and private sector can develop software, tools and protocols to supplement as well as address ecosystem-wide risks. A continuous emphasis and approach are necessary to keep up with a fast-evolving threat landscape.



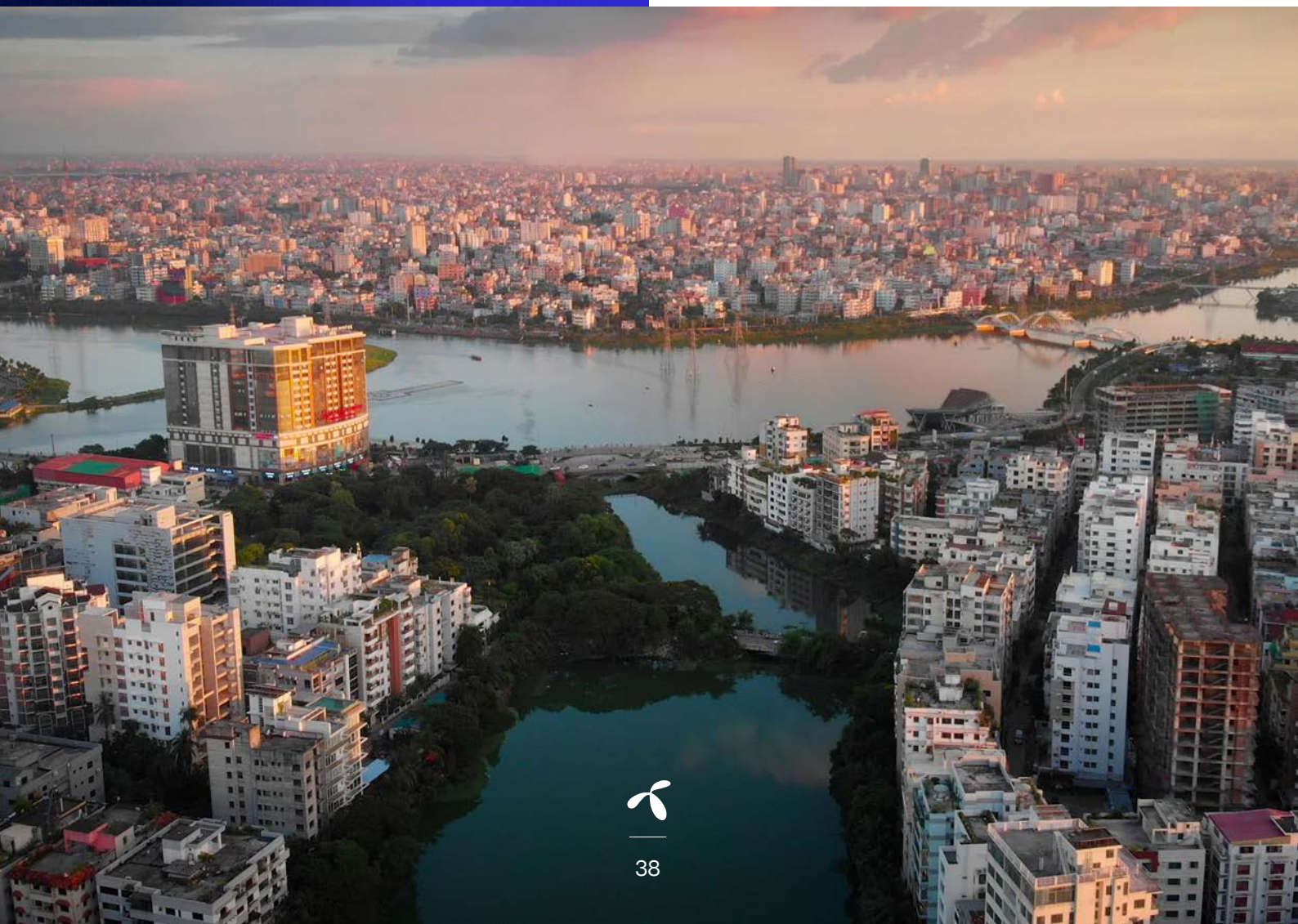
# Market snapshots



## Bangladesh

### Mobile devices are empowering people in Bangladesh

- Bangladeshis are more likely than their regional counterparts (33% vs 22% on average) to feel that mobile devices have significantly improved their relationships with family members, including spouses and children.
- 77% feel they have a good balance in their mobile usage and do not feel they are overusing it, reflecting an improvement on the 71% reported in 2022.
- Compared to other countries, mobile users in Bangladesh and Pakistan feel the most empowered when using their mobile device for online activities such as shopping, using search engines and messaging others.



## Over two-thirds feel very confident in their digital skills...

- Mobile users in Bangladesh and Indonesia feel the most confident in their digital skills to get the most out of the online world. 67% feel very confident, compared to 54% on average. However, females display markedly less confidence than their male counterparts (Females: 58%, Males 73%).
- Bangladeshis use their mobile device to access education, with 36% doing so, higher than the regional average of 27%. This trend is skewed towards male respondents (42%), contrasting with 2022 when a more even gender split was reported.

## ...And feel that mobile devices have significantly improved their performance and quality at work

- Respondents in Bangladesh are notably more inclined to believe that mobile devices have significantly improved their performance and quality at work over the last 1-5 years (47% vs 35% on average). This perception is particularly strong among those aged over 60 years.
- Bangladeshis are also among the most likely to feel that their employer fully utilises the potential of mobile technologies in the workplace (80% vs 70% overall).

## They are also using their devices to learn new skills, but online safety and security are concerns

- Bangladeshis are most likely to use their mobile device to learn a new skill (91% vs 87% overall). They also indicate the greatest hope that these new online skills can get them ahead or enter a new line of work (63% vs 45% overall).
- When learning new skills through their mobile device, Bangladeshis are most likely to put these into practice by providing freelance or consultancy services through online channels (60% vs 37% on average).
- 82% of Bangladeshis say their employers are supportive of them using generative AI for work on their mobile devices, while 47% of them expect their use of generative AI to increase in the next six months.

- Online harassment or bullying has, however, impacted the lives of many of our respondents. Bangladeshi respondents are more likely to experience online harassment or bullying, with 49% experiencing this at least once a month, compared to 38% regionally.
- 90% are concerned about the privacy and security of their mobile devices, in line with the regional average. 42% view privacy and security concerns as the most significant barrier to making the most out of mobile devices at work.

## The sustainability practices of mobile operators are a key decision-making factor for Bangladeshis

- 68% of Bangladeshis feel that their mobile devices allow them to live more sustainably, while 79% of Bangladeshis said that the sustainability practices of their mobile operator are either very important or important in their choice of whether to use them or not.
- 90% of Bangladeshis rely on their mobile phone in extreme weather events, with all saying their mobile use is important in monitoring and alerting them to extreme events in the future.





## Indonesia

### Indonesians expect work to be the primary driver of mobile device use over the next 2 years

- 70% of Indonesians expect mobile usage to increase over the next 1-2 years, most likely from greater use for work (86%), the highest among the countries surveyed. This is a decline from 2022 when 77% expected to increase mobile usage over the following 1-2 years.
- From the markets surveyed, Indonesians are most likely to feel that they have struck a good balance with their mobile usage (85% vs 77% overall feel like they are not overusing it). But it is worth noting that those aged 18-29 are likelier to feel they are overusing their mobile devices.
- When they fail to connect to the mobile internet, Indonesians are by far the most likely to have feelings of anxiety (60% vs a 40% average), with males and females equally impacted.

- 92% of Indonesians use digital wallets on their mobile device for payments, a significantly higher proportion than their regional counterparts (75% average).

### Managing the cost of living through mobile devices is entrenched in the daily lives of Indonesians

- To manage their cost of living, cost-conscious Indonesians are most likely to use their mobile device to find deals (84% vs 65% overall) and compare prices (82% vs 70% overall), with females more likely to do so.

### Mobile devices are also enhancing skills acquisition and workplace capabilities

- Indonesian's are least likely to feel that their employer is currently missing out on revenue opportunities afforded by mobile technology (40% vs 27% average) and are also least likely to feel that mobile technologies provide employees with an edge in the workplace.
- 93% of Indonesians have used their mobile device to learn a new skill over the last year, compared to an average of 87%, with males and females equally likely to have done so. 74% expect to use these newly acquired skills to provide an additional income stream.

### Indonesians are confident in their skills to get the most out of the digital world

- Indonesians express the least concern about their ability to keep pace with future technological changes. 51% report that they are not concerned, compared to 27% overall.
- But 75% of Indonesians express concerns over online safety among younger family members compared to 80% on average.

### Mobile devices are helping people in Indonesia live more sustainably

- 78% of respondents in Indonesia feel that their mobile device allows them to live more sustainably, higher than the regional average of 72%. Reduced paper usage and better access to information about transportation services are key drivers.





## Malaysia

### Malaysians are avid users of mobile technology

- On average, 89% of Malaysians spend at least half of their day using their mobile device, compared to 73%. One in five (20%) currently feel they are overusing technology, and nearly the same (19%) are never without their phone.
- When they cannot connect to the mobile internet, 46% of Malaysians feel frustrated, a larger proportion than the 39% reported overall.
- To manage their cost of living, mobile users in Malaysia are most likely to use budget apps and apps that track spending than their regional counterparts, with nearly half (49%) of them using such apps as compared to 41% overall.
- 83% of Malaysians have access to a digital wallet compared to 75% overall.

### But digital skills gaps and keeping pace with technology are concerns for Malaysians

- Malaysians are among the least likely to feel very confident in their digital skills to get the most out of the online world (48% vs 54%).
- They are also most likely to feel very concerned about their ability to keep pace with future technological changes (43% vs 27% overall). Those aged 18-29 years are significantly more likely to express these concerns compared to those aged over 60 years.
- In addition, more than half (55%) of Malaysian respondents are most likely to feel that a skills gap could expose them to online risks such as scams or security breaches, compared to 40% regionally, with those ages 18-29 and females feeling most concerned.
- Malaysian respondents are most likely to indicate that their company is currently missing out on revenue



opportunities due to underdeveloped use of mobile technology (67%, compared to 54% on average).

- 49% of Malaysians expect to increase their use of generative AI in the workplace over the next 6 months, below the regional average of 55%. 39% hope to use their mobile devices to gain skills in generative AI, also below the regional average of 44%.

### **There are also deep concerns over the privacy and security of mobile devices**

- 63% of Malaysians express great concerns over privacy and security on their mobile device, compared to 44% regionally.
- Data theft (67%), identity theft (65%) and fake news (57%) are the top three concerns around mobile use.
- They also acknowledge concerns over online safety for vulnerable family members such as the elderly (90% vs 77% overall).

### **Malaysians acknowledge the importance of sustainability in relation to their mobile usage**

- 74% of Malaysians acknowledge that the mobile allows them to live more sustainably.
- 89% of Malaysians feel that climate change and sustainability practices are important in influencing their choice of telecommunications provider.
- Nearly half (47%) of those aged 18-29 are very concerned about the environmental impact of their mobile use, while four in 10 say that climate and sustainability practices would influence their choice of telco.



## **Pakistan**

### **Mobile users in Pakistan use their devices daily for education, healthcare and food delivery...**

- Respondents in Pakistan are the most likely to expect significant increases in mobile device use over the next 1-2 years (37% vs 28% on average), with the greatest increase expected among those over 50 years. This is an uptick on 2022, when 32% expected to significantly increase their mobile usage over the next 1-2 years.
- Across the board, mobile users in Pakistan are among the most likely to feel empowered when using their mobile device for online activities such as shopping, using search engines and messaging others.
- Respondents in Pakistan are more likely than their regional counterparts to use their mobile device daily to access education (68% vs 27% overall), healthcare (27% vs 14% overall) and food and grocery delivery apps (30% vs 16% on average).

### **...But are most likely to feel they are overusing their devices**

- Mobile users in Pakistan are most likely to feel they are overusing their devices with 27% expressing this sentiment (compared to 21% on average), the highest of the markets surveyed.
- When searching for news stories on social media, mobile users in Pakistan show a greater propensity to access stories using X (formerly Twitter) than other countries, with 18-29-year-olds only slightly more likely to use it than those aged over 60 years.
- However, they are also the most likely to feel they have experienced fake news daily in the last 1-2 years (39% compared to 21% on average).







## Pakistanis feel mobile devices have enhanced their performance and quality at work...

- In the workplace, Pakistanis are among the most likely to feel that mobile devices have significantly improved their performance and quality over the last 1-5 years (47% vs a 35% average). They are also the most likely to feel that mobile devices have significantly improved their career and skills development over the same period (44% vs 30% overall), with females deriving greater benefits.

## ...But privacy and security, and digital skills gaps remain concerns

- While Pakistanis feel confident in their digital skills to get the most out of the online world, they are the most likely to express concerns over their ability to keep pace with future technological changes (51% vs 27% overall). They are also concerned that a skills gap could expose them to scams or security breaches.

- Privacy and security concerns pose less of a barrier to Pakistanis' ability to use their mobile devices to the fullest potential for work (32% vs 49% on average), in line with trends from 2022.
- They are also more likely than their regional counterparts to encounter fake news daily (39%, compared to 21% regionally).

## Pakistanis are using their devices to optimise well-being and contribute to sustainability efforts

- To enhance their overall well-being, 29% of Pakistanis use their mobile devices daily for mental or spiritual well-being apps, higher than the overall average of 18%.
- 93% of respondents in Pakistan feel that their mobile device allows them to live more sustainably, much higher than the regional average of 72%. Pakistanis value the sustainable advantages offered by mobile devices, including reduced travel or commuting needs, decreased paper usage and increased access to education and information.





## Philippines

### Filipinos remain the most likely to be inseparable from their mobile devices

- Filipinos are most likely to have their mobile on them at all times, with 24% saying they are never without it, compared to the regional average of 14%. A slight reduction on 2022, when 29% indicated that they were never without their mobile device.
- 86% of Filipinos spend at least half their day using their mobile device compared to 73% on average.
- Filipinos feel that mobile use positively impacts their personal lives, with 49% saying they felt it had improved their relationship with family members, compared to the regional average of 39%.
- 83% of Filipinos believe they have achieved a healthy balance with their mobile use. This is higher than the regional average of 77% and second only to Indonesia (85%).

### Many are using their device to acquire new skills...

- 51% of Filipinos feel very confident in utilising their digital skills to get the most out of the online world, compared to a regional average of 54%. However, they are also the most likely to be very concerned about not being able to keep up with future change, 40% say they are very concerned, significantly higher than the regional average of 27%.
- When it comes to using mobile devices to acquire new skills, most Filipinos hope to gain skills related to communication, such as learning a new language, at 65%, followed by photography skills at 59%, and video skills at 57%. 75% of Filipinos would use these skills to pursue an additional income stream.
- Almost one-third (31%) of Filipinos use their mobile device for educational purposes daily – greater than the regional average of 27%. Those aged 18-29 years are more likely to use their phones daily for this purpose compared to older cohorts.
- In the workplace, 39% of Filipinos feel that using mobile devices for work has significantly improved their productivity over the last five years. This compares to an average of 27%.



### ...But mobile privacy and security are top priorities for Filipinos

- Mobile privacy and security continue to concern Filipinos. 69% say they are very concerned, compared to the regional average of 44%. Phishing (73%) and data leakage (71%) emerge as the most prominent areas of concern.
- Filipinos are particularly worried about the impact of mobile privacy and security on vulnerable family members. 89% are concerned over the online safety of elderly family members, compared to an average of 77%. 94% are concerned about the safety of younger family members compared to 80% overall.

### The sustainability practices of their mobile provider is important to Filipinos

- 76% of Filipinos are aware of the environmental impact of mobile phone usage, higher than the 68% average.
- 81% of Filipinos say that the sustainability practices of their telecoms provider are important in their choice of whether to use them or not, the highest in the region (70% on average).





## Singapore

### Younger Singaporeans expect to increase their mobile use in the next 1-2 years, driven by social interaction...

- Over a quarter (27%) of Singaporeans expect their mobile usage to stay the same in the next two years – the highest percentage of all the markets.
- However, 34% of respondents aged 18-29 expect their usage to increase in the coming years, significantly more than any other age group. This is expected to be driven by social interaction (70%) and work (67%).
- The same group also feel that mobile devices have significantly improved their relationships with family members, friends and partners or spouse.

### But there is potential for an increase in mobile usage for work-related purposes in Singapore

- Only 58% of Singaporeans believe they are currently

utilising their mobile device and its features to its fullest potential, compared to the average of 79%. This comes as almost one-third (32%) of Singaporeans acknowledge that mobile tech skills will give employees a competitive edge in the workplace and are concerned that they will be outdated.

- Singaporeans are also the least likely to attribute improvements in their performance and productivity at work to mobile devices. Only 18% acknowledged that mobile devices had significantly improved the performance and quality of their work, compared to 35% on average.
- Furthermore, only 14% believe mobile devices have significantly improved their career and skills development, compared to 30% on average.
- Almost 20% of Singaporeans felt their mobile had not contributed positively to their work-life balance, compared to only 7% of their regional counterparts.



## Mobile devices do not feature highly as a means to learning new skills in Singapore

- Singaporeans are the least likely to use their phones to learn new skills. Only 67% say they have used their mobile device to do so in the last 12 months, compared to a regional average of 87%. They are also the least likely to use their mobile device daily for educational purposes – at 9% compared to the average of 27%.
- They are also least likely to feel they would like to use any skills gained through their mobile device to earn additional income (50% vs 67% on average).

## Concerns remain over mobile security and particularly among elderly family members

- 92% of Singaporeans are concerned that the mobile skills gap could expose them to scams and security breaches. One in three (33%) Singaporeans say they experience an instance of phishing at least once a week.
- 84% of Singaporeans express concerns over online safety among elderly family members, compared to 77% on average.
- While 21% regionally report encountering online harassment or bullying at least once a week, this only happens to 15% of Singaporeans, the majority aged 18-29.

## Singaporeans are less concerned about the environmental impact of their mobile use

- Only 50% of Singaporeans are aware of the environmental impact of their mobile devices usage, compared to 68% overall.
- Singaporeans are least likely to say that the sustainability practices of their telecoms provider is either important or very important in their choice of whether to use them or not (48% vs 70% on average).



## Thailand

### Thais are avid users of mobile devices and expect usage to increase further over the coming years

- 86% of Thais spend at least half their day using their mobile device compared to 73% on average.
- 83% of Thai mobile users expect their mobile device usage to increase in the next two years. More females (35%) than males (28%) expect this to increase significantly.
- The majority (78%) of users expect this to be driven by increased reliance on everyday online services and apps. Interestingly, 38% expect this to be driven by increased physical fitness and wellness use – higher than the regional average of 28%.
- Thai mobile users are more likely to feel frustrated than their regional counterparts when unable to



connect to the internet on their mobile device, at 55% – the highest percentage among all the markets, and higher than the regional average of 39%.

### **Mobile gaming remains a popular Thai pastime**

- Thai respondents are the most likely to use their phone for gaming, with 44% saying they use their mobile device for this daily, compared to the average of 30%. This is distributed evenly amongst age groups.
- Males are more likely to use their mobile device daily for gaming at 48%, compared to 41% of females.

### **Over half of Thais have no concerns over keeping pace with future technological changes...**

- 54% of respondents say they are not concerned about their ability to keep pace with future technological

changes – significantly higher than the regional average of 27%. Females are more likely to be concerned, with 50% saying they are at least somewhat concerned, compared to 42% of males.

### **...And many are using mobile devices to learn new skills**

- Encouragingly, 91% of Thais have used their device to learn new skills in the last 12 months. They are the most likely to use their mobile device to gain communication skills (67%) for example new languages, followed by video skills (59%) and photography skills (56%).
- Thais are the least concerned about privacy and security on their phone, an outlier for a second year, with only 17% expressing serious concerns (44% on average).



## **Vietnam**

### **Work is expected to be a key driver for the growth in Vietnamese mobile device usage**

- Only 9% of Vietnamese mobile users say they are never without their phone, lower than the regional average of 14%.
- Vietnamese mobile users are most likely to use their phone daily for social networking/messaging (71%), entertainment (66%), and email/communication purposes (55%)
- 61% of Vietnamese mobile users believe their mobile device usage will at least somewhat increase in the next 1-2 years, compared to 70% regionally. 80% of Vietnamese mobile users expect this increase to be driven by work.
- While the study shows that mobile users are utilising their phones to combat the cost of living crisis in

various ways, Vietnamese mobile users are more likely to use apps that track spending – 52%, compared to the regional average of 41%. They are also most likely to use their phones to monitor their energy use (37% compared to 28% regionally) and participate in shared economy services (38% compared to 30% regionally).

### **Many hope to acquire new skills, such as learning languages via their mobile device**

- In terms of gaining skills through mobile device usage, 70% of Vietnamese mobile users hope to gain communication skills such as learning new languages – significantly higher than the regional average of 57%. Males are slightly more inclined to gain skills around generative AI than females, compared to females – 49% compared to 37%.



- The majority (92%) of Vietnamese respondents say their mobile device usage has at least moderately improved their work-life balance.
- Vietnamese mobile users tend to believe that their employers are missing out on revenue opportunities due to lagging use and application of mobile technology.

### **Ongoing concerns persist regarding privacy and security but they are less pronounced than 2022**

- 34% are very concerned over the privacy and security of their mobile device, although this is a marked decline from the 46% reported for 2022.
- Privacy and security concerns are distributed evenly amongst age groups with top concerns being phishing and scams (44%), data leakage (41%) and spyware and ransomware, both at 35%.

- Those aged between 18-29 years tend to feel more strongly about privacy and security regarding mobile usage. Those above 60 are most likely to be most concerned about data theft (93%).

### **Vietnamese are willing to pay more for mobile plans which are more sustainable**

- While over half (57%) of Vietnamese respondents say their mobile device allows them to live more sustainably, this is lower than the regional average of 72%. However, 60% of Vietnamese mobile users would pay up to 10% for a mobile plan that produces a substantially lower carbon footprint, compared to only 51% regionally.



