

## Technology and Equity for the Elderly: Left Behind in the Digital Age

The recent congressional hearings in March 2023 regarding TikTok have generated buzz worldwide, with much of the discussion centered on how platforms like TikTok put children at risk through addictive algorithms, harmful content, and data collection practices. However, one crucial aspect that has remained largely unseen is the impact of social media on the elderly population worldwide. The evident increase in scams and abusive use of digital platforms and tools targeting seniors calls attention to the need for more support to safely utilize internet services for this vulnerable group.

Recent data from the 'Statistical Report on China's Internet Development' and a survey conducted by the Pew Research Center in the United States highlight a global trend of increased internet usage and technology adoption among seniors. In China, the number of internet users aged 60 and above surged from 59 million in June 2019 to 153 million in December 2022, marking a remarkable increase of 94 million older adults embracing digital technology over that period. Similarly, in the US, the Pew Research Center's 2021 survey reveals significant growth in technology adoption among those 65 and older over the past decade, with 61 percent of that age group reporting owning smartphones. While this trend indicates older generations are increasingly accepting of smartphones and online services, it also highlights a troubling parallel trend: scams targeting the elderly are on the rise.

As more elderly individuals embrace the online world, platforms and merchants have identified them as a lucrative market segment. Precise algorithms, addictive videos, and mini games are pushed to seniors, ensnaring them in addictive patterns. Regrettably, scammers also leverage technology to exploit this new user demographic. A case in point is the "CCTV 3. 15 Gala" of 2023, an annual consumer rights TV show hosted by China Media Group. This show sheds light on a particular scam, revealing how live stream hosts on platforms like Douyin (the Chinese equivalent of TikTok) were manipulating seniors' sympathy, gullibility, and unfamiliarity with app interfaces. They peddled so-called "magic drugs," purportedly capable of curing

age-related ailments, but in reality these cures are nothing more than regular food products. These scammers offer stories about how they stole the medicine from “greedy manufacturers” and want to sell it at a discount out of the goodness of their heart. They spin tales about how their own parents suffered from similar common ailments that affect the elderly, and how it led them to want to help others in the same position. Emotional manipulation of vulnerable elderly populations is one of the primary ways that perpetrators carry out health fraud victimization that not only leads to financial loss, but psychological distress and negative health effects. In China, which has one of the largest aging populations worldwide, factors including declining health due to age, mental illness, and loneliness all contribute to increased vulnerability towards health fraud and online scams.

However, this is not a problem unique to China. Such manipulation and deception also occur in the United States, where, in 2021, there were 92,371 elderly fraud victims, resulting in US \$1. 7 billion in losses. Moreover, in Australia, recent scams have even tricked elderly people into participating unwittingly in drug trafficking. In Japan, the government has issued a call to action urging young people to safeguard the assets of their elderly family members due to a recent surge in scams targeting this demographic. The scope of this issue is massive and worldwide. This recent trend of scams globally targeting elderly people signifies that although technology might be advancing some parts of society, others such as the elderly population are being left behind.

As our global population ages, the issue of equitable access to technology becomes even more pressing. By 2050, the global population aged 60 and above is projected to double to 2. 1 billion, heralding a significant demographic shift. Coupled with the expanding technology gap, this transformation has the potential to intensify the isolation experienced by older individuals. The looming threat of substantial financial losses, along with psychological hurdles like depression and anxiety, underscores the urgency of addressing this issue. The deepening technological divide further raises concerns about economic stability and the erosion of dignity in one’s later years. The growing gap in technological proficiency places digitally

inexperienced seniors at a heightened risk of exploitation, magnifying the real-world consequences they face. Beyond the immediate financial impact of scams, the rise of “digital phobia” among the elderly—a fear and anxiety born from unfamiliarity with and the potential pitfalls of technology—presents a concerning scenario. This psychological phenomenon highlights the anxiety senior citizens feel when navigating new technology. 53 percent of technologically comfortable seniors have disclosed that adopting new technology induces more anxiety than confronting traditional fears like visiting the dentist. This fear not only leads to the isolation of older adults, making them more susceptible to exploitation, but also perpetuates a dangerous cycle. Their reluctance to embrace technology results in limited access to crucial online services, further heightening their vulnerability and impeding their complete engagement in an increasingly digital society.

The rapid pace of technological development brings both promise and risk, especially for older adults. While novel technologies facilitate connectivity and offer conveniences in transportation, healthcare, and eldercare, they concurrently introduce vulnerabilities that disproportionately affect seniors. Ignoring the technological needs of the elderly magnifies inequalities, obstructing personal and societal advancement. As a result, safeguarding the interests of the elderly and ensuring their secure engagement in online pursuits has emerged as a pressing concern. In the face of this alarming trend, several countries have initiated efforts to bridge divides between generations and create digitally inclusive environments for this vulnerable population.

In Singapore, efforts are being made to increase digital literacy in vulnerable populations by offering free one-on-one instruction to the elderly at public libraries in order to help them better navigate the digital world. The results have been overwhelmingly positive: more than 130,000 seniors have benefitted from this program since its conception. Additionally, Japan, which has the highest proportion of elderly citizens of any country in the world, is striving to close inter-generational gaps by holding smartphone education classes that have been attended more than 15 million times since they began in 2018. While these initiatives are commendable, they alone cannot entirely shield seniors from digital vulnerabilities or adequately prepare them

for the intricate digital landscape that lies ahead.

Addressing the digital susceptibility and potential marginalization of older individuals demands a holistic, society-wide response. This entails not only implementing robust digital literacy programs but also enhancing security measures, refining interface designs to cater to seniors, establishing stringent policies and regulations against age-based targeting and manipulation, and cultivating a cultural shift that prioritizes compassion and vigilance.

To prevent the world's aging population from being left behind in this era of unlimited technological progress, strides must be taken to integrate this demographic into the process of shaping new technology. By embracing these multifaceted strategies, the unique insights and experiences of seniors can contribute to a future where technology becomes a means of empowerment, connection, and enrichment for people of all ages.