

## THOUGHT PROVOKING IDEAS OF THE GLOBAL ESSAY COMPETITION 2022

### **Bridging the Divide: Systematically Revising Our Digital Generational Contracts**

**Xu Wang is one of the top 25 contributors to this year's  
Global Essay Competition Award. She studies at Peking University and  
attended the 51st St. Gallen Symposium as a Leader of Tomorrow.**

#### ***Introduction***

For people living today, digital technology is not only an entertainment product, but also an important social infrastructure. In the wake of the COVID-19 global pandemic, people are increasingly relying on it to communicate, collaborate and protect their health. In the United States, people need to book their vaccines online; in China, people prove their eligibility to travel by showing a "health code". Entrepreneurs around the world are using teleconferencing instead of frequent business trips. Family members greet each other via social media. Digital technologies seem to help us build a more solid society. However, the distribution of digital resources is unfair. There is a deep "digital divide" between young and old. While young people are chatting on Facebook, some older people may not be using smartphones yet.

The "digital divide" is tearing our society apart and undermining the welfare of its members, especially under the trend of aging. In 2019, people over the age of 65 accounted for 9.1%

of the global population (United Nations, 2019), but only 7% of global Internet users (Statista, 2019). In popular social media, older people are even more marginalized. In 2021, only 5.2% of Facebook's global users were over age 65 (Statista, 2021). The problem of unbalanced distribution of digital resources deserves our attention.

#### ***1. The Digital Divide: Digital Intergenerational Contracts Unadjusted for Corrective Justice***

In the various discussions triggered by the digital society, the digital divide has not attracted enough attention. Current digital intergenerational contracts have not been scrutinized by any formal process, nor guided by any theory of corrective justice, but are a natural consequence. Under the motive of profit-seeking, neither digital product suppliers nor the public sector have considered the special needs of the elderly as a vulnerable group, which makes it impossible for a

considerable number of the elderly to integrate into the 21st century lifestyle.

### ***1.1 The Access Divide: Groups Excluded from the Digital Society***

Despite the rapid development of the ICT industry, many elderly people have not yet been able to enjoy the fruits of technological progress. In the United States, 68% of people over the age of 65 do not know WhatsApp or have no opinion on it (Statista, 2021); 25% of people over the age of 65 said they did not use the Internet (Statista, 2021). In China, there were 264 million people over the age of 60 in 2021, while only 123 million of them were Internet users (CNNIC, 2021). The gap between the rich and the poor is an important reason. Since the network infrastructure in many areas is still under construction, it is understandable that local people cannot enjoy trendy digital products, which naturally includes the elderly. In addition, some elderly people cannot access digital products due to physical health reasons. The elderly stage is a period of high incidence of various diseases, which will bring inconvenience to the elderly, making it difficult for them to invest time and energy in learning digital knowledge. The long-term accumulation of living habits of the elderly is also a reason that affect their exposure to digital products. Some elderly people have developed habits for decades, and they may not be willing to give up their past life patterns and go into new fields.

### ***1.2 The Understanding Divide: Complex Product Design and Privacy Terms***

Existing digital products are not friendly to the elderly who have the ability to access digital products. Web pages and mobile apps are flooded with a variety of disordered information and online advertisements. The operating interface of most products is too flashy, which makes it impossible for many elderly people to

use it independently. A survey in 2019 showed that 81.6% of the elderly need help from others more or less in the process of surfing the Internet (URORA, 2019).

Lengthy privacy policies are also a factor preventing older adults from understanding digital products. Enforcement of informed consent has long been a pain point in data privacy legislation. Suppliers have historically developed complex user agreements in pursuit of superficial compliance. For many older adults with poor eyesight and reduced learning abilities, reading such contracts will hinder their enthusiasm for using digital products.

### ***1.3 The Security Divide: Vulnerability to Illegal Behavior***

Because the elderly have a certain amount of asset accumulation and are not familiar with the network environment, they often become the target of "precise fraud". A survey of middle-aged and elderly Chinese netizens shows that 66.2% of the respondents have encountered online rumors, 52.7% of the respondents have encountered false advertisements, and 37.4% of the respondents have encountered online fraud. The scope of online fraud is very wide, including health care product fraud, red envelope fraud, lottery winning fraud, online pyramid schemes, etc (Tencent, 2018)

### ***1.4 The Relief Divide: An Opinionated External Perspective***

As the digital industry gradually enters the stock economy, many suppliers have gradually paid attention to the blank market of the elderly and launched special digital products to remedy the injustice. However, the development of such specialized products is also full of stereotypes in many cases. Pushing information specifically for the elderly may not meet the interests of the elderly and may also result in the reinforcement of stereotypes and age

discrimination. In addition, research has found that so-called digital technologies specifically aimed at older adults contain stigmatizing symbolism that might prevent them from adopting them (Wu, Y. H., et al, 2015).

## ***2. Two-way risk: How the digital divide affects the justice of intergenerational contracts***

### ***2.1 For the older generation***

There is no doubt that the elderly are the most direct victims of the digital divide. In the cyber era, a considerable number of elderly people cannot enjoy the fruits of technological progress. Some social fields have eliminated traditional offline interaction methods, which makes some elderly people unable to obtain basic social services. For example, the popularity of electronic payments caused some stores to refuse to accept cash; some banks only accepted online self-registration; and many government businesses are beginning to require digital processing. During the COVID-19 pandemic, the inconvenience of the digital divide is further evident. In China, an elderly man without a mobile phone was asked to get out of a bus because he could not show his health code (Ella Kidron, Vivian Yang, 2021). In the United States, some elderly people were delayed in getting vaccinated because they cannot use the Internet (Santee LaMotte, 2021). The digital divide not only increases the cost of accessing services for the elderly, if not completely depriving them of their rights, but also leads to a decline in the happiness of them, creating a greater gap between the old and the young. In the age of interconnectedness, the elderly are like an island, excluded from modern civilization.

### ***2.2 For the younger generation***

Although the younger generation has an upper hand on the digital divide, that doesn't mean they are outright winners. In fact, the risks of the digital divide go both ways. Everyone will grow

old. If the existing digital ethics model is not changed, as the younger generation gets older, they will also suffer from the rapid development of technology. Even today, the digital divide can affect young people's communication with their parents and grandparents, thereby reducing the happiness of family life. A wider harm is that the digital divide itself tacitly complies with the business logic of product complexity. Suppliers acquiesce that young people can accept more complex product designs and privacy policies, which will make the transparency rules of digital products overshadowed. When it comes to the operating interface is too complicated, the privacy policy is too long, and fraudulent information is flooded, young people can only overcome it sometimes, not completely without difficulties. A society with a digital divide is not humanistic. Young people seem to be ahead, but they don't know much more than older people about the technological risks they face. The complication of digital products will actually lead to the domestication of human beings by technology.

## ***3. Solution: Systematically Reshape Digital Intergenerational Contracts***

Addressing the digital divide requires us to rethink how digital resources have been allocated savagely over the past few decades, and to systematically revise our digital intergenerational contracts.

### ***3.1 Develop Technology Ethics and Laws that Focus on Intergenerational Justice***

Existing technology ethics and laws often focus on the issues of technology itself, while ignoring the fairness of intergenerational distribution. New digital intergenerational contracts should make intergenerational justice one of the bottom-line requirements of technology ethics and law. Digital technology practitioners should take the maintenance of intergenerational justice as their own moral code and incorporate it into the professional training system and

product evaluation standard. In various digital economy promotion laws and other digital field legislation, intergenerational justice should be an important legal principle. For digital products that clearly violate intergenerational justice, they can be incorporated into the product quality law for remedy.

### ***3.2 Develop Digital Products Consistent with Intergenerational Equity***

Just as the idea of data privacy led to the development of privacy technology, the idea of digital intergenerational fairness should also lead to technological change. When developing products, technology companies should pay attention to the care of vulnerable groups such as the elderly, such as setting appropriate font sizes, reducing unnecessary operation steps, designing concise interactive interfaces, and providing focused privacy policies. Such an approach can not only reduce the cost of use for the elderly, but also benefit the young. In the development process, managers should pay attention to the investigation and research of different user groups and pay attention to the needs of the elderly. While in the interests of users, technology companies will also gain greater market share.

### ***3.3 Help the Elderly Improve Their Ability to Contact the Digital Society***

Unlike millennial generation, who have been exposed to digital products since childhood, many older people need to relearn a new skill to use digital products. The government should encourage the establishment of colleges for the elderly with digital literacy courses. Technology companies should set up a more user-friendly way of product usage instructions. Technology companies should reduce the information push of age-based user profiles to avoid discrimination and information cocoon effects. For the elderly who cannot access digital technology due to poverty and physical disabilities, the government should set up

special funds to help them install digital infrastructure. Technology companies should develop assistive devices that are more suitable for the elderly to target the physical disabilities of the elderly.

### ***3.4 Preserve Non-Digital Social Services***

In the transitional stage of promoting digital intergenerational equity, social service providers should not rush to fully roll out the digitalization process, let alone cancel non-digital service methods. For common scenarios of the elderly such as shopping payment and banking, traditional transaction methods should be retained. Especially during the COVID-19 period, for the elderly who cannot use digital methods to authenticate and conduct business, other service methods should be added, such as telephone processing or on-site processing when public health conditions are met.

### ***Conclusion***

In the information society, the "digital divide" is causing serious intergenerational inequities. This is not only an erosion of the rights of the elderly, but also allows technology to discipline everyone. We should pay attention to the imbalances in today's digital intergenerational contracts and seek a path to systematic revision. The fruits of the technological revolution should be shared by all mankind, and the elderly should not be excluded.

## **Reference**

CNNIC (2019). The 48th Statistical Report on Internet Development in China.

<http://www.cnnic.net.cn/hlwfzyj/hlwxzbg/hlwtjbg/202109/P020210915523670981527.pdf>.

Ella Kidron, Vivian Yang (2021). How to close the digital gap for the elderly.

<https://www.weforum.org/agenda/2021/01/too-old-is-simply-a-myth-tech-companies-narrow-the-digital-gap-for-the-elderly/>.

Sandee LaMotte (2021). It's chaos as older people struggle to get a Covid-19 vaccine. Here is what you can do. <https://www.cnn.com/2021/01/15/health/senior-vaccine-struggles-wellness/index.html>.

Statista (2019). Distribution of internet users worldwide as of 2019, by age group. <https://www.statista.com/statistics/272365/age-distribution-of-internet-users-worldwide/>.

Statista (2021). Distribution of Facebook users worldwide as of October 2021, by age and gender. <https://www.statista.com/statistics/376128/facebook-global-user-age-distribution/>.

Statista (2021). U.S. internet usage penetration 2021, by age group. <https://www.statista.com/statistics/266587/percentage-of-internet-users-by-age-groups-in-the-us/>.

Statista (2021). Share of adults in the United States who have a favorable opinion of WhatsApp as of November 2021, by age group. <https://www.statista.com/statistics/1278351/united-states-opinion-whatsapp-age-group/>.

Tencent (2018). Investigation report on Internet access status and risk network of middle-aged and elderly people. <https://cloud.tencent.com/developer/news/371872>.

United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects: the 2019 Revision. [https://population.un.org/wpp/Publications/Files/WPP2019\\_Highlights.pdf](https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf).

URORA (2019). 2019 Research Report on Internet Access of the Elderly Group. <https://www.jiguang.cn/reports/450>.

Wu, Y. H., Damnée, S., Kerhervé, H., Ware, C., & Rigaud, A. S. (2015). Bridging the digital divide in older adults: a study from an initiative to inform older adults about new technologies. *Clinical interventions in aging*, 10, 193–200. <https://doi.org/10.2147/CIA.S72399>.