

References

1. Alan, B. K. How Computers Have Changed the Wage Structure: Evidence from Microdata, 1984–1989 / B. K. Alan. – The Quarterly Journal of Economics. – 1993. – № 108 (01). – P. 33–60.
2. Miller, P. W. Computer skills and wages / P. W. Miller, C. Mulvey // Australian Economic Papers. – 1997. – № 6 (68). – P. 106–113.
3. Goss, E. P. How information technology affects wages: Evidence using Internet usage as a proxy for IT skills / E. P. Goss, J. M. Phillips // Journal of Labor Research. – 2002. – № 23 (3). – P. 463–474.
4. DiMaggio, P. Make Money Surfing the Web? The Impact of Internet Use on the Earnings of U.S. Workers / P. DiMaggio, B. Bonikowski // American Sociological Review. – 2008. – № 73 (2). – P. 227–250.
5. The digital divide: Patterns, policy and scenarios for connecting the ‘final few’ in rural communities across Great Britain / Lorna Philip [et al.] // Journal of Rural Studies. – 2017. – № 54. – P. 386–398.
6. The Social Implications of the Internet / Paul DiMaggio [et al.] // Annual Review of Sociology. – 2001. – № 27. – P. 307–336.

Zhang Xiaoxia

Tomsk State University (Tomsk, Russia)

Ningde Normal University (Ningde City, China)

O. P. Nedospasova

Tomsk State University (Tomsk, Russia)

RESEARCH ON DIGITAL IDENTITY OF THE ELDERLY IN THE DIGITAL AGE: EXPERIENCE FROM CHINA

With the gradual deepening of Internet usage and penetration rate, the global social development mode has rapidly transformed into digitalization, and has greatly changed the social production and lifestyle of residents. Among them, the impact on the elderly is the most significant, and many elderly people have become ‘digital survivors’. In this context, this paper

takes the elderly as the research object, puts forward the concept of digital identity, analyzes the mechanism of digital identity of the elderly, and finally introduces the experience of improving the digital identity of the elderly in China.

Keywords: *digital divide, digital identity, self-identity, social identity.*

С постепенным расширением использования Интернета и его уровня проникновения глобальный режим социального развития быстро трансформировался в направлении цифровизации и значительно изменил общественное производство и образ жизни жителей. Воздействие данных факторов на пожилых людей является наиболее значительным. В этом контексте в данной статье пожилые люди рассматриваются в качестве объекта исследования, выдвигается концепция цифровой идентичности, анализируется механизм цифровой идентичности пожилых людей и, наконец, представлен опыт улучшения цифровой идентичности пожилых людей в Китае.

Ключевые слова: *цифровой разрыв, цифровая идентичность, самоидентификация, социальная идентичность.*

1. Introduction

From a global perspective, Internet use and penetration rate is rising rapidly year by year. According to Internet World Stats statistics (Table 1), global Internet users increased by 1,416 % from 2000 to 2022, with the largest increases in countries in Africa and the Middle East, reaching 14,362 % and 6,378 %, respectively; the Internet penetration rate of North America, Europe and Latin America is among the highest in the world. Under this trend, the new generation of information technology is more and more widely used in the government, market and society, and there are more and more application scenarios. The social development mode is undergoing a rapid digital transformation process, and has a wide impact on industrial development, public services and residents' social lifestyles. As an important part of the population structure, the elderly (population over 60 years old) are restricted by technology,

system, culture and their own factors. In general, there is a big digital divide in the degree of information technology ownership and application compared with other age groups, and then they become ‘digital refugees’. Therefore, studying the digital identity of the elderly at this stage is of great significance for the survival and development of the elderly in the digital society.

*Table 1. World internet usage and population statistics
(2022 Year Estimates)*

World Regions	Population (2022 Est.)	Population of World, %	Internet Users	Penetration Rate, % Pop.	Growth 2000–2022	Internet world, %
Africa	1,394,588,547	17,60	652,865,628	46,80	14362 %	11,90
Asia	4,352,169,960	54,90	2,934,186,678	67,40	2467 %	53,60
Europe	837,472,045	10,60	750,045,495	89,60	614 %	13,70
Latin America/Carib.	664,099,841	8,40	543,396,621	81,80	2907 %	9,90
North America	374,226,482	4,70	349,572,583	93,40	223 %	6,40
Middle East	268,302,801	3,40	211,796,760	78,90	6378 %	3,90
Oceania/Australia	43,602,955	0,50	31,191,971	71,50	309 %	0,60
World total	7,934,462,631	100	5,473,055,736	69	1416 %	100

Source: Internet World Stats. URL: www.internetworldstats.com/stats.htm.

2. Concept Analysis of Digital Identity

Regarding the research on identity, the research results of philosophy, sociology and psychology have different perspectives. In the field of philosophy, it explains the confusion in people’s mind about who I am and which group I belong to; in the field of social psychology, it clarifies the profound influence of social environment on identity; in the field of economics, the theory of identity economics further clarifies Significant differences in personal preferences and economic activity behaviors arising from people’s identities in different social environments.

At present, there are two understandings of the concept of digital identity in academia. One is the sum of digital information formed by individuals participating in network activities that can represent their identity [1]. The other is the Internet identity (or role) established by Internet users in the Internet community or website, also known as ‘Online identity’ or ‘Internet identity’ represented on Wikipedia [2]. Based on different research schools and theoretical thoughts, this paper believes that digital identity is the self-identity of individual netizens in the digital era for digital identity, and the digital social identity of individual netizens with common interests for belonging to one (or more) Internet groups (communities). In essence, digital identity is the significant influence of Internet information technology on people’s internal psychology and external behavior while innovating social life and production mode. Moreover, with the continuous iterative update of Internet information technology, people’s digital identity will also change further.

3. Mechanism analysis of digital identity of the elderly

The rise of the digital society has brought more and more elderly people into the digital world, which provides an effective mechanism for the elderly individuals and groups to transcend their own boundaries, and also provides a convenient way for their identity to converge into self-identity and social identity.

3.1. The popularity of the Internet triggers self-identification of the digital identity of the elderly

A series of studies have shown that the popularity and use of the Internet has provided many benefits for the elderly to cope with the digital transformation of society. (1) Internet use promotes the physical and mental health of older persons. Internet use strengthens the frequency and intensity of physical exercise in the elderly, which has a positive impact on the physical health of the elderly, and can also reduce the loneliness and depression of the elderly [3], and improve the life satisfaction and mental health of the elderly [4]. (2) The Internet helps the elderly to enhance cognitive ability. Internet use provides opportunities for older people to learn, thereby improving

their cognitive function [5]. It can be seen that Internet information technology has a positive impact on the physical and mental health and cognitive ability of the elderly, which makes the elderly continue to strengthen their self-identity of personal digital identity.

3.2. The digital transformation of society accelerates the social identity of the digital identity of the elderly

The digital society is the deep integration of digital technology and economic society. It uses digital technology and products to transform human production and life in an all-round way. On the basis of informatization and networking, it uses various data information to realize digital change of social organization and production mode, and then realizes the social form of high integration of physical real society and digital virtual society. In the digital age, integrating into the digital society is the inherent need for the survival and development of the elderly themselves. (1) Improved family relations. Internet, mobile phones and other information media shorten the space-time distance between the elderly and their families, create a sense of real presence in the virtual space of the network, and enhance the communication and connection between the elderly and their families [6]. (2) Expanding the social capital of the elderly. The Internet can bridge the weakening of the social network of the elderly in real life, alternatively comfort the interpersonal interaction desire of the elderly, and provide the possibility of transcending the space-time barrier for the elderly to fulfill their family roles [7]. (3) Massive digital information resources provide the basis for the construction of digital identity of the elderly. With the update and iteration of Internet information technology, its openness, interconnection, sharing and other characteristics make massive text, images, videos, knowledge and other content become important resources for the elderly to continue socialization and digital identity construction [8]. (4) The Internet platform has become a new space for the digital identity of the elderly. Based on the social platform, short video platform, knowledge platform, interest forum and other cyberspace of Internet information technology, the elderly

group has found a new social interaction space, formed a new way of social participation and interaction, realized the effective connection between online and offline, and further enhanced the social identity of their digital identity [9].

4. Discussion: China ‘s experience in enhancing the digital identity of the elderly

In the face of the rapid iteration and update of Internet information technology, under the background that the traditional social life style is gradually replaced by the digital and intelligent social life style, the trend of the elderly being marginalized in the digital society is becoming more and more obvious, and the family digital feedback and social digital education provide an effective way to realize the self-transcendence of the elderly.

On the one hand, family digital nurturing enhances the digital awareness of the elderly. In China, the family is the main place for the elderly to improve their digital literacy. This makes it easy for the elderly to cross the first layer of digital access gap. Through the guidance and self-study of the children in the family, many elderly people have mastered the basic digital life skills such as showing health codes, online socializing, watching short videos, online reading, flipping the circle of friends, online payment, searching simple information and so on. Therefore, most of the elderly Internet users in China can cross the second level of digital use gap under the digital feedback of family members. It can be seen that family digital back-feeding has enhanced the digital awareness and skills of the elderly in China, effectively promoted the recognition of the digital identity of the elderly, and laid a good foundation for their digital identity reconstruction and crossing the third-tier digital knowledge gap.

On the other hand, social digital literacy education improves the digital skills of the elderly. In November 2020, in order to effectively address the difficulties encountered by the elderly in the use of intelligent technologies, the Chinese government issued the “Implementation Plan for Effectively Addressing the Difficulties of

the Elderly in Using Intelligent Technologies”, planning a digitally inclusive society that is more friendly to the elderly from the top-level design and policy guidance. Focusing on the seven types of high-frequency matters and service scenarios involved in the daily life of the elderly, such as travel, medical treatment, consumption, entertainment, and work, 20 specific measures to bridge the digital divide for the elderly are proposed. Among them, it is emphasized that the ability of the elderly to use intelligent technology should be strengthened as the key content of elderly education. Through the elderly university, pension service institutions, community education institutions, etc., the combination of online and offline methods is adopted to help the elderly improve the ability and level of using intelligent technology. This professional, systematic and sustainable digital literacy education model for residents not only effectively stimulates the enthusiasm of the elderly for digital learning, but also guides more elderly people into the digital society through online learning communities.

5. Conclusion

All in all, in the context of the rapid development of the digital economy and the deepening of the aging of the population, through the family’s digital feedback and systematic digital literacy social education, it will help alleviate the anxiety of the elderly’s digital integration and the sense of digital identity crisis, and promote the elderly to use the Internet to achieve self-socialization, and provide more possibilities for them to participate in social activities such as social, labor, and volunteer services.

Acknowledgement

The reported study was funded by RFBR and VASS, project No. 21–510–92007.

References

1. Dong, J. Individual digital identity and its ethical issues in the era of big data / J. Dong, H. Cheng // Study on Dialectics of Nature. – 2018. № 12. – P. 76–81.

2. Wikipedia. URL: http://en.wikipedia.org/wiki/Online_identity.
3. Sloane-Seale, A. Older adults in lifelong learning: Participation and successful aging / A. Sloane-Seale, B. Kops // Canadian Journal of University Continuing Education. – 2008. – № 1. – P. 37–62.
4. Internet Use and Well-Being in Older Adults / J. Heo [et al.] // Cyberpsychology Behavior and Social Network-working. – 2015. – № 18 (5). – P. 268–272.
5. Kamin, S. T. Internet use and cognitive functioning in late adulthood: longitudinal findings from the survey of health, aging and retirement in Europe (SHARE) / S. T. Kamin, F. R. Lang // The Journals of Gerontology: Series B. – 2020. – № 75 (3). – P. 534–539.
6. Meng, L. Network Communication Compensation for the Lack of Family Role in the Elderly / L. Meng // Press. – 2013. – № 7. – P. 3–8.
7. Wood, A. F. Online Communication: Linking Technology, Identity, and Culture / A. F. Wood, M. J. Smith // Routledge. – 2001. – P. 51–75.
8. Chen, X. L. On the Internet and the Continued Socialization of the Elderly / X. L. Chen // Press. – 2015. – № 17. – P. 4–8.
9. Castells, M. The Power of Identity. Beijing, Social Science Literature Publishing House / M. Castells. – 2006.

Р. Е. Гончаров

*Белорусский государственный экономический университет
(г. Минск, Республика Беларусь)*

ОХРАНА ТОВАРНЫХ ЗНАКОВ В СОВРЕМЕННОМ КИТАЕ: ДОСТИЖЕНИЯ И РИСКИ

В статье осуществлен анализ эволюции и особенностей системы охраны товарных знаков в современном Китае, а также рисков, связанных с использованием товарных знаков в этой стране.

Ключевые слова: *интеллектуальная собственность, бренд, защита товарного знака, регистрация товарного знака, адаптация товарного знака, контрафакция, сквоттинг товарного знака.*