

# The Value Chain Reconstruction of the Elderly Digital Publishing Industry in the Context of Liquid Aging Society

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**Abstract**—Based on Bauman's 'liquid society' theory, this study analyzes the liquid characteristics of the aging society under the fluid modernity and the new changes and development paths of the elderly digital publishing industry in this social context. The liquid aging society urges us to re-examine the problem of the elderly digital publishing industry in the new context. In order to make the digital publishing industry adapt to the liquid aging society, the value chain concept is introduced to re-comb the upstream, midstream and downstream of the elderly digital publishing industry, and reconstruct the value chain of the elderly digital publishing industry in the context of the liquid aging society.

**Keywords**— Liquid aging society, digital publishing, value chain.

## I. THE SOCIAL CONTEXT OF LIQUID AGING AND ITS HOOKUP WITH THE SENIOR DIGITAL PUBLISHING INDUSTRY

Bauman put forward his thinking on the essence of "liquid society" in "mobile modernity." We live in a common and changeable world, in a serious, hopeless and unstable situation, this instability penetrates into all aspects of individual life... The safe harbor of trust is very rare, and most of the time, the trust is vainly looking for their own haven, like an unanchored ship drifting around. The influence of liquid penetrates into every corner of modern society. In today's increasingly serious problem of population aging, the elderly society is also facing liquid changes. This background should become a necessary prerequisite for the aging issue in the academic community. Only by analyzing the liquid aging society can we grasp the current historical context and give more accurate judgments on the reform of related industries.

New features emerge in the social context of liquid aging. Firstly, the degree of individualization deepens, and the loneliness of the elderly group increases. Bauman pointed out that after the collectivity is weakened, it cannot play the role of social aggregation, emotional support and risk-taking in the past, and the society reflects strong individual characteristics. The liquid aging society also reflects this feature. At the individual level, with the increase of age, retirement, widowhood and gradual separation from the family after the growth of children have gradually reduced the scale of the social network of the elderly, and the elderly are difficult to find the community. At the same time, it is gradually separated from the long-term stable community; at the family level, low birthrate and empty nesting are becoming more and

more common, and economic reciprocity, mutual life assistance and emotional support at the family level are weakened, because the opportunities to actually be together are reduced, and the realization of family relationships becomes more occasional and changeable. Therefore, for those who need to take care of the elderly, individualization may indeed become an inescapable fate; at the social level, industrialization and urbanization are becoming more and more obvious. People cannot find each other in the huge city or fall into the cloakroom community described by Bauman. People quickly join or flee the organization, and rarely or very shallowly participate in the emotional activities between groups. Social links and emotional interactions are difficult to maintain.

Secondly, the system difference is growing, and the structure of the elderly population is in dynamic exchange of blood. Since China's reform and opening up, the modern society has developed rapidly. A group of people who were first impacted by the reform have successively entered the aging group. There are great differences in values, lifestyles and other aspects between this group of young elderly and traditional elderly. Some scholars have proposed the concept of new elderly. The new elderly are generally between 55 and 70 years old. This group accounts for a large proportion of the elderly population. Compared with the older elderly, the new elderly show good economic foundation, strong information demand, open ideas, and high willingness to accept technology. Even within the elderly group system, the flow is also happening all the time. The structured and monolithic everything has been difficult to achieve. We have to rethink the more subdivided state of the elderly group.

Thirdly, The uncertainty increases, and the insecurity of the elderly increases. The precariousness of older people's lives is physically driven, and social mobility limits their access to support. The increasingly developed transportation, communication and media technologies provide a broad space and unlimited possibilities for the easy and rapid flow of capital, while capital is less and less responsible. The neoliberal economic model requires the reduction of state services to a minimum, and only for the most needy people. The physical function of the elderly is declining and the dependence on society is increasing. This dependence has become a laughable burden or a threat to the country's

economic success. Even hospitals may become places that exclude and despise the elderly, and there is not enough equipment to deal with complex diseases in old age. The only family that can be relied on has also become unable to make up for this problem. In modern society, workers have become accessories for computers as a means of production. The time and space boundaries of work are blurred, the pace of life is accelerated, and they are unable to give more support to the elderly.

Digital publishing should become an important tool to cope with the liquid aging society and an important starting point for building a positive aging concept and a new community for the elderly. As an important part of the whole media ecology, the publishing pattern has undergone tremendous changes in liquid modernity. The trend of liquidization is becoming more and more obvious, and the liquid publishing ecology is forming. Digital publishing is the application of digital technology in the publishing industry. Digital technology in the era of digital intelligence gradually runs through the whole process of the publishing industry, which makes the traditional publishing industry undergo subversive changes. The characteristics of de-structure, decentralization and de-stability of liquid publishing ecology are becoming more and more obvious. At present, digital publishing is developing rapidly. The individualization, difference and uncertainty of the liquid aging society are suggesting that we need to update the solidified publishing model to deal with the publishing problems of the elderly. The adaptability of digital publishing is more prominent in this context.

On the one hand, digital publishing has a greater possibility to meet the development needs of the positive view of aging. The positive view of aging is an attempt to shift the population aging from a negative and pessimistic perspective to a positive research perspective. Lou Chengwu and Yu Hui think that the positive view of aging tries to alleviate people's anxiety and fear of physiological aging, and turns to build a new perspective to liberate the aging population from the role of burden and consumption, affirming the significance and value of the elderly's survival, and returning the aging society to the normal development path. In the aging society, more and more elderly people start a new life after retirement, and reading has become one of the important supports for the new life of the elderly. How to make digital reading break through the shackles of the traditional model to meet the high-quality reading needs of the contemporary elderly should become a subject that needs to be considered. The natural life process is unstoppable but the spiritual life can always be young. The digital publishing of the elderly is expected to help the elderly take a positive view of the elderly life with a new look, support their spiritual life while meeting their high-quality reading needs, alleviate the impact of the liquid aging society, and construct a positive view of aging. On the other hand, digital publishing will further promote digital reading, making reading more extensive, accessible and suitable for the elderly. The elderly can enrich their lives in their later years by reading and find a place for their souls. It is also easier to build a community of interest after retirement, build an online and

offline silver age reading forum and community, and strengthen the social links and emotional interaction of the elderly, so as to reduce the uneasiness under systematic differences.

## II. REVISITING THE SENIOR DIGITAL PUBLISHING INDUSTRY IN THE CONTEXT OF A LIQUIDLY AGING SOCIETY

Firstly, Older digital publishing industry is small. A major feature of the liquid society is that technology has led to the separation of capital and labor in modern society. Capital and enterprises have turned their goals to consumers. The entire liquid society is permeated with the atmosphere of consumerism, which means that more consuming groups will become the focus of capital and enterprises. In the era when the elderly group gradually retreats from the public's vision, their reading needs also seem to be forgotten, and the digital publishing industry also reflects this feature.

The digital publishing industry is booming, and there are only a handful of digital reading resources available for the elderly. According to the 52nd "Statistical Report on the Development of China's Internet" released by the China Internet Network Information Center (CNNIC), as of June 2023, the Internet penetration rate reached 76.4%. In August 2023, the age structure of Internet users over 50 years old accounted for 29.9%. The Internet penetration rate of the elderly population in China is rising rapidly, and online reading is one of the main network activities of the elderly. In addition, relevant research shows that in the consumption of the elderly group, recreational products account for only 16%, and the elderly group needs spiritual products rather than physical products. At the same time, in the prevailing stereotypes, the elderly are diligent and thrifty, but the actual situation is not. The China Aging Industry Development Report predicts that by 2050, the consumption potential of China's aging population will increase to about 106 trillion yuan, and the proportion of GDP will increase to 33%. China will become the country with the largest market potential of the global aging industry. It can be seen that the digital reading demand of the elderly is not small, and there are a lot of gaps in the digital publishing industry. The elderly book market has not been valued by the publishing industry for a long time. After entering the digital publishing industry, this trend can be reversed to grasp the changing knowledge needs and reading characteristics of the elderly group and further develop the elderly digital publishing industry.

Secondly, Narrow coverage of older digital publication selections. In addition to the small scale of the elderly digital publishing industry, the only elderly digital publications also face the problem of narrow coverage of topics. The liquid aging society suggests that there is diversity and mobility in the internal structure of the elderly population. Digital publishing should think about how to meet the growing aging population with more subdivided publishing services, and break through the relatively fixed and structured publishing content. With the emergence of the new elderly group, the cultural literacy, reading habits, reading interests and needs of the elderly readers present a more multi-level appearance. In addition to health care and disease prevention, the demand for

high-quality content resources such as leisure, entertainment, education and new technology will gradually increase.

Relevant reports point out that 55.83 % of the elderly are between 60 and 69 years old. Readers of this age group not only have good independent reading ability, but also can become the leader of other elderly readers. At the same time, according to Quest Mobile statistics, the silver-haired crowd is still an important growth point in the mobile Internet market. The portrait of the entire mobile Internet user population in China shows that as of March 2023, users over 51 years old accounted for 26.5 %, a year-on-year increase of 3.5 %. Therefore, the acceptance of new reading methods by the elderly also needs us to rethink. Although the younger generation is still the mainstream group of digital reading, the potential of the younger elderly cannot be ignored. Through the aging development of the digital publishing industry, this group of elderly people may be able to complete the transition from digital reading layman to digital reading trendsetter.

Secondly, Neglect services and after-sales in the geriatric digital publishing industry. Consumerism and capital escape minimize digital publishing services. The elderly need more support for related activities due to age and physical decline, and this dependence is often ignored. Even in the academic community, many analysis of the digital publishing industry only ended abruptly after the sales were completed. In the face of today 's uncertainty, in the face of more restless elderly readers, complete digital publishing services and after-sales should be taken seriously.

Service and after-sales are directly related to the user 's reading experience and whether they have the motivation to persist in reading. Relevant research shows that in the face of pop-ups, network interception and even traffic reminders that may occur during reading, more than 50 % of the elderly are worried about encountering network fraud, more than 40 % of the elderly are afraid of personal privacy being leaked, and nearly 30 % of the elderly are worried about traffic exceeding the sky-high telephone charges. Although these problems are difficult to solve at the market level, they can be dealt with through popular science propaganda at the service level. On the contrary, the lack of relevant supporting services and after-sales care will further aggravate the technical anxiety of the elderly, thus affecting the healthy development of the elderly digital industry.

In summary, the digital publishing resources available in the reading circle for the elderly are limited, and the digital publishing industry has failed to take care of the diverse needs of the elderly. At the same time, there are not many suitable aging transformation of publishing technology, and the market system of digital publications for the elderly, including product content, platform operation, marketing channel and after-sales service, has not been established. It is necessary to reconstruct the digital publishing value chain for the elderly.

### III. VALUE CHAIN RECONSTRUCTION OF SENIOR DIGITAL PUBLISHING IN THE CONTEXT OF LIQUID AGING SOCIETY

Michael Porter puts forward that the enterprise is a collection of activities in the process of designing, producing, selling, sending and assisting its products. These activities

form a dynamic process of enterprise development and value creation, that is, value chain. Facing the liquid aging society and the rapid development of digital publishing, it is of great significance to construct the value chain of digital publishing for the elderly.

Jin Xuetao and others believe that the industrial value chain of digital publishing is a complete chain that takes content as the source, takes the Internet, telecommunication network, radio and television network as the transmission channel, and serves readers through handheld electronic receiving terminals such as computers, mobile phones, and e-books. However, the Internet is changing rapidly, and the radio and television network has declined in a blink of an eye. The value chain of digital publishing needs to be innovated urgently.

This study examines the upstream and downstream of the digital publishing industry chain, and the upstream content suppliers bear the responsibility of content supply. The platform and network operators in the middle reaches are responsible for transmission, distribution and operation distribution. Among them, the network operators mainly provide users with Internet service channels, and the space for change is limited. Therefore, the following mainly puts forward relevant suggestions for platform services; the downstream hardware manufacturers and digital publishers are responsible for terminal presentation. The value chain of digital publishing seems to have been formed, but the division of service and after-sales in the upper, middle and lower reaches is almost blank, and there is a lack of pertinence to the elderly readership.

Firstly, From the upstream of the industry, the content supply level mainly needs to solve the contradiction between supply and demand of digital content for the elderly, and promote the simultaneous development of the quantity and quality of digital content supply. The content supply of the traditional publishing industry is based on paper as the medium. The process of soliciting, submitting and editing is relatively fixed and strict. The overall content creation model is relatively single and the speed is lagging behind. The applicability of this path is reduced in the context of a liquid aging society. Digital publishing applies digital technology in content creation, and the overall editing speed is improved. The content is not limited to manuscripts. It integrates external creation, publishing and other resources, and has the ability to supply rich content for elderly users.

When talking about the feeling of digital reading, many elderly people say I can only use my mobile phone to read the news and I am not interested in the books recommended by the software, which actually reflects the forgetting and neglect of the reading interest of the elderly by the upstream content suppliers. To achieve the simultaneous development of the quantity and quality of digital content supply, there can be more diversified manifestations in the form of content, including text, images, audio and video, etc., which can be incorporated into the form of digital publishing. For example, although there is no market for comic strips now, many elderly people have emotions about comic strips, and the digital publishing industry may try the digital regeneration of old

comic strips. Secondly, in terms of reading resources, the content of publications for the elderly is similar, focusing on health care, disease prevention and extension. In fact, the elderly focus on sports, health, also like calligraphy, painting, and people like to look back on life, love to read biographies, or like to read classics, to further understand the world, the aging digital publishing industry should give more attention to the above categories, rich reading resources are conducive to broadening the boundary of reading types for the elderly.

Secondly, From the midstream of the industry, the traditional publishing industry mostly uses the sales offices and offices of state-owned enterprises such as publishing houses and magazines as channels for content dissemination, and users or organizations use subscriptions to obtain paper content. After the vigorous development of the network platform, users can use APP, WeChat push and other ways to subscribe independently without any intermediate channels, and are not limited by time and space. In this process, the platform plays an important role. The platform gathers upstream content resources and gathers readers. At present, most of the representative platforms in the market for the elderly reading, such as Himalaya, music age listening, are mainly reading apps based on audio reading. There are few text reading apps for the elderly group. Most of them are based on the original software to launch large-character editions and caring editions, and there are still restrictions on the degree of adaptation. However, audio books are a useful exploration, reflecting the liberation of the platform service for the visual and physical posture of the elderly when reading. However, there are still some shortcomings in its product promotion. Studies have shown that the download volume of music-age listening books accounts for only 0.037 % of the elderly population, and the promotion of audiobooks for the elderly has a long way to go.

At the same time, the platform also faces the problem of lack of operation. The information receiving environment of the elderly group is relatively closed. If we want to achieve widespread popularity in the group, we will inevitably need a more powerful way of publicity. An important point is to embed advertising into the daily scenes of the elderly's life, such as bus stations, park bulletin boards, elevator compartments, etc., to help the elderly audiobook platform to promote and promote.

Thirdly, In terms of downstream terminal presentation, in fact, there are not a few products on the market. Readers represented by brands such as kindle and palm reading are mature. The aging terminal presentation generally has the functions of adjusting font size, line spacing, built-in dictionary, magnifying glass, etc., but there is still a lack of human care in the specific operation mode. For example, palm reading light 2 does not support handwritten input or five-stroke input, while many of the 60 and 70 generations of elderly people do not learn pinyin, and it is difficult to complete retrieval without handwritten input. Whether manufacturers can investigate the user needs of the elderly group with more energy and sincerity will directly affect the downstream terminal presentation.

At the same time, the transaction is not the last link of the value chain, and the service for the elderly reading is not just as simple as increasing the size. Although the after-sales and service are in the downstream link of the value chain, they need to be completed together. The traditional publishing industry has a weak connection between readers and the links in the value chain. Reading is more like a completely independent activity. After-sales service is limited to "commodity exchange" and is often hindered by difficulties in obtaining communication. Digitized publishing has broken the previous publishing mode in which each node is separated, and there is a possibility of communication and connection between links. In fact, the services provided to improve or maintain the value of products have been paid more and more attention, and become an important means for enterprises or platforms to improve user stickiness.

In the face of a liquid aging society, the digital publishing industry needs to carry out operation and management. To establish a competitive advantage and improve the stickiness of elderly users, it is necessary to provide more comprehensive services to the elderly readers from the aspects of digital reading skills training, digital reading promotion, elderly reading lectures, promoting children's digital feedback, and even logistics reminders for the elderly, so as to bridge the digital divide of the elderly group, so that they can accept digital reading with a more positive and optimistic attitude and enrich their later life.

In the liquid aging society, the insecurity of elderly friends is even more serious. The sense of no dependence and no dependence makes it difficult for them to better integrate into the digital age. For the digital publishing industry, the integration of service and after-sales into the value chain means offering assistance to elderly friends, so that dependence is no longer a burden that can be ridiculed, and no longer excludes each individual who has slightly fallen behind, forming social altruism, life mutual assistance and emotional support.

#### IV. CONCLUSION

This paper draws on Bauman's view of fluid modernity, considers the changes brought by the liquid to the aging society, and focuses on the problems of the elderly digital publishing industry in the new historical context. According to the research, the liquid aging society presents the characteristics of individualization, difference and uncertainty, which leads to the change of production and life of the elderly. As far as the digital industry is concerned, it should build an industrial model of a liquid aging society with its adaptive changes, give full play to the role of digital reading in the spiritual nourishment, community construction, and positive aging concept construction of the elderly, and alleviate the impact of the liquid society. Therefore, based on Michael Porter's value chain concept, this paper puts forward the thinking of the direction of change from the three dimensions of upstream, midstream and downstream, and reconstructs the value chain of digital publishing for the elderly in the liquid aging society, in order to make some contributions to the digital reading life of elderly friends.

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