## Original Paper

## The Dilemma and Thinking of "Digital Labor" in The Era of

# Digital Economy

## Hanshu Zou<sup>1</sup>

<sup>1</sup> Renmin University of China, Beijing, 100872, China

Received: December 07, 2024	Accepted: December 27, 2024	Online Published: January 01, 2025
doi:10.22158/ibes.v6n6p99	URL: http://dx.doi.org/10.22158/ibes.v6n6p99	

From the beginning of 2018, the wave of innovation in new retail was in full swing, driven by capital and the entry of e-commerce giants such as Alibaba, JD.com, and Tencent.

Put forward by the e-commerce giant Alibaba, new retail aims at enabling enterprises to integrate online and offline businesses, addressing the backward management of offline stores, lack of logistics, limited online traffic, and poor experience. Through the integration of online and offline, the ultimate goal is to improve the fulfillment methods of retail and reconstruct the entire retail industry ecosystem in the three dimensions of "people, goods, and place".

Whether it's Alibaba, which successfully created Hema Xiansheng, Tencent's alternative "smart retail", or JD.com, which started the process of opening stores in cities like Beijing, Shanghai, and Guangzhou using the fresh food supermarket 7FRESH, new retail startups have sprung up like mushrooms, capturing people's attention with various high-tech methods, seizing the market, and forcing traditional retail enterprises to transform and upgrade in confusion and anxiety.

At the same time, various new retail models have also emerged. Moreover, unlike traditional e-commerce models, social e-commerce led by Xiaohongshu has become a new favorite among the public. Companies and individuals have all smelled the huge business opportunities, scrambling to occupy the high ground of the traffic pool, and for a while, "growth hackers" have become the hot cakes that major companies are competing to recruit. It can be said that in the era of the digital economy, traffic is king.

The Internet, 5G, AI, VR, and other technologies have greatly accelerated the digitalization process of our physical world. The complex information of the physical world is quickly and efficiently collected through various electronic terminal touch points and reduced to "bits", and all the data has become assets. This means that what is transacted online is far more than goods; essentially, it is the digital information of people in the physical world. Everyone, without realizing it and inevitably, serves as a free "digital laborer" for the world factory, such as private information generated by users logging into

app terminals, cookies generated by browsing web pages, personal privacy exposed during the use of the Internet of Things like Google Glass and Apple Watch, etc. These data are recorded and collected by businesses in the form of data and then transformed into commercially valuable big data for secondary resale. This reveals the double-edged sword impact of the digital economy.

Therefore, this article will analyze the phenomenon of "digital labor" in social e-commerce in the era of the digital economy, discussing the current dilemmas individuals may face and the methods to break the deadlock.

### 1. The Technological Background of the Emergence of "Digital Labor"

Vincent Mosco, a Ph.D. in sociology from Harvard University, once called the new wave of communication technology that "everything is media" the "next internet." Specifically, this includes three interconnected systems: cloud computing, big data analysis, and the Internet of Things.

Because of the development of cloud computing, consumers, businesses, and government agencies are able to do data transferring from personal computers and local IT departments to large data centers distributed worldwide. By charging storage fees and selling consumer data to companies interested in promoting their services and products, cloud computing companies earns their profits.

So-called big data analysis includes analyzing data stored in the cloud to determine the connections and correlations between different types of data, thus depicting people's behavior and attitudes and making predictions based on this. The three store, analyze, process, and distribute the massive amount of information collected by network sensors from all user terminals, constantly challenging the original intention of the Internet, establishing a new set of standards, and bringing about many issues such as the ecological environment, personal privacy, work, and labor.

Due to the upgrading of communication systems, the development of the 5G network, the trend of integration of these technologies will continue to facilitate people's participation in decisions that affect their lives, thus having great potential in promoting economy and democracy.

However, technology is also subject to severe questioning, such as the huge environmental pressure that cloud computing may cause, the need for a large amount of electrical resources, and the invasion of people's privacy, etc. Technology cannot end capitalism. On the contrary, technology is often used to exacerbate inequality, exploit workers and consumers, and bring all aspects of people's lives under its surveillance, including redefining the workplace, resulting in an intensified class divide. Capital uses the next-generation Internet to accurately target customers, constantly adjusting marketing advertisements and products based on this, and the potential for huge commercial benefits is incomparable to the first-generation Internet; government agencies can also more closely track and control the behavior, social activities, and life content of citizens.

100

#### 2. The Mechanism of the Emergence of "Digital Labor" Based on Social Media

Currently, the reason why social e-commerce has become a new favorite among the public is due to the strong attraction mechanism of social media to people. With attraction, there is naturally traffic. People use social media because, according to the "use and satisfaction" theory, they are driven by needs. In general, there are four types of needs: social needs, self-expression needs, emotional needs, and entertainment needs. It is precisely because people's needs can be continuously met on social networks that an addiction mechanism is produced, and the so-called "mobile phone addiction" and "computer addiction" are generated in this way. Under this mechanism, commercial companies are just right, and they have found a way to continuously obtain users, maintain stickiness, and ultimately continue to make profits.

When individual needs are met, there is a price to pay, and this price is a part of freedom.

When Facebook was caught up in a privacy scandal, Baidu CEO Robin Li once said, "Chinese people are willing to trade privacy for convenience." Indeed, the development of the Internet cannot be separated from the dissemination of concepts such as free and shared, but people's attention to convenience is often far more than privacy. Especially in the context of digitization, the concept of "users" has emerged, and user experience is particularly important because companies want to make profits, they need to strengthen user stickiness and loyalty through this method. Improving the user experience is both a user's need and a company's pursuit, which seems to be a win-win situation. However, we often do not think about the source of these needs and do not realize that these needs are not innate to humans but are constantly created by commercial companies driven by interests. In addition, advanced media technology will continuously create or meet social needs based on user data, and the relationship between needs is very close, and people almost have no right to say "no."

But this deprivation of freedom is often disguised quietly.

First, the user agreement is a copyright transfer under the "consent" law.

Usually, when we register and use social media, there is an option of "whether to agree to XXX user agreement," "agree" can use the social media, "disagree" cannot use it. This seemingly democratic choice is actually an irresistible "tyrannical clause," and users do not even pay attention to or think about the specific content of these agreements, based on such usage habits, users are easily deceived. The picture above is the "Weibo Service User Agreement" updated by Sina Weibo in September 2017,

which undoubtedly makes Weibo users make a "choice": either agree to Weibo's agreement and transfer the copyright of the content to the Weibo platform; or give up all functions of the Sina Weibo platform. Moreover, the copyright of the content published by users belongs to Weibo, the benefits obtained from rights protection belong to Weibo, and the consequences of violations are borne by the users themselves.

Second, "You Might Like" has become a free concession under the user experience.

Nowadays, when browsing any content on social (e-commerce) platforms, whether it is Mei Li Shuo, Mo Gu Jie, Xiao Hong Shu, or Taobao, JD.com, the first thing you see is the content pushed to us by the "recommendation mechanism." The algorithms of the recommendation system are generally divided into three categories: user nature, object nature, and the exchange process between users and objects, which work together in symbiosis and coordination, and change according to the differences in individual users and places. Then, the system will make up for the information supplemented by network tracking. E-commerce companies like Amazon and Taobao have a considerable amount of user data, and almost all operations of users after logging into the website are saved for later use. For anonymous users, browser Cookies will record this information, and once they register, the original anonymous information will be supplemented to the current user profile. At the same time, the system will also record the user's satisfaction with the recommended information, and based on the user's browsing and use of the recommended information, feedback is obtained to further optimize the subsequent recommendations, which can also improve the accuracy of the recommendations.

Now, many people believe that data is neutral and purely objective, but people have overlooked which information can be weighted and included in the technical algorithm program, and which information.

### Reference

- Ish, K., & Chidambara. (2024). A systematic literature review and bibliometric analysis of last-mile E-commerce delivery in urban areas. *Urban, Planning and Transport Research*, (1),
- Lang, J. J., & Mao, L F. (2023). The Dilemma and Thinking of Gig Workers in the Digital Organization Environment. *Information Systems and Economics*, (6),
- Pinchevski, A. (2023). Social media's canaries: Content moderators between digital labor and mediated trauma. *Media, Culture & Society*, (1), 212-221. https://doi.org/10.1177/01634437221122226
- Robinson, T. Y., & Smith-Jackson, T. (2023). Breaking barriers through the digital workforce: Providing IT training and employment pipelines for ex-offenders. Technological Forecasting & Social Change. https://doi.org/10.1016/j.techfore.2023.122438
- Yang, H., & Yue, Q. (2024). Gendering digital labor: Work and family digital communication across 29 countries. *Community, Work & Family*, (5), 588-611. https://doi.org/10.1080/13668803.2024.2373852
- Yue, X., & Md. Gapar, Md J. (2025). How external factors influence organisational digital innovation: Evidence from China. *Technology in Society*, 102802-102802. https://doi.org/10.1016/j.techsoc.2024.102802
- Zhang, X. H., Sun, D., Jiang, R. Y., Wang, J. Y., & Ma, X. C. (2024). The Impact of Technological Value Recognition on Job Performance Under Digital Transformation: The Mediating Role of Emotions in Digital Labor. *Journal of Organizational and End User Computing (JOEUC)*, (1), 1-20. https://doi.org/10.4018/JOEUC.354586