## The Upgrade Path Based on the Transformation of the New Retail Model of the Decentralized Data Center in the Mobile Internet Era

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**Abstract**: As a breakthrough point in the development of new retail models, blockchain will be supported by data to open up the value circulation channels of various platforms and merchants under new retail, and combine social trust on the basis of "decentralization" to create a new retail driven by quality Development Environment. In order to ensure the formation and sustainable development of the regional new retail model guided by the blockchain concept, safeguard measures should be improved from six aspects: transaction payment, technical support, government support, bank support, logistics services, and participation mechanisms, and focus on terminal technology scenarios. Construction, to enhance the enterprise's modern Internet technology development and application capabilities, to achieve a scene-based shopping experience; to reposition consumer value.

Keywords: Upgrade Path, New Retail Model, Decentralized Data Center, Mobile Internet Era

#### 1. INTRODUCTION

The origin of the concept of "new retail" in China was when Jack Ma, chairman of the board of directors of Alibaba Group, put forward at the Hangzhou Yunqi Conference in October 2016: "The era of pure e-commerce will soon end [1], the next 10, 20 years... ...Only the term "new retail" means that online and offline and logistics must be combined to create a real "new retail" [2]. In the new retail environment, the three core elements of retail-people, the goods and the market have changed and been redefined [3], but in any era, the root of the problem is how to realize the multi-party interests of consumers, brands and platforms [4].

Blockchain technology empowers brands, consumers, agents, and physical stores, thereby linking all parties together and creating an ecosystem [5], so that each brand product can be directly passed the new business link model that the platform reaches the hands of consumers-the blockchain social new retail model [6]. The advantages of this new business link model are reflected in many aspects. Blockchain technology is a brand-new distributed infrastructure and a trust mechanism that improves transaction quality [7]. This article is intended to study the application of blockchain, not the research of blockchain technology itself. In the face of changes in the world economic structure [8], based on the principle of similarity and complementarity of economic structures, based on the strong desire of backward economies to develop the economy [9], my country has proposed the "Belt and Road" initiative. In order to promote the regional development of the "Belt and Road", scholars have carried out in-depth research, among which the research in the field of business mainly focuses on e-commerce and trade investment [10].

Zheng Lei and others analyzed the spatial distribution and industrial selection of economic cooperation between China and the countries and regions along the "Belt and Road" from the perspective of direct investment [11], and advocated that China should invest in countries and regions along the routes based on the principle of differentiation. "We have been discussing the decentralization of retail [12], so Gome has created a new shared retail model of "social + commerce + sharing": everyone can realize value on our shared platform [13]. Gome draws on the supply accumulated over 30 years Chain Assets is committed to becoming an empowering platform for operators with zero cost and zero investment." At the "2018 Business School Business leaders Summit" [14], Gome Retail CFO Fang Wei explained Gome's thinking and philosophy on shared retail [15]. Many scholars have explored the development issues of the traditional retail industry, including: lack of product innovation, intensified competition in the same industry, rising costs and deepening of operating burdens [16], backward consumer experience that is difficult to meet customer needs, and the lack of a profit model for independent pricing power [17]. In this regard, the business and academic circles have put forward the concept of new retail, trying to use the theory of industrial integration to deepen the integration of Internet technology and sales and reshape the retail model [18].

Among them, Hu Hanhui (2003) believes that new retail is a process in which traditional retail companies use technology to improve and innovate traditional business models, and sell products and services to consumers through new ideas and ideas. Li Meiyun (2005) [19], based on the evolutionary logic of the retail industry, believes that new retail is a way to compensate for the development of traditional retail, and promotes the improvement of service quality through technology to drive the development of the retail industry. However, there are also many retail industry leaders [20], scholars and experts who have raised objections to the new retail concept. Real problems such as low sales. However, consumers have increasingly [21] higher requirements for product quality, and new demands such as improving product experience have emerged. Traditional e-commerce dividends are gradually shrinking, and they are encountering transformational bottlenecks [22]. Therefore, the combination of online and offline has become a way out for the sustainable development of the retail industry, and new retail has been derived from it [23]. At the same time, with the continuous upgrading and popularization of mobile Internet and smart

phones, WeChat, as an important decentralized traffic portal, deeply empowers e-commerce [24], and provides a mobile trading platform with a complete chain for retail companies to develop online businesses. Consumers have a new choice when shopping. Therefore, the retail industry must adjust strategic decisions as soon as possible, change the business model, and enhance consumer stickiness. It is the general trend to rely on the "mobile social e-commerce" path to develop the "new retail" model.

### 2. THE PROPOSED METHODOLOGY

### 2.1 The Decentralized Data Center

ECN provides northbound interfaces to application layer developers, developers can access resource information in the network, and call various network resources in the form of software programming to develop personalized services.

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This type of node has a large number and a wide range of applications. Therefore, in this chapter, only the hardware design of the vital sign monitoring node and the fall detection node in the health monitoring subsystem is described in the data collection node. The internationally commonly used LCA software listed above has existed in the market for a long time, and the one with a long history has been released for more than 20 years.

# 2.2 The Transformation of the New Retail Model

However, the core elements of the new retail model focus on differences. For example, the traditional retail model focuses on goods and venues, ignoring the human element. The new retail model is based on human text and consumer demand as the leading factor. Its methodology is: new retail = commodity\*person 2, that is, the new retail model uses commodities as a medium and establishes the relationship between people. The key point is It is an operator. Therefore, under the new retail model, the three elements of traditional retail "goods, market, and people" will be transformed into "people, goods, and market", and the model and value will be reshaped on this basis. In terms of the duality of the retail model, new retail is also different from traditional retail.

With the strong development of the mobile Internet, my country's traditional retail industry is facing an important transformation. The online retail traffic dividend tends to peak, and offline retail is also ushering in a cold winter. The decentralized and intermediary trust system itself guarantees its authenticity. Sex, does not require the intervention of the subject of external trust endorsement. The system is open, except that the private information of all parties to the transaction is encrypted, the data on the blockchain is open to everyone and the information is transparent. Any man-made intervention does not work, reducing external adverse intervention. Information cannot be tampered with, because the data on the chain can only be increased and cannot be modified, which determines the openness, transparency and non-tampering of transactions. The counterparty does not need to make the other party trust themselves by disclosing their identity, which is very helpful for the accumulation of credit.

The situation is difficult, and this situation forces the traditional retail industry to transform and upgrade in time. With the advent of the new retail era, in 2016, the State Council promulgated the Opinions on Promoting the Innovation and Transformation of Physical Retailing, which most directly pointed out how the physical retail industry should transform its model and adjust its strategic direction, and step up cultivation to achieve online and offline integration. Emerging market entities. Before the promulgation of this policy, the Ministry of Commerce conducted a rigorous and meticulous field survey on my country's physical retail entities, and concluded that the shape of my country's future retail industry must be a strong conclusion that the online and offline coordinated development will provide for the development of my country's new retail. Strong policy support. Retail is an important content in the marketing field. Its function is to connect products with end consumers and complete the exchange of value and utility. If value and utility basically match, the sustainability of retail exists; otherwise, it is not sustainable. From the perspective of the nature of retail, its own value lies in placing both supply and demand in the market network.

### 2.3 The Upgrade And Transformation of New Retail Model Based on Decentralized Data Center

The consumer demand concept has undergone a subversive change, providing a transformational appeal for the retail industry. Behind the decline and decline of the physical retail industry is the transformation of modern consumer concepts. Modern young consumer groups pay more attention to the added value of products, and the main goal is to meet individual psychological needs. According to statistics from the Alibaba Research Institute, my country's "post-80s" and "post-90s" consumer groups are growing rapidly at a rate of 14%, and are expected to contribute 65% of my country's total consumption in the future. We can participate in multiple parties through the blockchain, jointly maintain the same data source, and strive for as many commodity supply chain participants as possible.

The more parties involved, the more data jointly maintained, and the easier it is to bring consumers a more foundation of data trust. With the decentralized characteristics of the blockchain itself, the distributed network naturally overcomes the various shortcomings of the centralized system. Decentralization, security, and efficiency are a collection of blockchain concepts, which are applied to the "Belt and Road" regional business field, aiming to explore a new retail model suitable for the "Belt and Road" region under the new normal. The lack of an absolute economic center, mature payment channels, strong development aspirations and other factors strongly support the implementation of the blockchain concept in the "Belt and Road" region, and the current situation that traditional commerce and e-commerce are in trouble is the development of new business models Provides space.

The development of new retail with the concept of blockchain helps to integrate traditional commerce and e-commerce in the "Belt and Road" region closely around the core of retail. Secondly, the operators of the blockchain alliance chain are roughly divided into the following items: alliance chain, automation, visualization, data efficiency, cross-chain bridging, each link has a complete set of operating mechanisms, and the data chain information is comprehensive, Automation, openness, efficiency, rationality and linkage. This kind of operation management mechanism is more scientific and reasonable. In addition, due to the influence of Internet thinking and the rapid development of the commodity economy, the consumer market has changed from production-led to consumption-led in the past, and consumers have a heavier voice in the transaction process.

### 3. CONCLUSIONS

Based on the obvious characteristics of the retail industry's natural fragmentation of transaction data, diversification of transaction nodes, and complexity of transaction networks, the collection, storage and integration of information such as It should be emphasized that in the EPFL-PoliMI database, the original video sequence represents the video sequence without any distortion, and the reference sequence represents the use of JM reference software according to H. 264/AVC standard, and the distorted sequence represents the video sequence obtained after the reference sequence is distorted by simulated network packet loss.

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