The Supply Chain Management of Live Streaming E-Commerce

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Abstract: This paper provides a comprehensive analysis of the management mode, supply chain management, and future prospects of the live streaming e-commerce industry. The article begins by outlining the fundamental concept and development process of live streaming e-commerce, emphasizing its significant role as a novel business model in the digital economy. Subsequently, it delves into a detailed analysis of the management mode of live streaming e-commerce, encompassing anchor team construction, content planning, marketing promotion, data analysis and optimization, after-sales service, and customer relationship management. Drawing on successful cases such as Li Jiaqi and Wei Ya, it underscores the critical importance of meticulous supply chain management and astute market insight. Simultaneously, the article also highlights the challenges and issues encountered by the live streaming e-commerce industry, including difficulties in inventory management, product quality control, and logistics distribution efficiency. Ultimately, the paper anticipates the future of live streaming e-commerce, asserting that technological innovation and model innovation will serve as pivotal drivers for industry advancement. It further proposes measures to enhance technology research and development, optimize supply chain management, monitor shifts in consumer demand, and reinforce industry self-regulation and oversight. In summary, this comprehensive analysis offers readers an opportunity to gain a profound understanding of the live streaming e-commerce industry while providing valuable insights for relevant practitioners.

Keywords: Live streaming e-commerce, Supply chain management, Consumer behavior, Internet technology, Logistical enhancements.

1. Introduction

The rapid advancement of Internet technology and the significant shift in consumer shopping habits have propelled live streaming e-commerce to emerge as a dominant new model. According to the 49th Statistical Report on China's Internet Development released by China Internet Network Information Center, as of December 2021, the number of webcast users in China has reached 704 million, constituting 68.2% of total netizens. Live e-commerce integrates real-time interaction with product display, marketing activities, and consumer purchasing behaviors, enhancing consumers' shopping experience and providing merchants with an efficient sales platform [1]. However, the swift growth of live streaming e-commerce presents new challenges for supply chain management. The traditional supply chain management model struggles to meet the demands for rapid response,

efficient delivery, and accurate prediction posed by live streaming e-commerce. Therefore, it is crucial to explore supply chain management strategies tailored to the characteristics of this industry. This study aims to conduct an in-depth analysis of the current status, issues, and development trends within the live streaming e-commerce supply chain in order to offer theoretical guidance and practical insights for relevant enterprises and promote healthy and sustainable industry development.

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Therefore, previous research focused on the live streaming e-commerce development history, market trends, competition patterns and consumer behavior. This article primarily investigates the management mode, supply chain management, and future prospects of the live streaming e-commerce industry. The aim is to uncover the current status, challenges, and development trends of the industry through in-depth analysis and provide guidance for relevant practitioners.

2. Live E-commerce Management Mode

As a burgeoning business model, live streaming e-commerce plays a crucial role in fostering industry development and enhancing consumer experience through its distinctive management style and operational strategy.

2.1. Management Mode of Live E-commerce

The management mode of live streaming e-commerce is a highly integrated and real-time interactive business operation mode, which combines the advantages of traditional e-commerce and live streaming technology to form a unique operation system. This model not only relies on advanced technical support but also requires efficient management strategies to ensure its smooth operation. In live streaming e-commerce, supply chain management, anchor training and management, content planning, marketing promotion, and data analysis and optimization are all crucial [2]. These links work together to form the core operating system of live streaming e-commerce.

2.2. Supply Chain Management

In the realm of supply chain management, companies must forge close partnerships with suppliers to ensure swift replenishment and shipment of goods. Simultaneously, they should utilize data analysis to forecast sales trends, optimize inventory management, and mitigate risks of excess inventory or stockouts [2]. To achieve this objective, enterprises can leverage advanced data analysis tools and techniques for accurate market demand forecasting and adjust purchasing plans and inventory levels

accordingly. Furthermore, establishing an information-sharing mechanism with suppliers can facilitate collaborative supply chain operations and enhance overall operational efficiency.

2.3. Anchor Training and Management

The professional quality and performance ability of anchors are crucial to the sales effect in live streaming e-commerce. Therefore, enterprises should provide systematic training for anchors, covering product knowledge, sales skills, interactive ability, and other relevant aspects [3]. Additionally, it is essential for enterprises to establish a robust anchor management system to ensure that the conduct and image of anchors align with the brand's image. During the training process, enterprises can invite industry experts and senior anchors to give lectures and share experiences in order to enhance the professionalism and performance of anchors. Furthermore, organizing internal competitions and selection activities on a regular basis can help stimulate the enthusiasm and creativity of anchors.

2.4. Content Planning

Content planning is a crucial aspect of live streaming e-commerce. Companies must develop engaging live themes and content tailored to the preferences and interests of their target audience. Simultaneously, emphasis should be placed on the visual appeal and clarity of the live broadcast to enhance the audience's viewing experience [3]. During the planning process, enterprises can conduct market research and user analysis to gain insights into the preferences and needs of their target audience, enabling them to formulate content strategies accordingly. Furthermore, companies can also leverage star guests or industry experts to participate in the live broadcast, thereby increasing its appeal and relevance.

2.5. Marketing Promotion

In terms of marketing promotion, live e-commerce should be promoted through a diverse range of channels. Taking TikTok as an example, merchants can generate interest in live content by posting short videos to attract fans and encourage interaction [3]. Additionally, leveraging the algorithm recommendation mechanism of the TikTok platform can help push the live broadcast to a wider audience, thereby increasing exposure and conversion rates. Enterprises should develop detailed marketing plans and budget programs during the promotion process, selecting appropriate channels and methods for launch. Furthermore, enterprises can engage in joint promotion and cross-border cooperation with partners to expand brand influence and market share.

2.6. Data Monitoring and Optimization

Data monitoring and optimization is an integral part of live streaming e-commerce [3]. Merchants need to monitor and analyze data in real-time during the live broadcast, including the number of viewers, interactions, sales data, etc. According to the data analysis results, timely adjust the live broadcast strategy and content optimization user experience to improve sales conversion rate. In terms of data monitoring, enterprises can use advanced data analysis tools and technologies for real-time monitoring and analysis of live data. At the same time, enterprises can also establish a data feedback mechanism to timely feedback data analysis results to relevant departments and personnel so that they can timely adjust strategies and improve work.

2.7. After-sales Service and Customer Relationship Management

After-sales service and customer relationship management are essential components of live streaming e-commerce. Merchants must deliver high-quality after-sales service to address consumer concerns and uncertainties during the purchasing process [4]. Simultaneously, they should establish a robust customer relationship management system to gather user feedback and suggestions for continuous improvement of product and service quality. Enterprises can establish dedicated customer service teams and hotlines to provide consultation and complaint services for consumers in terms of after-sales support. Enterprises can simultaneously establish online customer service systems and social media platforms to facilitate communication with consumers at any time and from anywhere. In terms of customer relationship management, enterprises can create customer files and databases to record purchase history and behavioral preferences in order to gain a better understanding of customer needs and provide personalized services [4].

3. Successful Experience

In the field of live streaming e-commerce, Li Jiaqi and Wei Ya, as the head anchors, not only won the love of consumers with excellent personal charm and professionalism but also achieved continuous soaring sales performance through efficient supply chain operations. Behind their success lies a series of innovative supply chain strategies and intrinsic reasons [5].

3.1. Partnership

Firstly, Li Jiaqi and Wei Ya have established a close cooperative relationship with their suppliers. They recognize that product quality is paramount in gaining consumer trust, thus they rigorously vet their suppliers to ensure the reliability of the goods they sell [5]. Additionally, they utilize data analysis to forecast sales trends and collaborate with suppliers to develop production plans, enabling on-demand production and mitigating inventory surplus and stockout risks. This refined inventory management strategy enables their livestreaming platform to promptly introduce new products to meet consumer shopping needs. In addition, Li Jiaqi and Wei Ya also prioritize the efficiency and accuracy of logistics distribution. They have established close partnerships with multiple logistics companies to select the most suitable logistics solution based on order volume and distribution scope. During live broadcasts, they provide real-time updates on logistics information, allowing consumers to track their orders at any time. Additionally, they have set up a dedicated customer service team to address logistics issues and handle after-sales disputes, ensuring a guaranteed shopping experience for consumers [5].

3.2. Market Insight and Product Selection

In addition to efficient supply chain operations, Li Jiaqi and Wei Ya excel in the field of live e-commerce due to their keen market insight and precise product selection ability. Through in-depth analysis of consumer needs and market trends, they are able to identify products with potential for promotion [6]. This strategic product selection enables their broadcast room to consistently launch high-demand products and attract a large consumer base. On the contrary, they prioritize engaging and communicating with their fans. During live broadcasts, they not only provide detailed introductions to product features and usage methods but also actively respond to fan inquiries while sharing shopping experiences. This genuine and amicable interaction serves to bridge the gap with fans, ultimately fostering stronger fan attachment and loyalty.

3.3. Experience and Strategy Behind Success

In conclusion, the success of Li Jiaqi and Wei Ya is a result of their efficient supply chain operations, astute market insights, and genuine fan engagement, which have enabled them to establish an effective live streaming e-commerce operation system [5]. These experiences and strategies have not only garnered them market share and a strong reputation through word-of-mouth but also established a benchmark for the entire live streaming e-commerce industry. Looking ahead, we have every reason to believe that Li Jiaqi and Wei Ya will continue to lead the trend in the live streaming e-commerce industry and deliver high-quality products and services to consumers.

4. Technical Innovation and Model Innovation of Live Streaming E-commerce

With the continuous advancement of science and technology and the growing diversification of consumer demand, the live streaming e-commerce industry is experiencing unprecedented opportunities for development. In the future, live streaming e-commerce will focus more on technological and model innovation to enhance user experience and market competitiveness.

4.1. Technological Innovation Is the Driving Force

Technological innovation will serve as a significant driving force for the advancement of live streaming e-commerce. With the widespread adoption of 5G, AI, and other technologies, live streaming e-commerce will achieve enhanced picture transmission quality, more intelligent interactive experiences, and more precise data analysis. These technological applications will render live e-commerce more immersive and intuitive, enabling consumers to gain a deeper understanding of product characteristics and usage methods while also improving the accuracy of their purchasing decisions. For instance, high-definition cameras and stable network transmission technology will allow consumers to enjoy an in-person shopping experience from the comfort of their homes; meanwhile, AI technology can assist businesses in better-comprehending consumer needs and providing personalized recommendation services. Furthermore, technological innovation will drive the optimization of live streaming e-commerce in supply chain management [6]. Through the implementation of advanced logistics management systems and automated warehousing equipment, live streaming e-commerce can achieve enhanced inventory management and more efficient logistics distribution, leading to reduced operating costs and improved customer satisfaction. Additionally, leveraging big data and cloud computing technology for sales data analysis enables merchants to accurately predict market demand and trends, facilitating the development of more effective marketing strategies [6].

4.2. Model Innovation Breaks Down Limitations

In addition to technological innovation, model innovation is also crucial for the future development of live streaming e-commerce. The traditional live broadcast sales model no longer meets the increasingly diverse needs of consumers, so live broadcast e-commerce must explore more innovative marketing methods. For instance, the social e-commerce model leverages social media platforms to share product information with a wider audience, expand sales channels, and enhance brand awareness; while the content e-commerce model focuses on creating and disseminating high-quality content to attract consumer attention and drive purchase behavior [7]. In addition, live e-commerce can also explore cross-industry collaborations to create innovative shopping experiences. For instance, partnering with the tourism industry to introduce "cloud tourism" live broadcasts, allowing consumers to virtually experience the beauty and cultural diversity of different destinations from their homes;

collaborating with the education sector to offer "online classroom" live courses, providing students with convenient learning opportunities and access to a wide range of educational resources.

5. Future Development Suggestions

For future development, live e-commerce should pay attention to the following points.

5.1. Strengthen Technology Research and Development and Personnel Training

First and foremost, the key to enhancing their competitiveness lies in strengthening technology research and development as well as personnel training. With the continuous advancement of technology, live streaming e-commerce must constantly update its technology and equipment to meet consumers' demand for a high-quality live streaming experience. Simultaneously, it is imperative to cultivate a team with an innovative spirit and professional skills in order to promote the sustainable development of the industry [8]. To achieve this objective, enterprises can enhance their investment in research and development, adopt advanced technology and equipment, strengthen talent training and recruitment, and establish a robust talent incentive mechanism and promotion system. Additionally, enterprises can collaborate with universities and scientific research institutions to jointly develop new technologies and products.

5.2. Optimize Supply Chain Management

Secondly, optimizing supply chain management is crucial for ensuring product quality and maintaining a high level of after-sales service, which in turn plays a significant role in enhancing customer satisfaction. Live streaming e-commerce must establish a robust supply chain system to guarantee product quality and stability of supply. Simultaneously, providing top-notch after-sales service to address consumer issues during the shopping process is essential for boosting consumer satisfaction and loyalty [8]. To achieve this objective, businesses can enhance supplier selection and management, establish long-term stable cooperative relationships, and strengthen logistics management and distribution services to improve efficiency and accuracy. Additionally, they can also develop a comprehensive after-sales service system to promptly address consumer complaints and returns.

5.3. Pay Attention to Changes in Consumer Demand

Third, monitoring changes in consumer demand is essential for making timely adjustments to marketing strategies and product offerings. Given the constantly evolving nature of consumer preferences, live streaming e-commerce must closely monitor market dynamics and consumer feedback in order to make necessary adaptations to their marketing approach and product lineup to align with consumer demand [9]. To achieve this objective, businesses can enhance their market research and data analysis efforts to gain insights into consumers' purchasing behaviors and preferences. Simultaneously, they should strengthen consumer interaction and communication, and gather feedback and opinions. Furthermore, enterprises can adapt product structure and pricing strategies flexibly in response to market changes and competitive dynamics to enhance their market competitiveness.

5.4. Strengthen Self-regulation and Oversight of the Industry

Finally, enhancing industry self-regulation and oversight is a prerequisite for upholding market order and a fair competitive environment. The live streaming e-commerce sector should establish robust industry norms and standards to bolster the supervision and guidance of businesses in order to prevent

the occurrence of detrimental behaviors such as cutthroat competition and false advertising. To achieve this objective, the government can enhance supervision of the live streaming e-commerce industry and establish relevant laws and regulations to regulate market order. Simultaneously, industry associations can also play a proactive role in promoting industry self-discipline and integrity construction. Furthermore, enterprises themselves should uphold correct values and business concepts, and comply with laws, regulations, and business ethics, while establishing a positive corporate image and social reputation [10].

6. Conclusion

In conclusion, live streaming e-commerce has demonstrated significant potential and value in technological innovation, supply chain management, user experience, and other relevant aspects as an emerging business model. With the continuous optimization of management strategies, integration of advanced technology, and reinforcement of industry self-regulation and oversight, it is anticipated that live streaming e-commerce will continue to lead market trends in the future while providing consumers with a more convenient, efficient, and enjoyable shopping experience. There is reason to believe that as the industry matures and develops further, live streaming e-commerce will emerge as a pivotal force driving economic growth and facilitating consumption upgrades. Let us anticipate the promising prospects for live e-commerce's bright future and contribute to a new chapter in the digital economy.

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