

Uniqlo's new retail model optimized through big data analysis

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Abstract: With the rapid development of information technology, the application of big data analytics in the retail industry has become a crucial strategy for enhancing competitiveness and service efficiency of enterprises. This paper focuses on UNIQLO and explores how big data analytics optimize its new retail model. It introduces the concept and development trends of new retail, analyzing the current application status and future trends of big data in the retail industry. It delves into UNIQLO's position and strategic layout in the new retail field. Furthermore, the paper details how UNIQLO utilizes big data to collect, process, and analyze data to optimize supply chain management, offline retail store operations, and online platform sales, thereby improving product recommendations accuracy and customer experience. Lastly, it summarizes the main practices and experiences of using big data analytics to optimize UNIQLO's new retail model, and proposes suggestions for management practices and policies for retail enterprises.

Keywords: Uniqlo; New retail; Big data analysis; supply chain management; Store operation; Online sales

1. Introduction

1.1 Research Background and Significance

With the rapid development of information technology and changes in consumer behavior, the retail industry is experiencing unprecedented changes. The traditional retail model is no longer able to meet the growing personalized needs and instant experience expectations of consumers. In this context, the concept of new retail has emerged, with its core being the perfect combination of online and offline sales and services, achieving a more efficient and personalized consumer experience through technological innovation and data-driven approaches.

UNIQLO, as a globally renowned fast fashion brand, is committed to maintaining competitiveness in the global market through innovation and technology. Uniqlo's exploration and practice in the field of new retail, especially its new retail model optimized by big data analysis, has become a focus of attention in the industry. By conducting in-depth research on Uniqlo's new retail model, it can not only help understand how it utilizes data-driven innovation to enhance market competitiveness, but also provide reference and inspiration for other retail enterprises.

This paper aims to explore in depth how Uniqlo optimizes its new retail model through big data analysis, and analyze its specific practices and achievements in supply chain management, offline retail store operations, and online platform operations. Through the case study of Uniqlo, this paper explores the potential and limitations of big data in improving consumer experience, optimizing operational efficiency, and enhancing market competitiveness, in order to contribute new insights to the theory and practice of new retail.

Academic Editor:Hui LIU

Received: July 5, 2025

Revised: NA

Accepted: July 7, 2025

Published: July 31, 2025

1.2 Research Objectives and Research Questions

The main purpose of this study is to analyze and evaluate how Uniqlo utilizes big data analysis to optimize its new retail model, explore its implementation strategies and achievements. Specifically, it aims to answer the following questions:

- (1) What big data analysis technologies and methods has Uniqlo adopted in its transformation to a new retail model?
- (2) How does big data analysis affect Uniqlo's supply chain management, especially in improving response speed and optimizing inventory management?
- (3) How can big data help Uniqlo optimize the operational efficiency and customer experience of its offline retail stores?
- (4) How can Uniqlo improve personalized recommendations and sales efficiency on its online platform through big data analysis?

Through in-depth exploration of these issues, this study aims to provide empirical analysis for understanding the application of big data in the retail industry, provide valuable strategic recommendations for business decision-makers, and contribute new knowledge and insights to academic research on new retail models.

1.3 Overview of Research Methods and Paper Structure

This study adopts a comprehensive research method that combines qualitative and quantitative analysis to gain a deeper understanding of Uniqlo's new retail model optimized by big data analysis. The specific research methods include:

Literature review: By systematically reviewing and analyzing relevant literature, understand the latest developments and application status of new retail and big data in the retail industry.

Case study: Select Uniqlo as the case study object, and deeply analyze the specific practices and effects of big data application in its new retail model.

Data collection and analysis: Collect and analyze enterprise data, market data, and consumer data related to Uniqlo to validate research hypotheses and answer research questions.

Field research: Through on-site interviews and surveys, obtain the views and feedback of Uniqlo managers and consumers, and enhance the depth and breadth of the research.

2. Literature review

2.1 New Retail Concepts and Development Trends

New retail is a concept that has emerged in the global retail industry in recent years. Its core concept is to enhance consumer experience and operational efficiency by integrating online and offline sales channels, utilizing advanced technology, and data-driven precision marketing. The traditional retail model is increasingly inadequate to meet the challenges of personalized consumer demands, diversified shopping experiences, and rapid technological development. The development trend of new retail mainly includes the following aspects:

Online and offline integration: seamless connection of online and offline channels through technological means, achieving more efficient supply chain management and marketing strategies.

Data driven: The widespread application of big data, artificial intelligence, and IoT technologies helps businesses better understand consumer behavior, optimize product layout, and improve service quality.

Personalized service: Through data analysis, precise marketing and personalized recommendations are achieved to enhance consumers' shopping experience and loyalty.

Intelligent operation: Using automation and intelligent technology to optimize retail processes and management efficiency, reduce costs, and increase profit margins.

The rise of the new retail concept is not only an inevitable trend in the development of the retail industry itself, but also the result of technological progress and changes in consumer demand. In this context, major retail enterprises are exploring and practicing new retail models in order to stand undefeated in the fierce market competition.

2.2 Current Status and Development of Big Data Applications in the Retail Industry

By collecting and analyzing consumer shopping behavior data, retailers can gain a deeper understanding of consumer preferences, purchasing habits, and decision-making paths, thereby accurately targeting target customer groups and optimizing product promotion strategies.

Utilizing big data analysis to achieve real-time monitoring and optimization of various links in the supply chain, effectively reducing inventory costs, improving inventory turnover, and meeting rapidly changing market demands. Through data mining and predictive analysis, develop personalized marketing strategies and precise promotional activities to increase sales and customer satisfaction.

Optimize store layout, product display, and customer traffic management through data-driven methods to enhance shopping experience and customer loyalty. With the advancement of technology and the improvement of data processing capabilities, the application of big data in the retail industry continues to deepen and expand, providing more possibilities for innovation and development for enterprises.

2.3 Uniqlo and its Position and Strategy in the New Retail Sector

Uniqlo, as a globally renowned fast fashion brand, has always been committed to maintaining a leading position in the global market through innovation and the application of technology. Uniqlo's strategy in the new retail field is mainly reflected in:

(1) Online and offline integration: Uniqlo achieves diversified shopping experiences and seamless transitions for consumers by fully integrating online and offline sales channels.

(2) Data driven marketing strategy: Uniqlo utilizes big data technology to gain a deep understanding of consumer needs and behavior, and enhances customer satisfaction and loyalty through personalized recommendations and customized services.

(3) Optimization of supply chain management: Uniqlo optimizes supply chain management through big data analysis, achieving rapid response to market changes and reducing operating costs.

(4) Continuous investment in technological innovation: Uniqlo continuously introduces and applies the latest technological innovations, such as Internet of Things technology and artificial intelligence, to improve the efficiency and quality of product design, production, and sales.

Uniqlo's position and strategy in the new retail field have made it a model in the retail industry, and its successful experience and practice have important reference significance for other retail enterprises.

3. Analysis of Uniqlo's New Retail Model

3.1 Introduction to the Basic Framework of Uniqlo's New Retail Model

Uniqlo, as a leading brand in the global fast fashion industry, actively responds to the new retail concept by integrating online and offline sales channels, optimizing

supply chain management, and enhancing consumer experience, building its unique new retail model.

Uniqlo has achieved seamless integration of online and offline sales channels by building a comprehensive online platform and a global network of offline stores. Consumers can shop and experience different shopping habits and preferences through official websites, mobile applications, or physical stores in various ways. Uniqlo adopts an omnichannel retail strategy, achieving comprehensive display and sales of products through online platforms and offline stores. Consumers can browse products and check inventory through online platforms, as well as choose to try on and purchase products in offline stores, achieving interaction and conversion between online and offline.

Uniqlo has achieved rapid response to market demand and precise inventory control by establishing an efficient supply chain system and real-time inventory management system. This strategy not only improves the sales speed and efficiency of the product, but also effectively reduces the risk of excess inventory and unsold products. Uniqlo uses big data analysis to analyze consumer behavior and preferences, achieve personalized recommendations, customized services, and precise marketing, thereby enhancing consumers' shopping experience and loyalty. For example, based on consumers' purchasing history and preferences, Uniqlo can recommend relevant products, promotional activities, or fashion matching suggestions to increase consumers' purchasing decisions and satisfaction.

The success of Uniqlo's new retail model lies in its ability to flexibly respond to market changes and consumer demands, continuously optimize operational efficiency and improve service quality through technology and data-driven methods, and become a model and leader in the global retail industry.

3.2 The role and importance of big data in Uniqlo's new retail model

In Uniqlo's new retail model, big data plays a crucial role as a key driving force to support decision-making, optimize operations, and enhance consumer experience.

Uniqlo utilizes big data technology to analyze consumers' shopping history, browsing behavior, social media interactions, and other data, in order to gain a deeper understanding of consumers' preferences and behavior patterns. Through these data, Uniqlo can accurately identify the target customer group, understand their purchasing decision-making process, and thus precisely locate products and services. Big data analysis helps Uniqlo achieve real-time monitoring and forecasting of its supply chain and inventory. Uniqlo can adjust its supply chain strategy, optimize inventory management, reduce excess and unsold products, and improve inventory turnover and profit margins by analyzing market demand trends and sales data.

The personalized recommendation system based on big data analysis is an important component of Uniqlo's new retail model. By analyzing consumers' purchase history and behavior data, the system can recommend products that they may be interested in, improving sales conversion rates and customer satisfaction.

Uniqlo can achieve real-time monitoring and adjustment of marketing activities through big data analysis. When the market environment changes or consumer demand changes, Uniqlo can quickly adjust its marketing strategy and product pricing to maximize customer satisfaction and maintain a competitive advantage in the market. The role of big data in Uniqlo's new retail model is not limited to data analysis and decision support, but is also a key driving force for innovation and continuous improvement. By fully utilizing the potential of big data, Uniqlo can better meet market demand, improve operational efficiency, and stand out in the fiercely competitive market.

3.3 How Uniqlo collects, processes, and analyzes big data

Effective collection, processing, and analysis of big data is crucial for Uniqlo in implementing its new retail model.

Uniqlo collects big data through various channels, mainly including the following aspects:

Online sales platform: Uniqlo's official website and mobile application are one of the main sources of data, collected through consumers' online shopping behavior, browsing history, and search records.

Offline stores: Uniqlo's physical stores collect consumers' shopping data and transaction information through membership cards, shopping cards, POS systems, and other methods.

Social media platforms: Uniqlo collects consumer interaction and feedback information through social media platforms such as Facebook, Instagram, etc., to understand consumer social behavior and brand attention.

Third party data providers: Uniqlo may collaborate with third-party data providers to obtain external market data, industry trends, and competitor information as important references for decision support.

Data processing and analysis: Uniqlo utilizes advanced data processing and analysis techniques to transform the collected big data into valuable insights and decision support

Data cleaning and integration: Uniqlo cleans and integrates the collected data to ensure data quality and consistency, and eliminates errors and redundancies in the data.

Data mining and analysis: Uniqlo uses data mining techniques to explore and discover potential patterns and correlations in data, such as consumer behavior patterns, product preferences, sales trends, etc.

Predictive analysis: Through statistical analysis and machine learning algorithms, Uniqlo predicts market trends and consumer behavior, providing scientific basis for future market strategies and product planning.

Real time data analysis: Uniqlo achieves real-time analysis and monitoring of data, ensuring the ability to respond to market changes and consumer demands in a timely manner, and improving business flexibility and adaptability.

Through efficient data collection, processing, and analysis, Uniqlo is able to gain a deep understanding of the market and consumer needs, achieve refined management and personalized services, and continuously optimize the operational efficiency and market competitiveness of its new retail model.

3.4 Uniqlo's marketing strategy and consumer experience optimized through big data

Uniqlo has achieved multi-faceted marketing strategy optimization and consumer experience improvement through big data analysis, thereby maintaining a leading position in the fiercely competitive market.

Uniqlo utilizes big data to analyze consumers' historical purchase data, browsing behavior, and social media interactions to achieve personalized product recommendations. By recommending products or related combinations that consumers are interested in, increase purchase conversion rates and order value. Based on market insights from big data analysis, Uniqlo is able to develop precise marketing strategies and promotional activities. For example, during specific holidays or seasons, Uniqlo can launch targeted discount promotions based on consumers' purchasing history and behavior habits, attracting consumers to increase their purchase frequency and amount.

Uniqlo adjusts and optimizes its social media marketing strategy by analyzing consumer feedback and brand interactions on social media platforms. For example, increasing brand exposure, enhancing brand awareness and user engagement through

social media activities. Uniqlo continuously optimizes the user interface and shopping experience of its website and mobile applications through big data analysis, improving page loading speed, simplifying the shopping process, and enabling consumers to complete shopping more conveniently and joyfully.

Uniqlo utilizes big data analysis to achieve intelligent management and personalized services for offline stores. For example, by utilizing technologies such as mobile payments, virtual fitting rooms, and intelligent customer service, the service efficiency and customer experience of the store can be improved. Uniqlo optimizes its after-sales service process and solutions through big data analysis of customer feedback and complaint data. Timely respond to customer issues and provide personalized solutions to enhance customer satisfaction and loyalty.

Through big data optimized marketing strategies and improved consumer experience, Uniqlo has not only increased sales efficiency and customer satisfaction, but also further consolidated its leadership position in the global fast fashion market, laying a solid foundation for future sustainable development.

4. Application of big data analysis in Uniqlo's supply chain management

4.1 Basic Overview of Uniqlo Supply Chain Management

As a globally renowned fast fashion brand, Uniqlo's supply chain management is one of the key factors for its business success. Uniqlo's supply chain management covers the entire process from raw material procurement to final product delivery, requiring efficient coordination and management to ensure timely supply and quality assurance of products.

Uniqlo has established a global supply network that includes raw material suppliers, production factories, and global sales channels. This enables Uniqlo to fully utilize global resources, quickly respond to market demand, and adjust production capacity. Uniqlo has established long-term and stable cooperative relationships with suppliers and partners. This close partnership helps Uniqlo optimize production processes, reduce costs, and ensure product quality.

Uniqlo is committed to achieving sustainable development goals by monitoring and managing production processes and product quality in the supply chain to reduce environmental impact and provide high-quality products to consumers.

Uniqlo's supply chain management not only focuses on product supply and production, but also emphasizes information sharing and collaboration to improve overall operational efficiency and market response speed.

4.2 How big data optimizes Uniqlo's supply chain response speed and inventory management

Big data technology plays an important role in Uniqlo's supply chain management. Through the collection, analysis, and application of big data, Uniqlo can optimize its supply chain response speed and inventory management, thereby enhancing overall operational efficiency and market competitiveness.

Real time data monitoring: Uniqlo utilizes big data technology to achieve real-time monitoring of the global supply chain. By monitoring key data such as production progress, logistics and transportation status, and market demand, Uniqlo can promptly identify potential production or transportation issues and take prompt adjustment measures to ensure timely delivery of products and meet market demand.

Market demand forecasting: Based on big data analysis of market trends and consumer behavior patterns, Uniqlo can accurately predict future market demand changes. This prediction helps Uniqlo to adjust its supply chain strategy in advance,

such as adjusting the order quantity, optimizing the production plan and accelerating the product launch, so as to cope with the fluctuation of market demand and avoid excess inventory.

Supply chain collaborative optimization: Big data technology helps Uniqlo achieve information sharing and collaborative optimization in various links of the supply chain. By sharing data with suppliers, production factories, and logistics partners, Uniqlo can improve collaboration efficiency, reduce information transmission and communication time, thereby accelerating production cycles and optimizing distribution efficiency.

By analyzing historical sales data, seasonal changes, and market promotion activities through big data, Uniqlo can accurately predict the demand and sales trends of different products. This precise inventory prediction helps Uniqlo avoid the waste of funds and unsold products caused by excessive inventory.

Uniqlo utilizes big data technology to achieve dynamic inventory optimization, adjusting product replenishment and ordering strategies based on real-time sales data and inventory conditions. This strategy enables Uniqlo to flexibly respond to changes in market demand, reduce inventory backlog, and lower storage costs.

Uniqlo achieves cross channel inventory management and resource optimization by analyzing the inventory situation and sales performance of different sales channels through big data. For example, adjusting inventory levels and replenishment strategies between online and offline channels to ensure omni channel supply of products and customer satisfaction. By optimizing supply chain response speed and inventory management through big data technology, Uniqlo can achieve more efficient production and supply, improve product delivery timeliness and customer service satisfaction.

4.3 Case Study: How Uniqlo achieves rapid response and accurate prediction through big data analysis

Case 1: Real time supply chain monitoring and adjustment

Uniqlo has established an efficient supply chain network worldwide and achieved real-time monitoring of the supply chain through big data technology. For example, when sales suddenly increase or production lines encounter problems in a certain region, Uniqlo can immediately identify the root cause of the problem through big data analysis and quickly take adjustment measures, such as increasing production line capacity, adjusting transportation routes, or urgently scheduling inventory goods, to ensure that products can arrive at the market on time and meet consumer needs.

Case 2: Dynamic Inventory Optimization

Uniqlo has utilized big data technology to achieve dynamic inventory optimization, adjusting product replenishment and ordering strategies based on real-time sales data and inventory conditions. For example, when the sales volume of a certain product suddenly increases in a certain region, Uniqlo can identify the reasons for the sales growth through big data analysis, quickly adjust the inventory and replenishment plan of the product, ensure timely satisfaction of consumer purchasing needs, and avoid losing sales opportunities due to insufficient inventory.

5. Application of Big Data Analysis in Uniqlo's Offline Retail Store Operations

5.1 Layout and Management Characteristics of Uniqlo's Offline Retail Stores

Uniqlo, as a leading global fast fashion brand, has unique characteristics in the layout and management of offline retail stores, which directly affect customer experience and sales efficiency.

Uniqlo stores usually adopt open space design, simple shelf layout, and bright lighting to create a comfortable shopping environment. This design not only benefits customers in browsing and selecting products, but also enhances their shopping experience.

Uniqlo attaches great importance to the details of product display, usually displaying according to seasons, styles, or themes to guide customers' purchasing decisions. The rationality and attractiveness of product display directly affect sales effectiveness and customers' shopping experience. In order to enhance customer interaction and shopping experience, some Uniqlo stores have also set up fitting rooms, rest areas, or social areas, allowing customers to try on clothes more comfortably and enjoy the shopping process.

Uniqlo adopts an advanced inventory management system to achieve real-time inventory monitoring and management. Through these systems, store clerks can keep track of inventory status at any time, replenish and adjust product displays in a timely manner, ensuring the adequacy and diversity of goods.

Uniqlo focuses on professional training and service quality for its employees. After training, its staff can provide personalized shopping advice and high-quality after-sales service to customers, enhancing customer satisfaction and loyalty. Uniqlo optimizes its product layout and promotional strategies by analyzing sales data and customer behavior data from each store, in order to improve sales efficiency and business performance.

5.2 How big data can help Uniqlo optimize store operations and space utilization

Big data technology plays an important role in Uniqlo's offline retail store operations. Through data collection, analysis, and application, Uniqlo can optimize store operations and space utilization efficiency, enhance customer experience, and sales efficiency.

Uniqlo utilizes big data to analyze customer behavior data, including customer traffic, dwell time, purchase routes, and more. Through these data analyses, Uniqlo can understand customers' preferences and shopping habits, adjust product display and recommendation strategies, and improve customer purchase conversion rates.

Through big data technology, Uniqlo has achieved real-time inventory monitoring and management. Shop assistants can check the inventory status of products at any time and adjust replenishment strategies based on real-time sales data to ensure sufficient supply of hot selling products, while avoiding inventory backlog and capital waste.

Uniqlo uses big data to analyze the effectiveness of promotional activities and customer response, optimizing the timing and methods of promotional and marketing campaigns. This precise promotion management helps to improve the return on investment and customer engagement of promotional activities.

Uniqlo uses big data technology to generate heat maps of its stores, analyzing customer traffic and stay time in different areas. Based on the heat map analysis results, Uniqlo can adjust product display and spatial layout to increase product exposure and sales effectiveness in high traffic areas.

By analyzing the space utilization rate and product turnover rate of the store through big data, Uniqlo can optimize the space layout and shelf design, ensuring that every inch of space can maximize its effectiveness and improve overall sales efficiency and customer satisfaction.

6. Application of big data analysis in the operation of Uniqlo's online platform

6.1 Development history and characteristics of Uniqlo's online platform

As a globally renowned fast fashion brand, the development history and characteristics of Uniqlo's online platform are crucial for its globalization strategy and consumer interaction.

Uniqlo's online platform has gone through the following stages of development:

(1) In the initial stage, Uniqlo started its business through traditional physical retail stores. With the development of the Internet and the rise of e-commerce, Uniqlo has gradually established its own online sales platform to provide consumers with a more convenient shopping experience.

(2) In the expansion stage, with the popularization of mobile Internet technology, Uniqlo has increased its investment and development in online platforms, launched mobile applications and responsive websites, enabling consumers to access and purchase Uniqlo products anytime and anywhere.

(3) In the stage of globalization, Uniqlo has achieved global market coverage and sales by continuously optimizing the user experience and service functions of its online shopping platform. Now, Uniqlo's online platform has become an important part of its business, providing global consumers with diverse shopping choices and convenient shopping experiences.

Uniqlo sells its products through multiple channels such as official websites, mobile applications, and third-party e-commerce platforms to meet the shopping habits and preferences of different consumers. Uniqlo enhances consumers' shopping experience and satisfaction through personalized recommendations, customized services, and precise marketing strategies. Uniqlo's online platform supports multilingual, multi currency payments and global logistics delivery, providing convenient shopping and service experiences for consumers worldwide.

6.2 How big data supports Uniqlo's online sales and personalized recommendations

In the operation of Uniqlo's online platform, big data technology plays a key role in supporting its online sales and personalized recommendations.

Uniqlo uses big data analysis of online sales data to gain a deeper understanding of product hot sales, sales trends, and consumer purchasing behavior. These analyses help Uniqlo optimize its inventory management and replenishment strategies, ensuring timely supply of hot selling products and reducing inventory backlog of unsold products.

By analyzing consumers' browsing paths and purchasing behavior on online platforms, Uniqlo can optimize the user interface and interaction design of its website or application, improve the smoothness of shopping and user experience, thereby increasing shopping cart conversion rates and order completion rates.

Uniqlo uses big data technology to achieve real-time monitoring of online platforms, promptly identifying and resolving issues that may affect sales, such as website crashes, payment failures, or product link errors, ensuring stable and smooth online sales.

By analyzing users' browsing history, purchase history, and search habits, Uniqlo can understand the personalized preferences and needs of each consumer. Based on this data, Uniqlo can recommend the most relevant and personalized products to users, enhancing their interest and willingness to purchase the recommended products.

Uniqlo continuously optimizes its recommendation algorithm, utilizing machine learning and data mining techniques to improve the accuracy and precision of recommendations. Through real-time feedback and data analysis, Uniqlo can dynamically adjust its recommendation strategy to respond to market changes and changes in consumer behavior.

Based on big data analysis of users' lifecycle value and consumption behavior patterns, Uniqlo can design personalized marketing activities and promotional strategies to improve user loyalty and repeat purchase rates.

6.3 Case study: How Uniqlo improves online shopping experience and sales conversion rate through big data analysis

Uniqlo has achieved significant business results in its online platform operation through big data analysis. Here are some specific case studies:

Case 1: Shopping Path Optimization

Uniqlo has optimized the user interface and navigation design of its website or application by analyzing consumers' shopping paths and behavior trajectories on online platforms. By improving page loading speed, optimizing product search functionality, and simplifying the shopping process, Uniqlo has successfully enhanced users' shopping experience and retention rate.

Case 2: Personalized Recommendation

Uniqlo has implemented personalized recommendations by analyzing consumers' browsing history, purchase history, and click behavior through big data analysis. For example, when consumers log in to the website, Uniqlo recommends relevant products or promotional activities based on their interests and preferences, effectively increasing the click through rate and conversion rate of recommended products.

Case Three: Real time Inventory Management

Uniqlo has utilized big data technology to achieve real-time inventory monitoring and management on online platforms. By analyzing real-time sales data and inventory situation, Uniqlo can adjust its product replenishment plan and inventory management strategy in a timely manner, ensuring sufficient supply of hot selling products and avoiding capital waste and product stagnation caused by excessive inventory.

7. Conclusion and Implications

7.1 Summarize the main findings of the study

This article focuses on how Uniqlo optimizes its new retail model through big data analysis, and explores in depth the application and effectiveness of big data in Uniqlo's supply chain management, offline retail store operations, and online platform sales. The following is a summary of the main findings of this study:

Applications in Supply Chain Management:

In Uniqlo's supply chain management, big data technology has helped achieve real-time monitoring and response of the supply chain, enhancing its flexibility and efficiency. Through big data analysis, Uniqlo is able to accurately predict demand, optimize inventory management, and quickly respond to market changes, thereby reducing inventory costs and improving the operational efficiency of the supply chain.

Applications in offline retail store operations:

In the operation of Uniqlo's offline retail stores, big data analysis has helped Uniqlo optimize the store's spatial layout and product display, improving customers' shopping experience and sales efficiency. By analyzing customer behavior and store heat maps, Uniqlo can accurately understand customer preferences and behavior patterns, adjust store layout and promotional strategies, and maximize store sales effectiveness.

Applications in online platform sales:

In Uniqlo's online platform sales, big data technology supports personalized recommendations and real-time inventory management, improving users' shopping experience and online sales conversion rates. By analyzing user data and shopping behavior, Uniqlo is able to recommend the most relevant products to users, improving

their purchase satisfaction and loyalty; At the same time, real-time inventory management ensures timely supply of goods and avoids losing sales opportunities due to insufficient inventory.

7.2 Conclusion and Management Practices and Policy Suggestions for Uniqlo and Other Retail Enterprises

Through in-depth exploration of Uniqlo's big data analysis and optimization of new retail models, this study has drawn the following conclusions:

The successful case of Uniqlo shows that big data technology can significantly improve the supply chain management, store operation, and online sales efficiency of retail enterprises, thereby enhancing their competitiveness and market share.

By gaining a deep understanding of consumer needs and behavior patterns, retail enterprises can achieve precise marketing and personalized services, improve user experience and customer satisfaction, and thereby promote sales growth and brand loyalty.

In the process of optimizing retail models using big data, enterprises need to pay attention to the legality, security, and privacy protection of user data, establish sound data management and security measures, and ensure data compliance and confidentiality.

Retail enterprises should promote the construction of data-driven organizational culture, cultivate data analysis and decision-making abilities, regard data as important assets and strategic resources, and promote the deep integration of data and business.

Continuously optimizing user experience and service quality, retail enterprises should use big data analysis to continuously improve user experience and service quality, thereby enhancing customer shopping satisfaction and loyalty. For example, meeting the personalized needs of different consumers through personalized recommendations and customized services.

Strengthening data security and privacy protection measures, retail enterprises need to enhance the legality and security management of user data, formulate strict data usage and privacy protection policies, safeguard consumers' data security and privacy rights, and enhance consumers' trust and loyalty to the enterprise. To promote digital transformation and technological innovation, retail enterprises should increase their investment in digital technology and innovation, actively promote digital transformation, adopt advanced technological tools and solutions, and enhance their operational efficiency and market competitiveness.

Strengthen cross departmental and cross platform collaboration. In order to achieve comprehensive data-driven decision-making and business optimization, retail enterprises should strengthen cross departmental and cross platform collaboration and integration, break information silos, achieve data sharing and integrated applications, and improve organizational response speed and decision-making efficiency.

References

85. Yang Xiaoming, Zhang Chi (2019). Research on the Application and Development Trends of Big Data in the Retail Industry Intelligence Magazine, 38 (8), 103-108. doi: 10.3969/j.issn.1002-1966.2019.08.015
86. Liu Yang, Zhang Hua (2020). Research on Retail Business Optimization Driven by Big Data - A Case Study Based on Uniqlo Journal of Intelligence, 39 (10), 1215-1223. doi: 10.13578/j.cnki.jipb.2020.10.017
87. Zhang Lei, Wu Dan (2021). Big Data Driven Retail Supply Chain Management Optimization - Taking Uniqlo as an Example Modern Information, 41 (4), 179-183. doi: 10.3969/j.issn.1009-631X.2021.04.034
88. Chen Jing, Liu Min (2018). Research on the Application of Big Data Technology in Fast Fashion Retail: Taking Uniqlo as an Example Intelligence Theory and Practice, 41 (5), 61-65. doi: 10.3969/j.issn.1001-8044.2018.05.010

89. Zhao Wenbin, Zheng Meiling (2017). Exploration of Uniqlo's New Retail Model in the Era of Big Data Business Economics and Management, 27 (6), 97-100. doi: 10.3969/j.issn.1006-7515.2017.06.023
90. Sun, Y., Jia, H., & Luo, F. (2020). Application of big data in supply chain management: A bibliometric analysis. Journal of Industrial Engineering and Management, 13(2), 401-426. doi:10.3926/jiem.2987
91. Taylor, K. (2019). Fast fashion's unending growth. Business of Fashion. Retrieved from <https://www.businessoffashion.com>

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