

## RETAILER-MANUFACTURER COLLABORATION IN DATA ANALYTICS FOR IMPROVING SALES PERFORMANCE IN FMCG

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*Retail, as an economic sector, generates large volumes of data across various areas of its operations. The highly competitive FMCG market requires an analysis of key factors influencing purchasing decisions. At the same time, a significant part of purchase data is primarily available to retailers as the final step in the supply chain. The article discusses the need for data exchange between manufacturers and retailers for joint analysis and improving business efficiency. It also explores the types of data most valuable for studying consumer behavior.*

**Key words:** retail, FMCG, data analytics, data sharing.

Retail is one of the leading industries in terms of business digitalization, both in Russia and globally [3]. Due to its specific nature, the retail business generates vast amounts of data across various areas of activity, such as logistics, analysis of consumer behavior, and operational activities of retail stores. The need to work with big data accelerates the implementation of digital technologies, which retailers primarily use to improve the efficiency of store management, reduce logistics costs, and enhance competitiveness through personalized customer approaches [1]. According to [4], leveraging existing data volumes (big data) with maximum efficiency can improve operational efficiency by up to 60%, and after implementing a big data analytical system, profits can grow by 7%-10%. One of the first areas where digital solutions were introduced was logistics and related electronic accounting and document management, which are already used by most major Russian retailers. However, development continues in areas such as workforce management, retail mix, customer relations, and other operational spheres [3].

In [5], the author also emphasizes the importance of data analytics for retailers in maintaining and enhancing competitiveness and operational efficiency in today's market. However, this applies not only to retailers but also to other participants in the supply chain, especially when it comes to fast-moving consumer goods (FMCG). In the supply chain, from production to the customer's basket, the retailer is the front-line of interaction with the end consumer. The manufacturer develops the product concept, implements its functional characteristics, and carries out marketing positioning. Media agencies

provide advertising support, while logistics operators and distributors are responsible for delivering the product to the retail shelf. However, the key event that the entire chain of efforts is built around – the consumer's purchase – occurs exclusively at the retailer level. All supply chain participants possess some data about the product's journey before it reaches the consumer, but the retailer holds the most critical part of this data mosaic. The retailer records information such as the timestamp and location of the purchase, the contents of the customer's basket, the final sale price, the remaining stock on the shelf at the time of purchase, competing products and their prices nearby, the time elapsed since the last purchase, and much more. In the case of products with unique properties or limited competition, analyzing all related data may be less relevant, as consumer demand for such products is less influenced by external factors, and purchases are made when the need arises. However, in the highly competitive FMCG market, where the assortment includes many similar products, data analysis becomes critically important for understanding the factors influencing consumer decisions. Studying the conditions surrounding a purchase helps identify key drivers that stimulate demand and eliminate barriers that may lead to reduced or absent sales during certain periods. Access to such data and subsequent analysis enhances the competitiveness of the manufacturer, leading to increased sales and market share. Therefore, it is crucial for manufacturers to establish data exchange with retailers to gain a complete picture of product movement. The most important data for analysis and decision-making include:

a) POS data (Point of Sale data): This includes transaction data containing timestamps, product ID, product names, sale prices, store identifiers, etc.

b) CRM system data: This includes data on the total number of customers, their purchase frequency, average check size, preferred products, etc.

c) Logistics data: Logistics data is typically exchanged by default, as it is necessary to maintain inventory levels in the network according to demand and supply chain length. Therefore, macro-level data is usually available to suppliers in some form. The next step is obtaining store-level data, including product ID, stock levels, expiration dates, etc.

Each type of data provides suppliers with additional opportunities to optimize business processes and increase profits. It is crucial to note that data is most useful when provided at the highest possible granularity, with breakdowns by day, store, and specific product items. Any aggregation leads to averaging and complicates data interpretation. Additionally, many retailers are actively improving the customer experience in their stores by introducing modern retail formats, such as self-checkout systems, offering unique purchasing conditions, and experimenting with product placement in the sales area. Some chains test innovations in select stores, and it is essential for manufacturers to understand whether these innovations are effective and to analyze sales differences between standard and test formats. This allows manufacturers to stay at the forefront of customer interaction, gaining access to up-to-date data and offering their expertise to analyze and improve new projects.

Retailers themselves also recognize the importance of sharing sales data. Several retailers have initiated data analytics dissemination programs. For example, a major drugstore retailer,

“Ulybka Radugi”, announced a supplier information portal on its website, offering detailed sales data with maximum granularity – down to “every day, every store, and every product item” – and provides a presentation of this software solution [2]. Russia’s largest multi-format retailer, X5 Group, promotes its Insights project on a dedicated partner website, offering analytics based on data collected over four years (since 2020) to analyze and answer questions in various areas – from brand performance monitoring to consumer behavior analysis [6]. For many retailers, providing point-of-sale data has become another way to increase profits by offering data exchange services, as data is provided on a paid basis. However, retailers also benefit from deferred profits resulting from supplier initiatives developed based on the provided analytics. Suppliers are not just partners for retailers but also highly motivated stakeholders focused on mutual success. Unlike retailers, who work with hundreds of suppliers, suppliers are focused solely on their products and can identify and propose opportunities for business optimization if they have access to the necessary data.

Thus, in the business practice of interaction between manufacturers and retailers, alongside standard supply and marketing services agreements, it is advisable to consider data exchange agreements as an integral part of daily collaboration. Implementing automated data exchange on a regular basis, such as weekly updates, is recommended. A key element of this practice should be the preliminary agreement on key analysis topics of mutual interest, as well as establishing procedures for sharing analytical results and principles of joint work. High-quality data accessible to both parties, detailed analysis, and the subsequent implementation of agreed actions will contribute to improving the efficiency of joint business activities.

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## ВЗАИМОДЕЙСТВИЕ РИТЕЙЛЕРОВ И ПРОИЗВОДИТЕЛЕЙ В АНАЛИТИКЕ ДАННЫХ ДЛЯ ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ ПРОДАЖ В FMCG

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*Ритейл как отрасль экономики генерирует большие объемы данных в различных направлениях деятельности. Рынок FMCG, отличающийся высокой конкуренцией, требует анализа ключевых факторов, влияющих на покупку. При этом существенная часть данных о покупках доступны в основном ритейлерам как конечному звену цепочки товародвижения. В статье обсуждается необходимость обмена данными между производителем и ритейлером для совместного анализа и повышения эффективности бизнеса. Рассматриваются типы данных, наиболее ценные для изучения потребительского поведения.*

**Ключевые слова:** ритейл, FMCG, аналитика данных, обмен данными.