**The modern model of category management in the fast-moving consumer goods market**

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**Abstract.**

This article discusses the modern model of category management in the FMCG market. Category management is a strategic approach to product category management that involves analyzing data and consumer behavior to improve product range, pricing, promotion, and placement. The article discusses the importance of the FMCG market and the critical elements of a modern category management model, including data analytics, the interaction between retailers and suppliers, and customer focus. The article also explores the challenges and opportunities for adopting a modern category management model, such as the need to invest in technology and the potential to increase sales and profitability. Overall, the article highlights the importance of a modern approach to category management in the FMCG market and provides information for companies seeking to improve their category management strategies. As a result of the study, a step-by-step model for implementing a category management system was formed based on the experience of international companies. Companies in the manufacturing and trading sectors of the market can use the resulting methodology.

**Keywords: category management; fast-moving consumer goods market; assortment optimization;** **key performance indicators scorecard.**

**JEL codes:** D40, M11, M31, L11

**1 Introduction**

Category management has become an increasingly important strategy for companies operating in the fast-moving consumer goods (FMCG) market. Companies can optimize their product offerings and pricing strategies by analyzing consumer behavior and market trends to increase profitability and market share. However, the traditional approach to category management has evolved over the years, and a new modern model has emerged that takes advantage of technological advances and data analytics.

Category management is a process of joint management of product categories between a retailer and a manufacturer, and it's an innovative economic solution driven by changes in the traditional relationship between a supplier and a retailer to satisfy end users' needs.

The basic principle underlying the modern category management model is to create additional value for the consumer concerning the product's price, choice, availability, and other characteristics.

Within the framework of the modern concept, category management projects create additional value not only for the consumer but also

for project partners.

Category management combines the knowledge of the manufacturer and the seller about the consumer. We are talking about managing an entire product category, not individual brands of the manufacturer, which was based on a deep understanding of the category development trends.

This scientific article explores the key features of the contemporary category management model and examines its impact on the FMCG market. Through a combination of theoretical analysis and empirical research, this article provides valuable insights for companies looking to stay competitive in today's fast-paced business environment.

**2 Literature review**

Category management has become a crucial approach for companies operating in the fast-moving consumer goods (FMCG) market. It is a data-driven process that involves analyzing consumer behavior and market trends to optimize product offerings and pricing strategies. Over the past five years, there has been significant research in the area of category management in the FMCG market.

The fast-moving consumer goods (FMCG) industry is highly competitive, and companies are always seeking ways to improve their market position. One of the strategies employed in the industry is category management, which involves the management of product categories to optimize sales and profitability.

In this Scopus literature review, we examine the most recent research on category management, including its impact on the FMCG market, the challenges faced by companies implementing category management, and the role of technology in category management. Examples of some articles are presented below.

A comprehensive literature review on category management in the FMCG industry is provided by H. Zhang, Y. Li, and L. Li, who examine various aspects of category management, including its definition, benefits, and challenges, as well as the role of technology in category management. The authors also suggest future research directions [1].

Reviewing the challenges faced in implementing category management in the retail industry, K. Fatima and M. S. Siddiqui identify factors that hinder successful implementation, such as lack of top management support, poor data management, and resistance to change. They propose solutions to overcome these challenges and improve the effectiveness of category management [2].

Yeung and Nair discuss the research trends and future directions of category management in the grocery retailing industry, identifying emerging issues such as the use of data analytics, shopper marketing, and collaboration between retailers and suppliers. They suggest directions for future research in the field [3].

A multi-objective decision-making approach for category management in the FMCG industry is proposed by Jagadeesh, Kumar, and Panda. They consider various objectives, including maximizing sales, minimizing costs, and improving customer satisfaction, and apply their approach to a case study in the industry, demonstrating its effectiveness. [4]

Investigating the impact of feedback loops on the value of category management in retailing, Wouters, Koster, and Kooistra develop a model that incorporates feedback loops and test it using simulation. They find that feedback loops can significantly enhance the value of category management [5].

González-Benito, González-Benito, and Muñoz-Gallego provide a comprehensive review of the literature on category management in the retail industry, examining various aspects of category management, including its history, benefits, and challenges, as well as the role of technology in category management. The authors suggest future research directions [6].

Through an exploratory study, Siarheyeva, Siarheyeva, and Bublyk explore the challenges of implementing category management in retail chains, identifying several challenges such as lack of standardized processes, poor data quality, and insufficient communication. They propose solutions to overcome these challenges and improve the implementation of category management [7].

Boukherroub and Djellal conduct an empirical analysis of category management in the retail industry, focusing on France, and examine the effectiveness of category management in improving sales and profitability. They find that category management has a positive impact on retail performance [8].

Gwak and Kim conduct a qualitative study to explore the implementation of category management in small and medium-sized enterprises, identifying several factors that influence its effectiveness, such as top management support, employee skills, and information technology infrastructure [9].

Conducting a bibliometric analysis of category management in retailing, J. Kim and C. Y. Kim examine the trends and patterns of research in the field, including the most cited authors, journals, and keywords, and provide insights into the research directions and gaps in the field [10].

In summary, the literature on category management in the FMCG industry is vast and diverse. The studies reviewed here provide valuable insights into the benefits, challenges, and future directions of category management in the industry. They also suggest solutions to overcome the challenges and improve the effectiveness of category management.

**3 Methodology**

This methodology involved conducting expert interviews with representatives of international FMCG campaigns to identify the main prerequisites for developing and systematizing current data on category management. The interviews were conducted with 30 experts, including category managers, marketing coordinators, and supervisors, for the development of retail channels. The interviews aimed to obtain relevant data on the features of the implementation of category management in enterprises. The data collected through the expert interviews would then be used to analyze and develop current data on category management in the FMCG market.

**4 Results and Discussion**

Based on an expert interview, data relating to category management trends were systematized and described. The current market conditions in the Republic of Kazakhstan justify the current role of category management.

As the main reasons for increasing the importance of category management, the experts identified:

* The need to optimize business processes, as well as the definition of core and non-core types of business processes;
* Increasing demand for joint profit acceleration between retail companies and manufacturers;
* Diversification of purchasing behavior in the conditions of economic volatility;
* Focus on identifying and meeting the needs of customers;
* A wide range of products in modern networks;
* Accelerated development of modern trade formats and increased competition;
* High rates of the absence of high-turnover goods.

Based on the above prerequisites, the potential for to improve business processes in the FMCG industry. In addition to the main prerequisites that affect the acceleration of the development of category management in the Republic of Kazakhstan, specific barriers delay the spread of the foundations of category management. Among the limiting factors, the experts highlighted:

* Lack of resources to build a category management system;
* Deficiency of full data exchange, both internal and external information;
* Shortage of experienced professionals in the field of category management;
* Insufficiency of an adapted structure in retailers and manufacturers;
* Inflexible information systems in the FMCG market;
* Need for reliable market data.

The identified prospects and barriers determine the importance of introducing category management in organizations of different levels.

The modern concept of category management implies the construction of category models based on cooperation with retail organizations.

Based on the benchmarking of the experience of international companies and the results of an expert survey, the basics of category management can be presented as a process model (Figure 1).

|  |  |
| --- | --- |
| **1. Preparatory phase** | Assessment of available resources |
| **2. Analytical stage** | 1. Formation of the category definition |
| 2. The role of the category |
| 3. Category evaluation |
| 4. Indicators and goals of the category |
| 5. Category Strategy |
| **3. Implementation Phase** | 6. Category Tactics |
| 7. Evaluation of results |

Figure 1. Modern category management model

Note: compiled by the authors based on data from the primary study

Category management must also be considered as the implementation of individual projects in the context of the period of operation of the organization, categorical distribution, and so on.

The following economic and other indicators can be the priority goals in CM projects:

* Category growth beyond organic market growth in value terms
* Increase in category sales in physical terms
* Reduction of inventory in the store
* Increasing category profitability
* Segmentation and navigation within a category
* Category visualization.

Understanding and researching the buyer's needs in a particular category of goods is essential for achieving high category performance. Category management in modern practice is a collaborative effort between the retailer and its key suppliers. The Product Category Management process involves the work in multifunctional groups of each partner - the retailer and the supplier: marketing and marketing research departments, IT and analytics services, and logistics departments.

The preparatory stage is singled out separately based on the peculiarities of doing business in Kazakhstan.

This stage aims to determine the vectors of cooperation between the product manufacturer and its distributor. The conditions are assessed as part of this stage, and the cooperation priority is determined.

Defining the boundaries and structure of the category is the main stage of category management. At this stage, the parameters of a particular class in the retailer's business are determined, which is why the decision is crucial for the chain's competitive position in the market and choosing the development strategy for the category itself.

The decision is made jointly by the retailer and the manufacturer "category captain," considering the network's differentiating strategy and all available quantitative and qualitative market research, consumer needs, and buyer behavior (AC Nielsen, MEMRB, Gfk panels, etc.)

The category structure is fixed with at least four levels of segmentation. Maintaining a database with a specific structure is essential for category analysis and further tracking of results after the category development plan is implemented:

* Price segment;
* Taste;
* Packing size;
* Type of packaging.

The next stage - the definition of the role - makes it possible to indicate the importance of the category for the network and, thus, helps to optimize the distribution of resources among all product groups. Such resources are the whole complex of strategic and tactical decisions for the category.

The role definition process includes next steps:

1. Determining the set of roles that will be used be called in the company;

2. Assigning each of the categories to its role;

3. Distribution of resources between categories according to their roles.

Based on the data from expert interviews with international practice, the following models are used:

Main - a category that defines a network as one from the preferred suppliers of these products by offering consistently competitive customer value to the target customer.

Competence is a category that defines the chain as a priority supplier of these products by offering excellent customer value to a particular group of buyers who purchase high-value products, thus creating the chain's image.

Seasonal - a category that defines the chain as the leading supplier that offers a competitive assortment during the season or special event.

These are the classic definitions that are accepted in international practice. If, again, we come closer to convention and retail reality, then the roles indicated above can be combined into four groups of importance for the buyer and the network itself. The structure can be represented as follows:

The main category - aimed at increasing the overall consumer basket, can take up to 55-60% of the turnover.

Seasonal class - aimed at improving the flow of customers in a particular season, it can take up to 55-60% of the turnover during the peak season.

Image category - aimed at maintaining the image of the manufacturer and retailer, takes up to 5-7% of the total turnover of types.

The competency category is complementary for the network and takes 15-20% of the turnover.

Role definition principles:

* The role of the category should describe the desired outcome.
* The status of a particular category will determine its future role.
* The category role should be consumer-centric. A fundamental principle that says that everything done with categories should be aimed at the best way to meet the buyer's needs.
* Category roles should be coordinated. In an ordinary supermarket, there are from 150 to 200 different categories. Creating the right balance of all categories gives the chain a competitive edge.
* The main goal is to prioritize
* when a customer visits a store; he finds the product exactly where it is most
* comfortable and appropriate for him.
* Category roles should be clear. All managers in the network must understand what this or that means.
* The role, what tactical measures can be applied depending on the decision for each product group.

Once the roles of categories have been defined, a foundation for further strategic and tactical management of product groups within them is created. According to the designated functions, tactical measures can be distributed accordingly. The text provides an example of how the primary resources of a store - assortment, pricing, shelf placement, and promotional activities - can be distributed according to the role assigned by the network to the product group.

The text also highlights a few additional points: firstly, the role of a category can be determined for each format of a network of stores or the entire network as a whole. Secondly, the part of a category can and should change over time as both the market and the consumer evolve. Lastly, each segment and subcategory can have its role within a variety.

Overall, the process emphasizes the importance of defining the role of a category, as it is a crucial process that affects multiple levels of management. By prioritizing category management according to their preference for the target consumer, retailers and suppliers can create additional value and maximize return on investment.

Assessment of a category is a necessary step in category management, aimed at understanding the current state of the category in the retail network and identifying the essential areas of category development to achieve higher turnover, profitability, and customer loyalty. Partners need to assess the current state of the category and its components (subcategories, segments, brands, etc.) according to the category's role in the retailer's network. The discrepancies between current and desired performance indicators determine the most critical areas of category development. The result of the Category Assessment stage is crucial for further steps - defining the Category Strategy and Tactics. Category assessment consists of a comprehensive review in several directions: Consumer/Buyer, Market, and Retail Operator.

The assessment of the Consumer and Market enables the evaluation of the category in the country or sales channel based on various quantitative and qualitative indicators without considering the specific situation of the retail operator. The retail operator assessment allows comparing the category's current state in the analyzed retail network with the market situation and competing retail operators based on benchmark analysis.

The usual process lists various questions that the Assessment of the Consumer/Buyer aims to answer, such as the level of penetration of the category, the factors influencing its purchase, the purchase frequency, the purchasing mission, the level of loyalty, and the channels where the class is purchased. The Assessment of the Market, based on Retail Audit data, provides the following:

* Information on the category's weight in FMCG sales;
* The contribution of sales channels to category sales;
* The dynamics of demand;
* Seasonal dependencies in sales.

The information for analysis can be obtained from Retail Audit data, Household Panel data, and field research data. However, the data from panel studies and retail audits only sometimes provide specific answers to recent questions due to the high level of fragmentation in the Russian retail business and its low concentration level. Therefore, special consumer and market research studies have become necessary for identifying problematic areas and opportunities for development. The category evaluation is carried out sequentially at several levels, from general to specific, to determine such areas and opportunities for growth. Retailers need to know both consumers and buyers, as well as the market and its trends, to assess the category fully. To achieve this, the supplier and retailer must exchange information and jointly analyze the results.

The interview data from experts outline the main goals for category indicators, which include reflecting changes in consumer behavior, changes in the market, and changes in the retail operator's indicators. The retailer and supplier determine the category's goals jointly based on the category assessment and should align with the overall category strategy. The goals should be measurable and realistic, reflect changes within the retail operator and the market, and be suitable for tracking results over a long period. The plans should be easy to understand and analyze. Specific, measurable goals include penetration level, frequency of purchases, turnover, market share, and inventory turnover. Gross profit, net profit, and the number of days of inventory are also important indicators.

The importance of developing a category management strategy connects the overall retail operator's strategy with the specific category strategy. The article describes three main strategies: retaining market share, strengthening the store's image, and attracting attention. It also emphasizes the need to consider the additional costs associated with implementing strategies that increase customer loyalty. The text concludes by listing key considerations when choosing category management strategies, including the role of the category, the importance of being pragmatic, and the possibility of implementing different strategies for different category segments.

Developing tactics is an exciting and responsible stage in Category Management projects. By following the steps of the classic model, we have already determined the role, category strategies, and critical indicators.

The tactical work of the category manager is built around four points of attraction: the category assortment, store space, and shelves, pricing, and promotional activity to stimulate sales. Sometimes, a specific Category Management project may only allow the use of some tactical techniques. For example, the retailer may limit the supplier's category management activities to working with the assortment and shelf space only, leaving the promotional planning and pricing policy decisions to themselves. Thus, the arsenal of available tactical actions for each project is unique.

In general, all tactical activities of the Category Manager should be based on research data. Based on facts or fine examples from the practice of colleagues or competitors.

Some specialized program products combine different data for category management purposes, draw planograms, calculate price elasticity, and implement other tactical procedures. Among the suppliers of this software, it is worth mentioning the companies IRI, MEMRB, Nielsen, and SAP - the packages developed by them programs make working on Category Management projects much more efficient.

The implementation stage is usually the essential phase of any category management project. This is where our hypotheses and theories formulated in the plan are put into practice in a specific store. However, despite its importance, the implementation stage often needs the necessary planning and preparation from the category management team, which can lead to negative consequences and even project failure.

Several key factors need to be considered in preparation for the project's implementation in stores. These include forming a comprehensive team, understanding the partner hierarchy, involving all necessary employees, planning for evaluation, and paying particular attention to assortment. It is also essential to take photographs of the shelves before the project begins.

Assessment of results is essential in understanding the success of a developed category plan and its implementation in stores. When evaluating, the following points should be taken into account:

* A long enough test period should be considered to evaluate sales performance (at least three months).
* The comparison should be made with stores that did not participate in the test and similar indicators from the previous year.
* Adjacent categories should also be considered for evaluation.
* Previously defined project implementation effectiveness criteria (KPI) should be evaluated.

After the test period, conclusions can be drawn, and any shortcomings identified in the pilot stores can be corrected. Special attention should be paid to applying the developed recommendations in all retail network stores.

**5 Conclusion**

In conclusion, this article highlights the importance of a modern category management approach in the FMCG market, which involves analyzing data and consumer behavior to improve product range, pricing, promotion, and placement. The article also emphasizes the critical elements of a modern category management model, such as data analytics, the interaction between retailers and suppliers, and customer focus. The challenges and opportunities for adopting a modern category management model are also discussed, with the need to invest in technology and the potential to increase sales and profitability being the key factors.

The article provides a step-by-step model for implementing a category management system based on the experience of international companies, which can be used by companies in the manufacturing and trading sectors of the market. The methodology involves expert interviews with representatives of international FMCG campaigns to identify the main prerequisites for developing and systematizing current data on category management.

In summary, companies seeking to improve their category management strategies in the FMCG market can benefit from the information provided in this article. By adopting a modern category management approach and utilizing data analytics, retailers and suppliers can improve their product range, pricing, promotion, and placement, resulting in increased sales and profitability.

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