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## Category management: Industry vs trade

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**Abstract.** Identification of the peculiarities of category management in trade and industry enterprises, and development and testing of the method for category management evaluation in the light of global macro-trends that transform category management under the current conditions determined the relevance and purpose of the study. Nowadays, category management is perceived by most organisations as a continuous business process where category management activities are an integral part of the business. The theoretical and methodological basis of the study was the conceptual principles and methodological approaches to the management of product categories, which are highlighted by Ukrainian and foreign researchers, in the materials of periodicals, and in the Internet resources dedicated to the investigation of classical and modern concepts of category management. In the process of their development, such scientific and empirical methods as causal analysis and synthesis, deduction and induction, systematisation and generalisation, system and process approaches were used. The conducted research revealed the presence of significant reserves for the development of category management at industrial enterprises. According to the results of "The Future of Category Management" survey, such global macro trends of the transformation of category management were identified as the store



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of the future; digital supply system; the future of the food market; the growing role of environmental, social, and corporate responsibility. An approach to assessing the state of category management at a trade and industry enterprise is proposed, with the help of checklists for monitoring the state of provision of category management and monitoring the assessment of the organisational effect in the field of enterprise category management. The proposed approach to assessing the state of category management will contribute to the improvement of approaches to planning, information, and analytical support and control over the main management processes at the enterprise

**Keywords:** category management; management; industry; trade; retail; brand; social responsibility

## INTRODUCTION

The COVID-19 pandemic has been replaced by martial law in Ukraine. Their consequences may be most tangible and durable in the long-term prospect for consumer-oriented companies that were affected by the pandemic and war crisis. Today enterprises are developing in the context of intensifying competition for target markets, the emergence of new information and communication technologies, new forms and distribution channels, and the introduction of innovative services. Therefore, they should work to anticipate the already rapidly changing consumer needs to convincingly win the consumer and create the necessary conditions to ensure their loyalty to the company. Such an advanced strategic maneuver can be considered the concept of category management, which is increasingly penetrating Ukrainian business now. Usually, category management is focused on obtaining effects from the product categories, first of all, in the form of reducing the cost of purchases, stocks, and, sometimes, optimising the logistics costs, and therefore, becomes relevant for implementation at enterprises of various fields of activity.

The first publications on category management belong to foreign authors, in particular J. O'Brien (2009), manager of the international procurement management consulting agency, published a book "Category Management in Purchasing". This was the first book about the application of category management to non-retailers.

A. Sinha *et al.* (2013) proposed model that allows solving strategic and tactical decisions of category management in the activities of the trading enterprise, but is not adapted to industrial management. Further research was devoted to organising category management functions within PSM, and integration between the purchasing department and other business functions in the process of purchasing category management. Four cases of application in manufacturing companies were considered (Heikkilä *et al.*, 2018).

Category management in e-commerce is mentioned by B. Mihalčová & M. Pružinský (2014), describing the preferences of stakeholders, summarising the results of the study of category management in e-commerce and presenting new categories that will increase the profitability of this business. The scheme of distribution of roles between participants of the 3D-system of category management was considered by N. Mykytenko (2020),

as it can be implemented in the activities of an enterprise of any field of activity. In addition, models describing the forms of organisation of production activities in the conditions of probabilistic nature of demand were developed and their implementation by strategies of marketing interaction with consumers of products was determined by T. Kuvaieva & K. Pilova (2021).

I. Yashchyshyna *et al.* (2020), revealed the features of the social impact of corporate social responsibility of mining enterprises. Such approaches are important in the development of category management in the activities of an industrial enterprise. The monograph by V. Voronkova & N. Metelenko (2020) provided a complete, systematic, and concise coverage of a wide range of theoretical issues in the field of industrial management, based on digital technologies.

The study of a new key performance indicator, Category Conversion Power (CCP) is based on a unique data set obtained through a real-time location system (RTLS), which allowed the authors to collect behavioural data (Pascucci *et al.*, 2022). Despite the sufficient number of studies, this problem remains rather under-investigated today.

*The purpose of the study* is to analyse specific features of category management at the trade and industrial enterprises, create and test the method of evaluation of category management in terms of global macro trends that transform this concept in modern conditions.

Based on this goal, the following tasks were formulated: 1) systematise the evolutionary path of category management, highlighting the stages of its development in trade and industry; 2) propose a system of indicators for monitoring the state of ensuring category management and evaluating the organisational effect in the sphere of category management; 3) monitor the state of security and evaluate the organisational effect in the field of category management at trade and industrial enterprises in Ukraine; 4) identify global macro trends in the transformation of the future of category management. They also assume different toolkits, which has been the focus of this study.

## MATERIALS AND METHODS

The theoretical and methodological basis of this study is the conceptual principles and methodological

approaches to the management of product categories that are highlighted by Ukrainian and foreign researchers. Materials from periodicals and the Internet resources devoted to the study of classical and modern concepts of category management were also used. Scientific and empirical methods like causal analysis and synthesis, deduction and induction, systematisation and generalisation, and system and process approaches were also applied.

During the research, a complex of general scientific and special methods was used: analytical and logical generalisations – to systematise the evolutionary development of category management with the selection of stages of its development in trade and industry; methods of comparative analysis and synthesis – to clarify the specifics of category management in trade and industry with reference to the classical model by B. Harris; economic and statistical methods (sampling monitoring, comparative and technical and economic analysis, grouping) and the method of experimental evaluations – for the development and approval of a system of indicators for monitoring the state of ensuring category management and assessing the organisational effect in the field of category management at real enterprise operating in Ukraine; methods of marketing and sociological studies (surveys) and methods of generalisation – for conducting the survey “The Future of Category Management” and identifying global macro trends in the transformation of category management at modern enterprises.

To test the presented scientific developments, a survey was conducted, which included 163 respondents aged 20+, of various social statuses, professional skills, and positions from 64 enterprises of Ukraine, which have different sectoral groups, forms of ownership, number of employees, working conditions and technologies. The selected respondents gave voluntary consent to participate in the survey and completed the questionnaires. For the offline survey, adults were selected who voluntarily answered the questionnaire “The Future of Category Management” In each questionnaire, the respondent indicated consent to the processing of personal data and answers provided.

## RESULTS AND DISCUSSION

### The problem of development of category management.

Category management is one of the concepts of management of a trade assortment based on the selection of product categories in it, which is aimed at increasing the business results of the enterprise, mutually beneficial integration, and cooperation between all participants of the goods movement system, the formation of consumer loyalty and optimal satisfaction of their needs. Initially, category management originated in grocery retailing. Owners have found that they can unusually group goods and evaluate the range not as a set of individual products, but as a product mix given the key consumer views. But today, the field of application of category management is no longer limited to retail trade (Table 1).

*Table 1. Evolution of category management*

Period, participants, and stage	General characteristics of the stage and the main achievements of category management
1986, Apollo Space Management System	Following the instructions of the Apollo Space Management System, the Schnucks supermarket chain has set aside more space in baby food sections. As a result, sales in these sections increased by 20%. Schnucks soon began using the Apollo programme for all its categories, and in 1987 its main competitor left St. Louis. All this led to the creation of a revolutionary idea: the store can increase sales, approaching the range not as a combination of individual products, but as a set of certain categories or product groups.
1990, Procter & Gamble, Efficient Consumer Response	The stage is associated with Procter & Gamble, which in the early 1990s for the first time combined products in the category not by the principle of production, but by their common properties for the consumer.
2000, Super- and hypermarket chains, Modern retail	Mass use of technological innovations; introduction of unified approaches in the retail network to the introduction of automation of accounting, storage of goods, control of transactions, etc.; offering unique approaches to grouping the range of goods within the retailer; distribution of goods by groups, categories, and SKU; dynamic advertising of goods and services; use of multi-channel communication in customer service (television, e-mail, the Internet, mobile phones, etc.); the possibility of producing goods of its brand.
2013, Pharmacy chains, Pharmacy	Ability to meet the needs of end consumers, to invest with maximum efficiency in strategic categories of goods, and increase the loyalty of the end consumer to a particular brand of pharmacy chain or individual pharmacy.
2018, Industrial enterprises, Industry	Manufacturing companies need to respond quickly to changes in the market of a product and consider changes in market needs. The same range of products that have been produced at the company for years should be reviewed periodically. Tastes and needs change under the influence of scientific and technological progress, as a result of new fashion trends, new views on human safety and health, and environmental protection.

**Source:** authors' own research

In 1995, the Category Management Subcommittee of the ECR Best Practices Operating Committee and the Partnering Group Inc. published an important study: *Category Management Report: Enhancing Consumer Value in the Grocery Industry* (Basuroy *et al.*, 2001). As a result of the study, a cycle of category management was developed, which consists of eight processes: category definition, category role, category assessment, category scorecard, category strategies, category tactics, plan implementation, category review. The proposed cycle became the basis for the development of category management. C. Holweg *et al.* (2009), based on an empirical study, demonstrated the application of adjustments to the aspects of customer service personnel, and how such employees significantly affect the development of customer value. An interesting approach to the study of category management was developed by J. Hall *et al.* (2010), which described a multi-brand ordering and pricing model. The authors proved that category management leads to significantly higher profits than brand or margin.

In 2018, the authors published a paper explaining the concept of category management, which is understood as the development and implementation of the technology management of the product range by using information and innovation support, strategy generation, and methodical use of management tools for making the key competence and ensuring the long-term competitiveness of the enterprise (Y. Romat *et al.*, 2018). O. Rusak & T. Palamarchuk (2020) described territorial marketing of agribusiness development in rural areas. The researchers noted that the modern development of agribusiness requires new approaches to solving the issue of creating favourable conditions necessary for independent and proactive work of various agrarian enterprises in rural areas, but did not describe any of the models of category management that can increase the efficiency of the industry. The study suggests that this may be the next stage in development of category management. V. Khurdei (2021) identified the need to develop and clarify the business process of category management of trade enterprises, emphasised the need to introduce into the business process of category management components related to the analysis, evaluation, and selection of suppliers; preparation for sale and direct sale; marketing communications and analysis of sales and customer satisfaction.

U. Motorniuk & I. Stelmakh (2021) suggest that the problems of introducing category management at domestic enterprises should be counteracted and solved, as this would help increase the competitiveness of enterprises. The results obtained by S. Strapchuk (2019) confirmed the fact that the few authors investigated the application of category management in the field of trade in medicines. The heterogeneity of customer behaviour in supermarkets depending on the use of means for carrying things investigated by N. Larsen *et*

*al.* (2020) demonstrated the relationship between consumer segmentation and category management in retail. The volume of products sold depends on the available equipment, the area of the trading floor, and the location of product categories.

In the study by J. Cadeaux & L. Yee (2013), a structural equation model was developed, which was appropriate to interpret in the activities of an industrial or pharmaceutical enterprise because it showed how heterogeneity of category sales can affect both the category assortment and the distribution of inventory, and hence, in turn, the category performance. M. Goic *et al.* (2015) provided reports on how some category management exclusively from the standpoint of retail trade, and the proposed model for assessing the relative effectiveness of categories was aimed at achieving business processes and the mission of the enterprise.

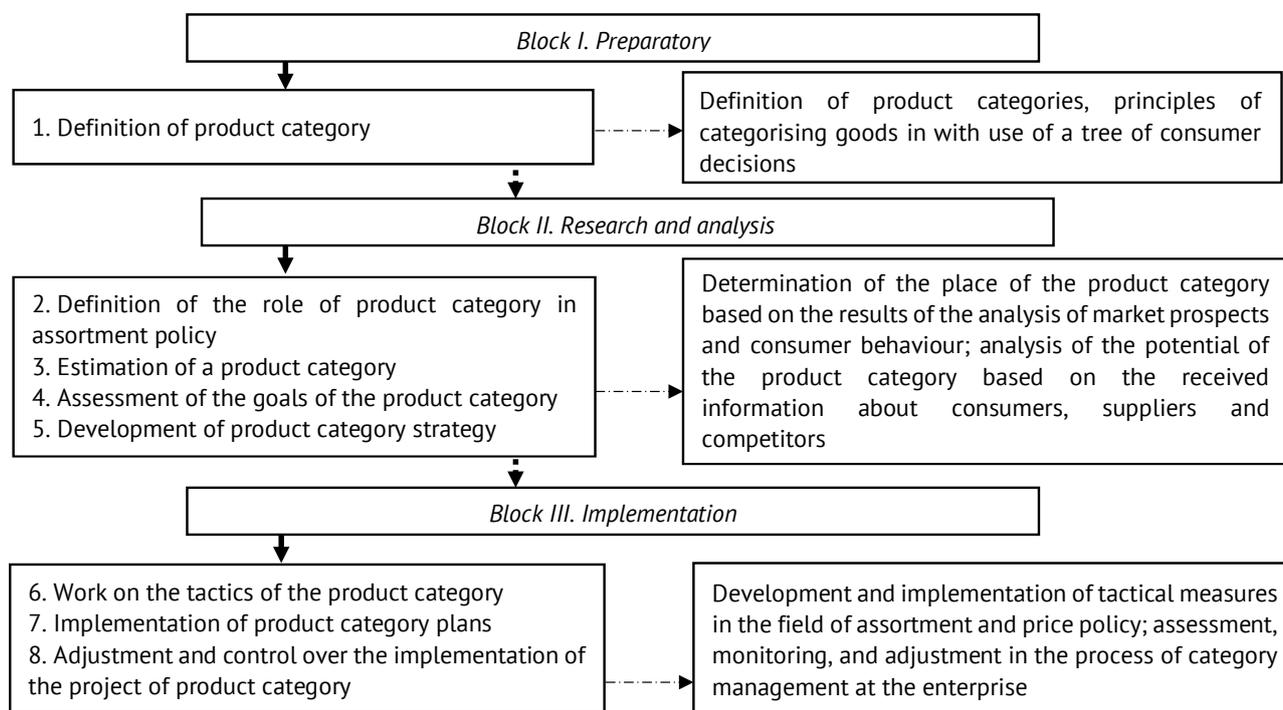
The general scheme of the process of product category management at the trade enterprise is presented in Figure 1. The entire process was divided into three blocks of operations. The preparatory stage of defining product categories is the starting point of the activity of the category manager, which depends on the correctness and vector of movement of further actions related to the management of the product category. The most important is the second stage of implementation of category management – the definition of the list of roles that will be used within the assortment matrix adopted at the enterprise. The role of the product category is a very important stage for consumer cooperation with retailers. Depending on the relevance of the product and its popularity, stores allocate the necessary square meters, and shelves, apply different approaches to advertising, develop discount systems, and the consumer pays attention to the product in any case.

The process of determining the role of certain products can be divided into the following stages: clarification of the role of a particular product for the company, which will be used within the existing assortment matrix of the company; indication of roles for each category of goods; division of resources among the developed categories based on these roles. Thus, it can be concluded that the implementation of category management is reduced to two main steps: 1) development and application of a categorical strategy, namely a document that includes analysis of the supplier market, prime cost analysis, analysis of total costs, and development of strategic decisions on methods of procurement of materials and principles of selection of suppliers; 2) creation of a categorical team of an inter-functional project group that solves the problem of supply chain management to a certain product category.

The development of organisational and economic mechanism for ensuring the innovative development of retail trade requires a comprehensive consideration of internal and external factors of the system under study, the creation of strategies and programmes to increase

the innovative potential of its participants, their active interaction, the development of an organisational and economic mechanism for ensuring the innovative de-

velopment of retail trade, increasing the use of innovative technologies, generating ideas and transformations (Hrynko et al., 2021).



**Figure 1.** The scheme of the process of product category management at the enterprise

**Source:** compiled by the authors

The specific features of the pharmaceutical market are the subject of study by many researchers, but little attention is paid to the development of product categories of medicines. N. Prytul'ska et al. (2022) defining the modern pharmaceutical market Ukraine and the world includes the production of medicines, dietary supplements, medical cosmetics, hygiene products, and medical devices, including medical knitwear, children's goods, medical equipment, but not structured in detail by product categories.

In the paper by A. Vitiuk et al. (2018), the researchers asserted trends in the development of the pharma-

ceutical industry require innovative approaches, namely the principles and features of category management can be such an area in pharmacy. Table 2 presents a step-by-step comparison of category management in trade and industry. Notably, unlike in the field of trade, the separation of product categories in an industrial enterprise is based on the principle of common sources of supply or proximity of the characteristics of the purchased goods. While in retail, product categories are distinguished based on the study of expectations and their perception by consumers.

**Table 2.** Comparative characteristics of category management in trade and industry

Elements of category management	Retail (wholesale) enterprise	Industrial enterprise
Category management purposes	Satisfying the consumer's final needs in product categories	Optimisation of costs related to purchasing and sale
Management approach	Category management as a value-oriented approach	Categorical approach to production
Focus of activity	Final consumer	Internal or external customer
Subject of management	Category manager	Category team
Selection of a class of goods	Food or non-food items	Basic and auxiliary materials
Selection of a group of goods (examples)	Groceries, bakery products, household chemicals	Components, materials, semi-finished products, fuel, raw materials

Table 2, Continued

Elements of category management	Retail (wholesale) enterprise	Industrial enterprise
Selection of a category of goods (examples)	Baking, milk, washing powder	Fabrics, knitwear, non-woven materials, natural and artificial leather, suede, artificial and natural fur, accessories, decorative materials
Balancing the assortment by width	The number of categories in the store is determined depending on gross profit and turnover	It is determined by the specifications of the finished product and the need for auxiliary materials or raw materials
Balancing the assortment by the depth	The number of products in the middle of the category, by brands, manufacturers, properties	Possible management by the procurement department with the participation in the category team of representatives of customer units
Balancing the assortment by height	Price offers	It is determined with the participation of customers and considering the company's policy on procurement
Roles of categories	Basic, priority, periodic, unique, convenient	None
Type of analysis	Analysis of product range, market, suppliers, logistics processes	Analysis of product range, market, suppliers
Merchandising	Sales promotion tool	None
Staff/sales training	Sales promotion tool	None
Advertising campaigns and promotions	Sales promotion tool	None
Tools for increasing the average check: up-sell, down-sell, cross-sell	Sales promotion tool	None
Determining the pricing policy of sales, pricing	Setting the selling price	None, because neither basic nor auxiliary materials are sold, and therefore have no selling price. The buyer manages only the purchase price of the materials
Turnover analysis	The most important key performance indicator (KPI) of trade, which reflects the speed of implementation, the number of frozen funds	Used for management analytics and illiquidity control
Development of supplier management strategy	Supply management system	Supply management system

**Source:** developed by the authors based on Brubakken et al. (2020); Dandage et al. (2019); Landale et al. (2017); Sangka et al. (2019); Zuhaira & Ahmad (2021)

Moreover, not all tools of category management can be fully applied in the work of industrial enterprises. Classic tools such as assortment analysis by role, depth, width, and height, marketing, merchandising, advertising campaign planning, and trade margin management are unacceptable in the industry. Due to the limitations in the application of management tools, it makes sense to talk about the use of the category approach in the industry, and not the entire set of management capabilities of category management. Moreover, at an industrial enterprise, the goal of category management in the procurement process is being reformatted to meet the needs of end consumers to optimise costs because procurement in such enterprises is not focused on external consumption, but on internal use.

In general, the use of a categorical approach in both trade and industry is very useful because it allows retailer so: personify approaches to the purchase of different

categories of goods; overcome the problem of applying only cost analysis without considering other factors in the process of evaluation and selection of suppliers; formalise the approaches adopted by the company to the purchase of certain categories of goods, exclude the interpretation of the performers; involve representatives of other functional units in the development of strategies by category. In addition, if in trade the category manager bears full responsibility for the management of the product category, then in industry technological processes impose their nuances on the management of the assortment of the category, which is why it is advisable to form category teams of engineers, technologists, marketers, analysts, IT specialists, etc., who will provide consultations on specialised procurement, supplier management, and product category market analysis.

**Algorithm for the development of category management.** Nowadays, there are enough methods to

evaluate category management in retail, but none to evaluate it in an industrial enterprise. It is expedient to carry out the analysis and estimation of parameters of category management through control sheets of monitoring a maintenance condition of category management and monitoring the assessment of the organisational effect in the field of category management of the enterprise.

Each of the proposed indicators is assessed on a scale in points, where 3 – work is conducted in full and meets the requirements of the documentation; 2 – work is not conducted in full, there are remarks (remarks are made in the checklist); 1 – work is conducted in the

minimum volume; 0 – work is not conducted. The significance coefficients are summarised based on an expert assessment by 42 employees who are involved in category management processes in 20 enterprises of both trade and industry. The state of the provision of category management can be assessed based on the Table. 3.

Gathering and aggregating information to assess the organisational effect, the experts, first of all, choose the factors of dominant influence. The study of their impact on category management provides a conclusion on the expediency of their grouping to more fully identify the existing reserves of economic growth, which may take the form of a single matrix (Table 4).

**Table 3.** Monitoring of the state of provision of category management

No.	Indexes	Significance ratio, $P_j$	Estimate, $T_i$ point*	Significance of the factor, $Szab$
1	Status of completeness and quality of implementation of information management processes of category management (Siz)	0.25		
2	Status of completeness and quality of implementation of the processes of methodological support of category management (Smz)	0.20		
3	Status of completeness and effectiveness of the implementation of the processes of resource provision of category management (Srz)	0,15		
4	Status of completeness and quality of implementation of technical support processes of category management (Stz)	0.20		
5	Status of completeness, quality, and effectiveness of the implementation of the processes of organisational support of category management (Soz)	0.20		
Provision of category management				$\Sigma$

**Note:** The proposed methodology involves filling out control sheets of monitoring of a condition of maintenance of category management of the enterprise by the method of expert assessments by specialists in the relevant field (trade, industry). Each of the proposed indicators is assessed on a scale in points

**Source:** developed by the authors

**Table 4.** Monitoring the assessment of organisational effectiveness in the field of category management

No.	Indexes	Significance ratio, $P_j$	Estimate, $T_i$ point*	Significance of the factor, $Sef$
1	Status of assortment management (Sko)	0.15		
2	Status of defining the roles of categories (Skn)	0.20		
3	Status of inventory management (Stb)	0.25		
4	Status of management of work with suppliers (Std)	0.20		
5	Status of selection of categories and subcategories (Svd)	0.20		
Organisational effect in the field of category management				$\Sigma$

**Note:** The proposed methodology involves filling out control sheets of monitoring the assessment of the organisational effect in the field of category management of the enterprise by the method of expert assessments by specialists in the relevant field (trade, industry). Each of the proposed indicators is assessed on a scale in points

**Source:** developed by the authors

As a result, a matrix for determining the state of category management in industrial and trade enterprises is proposed. Like all classical models of strategic planning, the matrix is a two-dimensional table, where axis X reflects the monitoring of the state of category management, and axis Y monitors the evaluation of

organisational effectiveness in the field of category management. The authors propose to evaluate the specified criteria by calculating  $Szab$  (1) and  $Sef$  (2):

$$Szab=0.25*Siz+0.20*Smz+0.15*Srz+0.20*Stz+0.20*Soz \quad (1)$$

where *Szab* – status of category management; *Siz* – status of completeness and quality of implementation of information support processes of category management; *Smz* – status of completeness and quality of implementation of the processes of methodological support of category management; *Srz* – status of completeness and effectiveness of the implementation of the processes of resource provision of category management; *Stz* – status of completeness and quality of implementation of the processes of technical support of category management; *Soz* – status of completeness, quality, and effectiveness of the implementation of the processes of organisational support of category management. 0.25; 0.20; 0.15; 0.20; 0.20 – corresponding coefficients of the weight of indicators.

$$Sef=0.15*Sko+0.20*Skn+0.25*Stb+0.20*Std+0.20*Svd \quad (2)$$

where, *Sef* – organisational effect in the field of personnel management; *Sko* – status of assortment management;

*Skn* – status of defining the roles of categories; *Stb* – status of inventory management; *Std* – status of management of work with suppliers; *Svd* – status of selection of categories and subcategories. 0.25; 0.20; 0.15; 0.20; 0.20 – corresponding coefficients of the weight of indicators.

Thus, category management should be considered as a management technology aimed at supporting, substantiating, and improving the effectiveness of management decisions in the field of enterprise management, and ensuring its purposes. The proposed approach to assessing the state of category management will contribute to the improvement of approaches to planning, information, and analytical support and control over the main management processes in the enterprise. To assess the probability of support and development of strengths and eliminate weaknesses in category management, it is advisable to use the results of calculations of indicators of probability and the development of strengths and the elimination of weaknesses (Table 5).

**Table 5.** Matrix for determining the state of category management in enterprises

Monitoring the assessment of organisational effectiveness in the field of category management		Criteria		
		Monitoring the state of category management		
		Absence (0-1.5 points)	Insufficiency (1.5-2.5 points)	Availability (2.5-3 points)
Criteria	Absence (0-1.5 points)	Category management is absent, no attempts are being made to adjust it	The existing provision of category management in the absence of the organisational effect of category management	
	Insufficiency (1.5-2.5 points)	Low level of provision of category management, adequate opportunities for the development of category management	Average level of category management at the enterprise	
	Availability (2.5-3 points)	Sufficient level of the management system of category management with its practically absent or low level	High level of category management	Ideal state of category management

**Source:** developed by the authors

**The results of application of the algorithm.** In the current conditions of operation, most enterprises of the country face problems in ensuring the efficiency of the use of resources. To investigate the practical aspects of implementing category management at trade and industry enterprises, the state of category management at Sika Ukraine LLC, Epicenter K LLC, Auchan Ukraine Hypermarket LLC, and Obolon JSC was analysed using the methodology proposed above (Table 6).

Considering Table 6, it is possible to ascertain the low level of organisation and provision of category management of the industrial enterprises (Sika Ukraine LLC and Obolon PJSC) compared to retail enterprises (Ashan Hypermarket Ukraine LLC and Epicenter K LLC). The most vulnerable aspects are the informational

and methodological support, the state of selection of categories and subcategories, and the distribution of roles of product categories. Thus, from the standpoint of the product category management algorithm (Fig. 1), the block of research and analysis is less developed in terms of determining the role of the product category in the assortment policy of the enterprise, analysing the potential of the product category based on the received information about consumers, suppliers, competitors.

According to the matrix for determining the state of category management at the enterprise (Fig. 2), Auchan Hypermarket Ukraine LLC has an ideal state of category management development, Epicenter K LLC has an average level, and Sika Ukraine LLC and Obolon PJSC have an existing provision of category management

in the absence of the organisational effect of category management. This once again confirms the signifi-

cant unused reserves for the development of category management at the specified industrial enterprises.

**Table 6.** Generalised results of monitoring the state of security and assessment of the organisational effect in the field of category management at trade and industrial enterprises in Ukraine

No.	Indexes	Significance ratio, $P_j$	Estimate, $T_j$ point	Significance of the factor, $S_{ef}$	Estimate, $T_j$ point	Significance of the factor, $S_{ef}$	Estimate, $T_j$ point*	Significance of the factor, $S_{ef}$	Estimate, $T_j$ point	Significance of the factor, $S_{ef}$
		Auchan Ukraine Hypermarket LLC	Epicenter K LLC	Sika Ukraine LLC	Obolon PJSC					
<i>Monitoring of the provision of category management</i>										
1	Status of completeness and quality of implementation of information management processes of category management ( $S_{iz}$ )	0.15	2	0.3	3	0.45	1	0.15	1	0.15
2	Status of completeness and quality of implementation of the processes of methodological support of category management ( $S_{mz}$ )	0.2	2	0.4	2	0.4	1	0.2	1	0.2
3	Status of completeness and effectiveness of the implementation of the processes of resource provision of category management ( $S_{rz}$ )	0.25	3	0.75	2	0.5	2	0.50	1	0.25
4	Status of completeness and quality of implementation of technical support processes of category management ( $S_{tz}$ )	0.2	3	0.6	2	0.4	2	0.4	2	0.4
5	Status of completeness, quality, and effectiveness of the implementation of the processes of organizational support of category management ( $S_{oz}$ )	0.2	3	0.6	3	0.6	1	0.2	2	0.4
Provision of category management			$\Sigma=2.65$	$\Sigma=2.35$	$\Sigma=1.45$	$\Sigma=1.40$				
<i>Monitoring of the evaluation of the organisational effect in the field of category management</i>										
1	Status of assortment management ( $S_{ko}$ )	0.15	3	0.45	2	0.3	2	0.3	3	0.45
2	Status of defining the roles of categories ( $S_{kn}$ )	0.2	2	0.4	3	0.6	1	0.2	1	0.2
3	Status of inventory management ( $S_{tb}$ )	0.25	2	0.5	2	0.5	2	0.5	2	0.5
4	Status of management of work with suppliers ( $S_{td}$ )	0.2	3	0.6	2	0.4	2	0.4	2	0.4
5	Status of selection of categories and subcategories ( $S_{vd}$ )	0.2	3	0.6	2	0.4	2	0.4	1	0.2
Organisational effect in the field of category management			$\Sigma=2.55$	$\Sigma=2.20$	$\Sigma=1.80$	$\Sigma=1.75$				

**Source:** developed by the authors

Next, the study considers in more detail the global macro-trends of the survey, which was attended by 163 respondents aged 20+, with different social statuses, professional skills, and positions from 64 enterprises in Ukraine, which have different sectoral groups, ownership, several employees, working conditions and technologies (Table 7).

The radical changes that are already taking place today in consumer markets have accelerated with the onset of the pandemic and the conditions of martial law in Ukraine. Thus, within the scope of this study, it is expedient to consider the global macro trends revealed as a result of the survey, which are transforming category management: the store of the future; relevance

of the brand; digital supply system; future of the food market; rapid growth of the role of environmental, social and corporate responsibility (Fig. 2).

Thus, according to global trends that have changed the face of contemporary category management, there is an undeniable fact that the world of physical stores has gone into the past. It has been replaced by an integrated store model with powerful innovative technologies and the transition to omnichannel functioning, providing meaningful value propositions, perfect service for consumers, and strengthening the role of environmental, social, and corporate responsibility. The system of providing modern enterprises has also transformed the activation of the ECR (Efficient

Consumer Response), SCM (Supply Chain Management) and CRM (Customer Relationship Management) functions by establishing interactive interaction of enterprises with permanent partners via the Internet,

building a system of forecasting expectations and behaviour models for consumers and rapid response to them, implementing digital supply technologies, using of smart contracts, etc.

**Table 7.** Analysis of the results of the questionnaire survey "The Future of Category Management"

Question	Answer	Number of respondents	% of answers
Please indicate to what extent you agree or disagree with such statements about the importance of environmental friendliness in shopping.	I buy products from companies that are conscious of the environment and help protect it	62	38
	I choose products whose origin information is open and transparent	45	28
	I buy more biodegradable/environmentally friendly products	25	15
	I deliberately buy goods in ecological packaging or with minimal packaging	21	13
	I practically don't consider the environmental factor	10	6
Which features in these product categories are you willing to pay more for? (Consumer goods, including food and beverages)	Health benefits	43	26
	Made in your country/from local ingredients	38	23
	Eco-friendly/ecological packing of better quality	32	20
	Ethically produced trademarks are known for their ethical principles	30	18
	Luxury brands	12	7
	I'm not willing to pay more for any of the above	8	5
What will the development of category management at an industrial enterprise lead to?	Clearer selection of categories and subcategories	47	29
	Defining the roles of categories	39	24
	Category analysis and strategy definition	41	25
	Formation of tactics in work	36	22
	Logistics	19	12
What areas of a category manager's work do digital technologies have a greater impact on?	Merchandising	17	10
	Procurement system	38	23
	Keeping records of product categories	41	25
	Financial activity	12	7
	Project management	15	9
	Cross-categorical analysis	21	13
	Increasing the competitiveness of the enterprise	52	32
What will the development of category management lead to (in your opinion)?	Attracting new consumers	57	35
	The growing role of environmental, social, and corporate responsibility	31	19
	Improving reputation and image	14	9
	Brand development	9	6

**Source:** calculated based on the data of a questionnaire survey of 163 respondents from 64 enterprises in Ukraine in May 2022

The digital supply system will continue to integrate all relevant internal functions, such as merchandising, category management, store operations, financial activities, and taxation, and integrate the activities of all supply system participants, including suppliers, logistics organisations, customers, and partners of innovative projects.

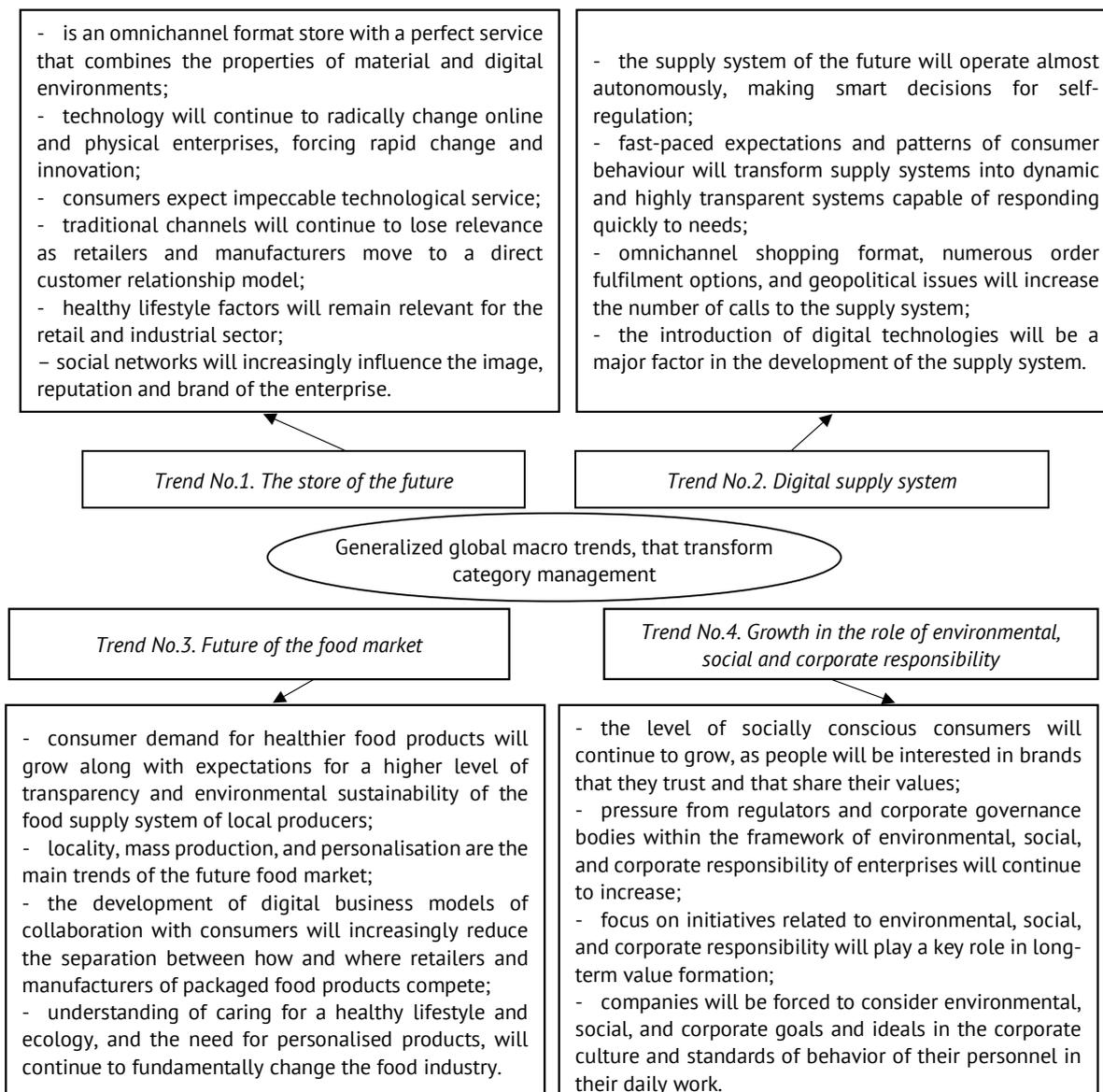
Many of the trends currently determining the future of consumer markets O. Penkova *et al.* (2022) will generally have a marked impact on the future of the food market. The future of the food market will also be

characterised by increasing personalisation, even excessive, and ambiguous attitudes towards it by some consumers, as this degree of personalisation is achieved through data collection and tracking of consumer behaviour.

Sharing the opinion D. Honcharenko (2021) even before the pandemic, there was a trend among consumers to demand healthy and environmentally friendly health and food products, and to limit the consumption of certain food groups and the use of food additives. The authors' consumer survey showed that half of the respond-

ents include more plant-based foods in their diets. It was expected that this trend will intensify and gain momentum. Therefore, according to the popularisation of healthy food trends and a healthy lifestyle and considering the

conditions of martial law in Ukraine, there is an increase in consumer demand for healthy, organic food products, pre-packaged products, and goods of local manufacturers, produced from local components and ingredients.



**Figure 2.** Generalised global macro trends, that transform category management

**Source:** compiled by the authors based on the PwC database "The future of consumer markets" (2021); Vanharanta et al. (2022)

Consumers demand accountability and transparency on a range of socio-environmental issues in category management, including the reduction of packaging waste, transparency of the supply chain, and fair employment practices. All participants in the production and distribution chains, including agribusiness, commodity producers, and trade enterprises, will have to meet these expectations if they want to stay in the market. Therefore, the practical aspects of category management are important for enterprises of both trade and industry.

## CONCLUSIONS

Category management is one of the most effective management approaches to managing the range of goods in the trade sphere or the product range of goods and material values in the sphere of industry. Its application allows optimising business processes from the purchase to the sale of goods (or internal use of materials, depending on the field of activity). Despite several subtleties that distinguish category management in trade and industry, their common characteristic is the ability

to differentiate approaches to the purchase of different categories of goods or materials, to involve functional consultants in the development of a category strategy, and to increase the efficiency of the evaluation and selection processes of suppliers.

The presented methodology for monitoring the state of security and evaluating the organisational effect in the field of category management was tested at real trade and industrial enterprises in Ukraine and provided several important conclusions. The processes of identifying the roles of product categories and analysing the potential of categories based on information about consumers, suppliers, and competitors are the least developed in the category management

of industrial enterprises. Therefore, the conducted research proved the existence of significant reserves for the development of category management at industrial enterprises. Prospects for further study are related to the development of methods for analysing the potential of industrial enterprise categories based on information about consumers, suppliers, and competitors.

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#### CONFLICT OF INTEREST

None.

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**Анотація.** Ідентифікувати особливості категорійного менеджменту на підприємствах торгівлі і промисловості, розробити та апробувати методику оцінки категорійного менеджменту в світлі глобальних макротенденцій, які трансформують категорійний менеджмент за нинішніх умов обумовили актуальність дослідження. Сьогодні категорійний менеджмент сприймається більшістю організацій як безперервний бізнес-процес, де діяльність з управління категоріями є невід'ємною частиною бізнесу. Саме тому метою дослідження було з'ясувати зміни макротенденцій та можливості застосування моделей категорійного менеджменту у різних галузях діяльності. В процесі їх опрацювання були використані такі науково-емпіричні методи, як причинно-наслідковий аналіз та синтез, дедукція та індукція, систематизація та узагальнення, а також системний та процесний підходи. Проведені дослідження дозволили виявити наявність значних резервів розвитку категорійного менеджменту на промислових підприємствах. За результатами проведення опитування «Майбутнє категорійного менеджменту» ідентифіковано такі глобальні макротенденції трансформації категорійного менеджменту, як магазин майбутнього; цифрова система постачання; майбутнє продовольчого ринку; зростання ролі екологічної, соціальної та корпоративної відповідальності. Запропоновано підхід стосовно оцінки стану категорійного менеджменту на підприємстві торгівлі та промисловості, за допомогою контрольних листів моніторингу стану забезпечення категорійного менеджменту та моніторингу оцінки організаційного ефекту в сфері категорійного менеджменту підприємства. Запропонований підхід стосовно оцінки стану категорійного менеджменту буде сприяти вдосконаленню підходів щодо планування, інформаційно-аналітичного забезпечення та контролю за основними процесами управління на підприємстві

**Ключові слова:** товарна категорія; управління; стратегія; маркетинг; ритейл; бренд; технологія