

IMPROVING THE MECHANISMS FOR MANAGING MARKETING RISKS AT CONSTRUCTION MATERIALS MANUFACTURING ENTERPRISES

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Abstract

The article examined mechanisms for improving marketing risk management in construction materials manufacturing enterprises. The principles of ISO 31000:2018 risk management were adapted to the specific conditions of the construction materials market. Major sources of marketing risk, including demand uncertainty, price fluctuations, competitive pressure, distribution channel disruptions, and brand-related factors, were systematized. Based on scientific literature, international market reports, and official statistical data, a conceptual mechanism for marketing risk management was developed. The findings demonstrated that the application of market intelligence, scenario planning, and digital analytics contributed to improving the quality of marketing decisions and strengthening market responsiveness. The proposed approach supported enterprise competitiveness and enhanced adaptability to changing market conditions. The study provided a practical framework for integrating marketing risks into enterprise management systems.

Keywords: Marketing risk, risk management, construction materials industry, ISO 31000, market intelligence, scenario planning, digital analytics, competitiveness.

Introduction

Annotatsiya

Maqolada qurilish materiallari ishlab chiqaruvchi korxonalarda marketing risklarini boshqarish mexanizmlarini takomillashtirish masalalari tadqiq etildi. Tadqiqotda ISO 31000:2018 risklarni boshqarish tamoyillari qurilish materiallari bozori sharoitlariga moslashtirildi. Marketing risklarining talab noaniqligi, narx o'zgarishi, raqobat bosimi, taqsimot kanallari uzilishlari va brend bilan bog'liq manbalari tizimlashtirildi. Ilmiy adabiyotlar, xalqaro bozor hisobotlari hamda rasmiy statistik ma'lumotlar asosida marketing risklarini boshqarishning konseptual mexanizmi ishlab chiqildi. Natijalar bozor razvedkasi, ssenariy rejalashtirish va raqamli analitika vositalaridan foydalanish marketing qarorlarining aniqligini oshirishga xizmat qilganligini ko'rsatdi. Taklif etilgan yondashuv korxonalarining raqobatbardoshligini mustahkamlash va bozor noaniqliklariga moslashuvchanligini kuchaytirishga yo'naltirildi.

Kalit so'zlar: marketing riski, risklarni boshqarish, qurilish materiallari sanoati, ISO 31000, bozor razvedkasi, ssenariy rejalashtirish, raqamli analitika, raqobatbardoshlik.

Аннотация

В статье были исследованы вопросы совершенствования механизмов управления маркетинговыми рисками на предприятиях по производству строительных материалов. Принципы управления рисками ISO 31000:2018 были адаптированы к условиям рынка строительных материалов. Были систематизированы основные источники маркетинговых рисков, связанные с неопределённостью спроса, изменением цен, конкурентным давлением, сбоями в каналах распределения и факторами бренда. На основе научной литературы, международных рыночных отчётов и официальных статистических данных был разработан концептуальный механизм управления маркетинговыми рисками. Полученные результаты показали, что использование инструментов рыночной разведки, сценарного планирования и цифровой аналитики способствовало повышению качества маркетинговых решений. Предложенный подход был направлен на укрепление конкурентоспособности предприятий и повышение их адаптивности к рыночной неопределённости.

Ключевые слова: маркетинговый риск, управление рисками, промышленность строительных материалов, ISO 31000, рыночная разведка, сценарное планирование, цифровая аналитика, конкурентоспособность.

INTRODUCTION

Construction materials manufacturing enterprises constitute one of the supporting links of the modern economy, since their output provides the material basis for housing construction, industrial facilities and infrastructure development. According to estimates by major analytical organizations, the global building materials market has reached a scale of several trillion dollars and has maintained a steady rate of growth: Grand View Research reports that this market amounted to USD 1.5 trillion in 2022 and carries an average annual growth prospect of 4.1 percent [15]. Such a scale opens a wide field of opportunities for enterprises in the sector, while at the same time requiring careful management of the uncertainty factors that affect their activities.

Because marketing activity is the principal link connecting an enterprise with its external environment, the uncertainties that arise precisely in this area exert a direct influence on product sales, pricing policy and market share. Marketing risk refers to the probability of failing to fully achieve planned marketing outcomes as a result of unexpected changes in the level of demand, price fluctuations, intensification of competitive conditions and shifts in consumer preferences. Managing such risks systematically at the enterprise level improves the quality of decision-making and protects the brand from potential losses [8].

In the economy of Uzbekistan, construction and the related production of materials have been passing through a stage of consistent development. According to data of the National Statistics Committee, in January-April 2024 a total of UZS 46.9 trillion of construction works was carried out across the republic, representing growth of 3.5 percent compared with the corresponding period of the previous year [20]. The production indicators of the sector also preserved a positive direction: in 2024 the output of construction materials increased by 7.5 percent [21]. This growth dynamic creates favourable conditions for enterprises in the sector to consolidate their market position and raise their marketing potential.

Making full use of the expanding opportunities of the sector turns the management of marketing risks through scientifically grounded mechanisms into

a task of primary importance. The aim of the article is to provide a theoretical justification of the mechanisms for managing marketing risks at construction materials manufacturing enterprises and to define the directions for their improvement. The exposition begins with a review of the scholarly literature and continues consistently with the methodological approach, the analytical results and the practical recommendations.

LITERATURE REVIEW

Over recent decades the theory of risk management has taken shape as an independent scholarly direction and has been regulated at the level of international standards. The ISO 31000:2018 standard defines risk management as a systematic process that increases the likelihood of achieving organizational objectives and that creates and protects value [1]. The standard understands risk management as the unity of principles, framework and process; the process itself encompasses the stages of establishing scope and criteria, identifying risks, analysing and evaluating them, and treating them [2].

Studies in the manufacturing sphere have sought to systematize risk factors along the dimensions of cost, time, quality and safety. A sustainable risk management framework developed for manufacturing enterprises proposed an approach adapted to small and medium-sized enterprises that allows key risk indicators to be identified and continuously monitored [4]. Work on strategic risk management, in turn, demonstrated the importance of analytical frameworks that capture economic, social and technological factors when assessing the external environment [3].

The concept of enterprise risk management proposes that individual risks be considered within an integrated system and takes account of the interrelationships among different types of risk. Studies conducted on the example of enterprises in developing countries substantiated that the adoption of this concept serves to improve financial outcomes [5]. In constructing the risk map of a manufacturing enterprise, the clearly allocated roles of management and adherence to compliance requirements were recognized as being of decisive importance [6]. Disruptions in the supply chain were shown to be manageable through systems that ensure real-time monitoring and transparency [7].

In the marketing context, the notion of risk is closely linked to consumer behaviour and to uncertainty in market demand. A consumer's perceived risk

arises from the fact that the outcome of a purchase decision cannot be fully determined in advance, and it influences the level of demand and therefore the innovative activity of the enterprise [9]. Under conditions of demand uncertainty, models of price and service competition demonstrated that the optimal decisions of supply chain participants depend on their attitude towards risk [10].

As an important direction for reducing marketing risk, the concept of market orientation has been studied extensively. Examining the influence of market orientation and strategic management on enterprise outcomes on the example of small and medium-sized enterprises, regular monitoring of competitors was found to become a central element of marketing activity [12]. Competitor orientation and proactiveness were confirmed empirically to play a mediating role in strengthening the competitive advantage of an enterprise [13]. In the relationship between competitor orientation and enterprise performance, marketing ethics and competitive intensity were also shown to serve as moderating factors [11]. The place of marketing capabilities and business orientation in the activity of fast-growing enterprises was investigated separately [14].

Although the existing scholarly sources have thoroughly illuminated the general theoretical foundations of risk management and the interaction of marketing activity with the market, mechanisms of marketing risk that take into account the specific features of construction materials manufacturing enterprises remain comparatively underdeveloped. The heaviness of the sector's products, the high transport costs and the dependence of demand on construction cycles shape a distinctive profile of marketing risk [22]. This circumstance makes the development of dedicated management mechanisms in the field necessary and defines the scholarly place of the article.

METHODOLOGY

The article relies mainly on a theoretical and analytical approach. Its methodological basis consists of the systematic generalization of scholarly sources, conceptual modelling and the comparative analysis of verified empirical indicators. Such an approach makes it possible to connect theoretical foundations with practical market data and to form a generalized management mechanism.

Three groups of sources were selected for the analysis. The first group included international standards of risk management, among them ISO 31000:2018 [1].

The second group comprised reports on the global building materials market produced by major analytical organizations [15]. The third group consisted of official data of the National Statistics Committee of the Republic of Uzbekistan [20]. Only data from verified and openly accessible sources were used; estimated or unverified figures were not included in the analysis.

In forming the management mechanism, the stages of the ISO 31000 process were adapted to the conditions of the building materials market. Each stage was linked with the identified sources of marketing risk, and the input, process and output layers of the mechanism were distinguished. A graphical representation of the mechanism is presented in Figure 1.

ANALYSIS AND RESULTS

At construction materials manufacturing enterprises, marketing risks were divided into five principal sources. Demand uncertainty is explained by the seasonal and cyclical nature of construction activity and generates the greatest uncertainty in planning sales volumes [9]. Price and cost fluctuations arise from the variability of raw material and energy prices. Competitive pressure is intensified by the large number of enterprises in the sector and the relative homogeneity of the product. Disruptions in the distribution channel are closely connected with logistics risks owing to the heavy and bulky character of the product [7]. Brand and reputation risks, in turn, arise in connection with the fulfilment of quality and warranty obligations.

The quantitative dimension of demand uncertainty is clearly manifested in the divergence of global market estimates across sources. Different analytical organizations calculate the size of the building materials market on the basis of differing methodologies, and as a result the estimates diverge considerably. Table 1 below brings together the principal indicators obtained from verified sources.

Table 1. Estimates of the global building materials market from verified sources¹

Research Organization	Market Segment (Year)	Market Size (USD Trillion)	CAGR (%)	Source
Grand View Research	Global Building Materials Market (2022)	1.50	4.1	[15]
Global Market Insights	Global Building Materials Market (2023)	0.8244	6.2	[18]
Grand View Research	Smart Building Materials Market (2024)	0.04165	9.6	[17]
Grand View Research	Green Building Materials Market (2024)	0.28589	8.5	[16]
MarkNtel Advisors	Global Building Materials Market (2025)	1.69	5.8	[19]

The data of the table show that, for one and the same sector, the estimates provided range from USD 824 billion to USD 1.69 trillion [18]. Such a divergence is explained by the differing definition of market boundaries and the differing coverage of segments. For an enterprise, this situation generates the risk of relying on a single source in forecasting demand and substantiates the necessity of comparing several independent sources. At the same time, the high growth rates of the green and smart materials segments also open up new market opportunities [16].

An integrated mechanism for managing the identified risk sources is presented in Figure 1. The mechanism consists of three layers: the input layer encompasses the sources of marketing risk; the central layer adapts the six stages of the ISO 31000 process to the context of construction materials [1]; and the output layer reflects the improved management tools and the expected outcome.

¹ Source: compiled from [15]; [16]; [17]; [18]; [19].

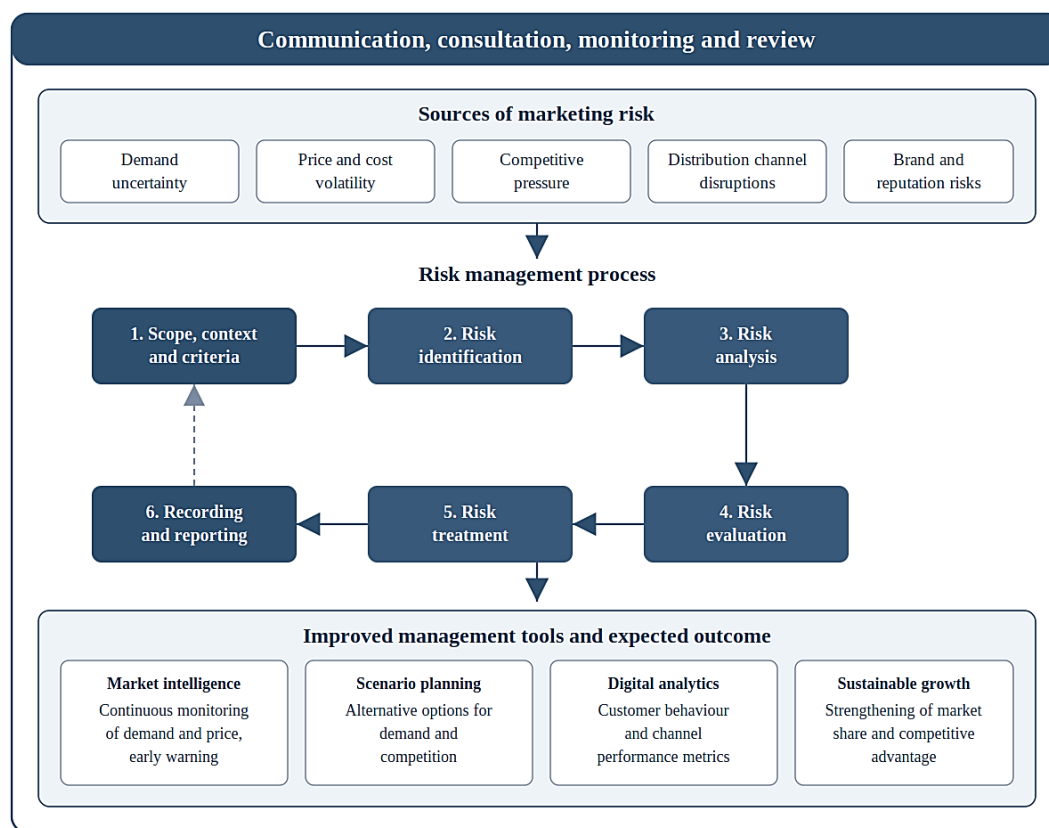


Figure 1. Mechanism for managing marketing risks at construction materials manufacturing enterprises²

At the first stage of the mechanism the enterprise establishes the market context and the risk criteria, that is, it determines which level of sales fluctuation is to be regarded as acceptable. The second and third stages provide for the identification of risks and the analysis of their likelihood and severity of impact. At the fourth stage the risks are evaluated against the established criteria and arranged in order of priority. The fifth stage encompasses risk treatment - measures of price flexibility, diversification of channels and reinforcement of the brand [11]. The sixth stage serves to record the results and to update the information base for the subsequent cycle.

The output layer of the mechanism brings together three practical tools. Market intelligence ensures continuous monitoring of demand and price indicators together with an early warning system. Scenario planning makes it possible to prepare alternative paths for demand and competition in advance [10]. Digital

² Adapted from ISO 31000

analytics substantiates decision-making through indicators that measure customer behaviour and the effectiveness of distribution channels. The joint application of these tools raises the degree of market orientation and reinforces competitive advantage [12].

The principal advantage of the proposed mechanism is manifested in the way it integrally connects marketing risks with the overall management system of the enterprise. Considering risks not in isolation but as an interconnected system improves the quality of decision-making and assists the rational allocation of resources [5]. Under the positive growth dynamic of the sector, such an approach creates a firm basis for enterprises to expand their market share in a sustained manner [21].

CONCLUSION AND SUGGESTIONS

The theoretical analysis carried out substantiated that the management of marketing risks at construction materials manufacturing enterprises is an important factor ensuring their sustainable development. Marketing risks were divided into five principal sources connected with demand, price, competition, the distribution channel and the brand; each of these influences enterprise outcomes in a distinctive manner.

The article proposed a management mechanism that rests on the ISO 31000 process but is adapted to the features of the sector. The mechanism encompasses an integral cycle running from the identification of risk sources to the recording of results, and it unites market intelligence, scenario planning and digital analytics as practical tools.

On the basis of the analysis conducted, a number of practical recommendations for enterprises in the sector were formulated. First, relying on at least two independent sources in forecasting demand reduces the risk arising from the divergence of market estimates. Second, responding to price and cost fluctuations through a flexible pricing policy is expedient. Third, diversifying distribution channels softens the impact of logistics disruptions. Fourth, regular monitoring of digital marketing indicators reinforces the early warning system. Fifth, integrating marketing risks into the enterprise risk management system ensures the integrity of governance.

The proposed mechanism serves as a theoretical and practical basis for the effective use of the expanding opportunities of the sector. In further research, the

quantitative modelling of individual stages of the mechanism and its testing on the example of particular enterprises were identified as a promising direction. Such development contributes to the sustainable and competitive growth of the construction materials field.

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