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Model for expression of personal entrepreneurship realization in the logistics sector

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Abstract: The global logistics sector offers significant opportunities for entrepreneurial growth, yet aspiring entrepreneurs often face challenges due to a lack of structured guidance in business creation. This paper addresses this issue by developing a universally applicable business creation model designed to increase the likelihood of successful logistics business establishment. The model systematically guides entrepreneurs through key decision-making stages, including choosing a business model, legal form, location, and financing sources. The methodological section provides decision-making support by implementing a multi-criteria evaluation approach—specifically, the Simple Additive Weighting (SAW) method—combined with criteria derived from modern academic literature. During practical implementation, the proposed model helped identify 10 logistics business models and 9 key evaluation criteria. Results showed that the model can effectively incorporate diverse expert evaluations, enabling more objective and efficient decision-making when selecting viable business creation options. The model was also tested by an entrepreneur establishing a new logistics company; the company, successfully launched, has been operating for over 10 months. The practical application confirms that the proposed model is a useful and adaptable tool for new entrants in the logistics sector seeking structured guidance throughout the business creation process.

Keywords: *Business creation model, Logistics, Multi-criteria evaluation, SAW method.*

1. Introduction

Logistics is a significant field within the global business sector, encompassing a wide range of companies, both large and small, that contribute significantly to the development of the global economy and the improvement of shared infrastructure. In 2023 alone, the global logistics sector reached a combined value of approximately USD 9.4 trillion [1]. The size of the logistics sector, the wide range of opportunities for different careers in the field, and the realistic prospect of potentially high incomes encourage many people of working age (especially younger individuals) to work in or set up a business in the logistics field.

Lately, the logistics service market has transformed into notably more competitive sector. In 2023, in the US alone, there were more than 4.27 million different registered businesses in transportation and warehousing sectors [2]. The significant global value of the logistics sector and the high concentration of logistics enterprises in developed markets underscore the important role of logistics as a core element of the modern economy, as well as the broad opportunities for entrepreneurs to establish various types of service-oriented businesses within this sector.

Even though there are numerous ways to start a new logistics business, new entrepreneurs often find the abundance of different business models and the necessity of making quick decisions under ever-changing market conditions quite challenging. The key question is how enterprising leaders can effectively penetrate today's mature and saturated service markets? This issue is particularly relevant not only to new business initiators in the logistics field, but also to innovative leaders and team-oriented

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professionals operating in any highly competitive area of business services. New entrepreneurs in the logistics sector frequently encounter a shortage of structured, coherent, and systematically presented information necessary for establishing and developing a successful logistics business. The lack of practical and applicable information on how to efficiently start a logistics business and select the most viable administrative and financial solutions remains a challenge for both academic researchers and aspiring entrepreneurs. This paper aims to address this issue in detail.

This paper aims to propose a universally applicable model for creating new logistics businesses, designed to enhance the likelihood of successful company establishment. The implementation of the proposed business creation model is expected to optimize financial and time-related costs of various administrative and financial business decisions for aspiring entrepreneurs, while increasing their chances of achieving long-term profitability and overall business success.

2. Requirements for the Model of Operations for Starting a Logistics Business

One of the initial tasks in developing a new logistics business should be evaluating the key components of a logistics business creation model. This assessment can serve as a solid foundation for forming a structured and coherent business creation model specifically suited to the development of new logistics business.

One of the most fundamental tasks in developing a new logistics business is identifying and selecting *typical logistics business models for further evaluation.* Although the scientific literature most commonly describes nine standard logistics business models, a broader variety can be distinguished when considering sectoral innovations and the evolution of 3PL, 5PL, and other advanced logistics services [3].

Another critical issue in selecting the most suitable logistics business model is choosing objective evaluation criteria. This step is usually based on personal judgment and/or expert insights from logistics professionals [4]. After identifying the key criteria for business model selection, it is important to determine the relative importance (weight) of each criterion [5]. To select the most appropriate business model, it is recommended to use a multi-criteria evaluation method [6].

Another key stage, following the identification of the most promising logistics business model, is *selecting the most suitable legal form for the enterprise.* Each country typically offers several legal forms of business. For selecting the most appropriate legal form, it is also recommended to apply a multi-criteria evaluation system. The exact number of selection criteria depends on the individual needs and decisions of the business founder; however, the primary evaluation criteria, as noted by Cole and Sokolyk [7] typically include the preliminary costs of establishing the legal entity and the long-term plans and possibilities for structural and financial business development.

After selecting the most suitable legal form using the aforementioned multi-criteria evaluation approach, it is also essential *to determine the most favourable location for establishing the logistics business.* To ensure an effective outcome, it is advisable to assess at least five geographically distinct locations within the chosen country, taking into account such factors as proximity to key transportation and logistics infrastructure, convenience for employees, and the cost of property acquisition or rental in the selected area [8].

Another essential step in the logistics business creation process is *analyzing financial income and expenditure, along with selecting the most appropriate sources of business financing.* A multi-criteria evaluation method is also suitable for this task. When selecting evaluation criteria, it is advisable to consider the loan repayment period and interest rates, the estimated internal rate of return (IRR) of the business, as well as other financial and administrative factors [9]. Once the preferred source of financing is chosen, the next step is *to sign a financing agreement for the newly established company* and, upon receiving the initial capital, begin business operations. To summarize the information presented and in accordance with content structure requirements, a comprehensive model of the logistics business development process is provided below (see Figure 1).

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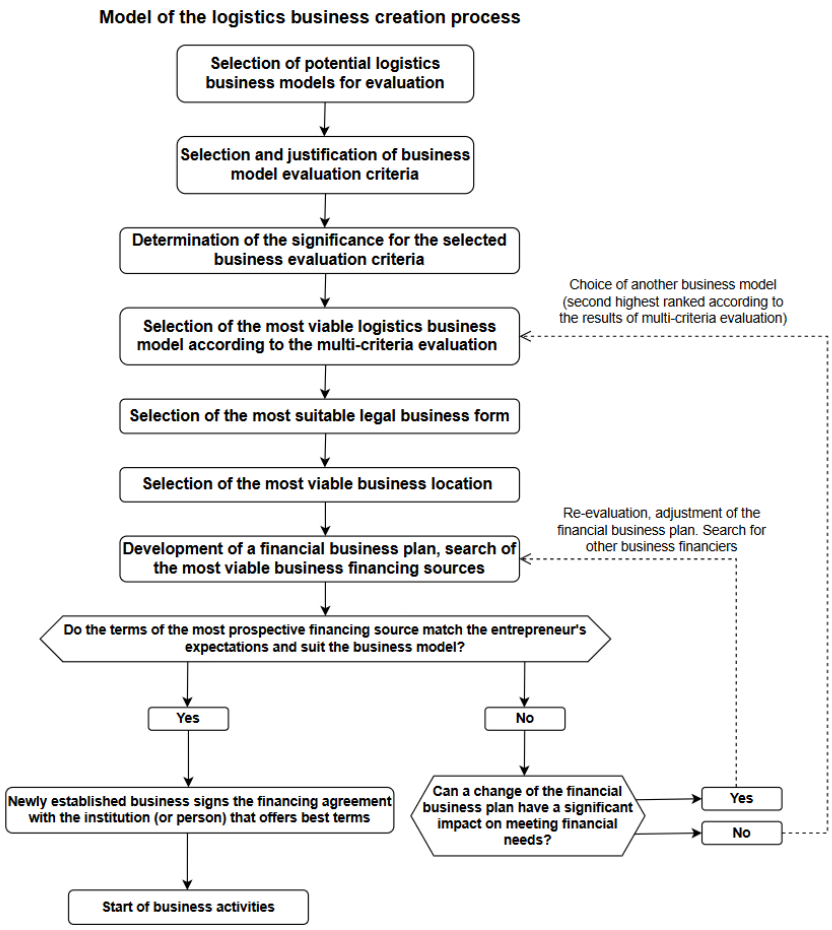

Figure 1.
Model of the logistics business creation process.

The sequence of applying the elements of the business creation model is based on logical principles and the requirements of effective multi-criteria evaluation. The consistent application of the proposed logistics business creation model can help logistics business founders optimize the costs associated with establishing a new business and accelerate the overall development process. Each element of the model is grounded either in expert insights from the logistics field or in the practical application of multi-criteria selection methodology; the quantitative expression of the latter method enhances the objectivity and efficiency of evaluation in key business decision-making processes. As a result, the likelihood of successfully launching and developing a functional and resilient logistics business increases.

3. Application of the Logistics Business Creation Process Model

Based on the established principles for modelling a new logistics business, it is now purposeful to discuss the content of each of the aforementioned elements of the business creation model and to justify the methods for the practical implementation of the developed logistics business creation model.

Based on the established principles for modelling a new logistics business, it is now appropriate to examine each element of the business creation model and to justify the methods for model's practical implementation.

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3.1. Selection of Logistics Business Models for Evaluation

Modern business models, according to the NACE Rev. 2 classification of economic activities approved by the European Union, are typically categorized under one of the 21 sectors of business organizations: Agriculture, forestry and fishing; Mining and quarrying; Manufacturing; Electricity, gas, steam and air conditioning supply; Water supply; sewerage, waste management and remediation activities; Construction; Wholesale and retail trade; repair of motor vehicles and motorcycles; Transportation and storage; Accommodation and food service activities; Information and communication; Financial and insurance activities; Real estate activities; Professional, scientific and technical activities; Administrative and support service activities; Public administration and defence; compulsory social security; Education; Human health and social work activities; Arts, entertainment and recreation; Other service activities; Activities of households as employers, undifferentiated goods- and services-producing activities of households for own use; Activities of extraterritorial organisations and bodies [10]. The functional definitions of the nine more common logistics business models can be specified according to the sector each model represents [11].

The selection of the most suitable logistics business model from among nine primary business models (evaluation objects) constitutes the first step in the implementation of the proposed logistics business creation process model. The final number of business models to be evaluated by the entrepreneur may exceed the aforementioned number of nine central logistics business models. This can be achieved by incorporating complex logistics business models and/or by disaggregating the defined primary models into more specific functional areas [12]. Below is an overview of the nine commonly encountered logistics business models for evaluation.

Product warehousing business. This business type involves providing warehousing services to both wholesale and (or) retail clients. The choice of clientele depends on the size and adaptability of the infrastructure, the ability to store various types of goods, the entrepreneur's desire to scale operations, and other criteria [13]. In recent years, the integration of warehouse robotics, Big Data, and the Internet of Things (IoT) technologies into storage infrastructure has significantly improved the efficiency of warehouse operations and overall supply chain management. This is particularly relevant in cases requiring non-standard logistics solutions, which contribute to market activation and cash flow turnover [14].

Warehouse space rental business. Under this model, entrepreneurs lease out warehouse spaces they own or manage to companies seeking premises for operations. The rental price depends on the condition and depreciation level of the facility, its proximity to major transport routes, and access to key infrastructure [15]. According to the thesis of Berglund and Nordqvist [16] the rapid growth of the modern e-commerce sector has significantly driven up rental rates and sale prices for warehouse and logistics premises.

Freight transportation business. This well-established logistics business model involves transporting and delivering goods for various clients via domestic or international routes. The initial investment in transport vehicles—whether purchased or leased—is relatively high [17]. Studies by Moschovou and Giannopoulos [18] conducted during periods of economic instability, indicate that freight transport by road, as a business model, strongly depends on the overall financial situation in the market of operations. Although freight transportation remains a crucial and promising logistics model, economic downturns in the operating market directly correlate with a noticeable decline in the intensity of road freight transport.

Freight forwarding business. Entrepreneurs in this field act as intermediaries who, for a fee, connect carriers with clients requiring freight transportation or help carriers find cargo to transport. According to Stojanović and Veličković [19] traditional freight forwarding can be understood as an economic activity responsible for organizing and administering freight delivery and transportation processes.

Rental of transportation and handling equipment. This business model involves acquiring new or used transportation and handling equipment and renting it out to various clients. Success in this area requires regularly updating the fleet with appropriately selected vehicles and equipment, which helps

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ensure profitability and business continuity [20]. Entrepreneurs who identify a profitable market niche within this model can effectively expand, diversify, and replicate their operations in new foreign markets of their choice [21].

Raw material trade (resale) business. Raw material trade (resale) business. This business model involves purchasing raw materials at relatively low prices in specific markets and reselling them at higher prices in others. Businesses operating in this area may relatively easily expand their service portfolio by integrating additional logistics activities, such as on-demand transportation and freight forwarding. Key success factors in this business field include comprehensive market knowledge, establishing reliable supplier and buyer networks, and efficiently organizing inbound and outbound transport flows.

Parcel delivery business. Parcel delivery business. Parcel delivery enterprises often begin by operating within a single, typically local market. Crucial operations in this business include clearly defining and efficiently organizing a collection and delivery system, continuously reviewing and reducing operational costs, and offering clients convenient, tailored services that create higher added value. In today's context, increasing demand is driving the emergence of new, specialized business models in the home parcel delivery sector [22].

Passenger transportation business. The price of a product or service is often linked not only to the quality delivered but also to the creation of a unique user experience. In the logistics transport sector, private passenger transportation services typically belong to the highest pricing tier [23]. To succeed, entrepreneurs must recognize that premium passenger transport services and corresponding pricing are closely tied to higher added value and distinctive customer experiences.

Logistics IT, software development business. New and growing logistics firms seeking innovative solutions often increasingly optimize their operations by implementing smart logistics IT systems that streamline and automate their daily repetitive tasks. Entrepreneurs involved in developing logistics and business administration software benefit from a significant advantage: variable costs, especially in the early stages of business development, can be minimal [24].

Manufacturing of vehicle accessories and handling equipment. At the initial stage of this business, it is advisable to focus on producing and assembling a few specific products. Options include the manufacturing of larger logistics transport tools (e.g., semi-trailers, cargo containers) or smaller parts used in transport operations. This business model of manufacturing logistics is becoming increasingly automated. Although the startup investment required for such a business model is often substantial, future smart manufacturing, associated with IoT-based process and equipment modeling, is expected to reduce recurring operational costs [25] significantly.

After discussing the main objects of evaluation, the next logical step in implementing the logistics business creation model is to select and justify the evaluation criteria.

3.2. Justification of Criteria for Selecting a Logistics Business Model

Having defined the main logistics business models for evaluation, the next logical step in the logistics business creation process is to select and justify the evaluation criteria. To ensure the quality of this process, it is advisable to rely on insights from experts in the field of logistics and business. Below are potential criteria for selecting the most viable logistics business model, based on academic works by logistics and business experts.

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Table 1.
Logistics business model evaluation criteria for an entrepreneur.

Business model evaluation criteria for the entrepreneur
Entrepreneur's satisfaction with their business activity [26]
Possibilities for meeting the goal of personal financial well-being [27]
Societal value of business [28]
Expected rate of return on investment (ROI) [29]
Prospects of business profitability [30]
Business development opportunities [31]
Initial capital investment needs [32]
Innovation implementation potential [33]
Business image in society [34]

Entrepreneur's satisfaction with their business activity. The founder's motivation, productivity, ability to focus, and willingness to dedicate sufficient time to essential business activities are highly dependent on the level of satisfaction and sense of purpose they find in their entrepreneurial endeavour. A study by Delgado-García, et al. [26] based on a sample of 335 entrepreneurs from various industries in the Castilla and León region of Spain showed that positive emotional traits in entrepreneurs are associated with broader, more ambitious goal-setting, whereas negative traits lead to narrower objectives.

Possibilities for meeting the goal of personal financial well-being. For an entrepreneur, it is important not only how quickly their investments will pay off, how fast sales volumes will grow, and how rapidly the business will expand, but also how soon they will achieve personal financial freedom. This criterion may be abstractly understood as the ability to earn a sufficient income, either through work or business-investment related passive income streams, to support oneself and one's family without needing to engage in paid employment for the rest of one's life [27].

Societal value of business. A successful business promotes innovation, generates added financial value, and contributes to the improvement of local infrastructure. Sustainable demand and a stable customer base typically emerge when a business consistently provides increasing value to its clients at the lowest possible cost. A key factor in business success and growth (in terms of societal value) is the offering of satisfactorily valued products (services) to the consumer [28].

Expected rate of return on investment (ROI). A preliminary estimate of the return on investment (ROI) for a start-up business enables the assessment of capital efficiency, facilitates the comparison of alternative business models in terms of profitability, and helps to determine the expected investment payback period. ROI, as a financial indicator, can serve both as a clear quantitative expression of a company's goals and as a dynamic measure used to evaluate business performance-related factors [29].

Prospects of business profitability. The expected revenue and profitability of a business reflect its relevance to market needs and its attractiveness to investors. According to Heikkilä, et al. [30] a key strategic goal for small and medium-sized enterprises is to increase profitability through improved internal efficiency and competitive pricing. Accurate measurement and forecasting of current and historical profitability are crucial for informed strategic decision-making and for establishing a reputation as a reliable, professionally managed business.

Business development opportunities. When launching a new business in a selected market, it is important to assess the scalability of the chosen business model. Transitioning from a growing business to a large but stable organization is often limited not only by the saturation of market share but also by the management's ability to recognize and pursue broader opportunities through creative adaptation of the business model to emerging market trends [31].

Initial capital investment needs. Financing a new business requires careful assessment of available funding sources, conditions set by financial institutions (usually lending at interest), and the precise capital needed for the start. Efficient financing might often be linked to simple funding sources. In certain parts of the United States (West Texas), one of the most developed markets, in the beginning of XXI century, new ventures were most commonly funded by personal savings (69.4% of respondents),

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commercial bank loans (44.8%), and contributions from friends and family (16.8%). The total percentage exceeded 100% because respondents of the analysed survey were allowed to specify multiple funding sources as answers to survey questions [32].

Innovation implementation potential. The potential for continuous business innovation plays a crucial role in supporting successful expansion and ensuring the long-term sustainability of a company. Ortiz-Villajos and Sotoca [33] examined the significance of innovation implementation and its impact on long-term business success in their empirical study. By analysing historical data from the top 200 British firms established in the 19th and 20th centuries, the authors found that the survival and longevity of British manufacturing businesses were positively influenced by a higher overall volume of patent applications—an indicator of these long-standing firms' capacity to implement and develop incremental, practically applicable innovations consistently. In contrast, in the British service sector, business longevity was more strongly associated with radical rather than incremental innovations, such as the introduction of entirely new products and processes.

Business image in society. A company's public image depends on multiple factors: product quality, perceived value of the received product in exchange for money, market-specific consumer habits, and others. De Bettignies, et al. [34] in a study on the challenges faced by the insurance sector, highlighted that public distrust is often linked to privacy concerns and industry scandals. Their findings suggest that customers value genuine responsibility, competence, and respect—factors that heavily influence the public perception of any business.

3.3. Determining the Significance of Evaluation Criteria for Logistics Business Models

After describing the main logistics business models and criteria, used for their evaluation, the next step is to calculate the criterion significance using a standardized criteria evaluation methodology. The significance of the criteria is determined according to the methodology proposed by Drejeris and Samuolaitis [5] and the calculation formulas outlined in (1), (2), and (3):

$$W_i = \sum_{i=1}^{n} W_{ie} \quad , \overline{i = 1, m} \tag{1}$$

Where: W_{ie} - the evaluation of the i-th criterion according to the e-th expert;
n - number of experts;
W_i - the intermediate sum of all expert evaluations for the i-th criterion.

The following formula (2) is used to accurately determine the relative significance of the evaluation criteria [5]:

$$n_i = \frac{w_i}{\sum_{i=1}^{m} W_i}, i = \overline{1, m} \tag{2}$$

Where: n_i = the significance of the evaluation criterion n (in percentage);
W_i = the intermediate sum of all expert evaluations for the i-th criterion;
m = the number of evaluated criteria;
$\sum_{i=1}^{m} W_i$ = the total sum of the intermediate expert estimates for all criteria.

When calculations are performed correctly, the sum of the relative significance of the criteria will always be equal to 1 (or 100%):

$$\sum_{i=1}^{m} n_i = 1 \tag{3}$$

Once the evaluation objects (business models) are selected and the significance of their evaluation criteria is determined according to the methodology above, the next step is the evaluation (selection) process of the business models.

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3.4. Selection of the Most Suitable Logistics Business Model

The most suitable logistics business model is selected based on the multi-criteria evaluation formula proposed by Drejeris and Drejeriene [6].

$$P_i = \sum_{j=1}^{n} K_{ij}\eta_j \quad (4)$$

Where: P_i – total value of every business model i;

K_{ij} – the value of each model i assessment according to criterion j;

η_j – the importance (significance) of criterion j;

n – the number of criteria.

When defining subjective potential choices and their evaluation criteria and performing multi-criteria assessment, it is important to rely not only on personal judgment but also to include the evaluations of at least five independent experts in the overall calculation [5].

3.5. Selection of the Legal Form of Business

Once the most suitable logistics business model has been identified, the same multi-criteria evaluation procedure and formulas (1), (2), (3), and (4) may be applied to select other crucial administrative aspects of the new logistics business, such as the legal form of the organization. In different segments of the private business sector, four main types of legal business forms are typically encountered:

Sole proprietorship – a legal form of business in which the enterprise is owned, managed by a single individual. Although the direct link between the individual and the business entity provides less financial and legal protection for the owner, the registration procedure for this type of business is comparatively the simplest among the four options.

Partnership – a legal form of business in which profits and liabilities of the established enterprise are either distributed proportionally among two or more owners based on their ownership interests or allocated unequally based on agreements that grant certain partners greater privileges and reduced obligations. Limited Liability Company (LLC) – a hybrid business structure that combines key features of partnerships and corporations. Under this form, business owners (or shareholders) may divide liabilities and profit rights either proportionally to their ownership stakes or based on individual agreements. Furthermore, LLC owners have limited liability, meaning they are not personally responsible for the company's debts or financial obligations beyond their investment in the business.

Corporation – transitioning a regular business to a corporate structure is often initiated by its founders or owners when the organization grows significantly and successfully expands across multiple sectors. The corporate form not only ensures limited legal and financial liability for shareholders but also facilitates the rapid acquisition of additional investment capital from the general public by issuing publicly traded shares or bonds.

When conducting the selection process for the most suitable legal form of business, it is advisable to consider evaluation criteria such as the simplicity of the registration process, the costs of the selected business legal form, the extent of the owner's financial liability, tax incentives associated with the legal form, and others [35].

3.6. Selection of Business Location

The process of selecting the precise location for a new logistics business should begin by identifying at least five promising geographic locations within the target operational market. The most attractive location can be assessed using the previously discussed multi-criteria evaluation method.

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When choosing a specific location for the business, it is recommended to consider not only the entrepreneur's judgment but also the insights of at least five additional independent logistics experts [5].

For the location selection process, it is advisable to apply effective location suitability assessment criteria, such as the distance from key transportation infrastructure, the cost of purchasing or leasing logistics real estate in the area, and accessibility of the location to potential employees, clients, business partners, and other relevant factors [8].

3.7. Financial Plan Development and Identification of Financing Sources

Once the logistics business model, legal form of the company, and precise location have been selected, the aspiring entrepreneur should proceed with developing a detailed financial business plan. A comprehensive financial plan not only enables the entrepreneur to realistically assess potential revenue, profitability, and growth opportunities, as well as the required startup costs, but also serves as a critical document when seeking to secure external funding from sources such as banks, credit unions, venture capital investors, and other financial institutions.

The financial business plan should primarily include the following essential components: a detailed description of the planned business operations; an accurate and well-founded projection of expected revenues and expenditures; a comprehensive justification of the required investment or loan amount; and an analysis of the target market and potential customer segments [36].

Upon completing a detailed financial business plan, it becomes significantly easier to identify the financing source that best aligns with the specific needs of the new enterprise. When choosing among various funding institutions, it is recommended to evaluate at least five potential financing providers through a multi-criteria decision-making process. The multi-criteria evaluation of financing alternatives can be conducted using several key subjective evaluation criteria, such as the proposed interest rate, loan repayment period, and the availability of flexible repayment options, such as refinancing or deferral arrangements [37].

Table 2.
Determination of the significance of business model evaluation criteria.

Criterion	Significance
Entrepreneur's satisfaction with their business activity	(0.2+0.4+0.15+0.15+0.1+0.2)/6=0.2
Possibilities for meeting the goal of personal financial well-being	(0.15+0.15+0.2+0.2+0.2+0.06)/6=0.16
Societal value of business	(0.1+0.2+0.05+0.05+0.3+0.2)/6=0.15
Expected rate of return on investment (ROI)	(0.15+0.1+0.1+0.2+0.05+0.12)/6=0.12
Prospects of business profitability	(0.1+0.2+0.1+0.1+0.1+0.06)/6=0.11
Business development opportunities	(0.2+0.1+0.05+0.05+0.1+0.1)/6=0.1
Initial capital investment needs	(0.05+0.1+0.05+0.1+0.05+0.07)/6=0.07
Innovation implementation potential	(0.08+0.03+0.05+0.05+0.05+0.1)/6=0.06
Business image in society	(0.02+0.05+0.05+0.02+0.01+0.03)/6=0.03
Sum	0.2+0.16+0.15+0.12+0.11+0.1+0.07+0.06+0.03=1 (100%)

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Table 3.
Selection of the most suitable business model based on multi-criteria evaluation.

Criterion / Business model	Entrepreneur's satisfaction with their business activity		Possibilities for meeting the goal of personal financial well-being		Societal value of business		Expected rate of return on investment (ROI)		Prospects of business profitability		Business development opportunities		Initial capital investment needs		Innovation implementation potential		Business image in society		Aggregate business model score based on relative criteria weights	Ranking of the business model
	Relative weight of the criterion η 0.2	Business model score based on criterion weight $K_{ij}\eta_j$	η 0.16	$K_{ij}\eta_j$	η 0.15	$K_{ij}\eta_j$	η 0.12	$K_{ij}\eta_j$	η 0.11	$K_{ij}\eta_j$	η 0.10	$K_{ij}\eta_j$	η 0.07	$K_{ij}\eta_j$	η 0.06	$K_{ij}\eta_j$	η 0.03	$K_{ij}\eta_j$		
Product warehousing business	Business model evaluation (K_{ij}) based on the criterion j	1.4	8 7 6 10 10 7	1.28	10 8 8 9 7 9	1.27	9 7 7 6 9 8	0.92	9 8 8 7 8 6	0.84	7 6 7 5 5 8	0.63	5 8 7 6 6 4	0.42	10 8 8 7 10 10	0.53	7 8 8 6 6 8	0.21	7.5	**6**
Warehouse space rental business	8 8 7 6 10 10	1.63	8 8 6 7 8 6	1.14	9 8 6 9 9 7	1.2	9 8 7 8 6 7	0.9	9 9 8 6 8 6	0.84	9 9 8 6 5 7	0.73	6 6 8 5 3 5	0.38	8 8 7 7 5 8	0.43	8 7 7 8 8 7	0.22	7.47	**7**
Freight transportation business	9 10 10 9 8 8	1.8	8 10 8 7 9 9	1.36	9 9 8 6 8 8	1.2	9 10 7 8 8 8	1	9 8 8 8 7 8	0.88	7 9 9 8 8 7	0.8	7 7 8 6 7 7	0.49	8 9 8 9 9 9	0.52	7 7 6 8 7 7	0.21	8.26	**1**
Freight forwarding business	8 7 7 8 6 9	1.5	8 8 7 8 7 7	1.2	9 8 7 7 8 6	1.12	8 8 9 8 7 7	0.94	8 8 7 7 10 8	0.88	9 8 7 7 7 8	0.76	10 9 9 8 8 9	0.61	8 8 5 6 7 8	0.42	6 6 7 6 5 7	0.18	7.61	**5**
Rental of transportation and handling equipment	7 8 8 6 9 7	1.5	8 7 7 9 7 7	1.2	7 7 6 8 9 8	1.12	7 8 8 6 6 8	0.86	7 7 7 8 8 9	0.84	8 7 7 9 9 7	0.78	7 6 7 6 6 8	0.46	7 7 6 8 8 8	0.44	6 5 7 6 8 8	0.2	7.4	**8**
Raw material trade (resale) business	9 9 8 8 8 6	1.6	10 10 8 9 7 7	1.36	9 8 8 8 7 8	1	8 8 8 9 7 7	0.94	10 10 10 8 9 8	1	10 10 8 7 8 7	0.83	9 9 7 8 7 6	0.53	8 7 8 6 6 7	0.42	6 6 7 8 6 6	0.19	7.87	**3**
Parcel delivery business	7 7 6 8 8 6	1.4	7 7 8 7 6 6	1.09	8 7 8 8 8 8	1.17	7 7 8 7 7 8	0.88	6 7 8 8 6 6	0.75	7 8 8 5 8 7	0.71	6 6 7 6 5 5	0.4	10 10 8 8 9 8	0.53	7 7 6 6 5 8	0.19	7.12	**10**
Passenger transportation business	6 6 7 8 6 6	1.3	7 8 7 7 8 9	1.22	6 8 9 7 7 6	1.07	8 8 8 7 7 7	0.9	7 8 7 8 9 9	0.88	7 8 7 9 9 8	0.8	6 7 5 8 8 7	0.47	7 7 7 7 8 8	0.44	7 6 7 7 8 8	0.21	7.29	**9**
Logistics IT, software development business	5 5 7 6 8 8	1.3	8 8 7 9 9 9	1.38	8 8 8 7 9 10	1.25	9 9 8 7 10 10	1.06	9 9 8 6 9 9	0.91	8 8 7 6 8 9	0.76	8 8 7 8 9 10	0.58	9 9 8 9 9 9	0.53	8 7 7 8 9 9	0.24	8.01	**2**
Manufacturing of vehicle accessories and handling equipment	8 8 8 7 6 6	1.43	7 8 9 9 8 8	1.3	9 10 8 9 8 8	1.3	8 7 8 8 9 7	0.94	8 8 7 7 8 8	0.84	8 8 7 8 9 7	0.78	6 6 5 7 7 7	0.44	8 7 8 9 9 8	0.49	9 9 9 10 9 9	0.27	7.79	**4**

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If, following the multi-criteria selection of business financing sources, a financier, whose conditions meet the needs of the business founder, is chosen, then the newly established logistics enterprise proceeds to sign a financing agreement and initiates active operations. However, if the selected financier offers terms that do not align with the optimal business needs and/or the financial capacity to repay the loan, the logistics business creation model (Figure 1) provides several possible solutions for addressing the issue. If it is determined that adjusting the business financial plan would significantly increase the chances of obtaining suitable financing, it is recommended to revise this part of the logistics business creation process and/or approach alternative potential financiers. Conversely, if attractive financing terms cannot be secured initially, and if modifications to the financial plan are unlikely to produce substantial improvements, the defined business creation model advises the entrepreneur to shift from the first to the second-ranked logistics business model from the prioritized model list. Subsequently, it is recommended to re-evaluate the selection of the most suitable legal form, business location, and financial plan. By doing so, the likelihood of identifying a financier offering acceptable terms and successfully launching active business operations increases.

4. Results of the Practical Application of the Proposed Business Creation Model

To determine the most viable logistics business model using the multi-criteria evaluation method, the relative significance of each selected evaluation criterion must first be calculated in accordance with formulas (1), (2), and (3). A practical example of the evaluation of criteria weights is provided below.

Once the weights of all evaluation criteria have been accurately assessed, it becomes possible to conduct a comprehensive analysis to identify which business model represents the most viable option under current market conditions. The results of these calculations are presented in Table 2. The evaluation was carried out using formula (4).

Consistent application of the described SAW evaluation methodology in the subsequent stages of the defined logistics business creation process model also revealed that, according to expert evaluations, the most suitable business legal form would be a Private Limited Liability Company (LLC). This evaluation was based on the fact that several future company owners intend to invest in the newly established logistics business. The proposed SAW evaluation methodology was similarly applied effectively in selecting the most promising location for the new logistics business. When choosing the area, it is recommended to evaluate at least five potential viable business locations within the selected market.

4.1. Business Operations Start

Following the outlined procedure and SAW methodology recommendations for selecting the most viable business model, legal form, and location, the next step is to create a financial business plan and identify funding sources based on the needs. If the financing terms proposed by the selected potential creditor, based on multi-criteria evaluation, meet the needs of the aspiring entrepreneur, the business owner signs a loan agreement in the name of the newly established logistics company. Upon receiving the funding, it is recommended to immediately begin implementing all processes necessary for the successful generation of business income (purchasing equipment, client acquisition, hiring and training employees, etc.). In the early stages of operation, it is advisable to avoid investments that do not generate direct income and to maintain an excessive focus on areas unrelated to the company's main revenue-generating activities [38].

5. Conclusions

1. The comprehensive procedure for creating a new logistics business can be implemented much more easily and effectively when based on the sequential business creation process model defined in this article. The universal business creation process, considering unique specifications and

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applying appropriate selection criteria, can be successfully applied to the process of establishing various companies in the logistics sector.

2. The proposed multi-criteria evaluation method, effectively combining objective evaluation criteria, various alternatives, and the opinions of independent experts and the aspiring entrepreneur, can help new business founders save significant financial and time resources while maximizing income potential by objectively selecting essential aspects of the business, such as business model, location, company form, and funding source.
3. The detailed logistics business creation model will assist aspiring entrepreneurs in systematically making essential business creation decisions while implementing the necessary legal and financial processes for company establishment. The model has been tested in practice, where the methodology (model) was used by an entrepreneur seeking to create a logistics business, leading to a successful business launch that has been operating for over 10 months.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Copyright:

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