

A BUSINESS MODEL COMPETITIVE ADVANTAGE IN THE TRANSPORT SECTOR

Andrius Tamošiūnas

Vilnius Gediminas Technical University,

11 Saulėtekio al. 11, Vilnius

Abstract

Based on an extensive review and the synthesis of scholarly works, the paper aims to determine how business model contributes to reaching a competitive advantage within the transport sector. The research reveals that a business model is a conceptual system that delineates how an organization operates, how income is generated, and how a profit-making plan is formulated. It was found that, aiming for competitive advantage, the selection of a business model is predominantly influenced by key partnerships, key resources, value propositions, consumer segments, channels and networks, customer relations, core activities, and cost structure. Subsequently, the paper emphasises that business models can be dynamic as per the specifics of the possible combinations of criteria and their interaction due to externalities affecting the flexibility and controllability of business models aiming for sustainable competitive advantage.

Key words. Business model, competitive advantage, transport sector, selection criteria, business dynamics.

Introduction

The transportation sector constitutes a crucial component of each country, facilitating economic expansion, influencing social progress, and attracting diverse investments. The fundamental purpose of the transportation sector is to fulfil the needs of the populace. In recent years, the transportation sector has been subjected to significant challenges, including the COVID-19 pandemic, unstable supply chains, military conflicts, and various environmental and social phenomena. These adversities have compelled companies within the transportation sector to respond swiftly and adapt to evolving market conditions. The competitiveness of organizations is aligned with customer expectations, thereby enhancing profitability. In the current business environment, organisations must possess and strive to uphold their competitive advantage and continuously develop and refine it. Contemporary organizations employ a variety of business models (Bazaras & Jarašūnienė, 2022) to identify the most effective means to establish a competitive advantage in their operations (Grant & Startz, 2022). A well-selected business model assists organizations in managing business processes, reducing costs, improving the quality of products or services, and penetrating new markets. This enables companies to not only pursue greater profits but also to grow, expand, cultivate a distinct perception of their activities, and reflect their business mission. Although there is considerable discourse regarding business models in the media and social networks, such models are frequently not clearly delineated or easily identifiable. Despite the extensive discussions, there is no universally accepted application of business models within the transportation sector. In this regard, it was also found that the findings of the research of scholars on the composition of the models and the criteria determining them are fragmented.

The object of the research is the business model in the transport sector.

The aim of this paper is to determine how business model can facilitate the attainment of a competitive advantage within the transport sector. The research focuses on the various business model selection frameworks articulated in scholarly literature and implemented in the transport sector.

The research objectives are the following: to elucidate the concepts pertaining to the transport sector, business models, and competitive advantage; to examine the theoretical foundations associated with the selection of a business model, including the essential criteria for this selection.

Research methods: analysis of scientific literature, synthesis method, and generalization method.

1. Theoretical Analysis of Business Model Selection in the Transport Sector

1.1. *Specifics of the modes of transport*

To effectively address the research objectives, it is of utmost importance to comprehend the relevant terms and concepts related to enhancing business models to achieve competitive advantage.

Transport constitutes an economic activity that facilitates fulfilling individuals' needs when the geographical context of goods or people shifts (Sivilevičius, 2012). Bazaras & Jarašūnienė (2022) characterise transport as a sector of the economy encompassing the movement of goods and passengers through various means of transportation. Rodrigue (2020) contends that the purpose of transport is to shift geographic loads, individuals, or information from their point of origin to their destination, thereby generating added value. Miller (2018) asserts that the primary objective of the transport system is to afford individuals or businesses access to one another, enabling them to physically partake in a myriad of activities distributed across space and time as well as to engage in the physical exchange of information, goods, and services. Thus, while transport is frequently associated with the physical movement of various goods, materials, and raw materials, it can also encompass the exchange of services or information among interested parties. In this context, the transport sector is characterised by a variety of transport modes, which can be categorised into four principal categories: road, air, waterborne, and pipeline transport. According to Bazaras & Jarašūnienė (2022), the transport system encompasses bio-transport, rail, road, maritime and inland waterway, air, urban electric, and pipeline transport, namely:

- Bio-transport refers to modes that include specialised pedestrian and bicycle pathways, as well as bicycles and scooters.
- Rail transport comprises railway lines, rolling stock, traction systems, communication tools, signalling and energy supply infrastructure, stations, and various engineering structures.
- Road transport consists of the roads themselves, vehicles, technological equipment, stations, and other engineering structures.
- Maritime and inland waterway transport encompasses shipping routes, seaports, navigational aids such as lighthouses, and other technical equipment.
- Inland waterway transport involves the use of waterways, ships, various means of navigation, as well as ports and piers.
- Air transport is defined by the inclusion of airports, aerodromes, and aircraft.
- Urban electric transport includes electric contact lines, electric vehicles, and technological devices.
- Pipeline transport is characterised by the networks of pipelines utilised.

Considering the above-listed modes, the transport sector is intrinsically linked to logistics, where the knowledge and management of quality significantly influence the success of organizations. Logistics encompasses the management of all processes that facilitate the movement of material flow and the alignment of supply with demand, generating advantages in terms of location and timing (Vasiliauskas, 2013). Although logistics processes have evolved due to the continual advancement of technology and the diverse needs of the market, the fundamental factors – namely, transportation, warehousing, and distribution - have remained constant. According to Akuto (2020), logistics entails the physical transportation of goods from one location to another, ensuring timely delivery at a reasonable price. This includes accepting inventory, warehousing, inventory management, distribution, customer delivery, and the return of goods. In essence, logistics is the discipline of calculating and planning the movement and positioning of inventory throughout the supply chain

(Saqib & Satar, 2021). Respectively logistics can be defined as the process of planning, implementing, and controlling the efficient flow of raw materials, unfinished goods, and finished products, along with related information, from the point of origin to the point of consumption, to fulfil customer needs and requirements. The overarching objective of logistics is to attain the highest level of customer satisfaction by delivering quality services at low or reasonable costs. Consequently, effective logistics management is regarded as a critical factor for the success of any organization (Witzig & Salomon, 2018), thus the primary processes within the logistics chain encompass several key functions, namely:

Procurement encompasses the acquisition of inventory within the supply chain. The procurement process relies on the exchange of contractual data and information concerning suppliers' products, purchase prices, discounts, characteristics of raw materials, delivery terms, and a multitude of other variables. Furthermore, procurement must identify suitable and reliable suppliers, negotiate optimal terms of service, facilitate the creation of orders, organise transportation, oversee payments, and collaborate with the organization's finance teams. This function does not involve the physical management of inventory; rather, it organises the transfer to the company (Ritter & Schanz, 2019).

Transportation constitutes a pivotal logistics activity that facilitates the movement of products from production sites to consumer locations. It presents an opportunity to procure the appropriate quantity of qualifying goods within the mutually agreed-upon timeframe and price, ensuring their delivery to the designated location (Akuto, 2020).

Storage represents an activity associated with managing the space required for inventory maintenance and preservation. Warehouses play an indispensable role within numerous supply chains. The functions of a warehouse encompass the acceptance, storage, provision for production, and shipment of appropriate stocks to customers. As a critical component of logistics processes, the function of a warehouse occupies an irreplaceable position within the logistics systems and supply chains of contemporary enterprises.

1.2. Understanding the business model and the competitive advantage

Although the notion of a business model is prevalent in nowadays business practice, its definition in academic literature varies significantly. Firstly, the term "model" itself suggests a simplified representation of reality, as business constitutes a complex system operating in conjunction with other systems; therefore, capturing all relationships and influences within a static model is impractical. According to Davidavičienė et al. (2020), a business model serves as a framework for organising a business, enabling the effective orchestration of its activities. It can be respectfully stated that a business model embodies the logic through which a company generates and delivers value to consumers, derives profit, and contributes to societal welfare. For instance, Amit and Zott (2001) characterise the business model as the structure, content, and management of transactions between the internal operations of the company and its exchange partners. In this regard, George and Bock (2011) describe the business model as a guarantee of long-term corporate survival, a prerequisite for entrepreneurship education, and a catalyst for innovation. Consequently, it can be considered that business models facilitate the emergence of new business forms while identifying market shortcomings. Furthermore, the business model elucidates the fundamental elements and principles underlying specific business operations, thereby aiding in the understanding, modelling, and managing business processes (Ginevičius et al., 2016). Other definitions of the concept of a business model proposed by various scholars are presented in Table 1.

1. The definition of a business model within the academic literature. *Compiled by author.*

Author	Description of the concept
Davidavičienė et al. (2020)	It is a way of organizing a business, by which a company can effectively organize its activities.
Kinderis (2012)	A business model, in a general sense, is the logic by which a company creates and provides value to the consumer, earns money from it and contributes to the creation of public welfare.
Amit & Zott (2001)	A business model is defined as the structure, content, management of transactions between the company's internal and its exchange partners.
George & Bock (2011)	It is a guarantee of the long-term survival of the company, a prerequisite for entrepreneurship education and at the same time innovation.
Masa, Tuči & Afuah (2018)	The business model is a new aspect of innovation, complementing traditional innovations, such as product, process and organisational innovations, thus pushing the boundaries of innovation. innovation-related phenomena and, consequently, innovation theories.
Ritter & Lettl (2018)	Business models are descriptions of how a company or, more generally, a person or organization conducts business.
Ramdani et al. (2019)	A business model can be described as a business management tool or body that allows you to look for new ways to define a value proposition, create and store value for customers, suppliers and partners.
Lanzolla & Markides (2021)	The term business model is described as a plan for the company's profit-making. It specifies the products or services that the company plans to sell while identifying the target market and estimated costs.
Foss & Saebi (2018)	A business model is a conceptual framework that describes how a company creates, delivers and captures value. It outlines the key aspects of how a business operates, generates revenue, and sustains itself over time.

Considering the above findings, it can be stated that the business model does not adequately capture the business mission; however, it does represent the business logic of the organisation, illustrating the offerings to customers, the methods of outreach, the ongoing maintenance of relationships, the nature of partnerships, and the revenue generation strategies. Upon examining the concept of the business model, it becomes evident that it constitutes a fundamental component of an organization's management, significantly influencing profitability, growth, reputation, and various other business outcomes. These outcomes may be affected by factors such as competition and competitive advantage, which directly dictate the market position of the organization. In this context, as to the variety of scholarly sources, competition emerges when multiple economic entities engaged in analogous activities operate concurrently, striving for benefits, typically manifested as higher income or profit, within a singular business domain, such as production, trade, or other endeavours. Furthermore, competition encompasses the rivalry among consumers seeking to purchase goods or services, as well as among producers aiming to sell such goods or services. The notion of competition within scientific literature is frequently linked to the behaviours of market participants, the efficiency of market economies, or the structural premises underlying competitive behaviour and economic efficiency. Furthermore, Beniušienė & Svirskienė (2008) highlight that competitiveness often influences the economic and social prosperity and prestige of an entity, be it a state, enterprise, group, or individual, while insufficient competitiveness may lead to substantial losses, economic shocks, or even systemic collapse. Consequently, it can be stated that competition represents a scenario in which numerous organizations vie within a particular market to optimally fulfil consumer needs and thereby achieve higher profitability relative to their competitors. Competitive advantage in the context in question, is considered as the capacity of an organization to maintain a distance from competitors, thereby ensuring successful operational continuity in the future. From a broader perspective, competitive advantage encompasses the attractiveness of the market and an organization's competitive positioning. In this respect Jahanshahi & Bhattacharjee (2020) contend that the enhancement of competitive advantage has emerged as a paramount objective for numerous private and public entities worldwide. Furthermore, the augmentation of competitive advantage enables

organizations to offer superior services or produce enhanced products for their clientele. Clulow et al. (2007) elaborate that a company's competitiveness is significantly influenced by its intangible assets, including customer loyalty, brand image, production capacity, knowledge, organizational culture, skills, and experience, all of which are esteemed for their distinctiveness and singularity.

Having in mind the above findings, it can be stated that various modes of transport constitute a fundamental element of logistics, which encompasses the processes of procurement, conveying, storage, and distribution of goods or services. In this respect, while the concept of a business model possesses multiple interpretations, the latter delineate the operational mechanisms of a business, the methods by which revenue is generated, and the establishment of a profit-making strategy. Consequently, competitive advantage shall be subject to a transport organisation's capability to outperform its rivals in the marketplace by offering superior services or producing higher quality products than those of its competitors. The latter capability is to be analysed in terms of the specifics of business model in the next chapter.

2. The Business Model Structure and Its Competitive Advantage

Evolving customer expectations, advancements in diverse technologies, and modifications in regulatory frameworks compel businesses to reassess their business models, often necessitating the exploration of new paradigms. For an organization embarking on the journey to develop a new business model, it is crucial to first determine whether there are opportunities to improve the existing business model. In this regard, for instance, Ramdani et al. (2019) indicate that the business model should encapsulate the organization's activities through four pivotal inquiries: why?, what?, what?, and how?. These questions serve as a rapid framework for comprehending the business effectively. The initial inquiry, " why? ", pertains to the concept of value creation or the value proposition presented to the customer. These notions can be aptly defined as a collection of goods or services and processes designed by the company to fulfil consumer needs. Furthermore, the value proposition encompasses the organization's novelty, performance, design, brand prestige, pricing strategies, cost mitigation, accessibility, and convenience. Value creation is fundamentally linked to the business offering, customer requirements, target market, and overall customer satisfaction. Furthermore, Ramdani et al. (2019) assert that the subsequent inquiry, " what? ", addresses critical questions such as:

Why should customers select the services in question? The inquiry encompasses the perceived value of the customer and the respective customer segments. Accordingly, customers are categorised into two groups: those who compensate for the goods or services rendered and beneficiaries who derive the most significant social advantages from the organization's operations.

What processes should be implemented and endorsed? This query pertains to the application of the organization's processes or activities. Rephrased, the question is: Which activities are necessitated by the company's value propositions, distribution channels, consumer relations, and revenue streams? Consequently, in this respect, the fundamental activities within a business model include production, problem-solving, and the management of platforms or networks.

What type of relationship should be established? – This matter encompasses interactions with customers, partners, and stakeholders. For instance, Greblikaitė (2018) asserts that businesses must cultivate positive relationships with customers or beneficiaries, grounded in the principles of trust and respect, while also being attentive to the specific needs of the target demographic. Respectively, organizations should evaluate their relationships with partners or stakeholders, determining whether these relationships should be characterised as warm (aiming for improved business outcomes while seeking various forms of advice) or cold (maintaining neutrality and acting independently).

What channels can effectively distribute products or services in question? – This topic should address how to introduce consumers to the company's offerings, facilitate consumer purchases of specific products and services, deliver value to consumers, and provide post-purchase support. In essence, the organization must devise a strategy to effectively reach the customer (Akuto, 2020).

The third question pertains to the identity of individuals responsible for various functions within the organisation, thereby encompassing all aspects related to the responsibilities and structure of the organization. In this regard, it is imperative to comprehend who will be accountable for the advancement of organisational knowledge (i.e., who should facilitate knowledge transfer? or who is charged with employee development?), the application of skills and competencies (who is designated to execute specific tasks?), or the allocation of incentives (who will receive rewards for exemplary performance?).

The fourth question addresses the financial aspects of the organisation, namely: how will revenue be generated? What pricing strategies will be implemented for products or services? How will cash flow be managed? And how will organisation ascertain customer needs?

Selecting an appropriate business model can lead to organisational success while simultaneously positioning the entity as a market leader. The relationship between the business model and competitive advantage is significant, as a well-structured business model can substantially enhance a company's capability to establish and sustain a competitive advantage (Ford, 2020). In this respect, the scholars (Saqib & Satar, 2021; Nosratabadi et al., 2019) contemplate the following primary characteristics of the business model and competitive advantage:

Value Proposition – The value proposition constitutes a critical element of a business model. This component may serve as a source of competitive advantage if it is highly valued by customers and challenging for competitors to imitate.

Cost Structure – The cost structure comprises two primary components: a focus on cost reduction (aiming to minimise costs across all areas) and an emphasis on value (placing greater importance on value over costs). The cost structure of a business model is among the most crucial factors in achieving competitive advantage (Nosratabadi et al., 2019). Should a company successfully realise cost efficiency in its operations, it can adopt a cost leadership strategy to secure a competitive advantage by offering products or services at price points lower than those of its competitors.

Revenue Generation – A company's methodology for generating revenue is intricately connected to its competitive positioning. By aligning revenue streams with the perceived market value, a company can reinforce its competitive advantage (Iyer et al., 2019).

Core activities and core competencies, regarded as the primary types of business model activities, represent the most critical tasks that an organisation must undertake. These activities frequently align with the company's core competencies, which are unique strengths that contribute to attaining a competitive advantage.

Considering the above-listed elements, according to Bouwman et al. (2019), innovation and adaptability are pivotal, and a business model that fosters innovation and adaptability can serve as a significant source of competitive advantage in dynamic markets. The capacity to respond swiftly to alterations in customer preferences or industry trends can enable a company to differentiate itself from its competitors. Consequently, branding and reputation are vital; the way branding and reputation management activities are incorporated into a business model can profoundly influence competitive advantage. A robust brand and a positive reputation can attract and retain customers (Chierici et al., 2019).

Considering the above findings, it can be stated that the elements of the business model should be cohesively aligned to support the execution of the selected competitive strategy. Consistency in execution enhances the overall efficacy of the business model by establishing and sustaining competitive advantage. Respectively, it can be concluded that a meticulously designed and effectively executed business model can significantly influence a company's competitive advantage, as it dictates how the organisation creates and delivers value, manages costs, and positions itself within the market.

The subsequent question pertains to business activities, incorporating distribution channels, relationships with customers, partners, stakeholders, customer segments, processes, and resources. The third question addresses human resources, focusing on organizational training, responsibilities, skills, competencies, and recognitions. The final question concerns financial resources, detailing sources of income, expenses, cash flows, and profit margins. These elements of the business model's structure are intrinsically linked to the concept of competitive advantage. Nearly all aforementioned

elements correlate with competitive advantage. Key factors such as value proposition, cost structure, revenue generation, core activities and competencies, innovation and adaptability, brand reputation, and strategic coherence are integral in selecting a business model that will directly influence the organization's competitiveness within the market.

3. Selecting Business Model in Transport Sector

Selecting a business model constitutes a pivotal decision for any organization, accompanied by a variety of challenges and contextual factors. As articulated by Fjeldstad & Snow (2018), it is essential for every organization to devise a strategy for adapting its current business model. In this context, scholars (Grant & Startz, 2022) identify four biases that may arise during the development of a business model:

1. Inappropriate assumptions or frameworks upon which the foundational logic is predicated – this occurs when organizations fail to comprehensively execute certain tasks, analyses, and practices, leading to the formulation of a flawed business model. It is imperative that the business model is meticulously scrutinised to ensure that the array of choices is internally consistent and mutually reinforcing. Gaining insight into customer behavior, preferences, and trends is vital for identifying the optimal approach.

2. Constraints or scepticism regarding strategic choices – this dilemma arises when senior management tends to address strategic decisions in a fragmented manner, a phenomenon that is particularly common within a volatile business environment. The business model necessitates that senior management engage with the underlying logic and internal coherence of strategic decisions.

3. Misunderstandings surrounding the creation and generation of value are critical, as the paramount aspect of a business model lies in determining how the business will generate revenue. A failure to address this fundamental component poses a significant risk of financial losses or other fiscal challenges for the business. To ensure the prospect of success, it is imperative to analyze the performance of competitors and differentiate one's business model in order to establish a distinct market presence. Moreover, a comprehensive understanding of the cost structure associated with the chosen business model is essential, encompassing both initial and operating costs.

4. Inadequate market selection and comprehension, as if organisations opt for a narrow or unstable market wherein any business model struggles to thrive. At times, the model erroneously presupposes that the existing web of values will remain unchanged in the future.

Based on the above context, it can be asserted that when analysing the criteria relevant to the development of business models in the transport sector, the primary criteria include (Baran & Zak, 2014):

Transportation costs – this aspect encompasses the cost structure, essential partnerships, operational activities, and available resources. The costs are calculated based on the expenses incurred by the fleet, expressed on a per-ton-kilometre basis.

Delivery Time – this particular criterion includes core activities, available resources, and communication channels or networks. It pertains to the duration required to deliver products or services to the customer, quantified as one hour for every one hundred kilometres.

Innovativeness of transport - this criterion addresses the resources of the organisation and is assessed according to the number of years since production.

Transport reliability—this encompasses the company's resources and can be quantified by the punctuality of deliveries, which may be represented as a percentage in conjunction with the fulfilment of delivered cargo.

Transportation quality refers to providing transportation services devoid of defects or errors and incorporating the organization's value proposition, cost structure, and resources.

Furthermore, the selection of criteria is contingent upon the specifics of the industry. Consequently, the criteria selected may vary across different sectors; however, the prevailing list includes delivery quality, delivery speed, price, convenience, safety, efficiency, smoothness, punctuality, and reliability. Genzorova et al. (2019) underscore the necessity of considering

technological feasibility in the development of a business model, specifically with regard to the seamless integration of technology for operations, customer interface, and internal management, while remaining up-to-date of technological advancements.

In consideration of the aforementioned context, the primary criteria essential for the development of a business model within the transportation sector are presented in Table 2.

22. Primary criteria of a business model. *Compiled by the author based on Osterwalder & Pigneur (2010), Johnson et al. (2008), Punakivi & Hinkka (2006), and Genzorova et al. (2019).*

Criterion	Specification of criteria				
User segments	Individual customers or organizations				
Value proposition	Efficiency (how quickly a product or service can be offered)	Convenience (may include product or service location, payment methods)	Security (includes the quality of the product or service, risks of security incidents)	Reliability (may include complaints, defects, customer obligations)	Environmental impact (may include pollution, green logistics)
Channels / networks	Order management platforms (whether unique platforms are used or global)		Physical locations (convenient communication with customers, suppliers, manufacturers)		
Customer Relations	Customer service (includes effective cooperation with customers, complaints)	Loyalty programs (includes various discounts and promotions for customers)		Feedback programs (includes company ratings, upgraded places)	
Revenue streams	Search for sources of income (identify activities from which income is generated)	Income distribution (may include cost coverage, investments)		Introduction of additional services (introduction and creation of new value)	
Key Resources	Human resources (number of employees required to perform the activity)	Equipment (equipment required to perform the activities, e.g. printer, scanner)	Transport (includes passenger cars, freight transport0	Technology (includes business and accounting management systems, artificial intelligence, automated systems	
Main activities	Process management (includes control of key activities, improvement of activities)	Planning (may include planning activities, resources, expenses)	Compliance with legislation		
Key partnerships	Suppliers	Producers	Governments and regulators		
Cost structure	Operating costs	Fixed and variable costs			

Based on the aforementioned context, it can be asserted that business models may exhibit dynamic characteristics according to the specifics of the potential combinations of criteria delineated in Table 2. In this regard, digital technologies can be designated as pivotal, enabling synergies of products across supply chains, thereby augmenting corporate revenues while simultaneously creating value for customers (Böttcher et al., 2021). Moreover, the latter can lead to a reduction in operational costs. However, in this context, Wollenburg et al. (2018) highlight the necessity for competencies essential for the digitalisation of supply chain processes. A reflection upon these criteria may also result in the engagement of independent intermediaries, agents, or wholesale dealers who do not possess ownership of the goods, facilitating operations among carriers and shippers, as well as among various companies that provide transportation, warehousing, transport tracking, and distribution services (Möller et al., 2021). In this regard, cargo terminals, shared warehouses, freight forwarders, and other legal or natural entities that offer logistics services or a complex of such services also have to be considered. Consequently, the necessity arises for continuous communication and supervision of these processes to ensure efficient and effective coordination of business operations. Therefore, in order to minimise the managerial complexities of business models, vertical and horizontal integration solutions should be considered in accordance with the scope and scale of the specific transport services concerned, as opposed to relying on intermediary services. According to Witzig & Salomon (2018), this enables companies to manage their profitability more effectively while maintaining

greater control over the entire process, alongside increased transparency and accountability that extends from production to shipping and delivery.

Conclusion

Through a comprehensive analysis of the scientific literature, it has been determined that the transport sector encompasses the supply and procurement, transportation, storage, and distribution of goods or services. The analysis revealed that the term 'business model' possesses numerous definitions; however, it is typically understood as a conceptual framework that delineates the operational dynamics of an organization, the generation of income, and the establishment of a profit-making strategy. Consequently, competitive advantage can be characterised as the capacity of a business to maintain a superior position relative to its competitors, with respect to revenue, market share, customer satisfaction, innovation, technological progress, among other factors. Essential criteria to consider when selecting a business model that influences an organization's market competitiveness include value proposition, cost structure, revenue generation, core activities and competencies, innovation and adaptability, branding and reputation, as well as strategic coherence and consistency. It was also found that business models can be dynamic as per the specifics of the possible combinations of criteria and their interaction with the changing business environment. In this regard, further respective scientific research could focus on externalities causing challenges in relation to the flexibility and controllability of business models aiming for sustainable competitive advantage.

Reference

1. Akuto, D. (2020). Organizacijos konkurencingumo veiksniai. *Konferencijos ekonomika. Verslas. Vadyba. 2020 straipsnių rinkinys*, 162-167.
2. Amit, R., & Zott, C. (2001). Value creation in e-business. *Strategic management journal*, 493-520.
3. Baran, J., & Žak, J. (2014). Multiple Criteria Evaluation of transportation performance for selected agribusiness companies. *Procedia-Social and Behavioral Sciences*, 320-329.
4. Bazaras D., Jarašūnienė A. (2022). *Logistikos ir transporto procesų organizavimas*. Vilnius: Vilniaus Gedimino Technikos universitetas.
5. Beniušienė I., Svirskienė G. (2008). Konkurencingumas: teorinis aspektas. *Ekonomika ir vadyba: aktualijos ir perspektyvos*, 32-40.
6. Böttcher, T. P., Li, W., Hermes, S., Weking, J., & Krcmar, H. (2021). Escape from Dying Retail by Combining Bricks and Clicks: A Taxonomy of Digital Business Models in Retail. *PACIS 2021 Proceedings*.
7. Bouwman, H., Nikou, S., & de Reuver, M. (2019). Digitalization, business models, and SMEs: How do business model innovation practices improve performance of digitalizing SMEs? *Telecommunications Policy*, 43(9).
8. Chierici, R., Del Bosco, B., Mazzucchelli, A., & Chiacchierini, C. (2019). Enhancing brand awareness, reputation and loyalty: The role of social media. *International journal of Business and Management*, 216-228.
9. Clulow, V., Barry, C., & Gerstman, J. (2007). The resource-based view and value: the customer-based view of the firm. *Journal of European industrial training*, 19-35.
10. Davidavičienė, V., Davidavičius, S., Lapinskienė, G., & Grybaitė, V. (2020). *Verslo valdymas informaciniame amžiuje*. Vilnius: Vilniaus Gedimino Technikos Universitetas.
11. Fjeldstad, Ø. D., & Snow, C. C. (2018). Business models and organization design. *Long range planning*, 32-39.
12. Ford, J. B. (2020). Competitive advantage. *The Routledge Companion to Strategic Marketing*, 141-150.
13. Foss, N. J., & Saebi, T. (2018). Business models and business model innovation: Between wicked and paradigmatic problems. *Long range planning*, 9-21.
14. Genzorova, T., Corejova, T., & Stalmasekova, N. (2019). How digital transformation can influence business model, Case study for transport industry. *Transportation Research Procedia*, 1053-1058.
15. George, G., & Bock, A. J. . (2011). The business model in practice and its implications for entrepreneurship research. *Entrepreneurship theory and practice*, 83-111.

16. Ginevičius R., Grybaitė V., Lapinskienė G., Peleckis K. (2016). *Verslo kūrimo ir plėtros projektavimas: teorija ir praktika*. Vilnius: Technika.
17. Grant, M., & Startz, M. (2022). Cutting out the middleman: The structure of chains of intermediation. *Research paper*.
18. Greblikaitė, J. (2018). Socialinis verslas kaimo vietovėse: kokį modelį pasirinkti veiklai? *Konkurencingumo stiprinimas: geroji patirtis*, 37-41.
19. Iyer, P., Davari, A., Zolfagharian, M., & Paswan, A. (2019). Market orientation, positioning strategy and brand performance. *Industrial Marketing Management*, 16-29.
20. Jahanshahi, A. A., & Bhattacharjee, A. (2020). Competitiveness improvement in public sector organizations: What they need? *Journal of Public Affairs*, 1-10.
21. Johnson, M. W., Christensen, C. M., & Kagermann, H. (2008). Reinventing your business model. *Harvard business review*, 50-59.
22. Kinderis, R. (2012). Verslo modeliai-jų semantinė raiška ir struktūra. *Ekonomika ir vadyba: aktualijos ir perspektyvos: mokslo straipsnių rinkinys*, 17-27.
23. Lanzolla, G., & Markides, C. (2021). A business model view of strategy. *Journal of Management Studies*, 540-553.
24. Massa, L., Tucci, C. L., & Afuah, A. (2017). (2018). A critical assessment of business model research. *Academy of Management annals*, 73-104.
25. Miller, E. J. (2018). Accessibility: measurement and application in transportation planning. 551-555.
26. Möller, F., Bauhaus, H., Hoffmann, C., Niess, C., Otto, B., & Isst, F. (2021). Archetypes of Digital Business Models in Logistics Start-UPS. *Research paper*.
27. Nosratabadi, S., Mosavi, A., Shamshirband, S., Zavadskas, E. K., Rakotonirainy, A., & Chau, K. W. (2019). Sustainable business models: A review. *Sustainability*.
28. Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries, game changers, and challengers*. John Wiley & Sons.
29. Punakivi, M., & Hinkka, V. (2006). Selection criteria of transportation mode: A case study in four Finnish industry sectors. *Transport Reviews*, 207-219.
30. Ramdani, B., Binsaif, A., & Boukrami, E. (2019). Business model innovation: a review and research agenda. *New England Journal of Entrepreneurship*, 89-108.
31. Ritter, M., & Schanz, H. (2019). The sharing economy: A comprehensive business model. *Journal of cleaner production*, 320-331.
32. Ritter, T., & Lettl, C. (2018). The wider implications of business-model research. *Long range planning*, 1-8.
33. Rodrigue, J. P. (2020). *The geography of transport systems*. Routledge.
34. Saqib, N., & Satar, M. S. (2021). Exploring business model innovation for competitive advantage: a lesson from an emerging market. *International Journal of Innovation Science*, 477-491.
35. Sivilevičius, H. (2012). *Transporto sistemos elementai (automobilių keliai ir jų statiniai)*. Vilnius: Technika.
36. Vasiliauskas, A. V. (2013). *Krovinių vežimo technologijos*. Klaipėda: Socialinių mokslų kolegija.
37. Witzig, P., & Salomon, V. (2018). Cutting out the middleman: a case study of blockchain-induced reconfigurations in the Swiss Financial Services Industry. Université de Neuchâtel.
38. Wollenburg, J., Hübner, A., Kuhn, H., & Trautrimis, A. (2018). From bricks-and-mortar to bricks-and-clicks: Logistics networks in omni-channel grocery retailing. *International Journal of Physical Distribution & Logistics Management*, 415-438.

VERSLO MODELIO KONKURENCINIS PRANAŠUMAS TRANSPORTO SEKTORIUJE

Andrius Tamošiūnas

Vilniaus Gedimino technikos universitetas

Saulėtekio al. 11, Vilnius

Santrauka

Pastaraisiais metais transporto sektorius susidūrė su dideliais iššūkiais, įskaitant COVID-19 pandemiją, nestabilias tiekimo grandines, karinius konfliktus ir įvairius aplinkos bei socialinius reiškinius. Šie iššūkiai privertė transporto sektoriaus įmones greitai reaguoti ir prisitaikyti prie kintančių rinkos sąlygų. Šiuo požiūriu organizacijų konkurencingumas turi būti suderintas su klientų lūkesčiais, taip didinant pelningumą. Kintančioje verslo aplinkoje organizacijos turi turėti savo konkurencinį pranašumą ir stengtis jį išlaikyti bei nuolat jį tobulinti. Sprendžiant šį uždavinį šiuolaikinės organizacijos naudoja įvairius verslo modelius, kad nustatytų efektyvias priemones, kaip sukurti konkurencinį pranašumą savo veikloje. Tinkamas verslo modelis gali padėti organizacijoms efektyviau valdyti verslo procesus, mažinti išlaidas, gerinti produktų ar paslaugų kokybę ir skverbtis į naujas rinkas. Tai leidžia įmonėms ne tik siekti didesnio pelno, bet ir augti, plėstis, ugdyti savitą savo veiklos suvokimą ir atspindėti savo verslo misiją. Nors žiniasklaidoje ir socialiniuose tinkluose plačiai diskutuojama apie verslo modelius, tokie modeliai dažnai nėra aiškiai apibrėžti ar lengvai atpažįstami. Nepaisant išsamių diskusijų, nėra visuotinai priimtino verslo modelių taikymo transporto sektoriuje. Šiuo atžvilgiu taip pat nustatyta, kad mokslininkų tyrimų išvados apie modelių sudėtį ir juos lemiančius kriterijus yra fragmentiški.

Tyrimo objektas yra verslo modelis transporto sektoriuje.

Tyrimo tikslas – nustatyti, kaip verslo modelis gali padėti įgyti konkurencinį pranašumą transporto sektoriuje. Tyrime daugiausia dėmesio skiriama įvairioms verslo modelių atrankos sistemoms, suformuluotoms mokslinėje literatūroje ir įgyvendintoms transporto sektoriuje.

Tyrimo tikslai yra šie: išsiaiškinti sąvokas, susijusias su transporto sektoriumi, verslo modeliais ir konkurenciniu pranašumu; išnagrinėti teorinius pagrindus, susijusius su verslo modelio atranka, įskaitant esminius šio pasirinkimo kriterijus.

Tyrimo metodai: mokslinės literatūros analizė, sintezės metodas, apibendrinimo metodas.

Išsamiai išanalizavus mokslinę literatūrą nustatyta, kad transporto sektorius apima prekių ar paslaugų tiekimą ir pirkimą, transportavimą, saugojimą ir platinimą. Mokslinių šaltinių analizė atskleidė, kad terminas „verslo modelis“ turi daug apibrėžčių; tačiau paprastai tai suprantama kaip conceptuali sistema, apibrėžianti organizacijos veiklos dinamiką, pajamų generavimą ir pelno siekimo strategijos sukūrimą. Todėl šiuo požiūriu konkurencinis pranašumas gali būti apibūdinamas kaip įmonės pajėgumas išlaikyti aukštesnę padėtį, palyginti su konkurentais, pajamų, rinkos dalies, klientų pasitenkinimo, naujovių, technologinės pažangos ir kitų veiksnių atžvilgiu. Tokiame kontekste nustatyta, kad esminiai kriterijai, lemiantys turinį verslo modelio, siekiant organizacijos, veikiančios transporto sektoriuje, konkurencingumo, yra vertės pasiūlymas, sąnaudų struktūra, pajamų generavimas, pagrindinė veikla ir kompetencijos, inovacijos ir pritaikomumas, prekės ženklo kūrimas ir reputacija, taip pat strateginis nuoseklumas ir nuoseklumas. Taip pat nustatyta, kad verslo modeliai gali būti dinamiškai atsižvelgiant į galimų kriterijų derinių specifiką ir jų sąveiką su kintančia verslo aplinka. Atitinkamai tolesni atitinkami moksliniai tyrimai galėtų būti sutelkti į išorės veiksnius, keliančius iššūkius, susijusius su verslo modelių lankstumu ir kontroliuojamumu.

Raktiniai žodžiai. Verslo modelis, konkurencinis pranašumas, transporto sektorius, atrankos kriterijai, verslo dinamika.