

THE INTERNATIONALIZATION OF ENTERPRISES IN THE FACE OF GLOBALIZATION – IDENTIFICATION OF KEY ISSUES AND MODELS

Wiktor ZYGOSZ

Opole University of Technology; wiktor.zygosz@student.po.edu.pl, ORCID: 0009-0009-4608-0337

Purpose: The purpose of this paper is to conduct a bibliometric analysis of research on business internationalization, with a focus on assessing the level of scholarly interest in the topic over time, identifying key thematic areas within the literature, and determining the relative popularity of different internationalization models.

Design/methodology/approach: The study employs bibliometric analysis to achieve its research objectives. Data extracted from the Web of Science database were analyzed using VOSviewer software, allowing for the identification of publication trends, key thematic areas, and the relative prevalence of various internationalization models in academic literature. The study provides a quantitative overview of the field, mapping research interests and conceptual developments within the domain of business internationalization.

Findings: The study reveals a growing academic interest in business internationalization, with publication activity peaking in 2019. Bibliometric analysis identified key thematic areas, including internationalization processes, performance outcomes, strategies, knowledge transfer, and the role of SMEs. The analysis also mapped the prevalence of internationalization models, with Foreign Direct Investment being the most frequently referenced, followed by the Network Approach, Born Global, Resource-Based View, and the Uppsala Model.

Research limitations/implications: This study is limited to Web of Science data, excluding other sources. The bibliometric approach lacks qualitative assessment and does not verify keyword co-occurrence, potentially overestimating references to internationalization models. Future research should integrate multiple databases, qualitative analysis, and temporal trends.

Originality/value: The study maps research trends in business internationalization, highlighting key themes and dominant models. It offers valuable insights for researchers, policymakers, and practitioners exploring international business dynamics.

Keywords: internationalization, internationalization theories, bibliometric analysis.

Category of the paper: Research paper.

1. Introduction

The contemporary market is dominated by global brands, posing challenges for domestic enterprises. The process of business internationalization, understood as the expansion of a company into foreign markets, is a key aspect of an organization's development strategy, thereby increasing its competitiveness. In the literature, internationalization is seen as a complex phenomenon that requires a multifaceted approach and consideration of various factors – from organizational structure to the specific resources of the company (Xie, Sun, 2014).

Internationalization not only provides access to new markets and customers but also fosters the transfer of knowledge, technology, and innovation, which further strengthens their competitive position (Almahendra, Rosari, 2014). A key factor in this process is the ability to adapt to local cultural, legal, and economic conditions, which often presents a significant challenge for companies. An important area in this context is also the selection of the appropriate internationalization strategy, which is determined by factors such as resources, business scope, and legal aspects. Contemporary research also highlights the growing role of digitization and technology in facilitating internationalization processes, particularly in the context of small and medium-sized enterprises (Hervé et al., 2020).

The article addresses the issue of key theories and models aimed at identifying critical issues and assessing the popularity of various internationalization models and theories. The bibliometric analysis conducted holistically covers both classic concepts of internationalization, such as the Uppsala model, as well as modern models that take into account the dynamics of contemporary markets. Despite the existence of articles containing review studies and bibliometric analyses on the area of internationalization, they focus on different aspects, narrowing the analysis either geographically or thematically (Papanastassiou et al., 2020; Chelliah et al., 2024).

The originality of this article stems from a comprehensive approach to the bibliometric analysis of internationalization theories, encompassing both classical and modern models in the context of dynamic changes occurring in global markets. As a result, the article makes a unique contribution to the literature, offering a deeper understanding of the evolution of internationalization concepts and their significance in contemporary business strategies.

This article presents the results of research conducted using quantitative data analysis and bibliometric analysis of works related to internationalization. This will help answer questions regarding the popularity of the internationalization field in academic research, researchers' interest in specific models, and highlight thematic areas addressed during the study of individual models. This paper will fill the research gap concerning the lack of a comprehensive bibliometric analysis that simultaneously identifies key research areas and determines the popularity of various internationalization models. The article will provide new value by

delivering a comprehensive overview of the state of research on internationalization, which can serve as a basis for further analyses.

2. Models of Enterprise Internationalization

The internationalization of enterprises is a complex process that requires an analysis of both the internal resources of the company and external market conditions. Early studies on the internationalization of enterprises focused on exploring issues related to the flow of goods and services in international business (Heckscher, 1919). The analysis of foreign trade concentrated on determining the role of factors such as land, labor, and capital, which influenced the benefits of export and import, based on the principle that countries export goods that intensively utilize abundant and cheap production factors, while importing those in which they are lacking (Ohlin, 1933).

A significant next step in research was the area of foreign direct investment, which was extensively analyzed by John H. Dunning in 1958. His studies focused on the factors influencing firms' decisions regarding the location of foreign operations. Dunning emphasized that this choice depends on elements such as market structure, resource availability, labor costs, and economic regulations (Dunning, 1958). In this early work, Dunning examined the motivations of firms choosing foreign investments over exports, which laid the foundation for the later development of the well-known eclectic paradigm (OLI1) (Dunning, 1981).

The end of the 20th century brought numerous studies exploring issues related to foreign expansion, focusing on the transformation of local businesses into international corporations, often dominating the market (Hymer, 1976). As a result of the work of scholars, theories such as the oligopolistic reaction theory (Knickerbocker, 1973), the internalization theory (Buckley, Casson, 1976; Hennart, 1982), and the resource-based view (Barney, 1991) emerged, emphasizing the role of a company's unique resources in the internationalization process. Related theories, such as the competitive advantage theory (Peteraf, 1993) and the transaction cost theory (Williamson, 1975), further explain the mechanisms of expansion into foreign markets. An important approach is also the network approach (Hägg, Johanson, 1982), which highlights the significance of networks of contacts in the internationalization process.

Research on the competitiveness and internationalization of enterprises has laid the foundation for the internationally recognized models of internationalization (Gorynia, Jankowska, 2007), which are the main focus of this paper. The literature has developed a range of models offering various perspectives on the mechanisms and determinants of international expansion (Jędralska et al., 2013). A comparison of internationalization models allows for a better understanding of the diverse theoretical approaches and practical strategies employed by companies in the process of entering foreign markets. The table below presents the key

characteristics, assumptions, and differences between selected internationalization models, enabling their comprehensive analysis (Table 1).

Table 1.
Selected Models of Enterprise Internationalization

Classification	Internationalization Model/Theory	Author	Key Assumptions
Resource-Based Approach	Foreign direct investment (FDI)	Hymer (1971)	It is a capital investment in a foreign company aimed at gaining long-term influence over its operations and deriving profits from it (Patora, Piasecki, 2001).
	Transaction cost theory (TCT)	Coase (1937), Williamson (1998)	In this perspective, the enterprise's activity is viewed as a contractual issue. It involves making a choice between purchasing specific goods and services from external, specialized market entities and producing them internally within the company. The exchange of goods and services, referred to as a transaction in this concept, is the key unit of organizational analysis (Williamson, 1998).
	OLI Model	Dunning (1980)	It is a combination of different approaches, according to which internationalization occurs if the company possesses a competitive advantage, has specific ownership characteristics, and its operations in a particular location can lead to increased profits (Dunning, 1980).
	Resource-based view (RBV)	Barney (1991)	It is assumed that an organization is a collection of resources and competencies. According to this theory, the company's knowledge and skill resources are more important in strategy creation than the conditions prevailing in the environment. The strategy is first developed for the entire organization and only later for individual divisions or business units (Barney, 1991).
Stage Approach	The Uppsala Model	Johanson, Wiedersheim-Paul (1975)	The stage model of internationalization assumes the gradual internationalization of a company, distinguishing stages such as: irregular exports, exports through intermediaries, establishment of sales subsidiaries, and the commencement of production abroad (Johanson, Wiedersheim-Paul, 1975).
	Innovation-Related Internationalization Model	Bilkey, Tesar (1977)	The stage model of internationalization refers not to the entire process of internationalization, but to the stages in which the dominant form of foreign expansion for the company is export (Bilkey, Tesar, 1977).
Network Approach	The Network Approach	Johanson, Mattsson (1988)	The network approach focuses on the networks created by the company, which connect it with various business partners. According to this approach to internationalization, the process involves establishing, maintaining, and developing relationships with other entities operating in foreign markets (Johanson, Mattsson, 1988).

Cont. table 1.

Contemporary Internationalization Models	Born Global (International New Venture)	McDougall, Shane, Oviatt (1994, 2000)	The approach assumes the internationalization of the company in the early years of operation. In this model, the company does not treat global operations as an addition to its domestic activities but instead focuses on operating in the global market from the very beginning of its existence (McDougall, Shane, Oviatt, 1994; McDougall, Oviatt, 2000).
	International Entrepreneurial Orientation (IEO)	Jones, Coviello (2005)	In this model, international entrepreneurship encompasses behavioral processes focused on creating value by developing unique resources and fully exploiting available opportunities by the firm (Jones, Coviello, 2005).
	Born-again global	Bell (2001)	The presented model refers to a phenomenon in which companies that were already well-established in domestic markets and had shown no prior interest in international expansion suddenly begin to enter global markets dynamically and decisively (Bell, McNaughton, Young, 2001).

Source: own elaboration based on Barłożewski, 2017, pp. 15-32; Milovanovic, Cvjetkovic, 2021, pp. 34-57; Wach, 2012, p. 99.

In the literature, the classification of internationalization models is quite consistent, considering the assignment of specific models to groups. Not all researchers use the aforementioned classification and terminology, as its shape depends on many factors, such as the research objective, perspective, or researcher preferences. Nevertheless, in numerous studies, the classification of approaches appears as resource-based, process-based, network-based, and other – alternative – approaches (Wach, 2012).

The presentation and classification of models aim to systematize knowledge in the field of enterprise internationalization. This serves as a starting point for the next section of the article, i.e., the research part, in which a bibliometric analysis of works describing the processes of enterprise internationalization will be conducted. This analysis will provide answers to the research questions presented. The study will address the research gap identified as the lack of a comprehensive bibliometric analysis, which, considering a wide range of scientific papers, identifies key research areas and determines the popularity of individual models of enterprise internationalization.

3. Research Methodology

Based on the planned activities, a research procedure was developed, beginning with the definition of the research problem, which focuses on analyzing researchers' interest in enterprise internationalization, identifying key issues addressed in the literature, and determining the popularity of individual internationalization models.

The article aims to analyze the current state of knowledge on the internationalization of enterprises, considering the most important thematic areas that dominate in the subject literature. The conducted analysis will fill the identified research gap by defining key research issues and the main directions for the development of this field. The analysis aims to provide answers to the following research questions:

1. How has researchers' interest in internationalization evolved over the years?
2. What key issues and areas are discussed in studies devoted to internationalization?
3. What internationalization models dominate in scientific literature?

In the context of this study, issues will be understood as keywords appearing in the works subjected to bibliometric analysis, which is the research method used to achieve the research objective.

For the purposes of the analysis, it was decided to use data from Web of Science due to its high indexing quality and consistent metadata, which enables a reliable bibliometric analysis. Although relying on a single data source may have certain limitations, including the possibility of omitting publications indexed exclusively in other databases such as Scopus, the choice to use a single database was deliberately made to enhance the clarity of the study. The data for the study was obtained on January 1, 2025. Initially, it was decided to use quantitative data cataloged by year to examine how researchers' interest in internationalization has evolved over time. The search was narrowed to the topic "internationalization" and the Web of Science Categories: Business, Management, Economics, Business Finance, International Relations, as these areas were considered to align with the research topic. This allowed the exclusion of works unrelated to the internationalization of enterprises. The topic was understood as a phrase appearing in at least one of the following fields: title, abstract, keyword plus, and author keywords. The Web of Science database contained 13,361 works that met the selected criteria. Data from these works were used to construct a chart depicting the number of publications on the selected topic in relation to the years of publication. The chart serves to illustrate how researchers' interest in internationalization has developed and to determine the dynamics of changes in the number of publications over the years, which will help answer the first research question.

The data export from the Web of Science database was performed using the "Record Content: Full Record" setting. The data was then analyzed using VOSviewer software, based on the following settings. The "Type of analysis" was set to "Co-occurrence", the unit of analysis was set to "All Keywords", and the counting method was selected as "full counting". Subsequently, to answer the second research question, a table was created containing the 50 most frequently occurring keywords in the analyzed papers. The identified keywords were grouped based on shared themes. These groups were considered key thematic areas found in the literature on internationalization.

Next, keyword maps for the topic "internationalization" were created to visualize the relationships between the 50 most frequently occurring keywords listed in the table. This allowed for confirming the connections between keywords and visualizing the complexity of these relationships. The visualization of the map also confirmed the accuracy of keyword grouping in certain thematic areas, where it was expected that such connections would exist. At the same time, it was explained that some thematic groups may contain concepts that do not necessarily co-occur in the papers due to their specific nature. This stage of the study provided an answer to the second research question.

The goal of the next stage of the research was to provide an answer to the third research question. To this end, bibliometric analysis of the collected data was once again conducted using VOSviewer software. The objective of this part of the study was to create a table of keywords related to specific theories and models of internationalization. For this purpose, a list of the 200 most frequently occurring keywords in the analyzed papers was created, based on which a table was constructed containing only those keywords associated with internationalization models and theories. The identification of keywords directly related to theories and models of internationalization considered the occurrence of the full, partial, or abbreviated form of the theory's name within the keyword. This approach allowed for obtaining results based on quantitative data without the need for qualitative analysis.

The resulting table served as a starting point for inferring the popularity of specific models in the literature. In the next step, the number of papers corresponding to the identified keywords was grouped based on their affiliation with specific theories and models. This allowed for the determination of the possible number of papers in which references to these models and theories appeared, thereby providing an answer to the third research question.

4. Research Results and Discussion

The first stage of the research involved processing the data obtained from the Web of Science database using Microsoft Excel. The results of the quantitative data analysis were visually presented in a bar chart (Figure 1).

The analysis revealed trends in academic interest in internationalization. Although the first theories and models of internationalization emerged in the 1970s and 1980s, the number of publications on the topic remained relatively low.

The earliest works mentioning "internationalization" appeared in the 1950s, but until the 1990s, the annual number of publications did not exceed a few dozen. It was only in the 1990s that the number of publications grew significantly, rising from 7 in 1991 to 56 in 1996.

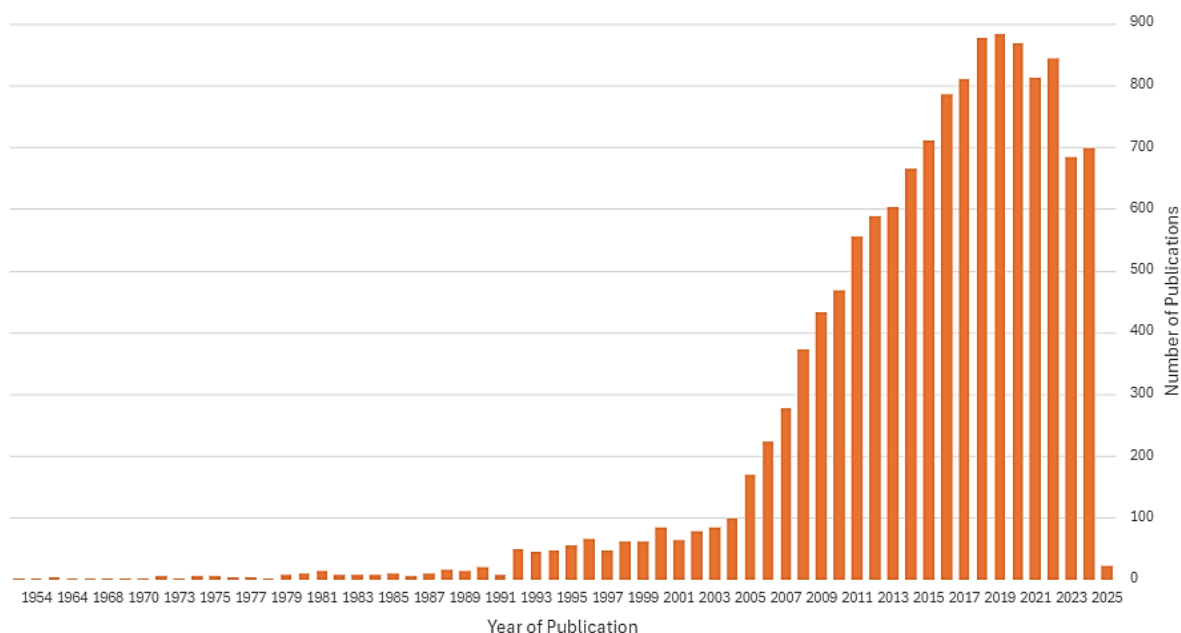


Figure 1. Trend Analysis of the Popularity of the Topic of Internationalization Based on Web of Science Data.

Source: own elaboration.

The annual number of publications surpassed 100 for the first time in 2005, reaching 169. This upward trend continued, peaking in 2019 with 883 publications. In the following three years, publication numbers remained stable, but 2023 and 2024 saw a noticeable decline. However, without further research, this decrease should not be interpreted as waning academic interest in internationalization, as it may result from data acquisition delays in the Web of Science database or other factors. Similar trends, with a decline in recent years, have been observed in other research areas (Zygosz, 2024).

Despite yearly fluctuations, the 2010s and 2020s represent the period of greatest scholarly interest in internationalization. The number of annual publications underscores the significance of this research area in the contemporary business landscape.

In summary, the analyzed data indicates a steady increase in scholarly interest in internationalization, measured by the number of publications since the 1950s. The peak was reached in 2019, though the 2010s and 2020s should be recognized as the most prolific period for research in this field.

The next stage of the study involved a bibliometric analysis of the collected research material. Using data from 13,361 publications, VOSviewer software was employed to generate a list of keywords appearing in the studies. Out of 24,474 keywords, the 50 most frequently occurring ones were selected for further analysis. Based on these, a table was created, ranking the keywords by frequency of occurrence (Table 2).

Table 1.*List of Keywords by Occurrences*

No.	Keyword	Occurrences	No.	Keyword	Occurrences
1	internationalization	5173	26	ownership	539
2	performance	2967	27	perspective	531
3	innovation	1792	28	technology	528
4	knowledge	1555	29	diversification	524
5	firms	1316	30	dynamic capabilities	514
6	firm	1259	31	growth	500
7	strategy	1185	32	emerging markets	473
8	model	1113	33	market	462
9	impact	1057	34	competitive advantage	434
10	management	948	35	export performance	425
11	entrepreneurship	903	36	expansion	400
12	smes	881	37	enterprises	399
13	determinants	881	38	governance	390
14	capabilities	876	39	international entrepreneurship	378
15	foreign direct-investment	848	40	resource-based view	373
16	firm performance	777	41	investment	371
17	globalization	764	42	multinationals	365
18	strategies	735	43	trade	356
19	internationalisation	700	44	entrepreneurial orientation	355
20	business	685	45	behavior	353
21	china	679	46	corporate governance	349
22	research-and-development	660	47	absorptive-capacity	345
23	internationalization process	619	48	choice	336
24	networks	617	49	international business	333
25	entry	606	50	ventures	332

Source: own elaboration.

The resulting table (Table 2) enables the identification of key areas addressed in studies on internationalization. The keywords from the table were grouped into the most homogeneous categories possible, which were then described based on their common features (Table 3).

Table 3.*Identified Key Thematic Areas*

No.	Key Area	Included Keywords	Description
1	Process of Business Internationalization	internationalization, internationalisation, entry, ventures	Research focuses on the processes of firms entering foreign markets, analyzing entry strategies, internationalization dynamics, and the role of networks in international expansion (Naudé, 2009; Sui, Baum, 2014).
2	The results and effectiveness of the actions of internationalized enterprises	performance, firm performance, export performance, growth	Issues related to the impact of internationalization on the financial, operational, and other aspects of enterprise efficiency (Thornton, 2024).
3	Models and theories of internationalization	model, resource-based view, networks, foreign direct investment	Development of theoretical models describing internationalization, including the resource-based view and dynamic capabilities perspectives (Kazlauskaitė et al., 2015; Kowalewski, Radio, 2014).

Cont. table 3.

4	Strategies and management in the context of internationalization	strategy, management, competitive advantage, governance, multinationals, corporate governance	Analysis of strategies adopted by enterprises in the process of internationalization and management mechanisms in different international contexts (Graves, Thomas, 2006).
5	The importance of knowledge and innovation in internationalization	knowledge, innovation, research-and-development, technology	The role of knowledge, technology transfer, and research and development activities in the effective internationalization of enterprises (Jaw, Chen, 2006).
6	Emerging markets and the global context of internationalization	emerging markets, globalization, international business, china	The specifics of internationalization in the context of emerging markets and the impact of globalization on business strategies (Ho, Nguyen, 2024).
7	Small and medium-sized enterprises (SMEs) in the process of internationalization	smes, entrepreneurship, entrepreneurial orientation, enterprises, international entrepreneurship	Internationalization of SMEs, entrepreneurship in the international context, and entry strategies for smaller firms in foreign markets (Wasowska, 2016).
8	International expansion	investment, expansion, trade	International expansion and the associated activities, such as investments and trade (Tatoglu et al., 2003).
9	Determinants of internationalization	determinants, capabilities, absorptive capacity, dynamic capabilities	Identification of factors influencing the effectiveness of internationalization, including the adaptive and absorptive capacities of enterprises (Mun, 2019).

Source: own elaboration.

The keywords that were omitted did not contribute directly to the discussion of key research areas on internationalization, as a result of the repetition and significance of selected keywords in this context.

To deepen the analysis of key areas discussed in works dedicated to internationalization, a map of the 50 most frequently occurring keywords was constructed using VOSviewer software (Figure 2).

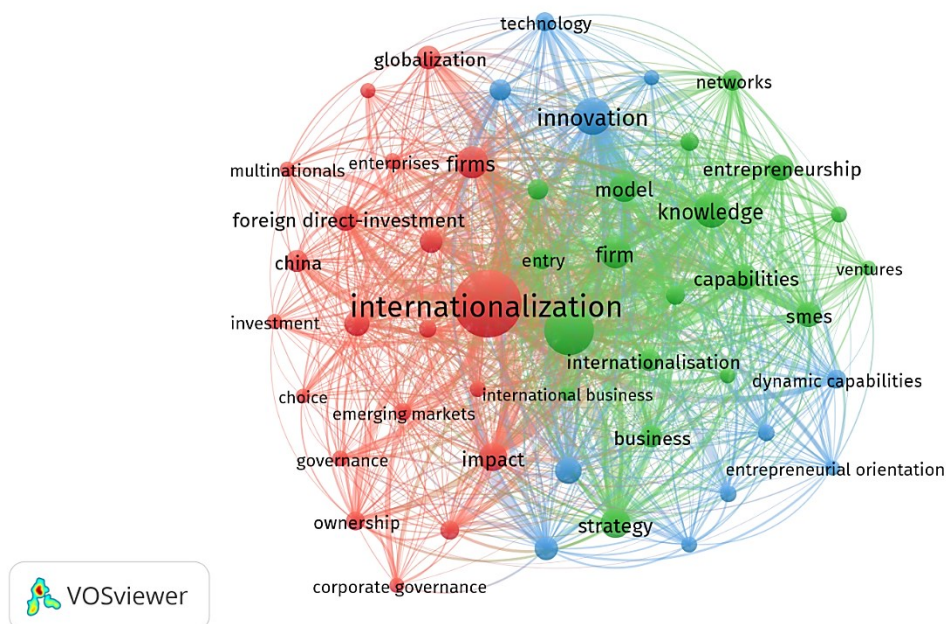


Figure 2. Map of 50 keywords related to the topic of internationalization.

Source: own elaboration.

The map divides the keywords into three areas marked by red, green, and blue colors. These colors separate the groups of keywords formed in this way, while the lines connecting the terms reflect the associations found in the works, i.e., the co-occurrence of keywords in the studies. The separation of the groups by color resulted from the analysis of keyword co-occurrence, with terms from the same-colored groups appearing together more frequently than those from two different groups.

The grouping of areas shown in Figure 2. should not be interpreted as contradicting the grouping from Table 3, as both were based on different assumptions. Referring to the selected areas that are the core of the studies from Table 3, it is important to note that some areas include keywords marked mainly by one color from Fig. 2. For example, the group "5. The importance of knowledge and innovation in internationalization" contains three terms from the blue area, i.e., innovation, research-and-development, technology, and one term from the green area, i.e., knowledge. At the same time, in Table 3, there are areas that contain terms marked by all three colors. For instance, group 3, "Models and theories of internationalization", includes terms such as model, resource-based view, networks, and foreign direct investment, which refer to different models of internationalization, but they rarely co-occur in the same paper. This results from the way the groups in Table 3 were selected, based on thematic consistency, and therefore, group 3 contains terms that relate to various internationalization models.

The next stage of the study was to identify how researchers' interest in specific models of internationalization is shaped. For this purpose, the 50 most frequently occurring keywords from Table 2 were reanalyzed. Keywords directly referring to specific internationalization theories/models were marked in light green. In the table, only three terms were directly related to models: no. 15 "foreign direct investment", appearing in 848 works; no. 24 "networks", appearing in 617 works; and no. 40 "resource-based view", appearing in 373 works.

While terms no. 15 and no. 40 are clearly associated with internationalization models, the term no. 24 "networks" is not necessarily directly linked to "the network approach" in all 617 works due to the potential for interpreting the term "network" in various ways depending on the context. Some of these studies indeed focus on the network approach to internationalization (Fletcher, 2008; Persson, Mattsson, Öberg, 2015), but many others focus on different network-related aspects, such as social networks (Han, Goxe, Freeman, 2024), Knowledge Network Capital (Wu, 2017), and interpersonal networks (Idris, Saridakis, 2018), among others.

The nature of this study and the quantitative character of the data make it difficult to precisely count the studies in order to verify the actual situation. Therefore, the current results can serve as a starting point for future research, which could conduct a qualitative literature review on internationalization models. Based on the presented results, it can be concluded that the most frequently analyzed approach in scientific papers is the FDI model, followed by the Networks Approach, and then the RBV. However, the results of this study in their current form are subject to high imprecision. For this reason, a decision was made to conduct another study.

Narrowing the search results to the 50 most frequently occurring keywords did not yield a satisfactory outcome in identifying the most frequently studied theories and models of internationalization, which is the main focus of this paper. Due to the low number of terms directly referring to these theories among the 50 most frequently occurring keywords, it was decided to create another table that would better illustrate the level of interest among researchers in specific theories. This table will be constructed based on the same data; however, the list of keywords will be expanded to the 200 most frequently occurring keywords. To improve the clarity of the work, the table will include only terms that directly reference specific theories and models of internationalization (Table 4).

Table 4.

List of keywords related to theories and models of internationalization

No.	Keyword	Occurrences
1	foreign direct-investment	848
2	networks	617
3	resource-based view	373
4	fdi	319
5	foreign direct investment	237
6	uppsala model	186
7	outward fdi	175
8	born globals	174
9	direct-investment	154
10	network	145
11	born global	124
12	born global firm	118
13	international new ventures	113
14	born-global firms	102

Source: own elaboration.

In the table, terms that refer to specific theories and models of internationalization can be distinguished. Among the 200 most frequently occurring keywords, phrases related to five internationalization models were identified: the Foreign Direct Investment (FDI) model, the Networks Approach, the Resource-Based View (RBV), the Uppsala model, and the Born Global model. These are the most frequently studied internationalization models and theories.

The FDI model is described by terms such as: foreign direct-investment, fdi, foreign direct investment, outward fdi, and direct-investment. The RBV model is described by the term: resource-based view. The Uppsala model is described by the term: uppsala model. The Born Global model is described by terms such as: born globals, born global, born global firm, international new ventures, and born-global firms. The Network Approach is described by terms such as: networks, network.

Often, one theory corresponds to more than one keyword, which makes it difficult to accurately determine the number of papers dedicated to a particular theory. Attempting to sum the number of papers in which keywords associated with a single theory appear is prone to a significant margin of error, as some papers contain more than one keyword from the list

(Bernat et al., 2024; Kapoor, Arora, 2023; Kaczmarek, 2017). On the other hand, some papers contain only one of the mentioned keywords (Brennan, Garvey, 2009; Szymczyk, 2020).

It was decided that for the purposes of this study, the indication of how researchers' interest in specific models of internationalization has developed would be constructed by summing the occurrences of grouped keywords, with the note that the number represents the maximum possible number of papers dedicated to a given theory, rather than the actual number. Indicating the actual number in this case would require a more in-depth analysis of the data using another tool that would allow for summing the number of papers while avoiding double-counting those that appear multiple times. The popularity of individual internationalization models is reflected in the table (Table 5).

Table 5.
Identified Models and Theories of Internationalization

No.	Model/Theory	The maximum number of academic works or articles in which it appears
1.	Foreign Direct Investment	1733
2.	Networks Approach	762
3.	Born Global	631
4.	Resource Based View	373
5.	Uppsala Model	186

Source: own elaboration.

The internationalization model that appears in the highest number of analyzed studies is the Foreign Direct Investment (FDI) model, representing the resource-based approach. Based on the conducted analysis, it can be determined that references to this model appear in a maximum of 1733 studies. The second most frequently occurring model in the analyzed papers is the Networks Approach, with up to 762 studies containing references to this perspective. The third model distinguished in the table is the Born Global approach, representing the school of international entrepreneurship. References to this model appear in a maximum of 631 studies. The fourth position is occupied by the Resource-Based View (RBV), another model representing the resource-based approach, with references appearing in up to 373 studies. In fifth place is the Uppsala Model, classified as a stage-based approach to internationalization, with a maximum of 186 studies dedicated to this theory among the analyzed works.

It is essential to highlight the remarkable dominance of the FDI concept over other models and theories. This concept is indeed one of the earliest described and represents a highly popular approach to internationalization applied in practice, which undoubtedly contributes to the substantial number of studies dedicated to it.

The number of studies focused on the Networks Approach is more than twice as low, indicating a particularly significant disparity. At the same time, it is crucial to reiterate that the keywords related to this concept may, in some cases, not specifically refer to the Networks Approach itself but rather be used in other contexts. The employed analytical tool did not allow for obtaining more precise results. Therefore, the Networks Approach was included in the table,

but attention is drawn to the potential ambiguities in the interpretation of the collected data. Consequently, the results of this analysis should be treated with caution, and any conclusions derived from them should be validated through additional sources or further analyses.

The next concept, Born Global, represents one of the more recent internationalization models, emerging at the turn of the 20th and 21st centuries. The high ranking of this model reflects significant scholarly interest. Undoubtedly, technological advancements and widespread Internet access have facilitated the development of this model, which assumes that firms operate in global markets from the very beginning of their existence.

Following in the table is the Resource-Based View (RBV) concept. RBV focuses on analyzing a firm's internal resources and capabilities as key determinants of its competitiveness in international markets. Although the number of studies dedicated to this theory (373) is significantly lower compared to leading models such as FDI or the Networks Approach, RBV remains a crucial framework in the literature on internationalization.

The final concept highlighted in the table is the Uppsala Model, which represents a stage-based approach to the internationalization of firms. Developed based on the research of Johanson and Vahlne in the 1970s, this model posits that the internationalization process occurs gradually as firms gain experience in foreign markets and reduce uncertainty stemming from cross-cultural differences. The analysis determined that a maximum of 186 studies reference this theory, placing it fifth in terms of popularity.

The lower number of publications compared to other models may stem from the fact that the Uppsala Model is one of the earliest approaches to internationalization, and its original assumptions have been subject to numerous revisions and modifications in response to rapidly changing market conditions. This model has been criticized, both historically and in contemporary research, primarily for its limited applicability to modern firms that often adopt more dynamic international market entry strategies and for its failure to account for the initial conditions of internationalization (Andersen, 1993). Nevertheless, the Uppsala Model continues to serve as a crucial reference point in internationalization research, particularly concerning small and medium-sized enterprises and markets characterized by high uncertainty.

The study demonstrated that firm internationalization is a subject with a long-standing research tradition. The conducted research confirms the growing interest of scholars in internationalization, as illustrated by the dynamic increase in the number of publications since the 1950s, with a particular intensification in the 21st century. Similar analyses have already appeared in scholarly works (Papanastassiou et al., 2020; Chelliah et al., 2024; Xie, Zeng, 2025), which also confirmed the occurrence of this phenomenon; however, those studies focused on specific groups of research papers. It was decided to repeat the study for a broader group of papers in order to verify the occurrence of this phenomenon for the entire body of research on firm internationalization. This approach may allow the results of this analysis to serve as a starting point for further studies focusing on the analysis of internationalization mechanisms, the identification of determinants of firm success in foreign markets,

and the development of new theoretical models that will enable a better understanding of the dynamics of global business strategies.

A novel aspect of this research is the detailed identification of the popularity of individual internationalization models, where the dominance of the FDI model is contrasted with a lower level of interest in the network approach, the Born Global model, RBV, and Uppsala. The analysis confirms the historical evolution of research in this field, but it also reveals new trends, including a strong increase in publications over the past decades and the dominance of the FDI model. Furthermore, the bibliometric analysis enabled the identification of less obvious relationships between the occurrence of specific keywords and the theoretical models under investigation.

Based on the analysis conducted, it can be stated that the literature on internationalization is developing dynamically, and researchers are increasingly undertaking analyses of complex theoretical models. The results indicate the need for more in-depth qualitative analyses, which would allow for a more accurate estimation of the actual number of papers devoted to individual theories and a better understanding of the specifics of the research methods employed.

In following stages, the plan is to apply tools that enable the elimination of duplicates and a more precise count of the papers, which will allow for the verification of the results obtained using quantitative analysis. Qualitative research is also intended to be conducted, which will allow for a deeper interpretative analysis of the data and the derivation of conclusions regarding the impact of individual models on the practice of managing firm internationalization. Future studies may focus on identifying the popularity of internationalization models in relation to publication time, in order to verify the current dynamics of research on specific internationalization models. Future studies may also verify the obtained results by conducting research using other databases, such as Scopus.

5. Summary

The first conclusion drawn from the study is the noticeable increase in academic interest in the topic of internationalization in recent years compared to the previous century. Although the main theories emerged between the 1970s and 1990s, the number of studies on internationalization during that period was relatively low. The annual number of publications on this subject increased steadily, reaching its peak in 2019.

Currently, a slight decline in the number of publications is observable, which may result either from a decrease in researchers' interest in internationalization or from delays in indexing new studies in the Web of Science database. Future research will be necessary to verify the actual trend. Despite this, the 2010s and 2020s represent the period of greatest scholarly attention to internationalization, with the annual number of publications being significantly

higher than in the previous century. The presented findings address the first research question: "How has researchers' interest in internationalization evolved over the years?".

The article presents the results of a bibliometric analysis of research on the internationalization of enterprises, based on 13,361 academic papers. Using VOSviewer software, the 50 most frequently occurring keywords were extracted from a total pool of 24,474 terms. The key concepts were categorized into nine thematic areas, including: the process of enterprise internationalization, performance and efficiency of internationalized firms, models and theories of internationalization, strategies and management in the context of internationalization, the role of knowledge and innovation in internationalization, emerging markets and the global context of internationalization, small and medium-sized enterprises (SMEs) in the internationalization process, international expansion, and determinants of internationalization.

Additionally, the bibliometric analysis led to the creation of a keyword map that grouped the key topics into three color-coded clusters, representing the relationships between keywords. The analysis indicated that the groups from the table and the keyword map partially overlap. However, complete alignment was not possible due to differences in the methodological assumptions used for categorizing keywords into thematic groups in the table. The presented findings provide an answer to the second research question: "What key issues and areas are discussed in studies devoted to internationalization?".

The next stage of the study involved identifying the popularity of specific internationalization models in academic research, understood as the occurrence of references to particular models and theories within the analyzed papers. To achieve this, the study initially examined a table containing the 50 most frequently occurring keywords in the reviewed studies. However, since this table included only three keywords directly referring to specific models and theories, it was decided to expand the analysis to the 200 most frequently occurring keywords and construct a new table containing only those terms that directly corresponded to particular internationalization models and theories.

The final table included 14 keywords, which were then assigned to five different models. For models associated with multiple keywords, the total number of publications in which these keywords appeared was summed. The results regarding the popularity of specific models and theories were subsequently presented by highlighting the maximum number of publications in which references to them were found. The maximum number of studies was used as a metric due to the inability to verify whether multiple keywords related to a given theory co-occurred within a single paper.

Based on the study results, the most frequently referenced theory was Foreign Direct Investment, with a maximum of 1733 publications. The next most frequently mentioned models were Networks Approach (762), Born Global (631), Resource-Based View (373), and Uppsala Model (186). These findings provide an answer to the final research question: "What internationalization models dominate in scientific literature?".

The article provides a summary of the current state of knowledge regarding the theories and models of firm internationalization. The study's results highlight key areas and theories in the literature on internationalization and may serve as a foundation for further analyses, including a qualitative literature review on internationalization models. Additionally, future research could focus on determining the popularity of specific internationalization models over time. Such studies would provide deeper insights into the changes and trends occurring in internationalization research.

The conducted bibliometric analysis, in addition to providing a comprehensive overview of the state of research on internationalization, also carries significant practical implications. The presented findings can serve as a reference point for businesses and policymakers in selecting internationalization strategies. Understanding dominant models and identifying key research areas can help companies adjust their international expansion strategies to evolving market conditions.

The research results highlight the growing role of digitalization and innovation in internationalization processes, which may be particularly relevant for companies planning to expand into foreign markets. Models such as Born Global and Network Approach can be especially useful for small and medium-sized enterprises (SMEs) aiming for rapid entry into international markets without the traditional, gradual internationalization process. On the other hand, companies with greater capital and resources may benefit more from the Foreign Direct Investment theory, enabling them to manage global operations more effectively.

Furthermore, the analysis results can be utilized by policymakers to shape support policies for companies planning internationalization. Understanding the most applied models and strategies can aid in developing effective instruments to support firms' expansion, such as funding programs, regulatory facilitation, or initiatives promoting the development of internationalization-related competencies.

It should be noted that this work has significant limitations. The results of the study on the popularity of internationalization models are subject to the risk of error due to the research tool used, which prevented the verification of the co-occurrence of terms within a single article. As a result, cases where two or more concepts related to different internationalization models were discussed within the same paper were treated as separate publications for each of these terms. This may lead to an overestimation of the number of papers assigned to specific models and distort the analysis results. Furthermore, in some cases, the attempt to verify the association of certain keywords with specific models revealed that not all instances of the term directly relate to the model, which also impacts the accuracy of the results. It is also worth mentioning that the data for the analysis was drawn from a single database, which limited the amount of research material. However, this was done deliberately to avoid issues related to differences in metadata structure and indexing standards.

References

1. Almahendra, R., Rosari, R. (2024). Reverse knowledge transfer and internationalization strategy: Cases from Japanese MNCs in Indonesia. *Transnational Corporations Review*, Vol. 16, Iss. 2, No. 200049, doi: doi.org/10.1016/j.tncr.2024.200049
2. Andersen, O. (1993). On the Internationalization Process of Firms: A Critical Analysis. *Journal of International Business Studies*, Vol. 24, Iss. 2, p. 216.
3. Barłożewski, K. (2017). *Wpływ ekspansji zagranicznej na efektywność przedsiębiorstw*. Warsaw: C.H. Beck, pp. 15-32.
4. Barney, J.B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, Vol. 17, Iss. 1, pp. 99-120.
5. Bell, J., McNaughton, R., Young, S. (2001). Born-again global firms: An extension to the born global phenomenon. *Journal of International Management*, Vol. 7, pp. 173-189.
6. Bernat, M., Liu, H., Szczewczyk, M. (2024). Investment attractiveness of Opole Voivodeship in the context of inflow of foreign direct investments. *Scientific Papers of Silesian University of Technology, Organization and Management Series*, No. 203. doi: dx.doi.org/10.29119/1641-3466.2024.203.1
7. Bilkley, W.J., Tesar, G. (1977). The Export Behaviour of Smaller Wisconsin Manufacturing Firms. *Journal of International Business Studies*, Vol. 8, pp. 93-98.
8. Brennan, L., Garvey, D. (2009). The role of knowledge in internationalization. *Research in International Business and Finance*, Vol. 23, Iss. 2, pp. 120-133, doi: doi.org/10.1016/j.ribaf.2008.03.007
9. Buckley, P.J., Casson, M. (1976). *Future of the Multinational Enterprise*. London: Palgrave Macmillan
10. Chelliah, S., Sulaiman, M.B., Yusliza, M.Y. (2024). Internationalization and performance: Small and medium enterprises (SMEs) in Malaysia. *International Journal of Business and Management*, Vol. 5, Iss. 6, pp. 27-37. doi: 10.5539/ijbm.v5n6p27
11. Dunning, J. (1980). Toward an Eclectic Theory of International Production: Some Empirical Tests. *Journal of International Business Studies*, Vol. 11, pp. 9-31.
12. Dunning, J. (1981). *International Production and Multinational Enterprise*. London: Allen and Unwin.
13. Dunning, J.H. (1958). *American investment in British manufacturing industry*. London: Allen & Unwin.
14. Dziemianowicz, W. (2002). *Bezpośrednie inwestycje zagraniczne – między teoria a praktyką*. Warsaw/Cracow: Regionalne Centrum Informacyjne Integracji Europejskiej przy Akademii Ekonomicznej w Krakowie, pp. 4-13.
15. Fletcher, R. (2008). The internationalisation from a network perspective: A longitudinal study. *Industrial Marketing Management*, Vol. 37, Iss. 8, pp. 953-964.

16. Gorynia, M., Jankowska, B. (2007). Teorie internacjonalizacji. *Gospodarka Narodowa*, No. 10, pp. 21-44.
17. Graves, C., Thomas, J. (2006). Internationalization of Australian family businesses: A managerial capabilities perspective. *Family Business Review*, Vol. 19, Iss. 3, pp. 207-224.
18. Han, X.M., Goxe, F., Freeman, S. (2024). Internationalization through social networks: A systematic review and future research agenda. *International Business Review*, Vol. 33, Iss. 4, No. 102292.
19. Heckscher, E. (1919). The Effect of Foreign Trade on the Distribution of Income. *Ekonomisk Tidskrift*, Vol. 21, pp. 497-512.
20. Hennart, J.F. (1982). *A Theory of the Multinational Enterprise*. Ann Arbor: University of Michigan Press.
21. Hervé, A., Schmitt, C., Baldegger, R. (2020). Internationalization and Digitalization: Applying digital technologies to the internationalization process of small and medium-sized enterprises. *Technology Innovation Management Review*, Vol. 10, Iss. 7, pp. 28-40.
22. Ho, B.D., Nguyen, T. (2024). Institutional quality and internationalization: Empirical evidence from manufacturing SMEs in Vietnam. *Economies*, Vol. 12, Iss. 6, No. 144.
23. Idris, B., Saridakis, G. (2018). Local formal interpersonal networks and SMEs internationalisation: Empirical evidence from the UK. *International Business Review*, Vol. 27, Iss. 3, pp. 610-624.
24. Jaw, Y.-L., Chen, C.-L. (2006). The influence of the Internet in the internationalization of SMEs in Taiwan. *Human Systems Management*, Vol. 25, Iss. 3, pp. 167-183.
25. Jędralska, K., Komańda, M., Dziubińska, A. (2013). *Kompetencje internacjonalizacyjne przedsiębiorstwa*. Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach, pp. 11-39.
26. Johanson, J., Mattsson, L.G. (1988). Internationalization in Industrial Systems—A Network Approach. In: N. Hood, J. Vahlne (Eds.), *Strategies in Global Competition* (pp. 280-287). New York: Croom Helm.
27. Johanson, J., Wiedersheim-Paul (1975). The Internationalization of the Firm: Four Swedish Cases. *Journal of Management Studies*, Vol. 12, Iss. 3, pp. 305-323.
28. Johanson, J. (1982). Företag i nätverk [Firms in Networks]. *International Journal of Research in Marketing*, Vol. 1, Iss. 1, pp. 88-90.
29. Jones, M.V., Coviello, N.E. (2005). Internationalization: Conceptualizing an Entrepreneurial Process of Behavior in Time. *Journal of International Business Studies*, Vol. 36, Iss. 3, pp. 284-303.
30. Kaczmarek, B. (2017). Foreign direct investment of Polish enterprises in Ukraine – its conditions and structure. *Management*, Vol. 21, Iss. 2, pp. 109-123. doi: 10.1515/manment-2017-0008
31. Kapoor, K., Arora, R. (2023). Impact of outward FDI on exports: A theoretical and empirical review. *Transnational Corporations Review*, Vol. 15, Iss. 1, pp. 14-26.

32. Kazlauskaite, R., Autio, E., Gelbuda, M., Sarapovas, T. (2015). The Resource-based View and SME Internationalisation: An Emerging Economy Perspective. *Entrepreneurial Business and Economics Review*, Vol. 3, Iss. 2, pp. 53-64.
33. Kowalewski, O., Radio, M.-J. (2014). Determinants of foreign direct investment and entry modes of Polish multinational enterprises: A new perspective on internationalization. *Communist and Post-Communist Studies*, Vol. 47, Iss. 4, pp. 365-374.
34. McDougall, P.P., Oviatt, B.M. (2000). International Entrepreneurship: The Intersection of Two Research Paths. *Academy of Management Journal*, Vol. 43, Iss. 5, pp. 902-906.
35. McDougall, P.P., Shane, S., Oviatt, B.M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing*, Vol. 9, Iss. 6, pp. 469-487.
36. Milovanovic, B., Cvjetkovic, M. (2021). Theory review: Critical success factors for internationalization of small and medium-sized enterprises. *International Journal of Contemporary Business and Entrepreneurship*, Vol. 2, pp. 34-57.
37. Mun, H.J. (2019). The home country boundness of technological resources and internationalization performance. *Management Decision*, Vol. 57, Iss. 9, pp. 2325-2343.
38. Naudé, W. (2009). "Rushing in where angels fear to tread": The early internationalization of indigenous Chinese firms. *Journal of Chinese Economic and Foreign Trade Studies*, Vol. 2, Iss. 3, pp. 163-177.
39. Ohlin, B. (1933). *Interregional and International Trade*. Cambridge: Harvard University Press.
40. Papanastassiou, M., Pearce, R., Zanfei, A. (2020). Changing perspectives on the internationalization of R&D and innovation by multinational enterprises: A review of the literature. *Journal of International Business Studies*, Vol. 51, Iss. 4, pp. 623-664.
41. Patora, R., Piasecki, R. (Eds.) (2001). Polityka konkurencji w krajach wschodzących rynków. *Studia i Monografie*, Vol. 3, p. 85.
42. Persson, S.G., Mattsson, L.-G., Öberg, C. (2015). Has research on the internationalization of firms from an IMP perspective resulted in a theory of internationalization? *IMP Journal*, Vol. 9, Iss. 2, pp. 208-226.
43. Peteraf, M.A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, Vol. 14, pp. 179-191.
44. Sui, S., Baum, M. (2014). Internationalization strategy, firm resources and the survival of SMEs in the export market. *Journal of International Business Studies*, Vol. 45, Iss. 7, pp. 821-841.
45. Szymczyk, K. (1-2.04.2020). *Some Essential Considerations on the Phenomenon of Early Internationalization and Born-Global Firms*. 35th International Business Information Management Association Conference (IBIMA), Seville, Spain.

46. Tatoglu, E., Demirbag, M., Kaplan, G. (2003). Motives for retailer internationalization to Central and Eastern Europe. *Emerging Markets Finance and Trade*, Vol. 39, Iss. 4, pp. 40-57.
47. Thornton, H.C. (2024). Business model change and internationalization in the sharing economy. *Journal of Business Research*, Vol. 170, No. 114250.
48. Wach, K. (2012). *Europeizacja małych i średnich przedsiębiorstw. Rozwój przez umiędzynarodowienie*. Warsaw: PWN, pp. 99-100.
49. Wach, K. (2012). Wybrane modele internacjonalizacji przedsiębiorstw bazujące na wiedzy, In: S. Wydymus, M. Maciejewski, *Innowacyjność i wiedza we współczesnym handlu międzynarodowym* (pp. 245-250).
50. Wasowska, A. (2016). Perception of export barriers at different stages of the internationalization process - Evidence from European SMEs. *Journal of Entrepreneurship Management and Innovation*, Vol. 12, Iss. 4, pp. 29-49. doi: doi.org/10.7341/20161242
51. Williamson, O. (1998). *Instytucje ekonomiczne kapitalizmu*. Warsaw: PWN, pp. 15-16.
52. Williamson, O.E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: Free Press.
53. Wu, H. (24-25.06.2017), *Examining the impact of different social capital on explorative internationalization*. 4th International Conference on Economics and Management (ICEM), Chongqing, China.
54. Xie, Y.H., Suh, T. (2014). Perceived resource deficiency and internationalization of small- and medium-sized firms. *Journal of International Entrepreneurship*, Vol. 12, Iss. 3, pp. 207-229.
55. Xie, Y., Zeng, R. (2025). Exploring the relationship between firm internationalization and corporate social responsibility: A literature review and bibliometric analysis. *Sustainability*, Vol. 17, Iss. 4.
56. Zygosz, W. (2024). Management of a Multicultural Work Environment in the 21st Century: A Bibliometric Analysis. *Scientific Papers of Silesian University of Technology Organization and Management Series*, No. 203, pp. 667-684. doi: dx.doi.org/10.29119/1641-3466.2024.203.37