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Development of an Algorithm for Internet Marketing Strategy Implementation: A Case Study in the EU Hotel and Restaurant Sector

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ABSTRACT

This article is dedicated to the development of an algorithm for the implementation readiness of an Internet marketing information technology strategy within the enterprise context, specifically focusing on the EU market's hotel and restaurant services sector. The research adopts modern quantitative assessment methods and constructs a multifactor correlation regression model as its core methodology. Statistical analyses have been conducted, leading to the formation of a multifactorial correlation and regression model, which underpins the development of the implementation readiness algorithm for the Internet marketing information technology strategy. The outcomes of this study comprehensively address the set objectives and tasks. The novelty lies in the proposed methodological approach for presenting the implementation readiness algorithm, offering an innovative perspective on constructing the algorithm for developing a marketing strategy. However, the study's applicability is limited, as it focuses on enterprises within the EU market with specific operational directions. Therefore, the effectiveness of the current model may be reduced when applied to enterprises outside the EU market or those with significantly different activities. Future research directions should consider adapting and expanding this methodology to other business sectors and markets beyond the EU, with a particular emphasis on its applicability in different segments of the IT sector.

1. INTRODUCTION

The integration of information technologies into the operational activities of enterprises within the European Union (EU) market is observed to optimize various business processes, including management, accounting, production, marketing, document flow, and the organization of remote work. The quality and effectiveness of enterprise management and marketing decisions in the EU market are intricately linked to the availability of comprehensive, current, and reliable market data, encompassing aspects such as supply, demand, consumer preferences, and tastes.

Historically, business leaders in the EU market prioritized advertising and organizing product sales. However, the current focus has shifted towards addressing strategic issues and planning market activities. The economic development in various EU countries is now being driven by high technologies, which are not only transforming industries but also fostering the emergence of new ones. These technologies span diverse domains, from introducing novel production types to creating cyber-physical systems that integrate real and virtual objects via information networks. The commercialization of bio- and nanotechnologies, artificial intelligence, autonomous vehicles, and 3D smart technologies is becoming increasingly prevalent, as is the emergence of global digital platforms and novel business models, commercializing concepts like 'talent,' 'culture,' and 'high technology.'

The Internet undoubtedly plays a pivotal role in marketing activities, given its maturity level that facilitates marketing research, establishes bilateral contacts to meet demand considering consumer needs, and enables the sale of goods, thereby creating competitive advantages in a global economy. Globally, prevalent technologies for conducting Internet research include E-mail distribution, the posting of text questionnaires in news groups, Internet forums and bulletin boards, standard web questionnaires, self-loading questionnaires, and online focus groups.

The principal benefits of Internet marketing lie in its interactivity, precision in targeting specific audiences, and analytical capabilities that enhance metrics such as website conversion rates and the effectiveness of online advertising campaigns. The scope of Internet marketing extends beyond

mere information product sales, encompassing trade in the information space, software products, business models, and an array of other goods and services.

These Internet marketing methods have demonstrated remarkable effectiveness in the online domain. This is largely attributed to the ability to meticulously track statistics and maintain consistent contact with consumers. Employing Internet marketing strategies is geared towards cost savings, particularly in terms of sales department salaries and advertising expenditures. Additionally, it facilitates the expansion of company operations. Contrasting with traditional advertising media, market entry via the Internet is comparatively cost-effective. A significant distinction from traditional marketing methods is the clear statistical insight provided by Internet marketing into the effectiveness of marketing campaigns.

In the current landscape of modern market dynamics, financial constraints of enterprises, and the limited efficacy of traditional information mediums, there is a growing recognition of the need for innovative forms of organizing marketing research and operational calculations. Finding and presenting pertinent information for decision-making has become a critical challenge. Modern information technologies have emerged as powerful tools in addressing these challenges. Consequently, their adoption in marketing activities, particularly in marketing research within the EU market, is a pertinent and pressing matter. The exploration of these technologies' methods, techniques, and the advantages and disadvantages they bring in information collection is an area of considerable relevance and significance in current marketing policy.

A marketing strategy encompasses a company's comprehensive, long-term plan of action designed to achieve specific marketing objectives. This strategy involves identifying the target market, positioning the product or service, developing a marketing mix (encompassing product, price, place, promotion), and pinpointing the necessary resources for effective implementation. Crucially, the strategy must consider external factors such as the environment, competitive dynamics, and the company’s inherent strengths and capabilities. In this context, the algorithm for readiness to implement a marketing strategy emerges as a methodological tool—an information tool for modeling.

The application of modern information technologies in marketing is increasingly pertinent due to their transformative impact on customer interactions and the overall efficacy of marketing strategies. These technologies enable a deeper understanding of consumer needs and preferences, thereby enhancing the effectiveness of communication and advertising efforts. This is achieved through the collection and analysis of extensive data, facilitating the creation of personalized offers and advertising tailored to individual customer preferences. This research introduces a novel algorithm, an innovative information technology, for assessing the readiness to implement an Internet marketing information technology strategy.

The aim of this article is to develop an algorithm for the implementation readiness of an Internet marketing information technology strategy. The focus of the study is the enterprise's Internet marketing information technology strategy itself.

The article is structured to provide a comprehensive review of the literature, followed by a detailed description of the methodology and primary methods employed. It then presents the main results of the study, engages in a discussion of these findings, and concludes with key takeaways and implications of the research.

2. LITERATURE REVIEW

In contemporary business environments, the efficacy of an enterprise's marketing activities is closely intertwined with the integration of information technologies. This nexus has emerged due to advancements in computer technology and the proliferation of the Internet. Annually, the landscape sees the advent of new software tools and the enhancement of existing ones, all aimed at augmenting the marketing effectiveness of enterprises. Critical domains within an enterprise's marketing spectrum, such as marketing research, product, pricing, distribution, and communication policies, necessitate robust information support [1, 2].

Recent scholarly investigations [3, 4] anticipate a trend where EU market companies will increasingly allocate their marketing research budgets towards modern information technologies. In a comprehensive context, information technologies encompass the techniques, methods, and tools for gathering, recording, transmitting, storing, processing, and disseminating information. Their deployment underpins marketing activities by providing vital information for marketing decision-making and furnishing infrastructure for novel service delivery modes.

Contemporary scientific discourse [5-7] has witnessed an evolution in the understanding of information support for an enterprise's marketing activities. This concept now encapsulates a diverse array of information covering all facets of marketing activity, inclusive of modern information technologies, analytical methods, and information presentation models. Marketing Information Systems (MIS) represent an amalgamation of information, technical and software tools, telecommunications resources, data bank databases, methods and procedures, and engineering and technical personnel. These components collectively execute the functions of collecting, transmitting, processing, analyzing, forecasting, and accumulating information. This process facilitates the preparation and execution of effective managerial decisions in marketing.

Contemporary research by several scholars [7, 8] posits that the marketing activities of organizations commence with accurately defining the market, centering on customer needs, and coordinating all efforts towards customer satisfaction, ultimately yielding benefits. This holistic view of marketing encompasses advertising, pre- and post-sale activities, and nurturing long-term customer relationships. In the digital era, a novel market has emerged, characterized by its 24/7 accessibility and heightened competition. The distinction between the market and the customer has evolved, giving rise to new approaches to engagement, amidst escalating competition and unique challenges of this new market landscape. Influenced by globalization and information technology, modern marketing has pivoted towards a customer-centric model.

The concept of high-tech marketing, which originated in the previous century, has seen significant development following the integration of electronic technologies across various sectors. This study's thematic scope entails defining the essence and content of pivotal concepts that are interconnected to formulate a conceptual model of marketing. Such a model

aims to elucidate the value of tools, their roles, and functions within the corresponding marketing system [9].

Transitioning from Mass Marketing to Personalization: Historically, marketing strategies have largely targeted the mass market with generic messaging and advertisements. However, the advent of information technology has enabled companies to tailor their campaigns to individual consumers, leveraging data on their behaviors and preferences. A pertinent example of this shift is the application of machine learning algorithms in online advertising. These algorithms facilitate the presentation of advertisements that align more closely with consumers' interests and purchasing histories, epitomizing the shift towards personalization in marketing strategies.

Zeleňáková et al. [10, 11] argued that the efficacy of marketing activities within EU markets is contingent on several factors, with marketing research and subsequent decision-making based on this research being notably crucial. In these processes, it is essential to consider a plethora of rapidly changing external and internal environmental factors, leading to an increase in the volume of information that must be processed for decision-making.

Further, Miklosik et al. [12, 13] emphasized the growing importance of comprehensive modern information support for marketing activities, particularly in the EU markets' increasingly risky business environment. The pivotal role of information in all societal spheres and enterprise activities, including every stage of production and product distribution, is highlighted. In the face of intensifying competition within the EU markets, the timely and comprehensive delivery of information to economic entities elevates information support as a critical component in developing marketing activities and enhancing its role in enterprise management in these markets.

Upon analyzing the existing research on the formation of an algorithm for implementing an Internet marketing information technology strategy, it becomes imperative to systematize the key gaps in this area (Figure 1). This systematization aims to identify and address the lacunae in current understanding and practices, thereby contributing to the refinement and effectiveness of Internet marketing strategies.

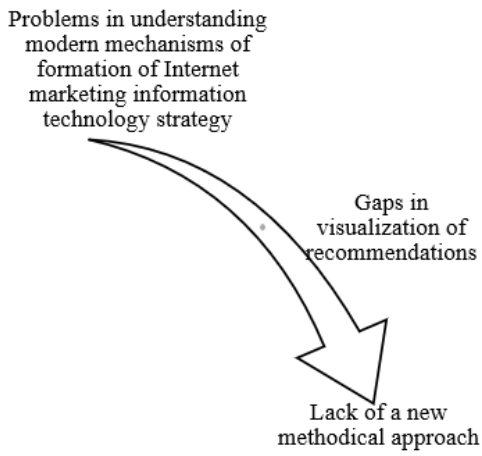

Figure 1. Key gaps in the literature about the issue of forming an algorithm for implementing an Internet marketing information technology strategy

The identified gaps lead to the formation of a pivotal scientific question: How can a novel methodological approach facilitate the creation of an effective algorithm for gauging the readiness to implement an Internet marketing information technology strategy? The primary scientific task entails modeling the process of formulating such an algorithm.

This formulation of the question underscores the utility of the algorithm as an information tool. It is designed to gather and deliver essential information to enterprise management, thereby aiding in the selection of an appropriate marketing strategy. Essentially, this tool aims to meet the diverse needs of management in the realm of strategic marketing decision-making.

3. METHODOLOGY

Today, the theory and practice of marketing are highly developed thanks to the experience and research of developed countries, especially hotel and restaurant businesses. However, despite the strong theoretical foundations of marketing and the specific scientific implications of marketing research, new research trends in the marketing practices of hotel and restaurant businesses and their impact on decision-making remain an active topic of research.

Hotel and restaurant business enterprises are the basis for increasing the competitiveness of any national economy. The development of the country's high-tech enterprises is of strategic importance for the implementation of the state's national priorities, which will ensure the successful functioning of various forms of world economic relations.

The choice of the hotel and restaurant industry in the Czech Republic as research subjects is due to their significant role in the country's economy, especially in terms of tourism and hospitality. These industries are often a showcase of a country's cultural diversity and appeal to visitors, making them key to understanding overall economic trends. Additionally, the hotel and restaurant industry is a dynamic sector that responds quickly to changes in consumer preferences and technological innovation. This makes them ideal for studying the impact of various factors on business strategies and performance.

The Internet marketing information technology strategy has become one of the forms of international marketing, given that most enterprises, including hotel and restaurant businesses, already have free access to the world market. Given this, it is important to include methods relevant to international marketing in research.

International marketing of information technology is a socio-economic activity responsible for marketing producers of goods or services, intermediaries, and companies using or forming information technology, providing high-tech products to the market, and promoting customer loyalty.

International marketing can be defined as marketing in foreign markets. The criteria that can be highlighted are state borders - this type of activity is focused on the external interests of the enterprise and concerns international marketing. To quantify the impact on international marketing of information technology from the point of view of investing in science, education, and research of each factor, it is proposed to build a multifactor correlation-regression model, which will be specified according to formula (1).

$$Y = a_0 + a_1 x_1 + a_2 x_2 + a_n x_n \quad (1)$$

where, Y is the volume of investment in educational and scientific developments;

x_1 – total monthly average expenses per household;

x_2 – volume of scientific and scientific-technical work performed in actual prices;

x_3 – volume of sold industrial products (goods, services) by type of economic activity;

x_4 – volume of nominal GDP;

$a_1...a_n$ – parameters characterizing the quantitative influence of factors x_1, x_2, x_3, x_4 on the dynamics of investment in the education sector;

a_0 is the free term of the equation.

These variables reflect different dimensions of economic activity and consumer behavior, such as the general level of welfare of the population, the intensity of scientific research, industrial output and economic development in general (Table 1).

Table 1. Input data for determining the quantitative influence of factors on investment dynamics in the development of information technology in the Czech Republic

Year	Investment in the development of information technology	Cumulative expenses on average per month per enterprise of hotel and restaurant businesses, CZK.	Volume of scientific and scientific-technical work performed in actual prices	Volume of products sold (goods, services)	GDP
	y	x_1	x_2	x_3	x_4
	CZK million	CZK million	CZK million	CZK million	CZK million
2018	2276,3	3815	11781	1322408	1451876
2019	2378,6	4048	10950	1428839	1566728
2020	2445,7	4952	12611	1776603	1979458
2021	2456,7	5720,4	13712	2158030	2261886
2022	2567,6	7139,4	14098	2625862	2908233

Using these variables allows one to assess how domestic economic processes and development promote or constrain investment in key areas such as education and science that are vital to a country's long-term development.

To specify the study, we selected enterprises of the hotel and restaurant complex in the Czech Republic. The model uses the volume of investment in the development of information technology in the Czech Republic as a regressor (y). The variables (regressors) were the total monthly average expenses per household, the volume of scientific and scientific-technical work performed at actual prices, the volume of sold industrial products (goods, services) by type of economic activity, and the volume of nominal GDP. The study period was 5 years: from 2018 to 2022.

Data on variables were collected from official sources such as Eurostat and data from enterprise managers.

Having received all the necessary digital indicators, the next step is to carry out a direct mathematical calculation of the results and build a specific model.

In any study using a correlation-regression model, there are certain limitations and potential places for bias. One of the main aspects is that correlation does not always mean causation. A model may reveal relationships between variables, but this does not necessarily indicate that one variable is the direct cause of change in another.

4. RESULTS OF RESEARCH

Based on the econometric analysis by calculating a multivariate regression model using the statistical analysis method Statgraphics (module – Multiple Regression), the results given in Tables 2-3 were obtained.

After carrying out the calculations in the above-mentioned software, the results are shown in Table 3.

The level of statistical significance of the regression coefficient indicates the calculated values of the Student's t-test: t (x_4) = 9.76. It can be argued that the model parameter is significant since the calculated value is greater than the tabulated value – 2.07. The coefficient of determination R^2 is 82.6%. It can be argued that 82.6 percent of the level of investment in information technology in the Czech Republic depends on the analyzed factor x_4. The degree of assessment of the significance of improving the quality of the model - Fisher's F-test for the model is 333.1, that is, the indicator indicates the reliability of the data in the model, as well as its statistical significance. As a result of reverse selection, a pairwise regression was obtained and the most significant factor was determined: x_4 – GDP.

Table 2. Listing of the results of regression analysis of factors influencing investment dynamics in the development of information technology in the Czech Republic

Multiple Regression-y Dependent variable:y					
Independent variables		x1	x2	x3	x4
Parameter	Estimate	Error	Statistic	P-Value	
Constant	-213.2	147.802	-1.44	0.16	
x4	0.00123	0.00012	9.76	0	
Analysis of Variance					
Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	2.03	1	2.03	95.3	0
Residual	4.27	20	213613		
Total	2.46	21			
R-squared					82.65
R-squared (adjusted for d.f)					81.787
Standard Error of Est.					462.18
Mean absolute error					338.705
Durbin-Watson statistic					0.54 (P=0)
Lag 1 residual autocorrelation					0.65

Table 3. The main parameters of the correlation-regression model of the dependence of the volume of investment in the development of information technology in the Czech Republic on the factors influencing it

Function Parameter	The Value of the Function Parameters
Determination coefficient	0,8265
Correlation coefficient	0,9091
Student's t-test	9,762
Fisher criterion	333,1
Standard approximation error	9%

The finding that 82.6 percent of investment levels in the Czech Republic can be explained by the volume of nominal GDP underscores the importance of economic growth in driving technology investments. It provides valuable insights for policymakers and businesses and contributes to a deeper understanding of the economic factors that influence information technology dynamics. This knowledge is instrumental in shaping strategies for fostering technological advancement and development.

The calculated model has the form:

$$Y = -213,2 + 0,00123 \times x_4$$

Having analyzed the regression coefficients, we can say that with an increase in GDP by 1 million CZK, the amount of investment in information technology will increase by 0.0012355 million CZK. Econometric modeling modeling is also aimed at forecasting econometric indicators. This procedure is carried out using the Durbin-Watson criterion. DW for our model is 1.02105. Using the Durbin-Watson table for n=22 and k=1 (5% significance level), we find dL=1.24, dU=1.43. The calculated Durbin-Watson coefficient shows the presence of autocorrelation, from which we can conclude that it is impossible to predict using a given model.

The Durbin-Watson test is used in statistics to detect the presence of autocorrelation in the residuals from a regression analysis. Autocorrelation occurs when the residuals (the differences between the observed values and the values predicted by the model) are not independent of each other. This is a significant concern in regression analysis as it can lead to biased and inefficient estimates and can affect the validity of the model's conclusions.

Table 4. Listing of the results of regression analysis of factors influencing investment dynamics in the development of information technology in the Czech Republic

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Thus, the analysis showed that models can be used to describe the relationship between factors and the result, however, it should be taken into account that 17.34% depend on factors that are not reflected in the model. It should be noted that the level of investment in information technology in the Czech Republic largely depends on GDP. The resulting econometric model suggests that to increase the level of investment in information technology, it is necessary to increase the level of GDP. Identifying the significance of the factor will significantly help determine the level and dynamics of the process of implementing the Internet marketing information technology strategy under study.

It is advisable to calculate the level of development of information technology strategies for Internet marketing of an enterprise based on the method of taxonomic indicators that we used when conducting the study. We present this sequence in Figure 2.

Therefore, based on this, we will carry out and present the necessary calculations. Table 4 groups the factors influencing the development of international marketing of information technologies and presents their main groups.

In the first stage, we select a system of indicators that comprehensively characterize the state of the brand of a high-tech enterprise. In the second stage, it is necessary to build a matrix, the elements of which are indicators and even, i = 1...m, and j = 1...n, where m = 6 (number of enterprises), and n = 7 (number of indicators). Since, when conducting taxonomic analysis, the indicators of the objects of study may be quantitatively incommensurable. Taxonomic analysis has unique advantages that distinguish it from other types of analysis, especially in contexts where multiple data or phenomena need to be organized and classified. The main essence of taxonomic analysis is that it allows you to organize and structure information according to certain criteria, identifying similarities and differences between objects of study. and classify a variety of data or phenomena. The main essence of taxonomic analysis is that it allows you to organize and structure information according to certain criteria, identifying similarities and differences between objects of study.

In Figure 2 we present the value of the calculated indicators of the taxonomic coefficient and the strength of dominance of trademarks of hotel and restaurant business enterprises that use Internet marketing information technologies in their activities. According to Figure 2 «Bellevue Hotel Karlov Benešov» takes first place in terms of brand development in the ranking of hotel and restaurant business enterprises that were studied.

Stages of analysis of the level of innovative development and provision of information technologies for Internet marketing of enterprises:

Stage 1:

- Formation of a system of indicators that comprehensively characterize the level of implementation of information technologies in marketing activities

Stage 2:

- Construction of a matrix whose elements are Xi_j and at the same time, i = 1...m, a_j = 1...n, where m=14 (the number of enterprises), n=20 (the number of indicators)

Stage 3:

- Standardization of indicator values using the formula: $z_{ij} = \frac{x_{ij}+\bar{x}_j}{s_j}$, where x_j - the value of the j- index; s_j - standard deviation of the j-index; z_{ji} - standardized i-index value for j-object

Stage 4:

- Classification of indicators characterizing the level of implementation of information technologies in marketing activities for stimulants and destimulants

Stage 5:

- Building the standard $p_0\left(x_{01},\ x_{02},\ \ldots x_{0j},\ \ldots x_{0m}\right),\ j = 1 \ldots m \ldots$

- If indicator *xj* acts as a stimulant, then $x_{0j} = max_i x_{ij}$
- If the indicator x is classified as a destimulant, then $x_{0j} = min_i x_{ij}$

Stage 6:

- Calculation of the Euclidean distance according to the formula: $d_{0i} = \sqrt{\sum_{i=1}^{m}(x_{ij} - x_{0j})^2}$

Stage 7:

- Determination of the values of taxonomic indicators of marketing activities and the use of information technologies using the formulas: $K_{cc1} = 1 - \frac{d_{0i}}{d_0}$; $d_0 = \overline{d_0} + 2\sigma_0$
- where, d_0 - average Euclidean distance for all objects; σ - standard deviation of multivariate distances

Stage 8:

- Interpretation of the results obtained

It should be noted that the coefficient of the brand development level of this enterprise is equal to one. This fact indicates that:

«Bellevue Hotel Karlov Benešov» has the best values for all indicators identified to characterize the level of development of brands of hotel and restaurant business enterprises that use Internet marketing information technologies in their activities.

This statement makes it possible to consider «Bellevue Hotel Karlov Benešov» as a standard. This company is followed by brands such as «Hotel Millenium» (0.87), «Botanique Bar» (0.7). The lowest indicators of the level of development are «Atrium Vyškov», «Vida MAIS», «ATN»; the values of the level of development of these enterprises are respectively equal to 0.21, 0.15 and 0.14, which is much less than the values of the level of development of the leading ones.

Calculation of the strength coefficients of brand dominance of hotel and restaurant business enterprises using Internet marketing of information technologies showed that the largest market share among the enterprises under study belongs to «Bellevue Hotel Karlov Benešov». Also among the market leaders you can see such enterprises of the hotel and restaurant business as «Hotel Millenium», and the «Botanique Bar». The last places in the ranking in terms of the strength of brand dominance in the high-tech goods market belong to «Atrium Vyškov», «Vida MAIS», and «ATN».

Thus, it should be noted that a comparative analysis of the ratings of Czech hotel and restaurant business enterprises according to such indicators as the level of brand development and the strength of market dominance suggests the existence of a direct relationship between these indicators. The theoretical approach we propose makes it possible to obtain the information and inform the management of the enterprise necessary to choose the right marketing strategy. With high results and high innovativeness, the choice may be in favor of an aggressive strategy that reveals key competitive advantages.

Table 5. Factors influencing the development and implementation of international information marketing technologies

Group of Factors	Factors that Have a Negative Impact	Factors that Have a Positive Impact
Economic and technological	Lack of funds to finance high-tech marketing projects, insufficient material, and scientific and technical base.	Availability of a reserve of financial, logistical, and technical capabilities, and information technologies for Internet marketing
Political and legal	Limitation of antimonopoly,	Legislative initiatives encouraging innovation, government support for innovation in information technologies for Internet marketing
Socio-psychological and cultural	tax, depreciation, patent and licensing legislation	Moral encouragement of participants in the process of formation and use of Internet marketing information technologies.
Organizational and managerial	Inappropriate perception of the process of using Internet marketing information technologies, outdated consumer traditions	Flexible organizational structure, decentralization, democratic management style, autonomy

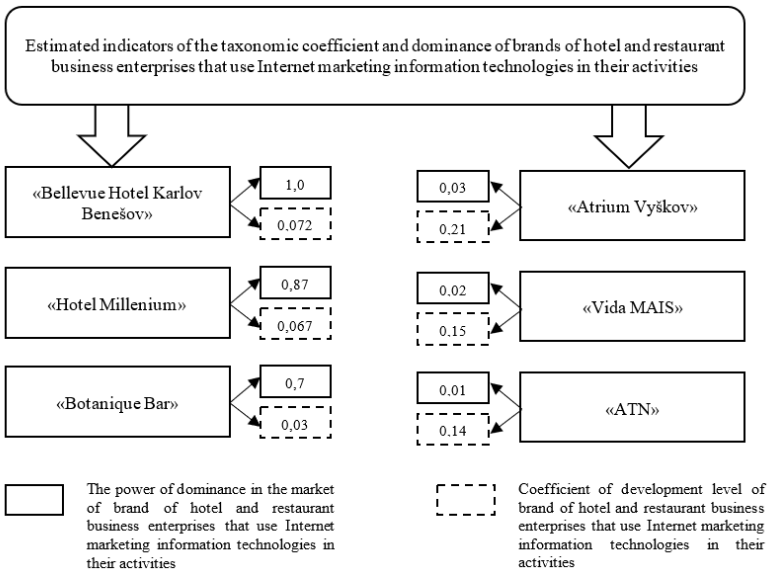

Figure 2. The value of the calculated indicators of the taxonomic coefficient and the strength of dominance of brands of hotel and restaurant business enterprises that use Internet marketing information technologies in their activities

5. DISCUSSIONS

When discussing the results of our research, we should compare them with similar ones. Scientists [14, 15] who have studied the formation of Internet marketing information technologies determine that, according to the marketing expert system model, the majority of employees of business enterprises today do not have competencies in specialized areas of marketing. This statement also applies to the digital environment. Thus, in Internet marketing, various areas of activity require expert knowledge. The bearers of expert knowledge are specialists in certain areas of Internet marketing: search engine optimization, contextual and targeted advertising, compilation of semantic cores, technical optimization, and other types of activities. Taking this into account, according to these scientists, a solution to this problem is possible only through the participation of third parties.

Another group of scientists [15, 16] will present in the results a model of the development of marketing communication methods. Modern marketing is characterized by a variety of marketing communication methods. Messengers, targeted, contextual advertising, search engine promotion, aggregators, and other marketing methods. Classic marketing methods most often have a negative impact on the target audience. This is manifested in the development of the concepts of permission and inbound marketing, which allow a company to become found in the streams of marketing communications without annoying consumers with advertising messages.

Turning to the peculiarities of digital marketing of enterprises, other authors [17, 18] suggest that Internet marketing technology should be formed based on the process of interaction between the competencies of a small business and an external marketing expert subject. In this setting, according to the authors of the study, strengthening the characteristics of the enterprise's marketing policy is achieved through the use of Internet marketing methods.

Another group of scientists [19, 20], believe that to run an active business that produces positive results, it is now not enough to place information about destinations, brands, products and services on website pages. Websites created by corporations must be modernized and cannot lag behind advanced techniques. Certain business priorities must be met. The use of various tools for Internet promotion should be based on the results of analytical work. Web analytics in this context looks like a full-fledged comprehensive set of various activities aimed at assessing the perception of a web resource by a specific audience and calculating the performance of organized advertising events.

Table 6. Similarities and differences in our study results

Similarities	Differences
1. A common feature is that today information technologies of Internet marketing are important for the survival and development of any enterprise.	1. The difference in the proposed methodological approach to modeling
2. Another similarity is that Internet marketing information technology is a complex issue, and therefore requires the use of specific planning and modeling methods.	2. Difference in the use of objective mathematical methods to determine key modeling elements

However, the results of our study have both similarities and differences compared to others (Tables 5 and 6).

The novelty of the article is revealed in the proposed methodological approach to assess the level of innovation and the use of modern Internet marketing technologies in their activities. In contrast to our research results, it should be emphasized that we can present an algorithm of the author's vision, combining various methods, which in total represents a new methodological approach to determining the readiness of enterprises to implement a modern marketing strategy. We have clearly described how methods of different natures can work together to achieve a common goal. We have provided specific examples of companies and their information systems. But along with this, in the future, we strive to expand the range of the algorithm and take into account more sectors.

6. CONCLUSIONS

In accordance with the goals we set, we formed an algorithm for readiness to implement an information technology strategy for Internet marketing. For this purpose, modern methods of quantitative assessment and the method of constructing a multivariate correlation regression model were used. The multifactorial correlation and regression model was formed for the formation of an implementation readiness algorithm of Internet marketing information technology strategy. At the same time, scientists can use our algorithm for their own research, for example, regarding the marketing strategy of other sectors of activity.

Summing up, at the current stage, the practice of managing the marketing activities of enterprises indicates a low level of satisfaction with the information needs necessary for making management decisions. According to modern scientific theory, the successful implementation of goals and business development significantly depend on the effective use of one's information resources. Information resources are the basis for the information security of an enterprise's activities and signify its strategic success. Changes in information security of marketing management of enterprises are formed under the immediate influx of officials from their external and internal environment and orient the enterprise towards increased obligations information resources to be used for management.

The role of the information system in the marketing management system of enterprises in the EU markets is to determine the information needs for marketing management, obtain it, and timely provide the necessary information to managers for decision-making. It is quite obvious that the development and implementation of elements of marketing information systems in the practical activities of any enterprise will provide it with prompt access to data on the market situation and the qualitative superiority of competitors.

Considering the marketing information system as a set of related structural parts and relationships of a single system, one can see the need to study the optimization and effectiveness of the marketing information system, which can affect the economic condition of an individual enterprise and the EU region as a whole. The formation of modern information support for an enterprise in general and its marketing activities, in particular, requires a holistic view of the management object, which is impossible without information, technological, and business processes. For effective activities and implementation of marketing management, it is necessary to integrate the key components

of its information support.

As a result, statistical analyses were carried out and analyzed, and a multifactorial correlation and regression model was formed for the formation of an implementation readiness algorithm of Internet marketing information technology strategy. Our contribution to the development of science and marketing is the presentation of a methodological approach and an algorithm, information about it, which can be used for assessment and decision-making.

The study is limited by the fact that enterprises operating in the EU, in particular, the Czech Republic market, and having a clear direction of activity were selected. Taking this into account, the current model may not be effective enough in the context of enterprises outside the EU market, as well as enterprises whose specific activities are radically different from those chosen by us. However, these limits do not have a significant impact on the results of constructing the algorithm.

Taking this into account, the prospects for subsequent research should be the unification of the existing methodology in the realities of other enterprises and other markets.

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