

The marketing information system of the tourism enterprise

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Abstract. Article is devoted to research of the essence and the structure of the marketing information system of tourism enterprise. A current state of the marketing information system of tour operators and tour agents in Ukraine is analyzed. The scheme of improvement of marketing information system of Ukrainian tourist enterprises is created.

Keywords: marketing information system, a travel company, a tour operator, a travel agent

Tytuł: System informacji marketingowych w przedsiębiorstwie turystycznym

Streszczenie. Artykuł jest poświęcony istotą i strukturą systemu informacji marketingowych w przedsiębiorstwie turystycznym. Scharakteryzowano aktualny stan systemów informacji marketingowych touroperatorów i biur podróży na Ukrainie. proponowane temat sposobów ulepszenia systemów informacji marketingowych ukraińskich przedsiębiorstw turystycznych.

Słowa kluczowe: System informacji marketingowych, przedsiębiorstwa turystyczne, touroperator, biuro podróży

Название: Маркетингово-информационная система туристического предприятия

Резюме. В статье рассмотрена сущность и структура маркетингово-информационной системы туристического предприятия. Проанализировано современное состояние маркетингово-информационных систем туроператоров и турагентов Украины. Предложена схема усовершенствования маркетингово-информационных систем украинского туристического предприятия.

Ключевые слова: маркетингово-информационная система, туристическое предприятие, туроператор, турагент

Introduction

Quality information is very important for modern enterprises because it influences the efficiency of the organisation. The knowledge of customer needs is proportional to the level of sales, especially in the travel agencies that are directly in contact with the customer and get information from him. The manager should have information about competitors' prices, the desires of tourists, tourist fashion, and political circumstances to make decisions on price, tourism destinations and tourism product structure. He spends 60% of time on paperwork and reads about million words a week in search for information¹. Professor D. Buhalis says that tourism manager makes decisions based on rumours, own intuition and previous experience, but all of this is not enough sometimes. These factors cause the need to systematize all received information. Marketing information

¹ Rezdy: Online Booking Platform For Tours & Activities. [Електронний ресурс]. – Режим доступу: <https://www.rezdy.com>

system (MkIS) was designed to perform this function. However, this system requires proper organization and consistent management.

The formation of mechanism of marketing activity management at tourism enterprises is the object of research for many recognized marketing professionals. We can find theoretical and methodological aspects of this problem in the works of foreign scientists as J. Altkorn, J. Bowen, S. Briggs, P. Kotler and others. Some aspects of MkIS management at tourism enterprises are investigated in more details by such economists as O. Azaryan, V. Bohaldin-Malykh, A. Durovych, N. Zhukova, Y. Zabaldina, Y. Pravyk, L. Shulhina.

At the same time, new sources of information, such as social networks, make important redistribution of existing ones. The structure of tourism is changing, as is gradually becoming more online oriented. As MkIS should meet the needs of a dynamic tourism market, it should change using innovations in management and marketing. That's why MkIS requires new research with aim to find ways to improve it.

Purpose of article

The purpose of article is to identify ways of improving the functioning of the marketing information system for tourism enterprises to solve marketing problems.

The essence of marketing information system (MkIS)

The term "marketing information system" is multifaceted. So scientists disagree on its definition, particularly in terms of its components. The majority of foreign scientists believe that the MkIS is a part of marketing information systematization created to help managers in making decisions and therefore scientists often associated MkIS with an automated computer system that is a controllable system.²³⁴

According to the AMA (American Marketing Association) marketing information system is a set of processes and methods for control, data collection, analysis and presentation of information for its use in making marketing decisions⁵. In a domestic science, it is usually presented as the management process that includes a mandatory component of the system – the personnel of travel company which is the subject of management. The marketing information system is a set of personnel, information and methods (procedures) intended for regular collection, processing, analysis and preparation of the information for making marketing decisions.⁶

Take a look at the MkIS in terms of modern systems classification to clarify the essence of this concept. It is clear that the system is organizational and socio-technical therefore. An integral part

² P. Kotler, K. Keller *Marketing management*. – 15th ed. – New Jersey: Pearson Education, Inc, 2015. – 812 p. – P. 66-240.

³ I.Frochot, P. Legohérel *Marketing du tourisme*. – 3-e éd. – Paris: Dunod, 2014. – 336 p. – P. 118-124.

⁴ J.M. Lopez-Bonilla, L.M. López-Bonilla, J.C. Peña-Vinces *Sistemas de Información de Marketing: una visión integradora* // *Tourism & Management Studies*. – Sevilla, 2015. – №11 . – P. 197-203.

⁵ American Marketing Association: official site. [Електронний ресурс]. – Режим доступу: <https://www.ama.org>

⁶ В.А. Полторац, І.В. Тараненко, О.Ю. Красовська *Маркетингові дослідження*. – К.: Центр навчальної літератури, 2013. – 417 с.

of socio-technical system is man, and that is why in the context of this study we can be considered that the last determination of the concept is the most correct.

The structure of tourism enterprise MkIS

MkIS is being created to perform the tasks of marketing tourism. The need for effective functioning of the tourism enterprise MkIS, particularly a travel agency, is related to the direct contact of the staff with the consumer. The staff of tourist agents gets the information from the consumers and this is very important for tourism chains because the tour agent is the source of information for tour operator. As that system is open-ended, as it always communicates with the external environment, we can apply the "black box model" (fig.1).

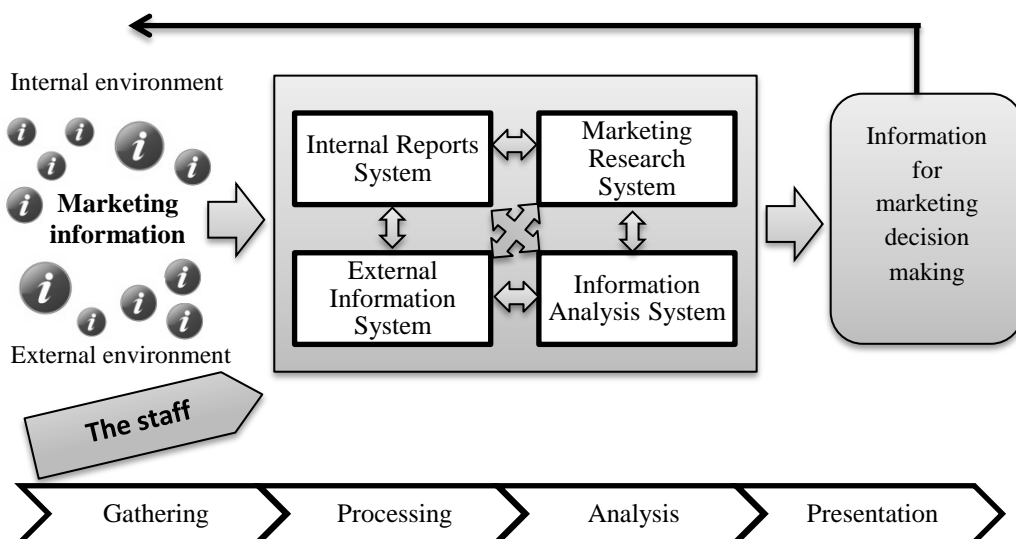


Fig. 1 The model of the tourism enterprise MkIS

Source: own elaboration

Depending on the interpretation of the term different scientists include different elements in the marketing information system of a travel company. Thus, foreign scientists include collection, processing, storage and transmission of information to its structure⁷. But these components are likely MkIS functions. Based on them, we can determine the functionality of MkIS:

- an early warning of possible difficulties and problems of travel companies and an identification of favorable trends and opportunities;
- identification and evaluation of strategies and measures of marketing activities;
- assessment of performance plans and marketing strategies using statistical analysis and modeling⁸.

According to the model (Fig. 1) MkIS includes:

⁷ J. Miranda, J. Zamora, John T. Bowen *Marketing turistico*. – 5.a ed. – Madrid: Pearson Educacion, S.A. 2011. – 798 p.

⁸ В. О. Лук'янов, Г. Б. Мунін Маркетинг туристичного бізнесу: навч. посіб; Ін-т економіки та упр. – 2-ге вид., переробл. і доповн. – К. : Кондор, 2012. – 335 с.

- the staff who manages other elements and connects them with each other;
- information that is the raw material of the system;
- methods and processes for collecting, processing, analysis and preparation of information for making decisions.

P. Kotler suggested an approach to the structure of the MkIS by decomposition. The marketing information system is a complex system, which includes 4 subsystems:

- an internal information, which includes the entire documents of tourism enterprises, information about clients (tourists);
- external information that expands information on potential tourists and providers of tourism products, and provides information about the competitors and the environment.
- marketing researches organized for getting specific marketing information during the launching new tourism products to the market, entering new market segment, in the case of crisis.
- analysis of marketing information that includes a set of models designed to solve specific marketing problems.

The structure of MkIS includes subsystems of identical components, but their functions are different depending on the functions of the subsystem.

The role of the staff in the management of the tourism enterprise MkIS

MkIS should constantly get better, meeting the requirements of the competitive environment; it needs creativity, i.e. it needs the presence of permanent control element, which is the manager. During the existence of MkIS managers have adapted it to the requirements of each organization, depending on size, turnover, specificity of goods and the number of staff. The functioning of tourism enterprise MkIS, as well as any other information system, is based on information technology. Therefore specialist that develops it should be an engineer, a specialist in information technology and marketing, statistician in the same time.

The manager begins the activity of MkIS, because he collects and makes primary processing of information. The work of the employee of the tourism industry is characterized by high intensity and large volumes of information that he has to structure at MkIS subsystems.⁹ Manager collects information about tourists by communication with them. Using this information manager creates the CRM (Customer Relationship Management) – the most important element of the client base management.¹⁰

One of problems is authentication of the information. The specificity of the tourism industry is a high changeability and dependence on external changes, so "word of mouth", rumors and something similar are important for tourism enterprises. However, tour agents are often guided just by such data in decision-making. They can ignore a full information provided marketing information system. In addition to managers, accountants that create one of the subsystems of MkIS (internal reporting) also play an important role in the MkIS. An important role of the

⁹ Шамян Л.С. Побудова ефективної маркетингової інформаційної системи туристичного підприємства// Інвестиції: практика та досвід. – К., 2012 – №4. – С. 78-82.

¹⁰ Quel avenir pour les SIT [Електронний ресурс]. – Режим доступу: <http://www.eturisme.info/quel-avenir-pour-les-sit>.

manager is to choose methods of information processing, which should meet such criteria: capital intensity, complexity and completeness of an output information. Depending on a degree of technical and information equipment of the enterprise, the manager can perform every stage of the information management, not just control it. But there is a high probability of inaccuracies that human factor causes. The most important task of the manager in marketing information system is to take rational decisions based on the data, otherwise the process was useless. When manager made the decision, he should analyze the reaction to this decision.

Marketing information of tourism enterprises

The purpose of marketing activity in tourism is to support a positive ratio 'own product - the product of a competitor', which enables the company to maintain and increase its market share based on its capabilities. Information about the organization and its competitors is the basis of this ratio. Thus, the quality of information is at the heart of the effective functioning of the MkIS. Decision-making in travel agencies require the information on supply and demand, the tourism product and competitors, stock prices and inflation etc. If necessary marketing information is missing or incorrect, it can cause serious errors. The purpose of the use of marketing information is to reduce the impact of subjectivity in the decision making process.

Marketing information is such information that we receive in the course of research of exchange of socially useful activity results. This is the result of interaction between market systems subjects that participate in all fields of the travel company including marketing activities.

Marketing information does not disappear after use, but rather increases, deepens and it is the basis for the adoption of a new decision making process. At each stage the new information is forming as the basis for the realization of the next stage. It is important to have feedback to analyze reactions to previous management decisions. The information created on these stages can cause:

- need to change the purpose if we found changes in the informational environment leading to loss of relevance of hypothetical solutions;
- modifications of the sources that we do market research, if we need specific information;
- change of models and methods of information processing, indicators;
- form of presentation, tabular, graphics and text.

The main condition of the existence of MIS is completeness of the information sources (Fig. 2). The structure of sources is quite extensive, so in conditions of limited time the manager should take into account the degree of completeness of each source in the process of information collecting.

If organizations need to obtain specific information, they use market research: observation, survey, experiment, simulation. The last two in tourism, especially in the tour agencies often are not used. Data obtained in this way is more comprehensive and correct. But this research is expensive for the organization.

After collecting and processing of information the staff makes its analysis using special methods and models. If the leaders of big tour operators use economic models of information processing, the heads of small travel agencies use only a few statistical methods. This is caused by high costs for creating and using software on the base of these models. Tour operator uses a large amount of information that is difficult to analyze without additional technical equipment.

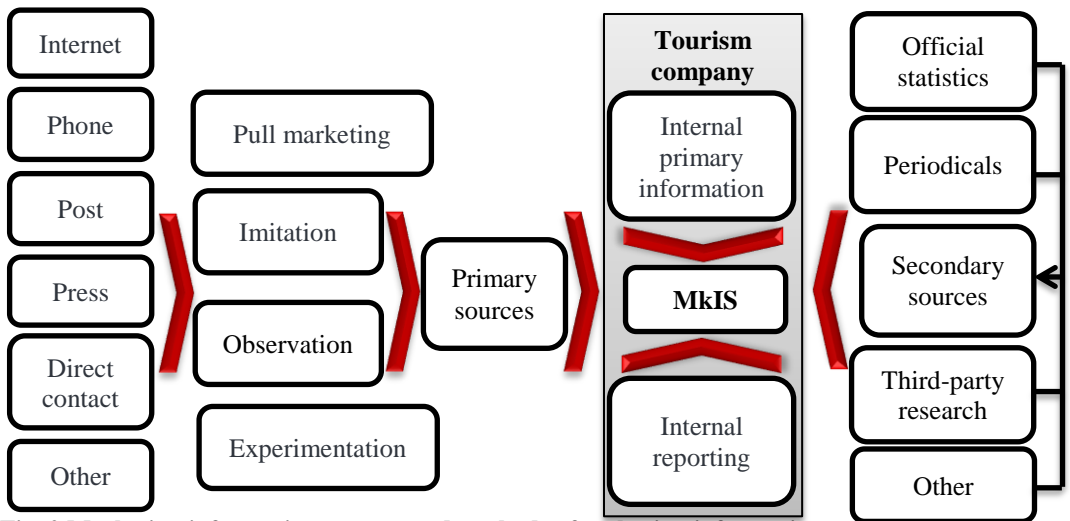


Fig. 2 Marketing information sources and methods of gathering information

Source: own elaboration

The needs of tour operator in information vary depending on the needs of tour agents, as a tour operator creates assortment policy, analyzes pricing. Y. Zabaldina says that "among many market players only some ones use all marketing features, the majority uses only some tools (mostly advertising)."¹¹ Therefore travel agents need smaller information for decision making and that's why do not use all MkIS methods and models (Fig. 3).

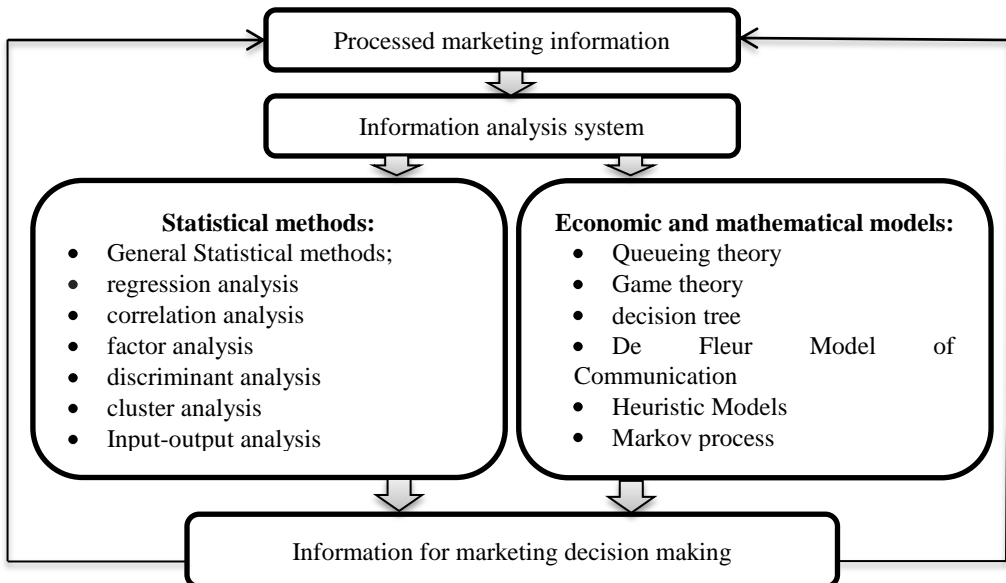


Fig 3. The methods and model of analysis of information in MkIS

Source: own elaboration

¹¹ Забалдіна Ю.Б. *Маркетинг туристичного підприємства*: навч. посіб. - К.: Музична Україна, 2005. – 196 с.

The final stage of information traffic in the MkIS is its presentation to the manager for making marketing decisions. Ready information is stored in the subsystem of internal information after using.

MkIS of tourism enterprises in Ukraine

L. Shamyán identifies 4 levels of systems depending on requirements to the functions of tourism enterprise MkIS (fig. 4).

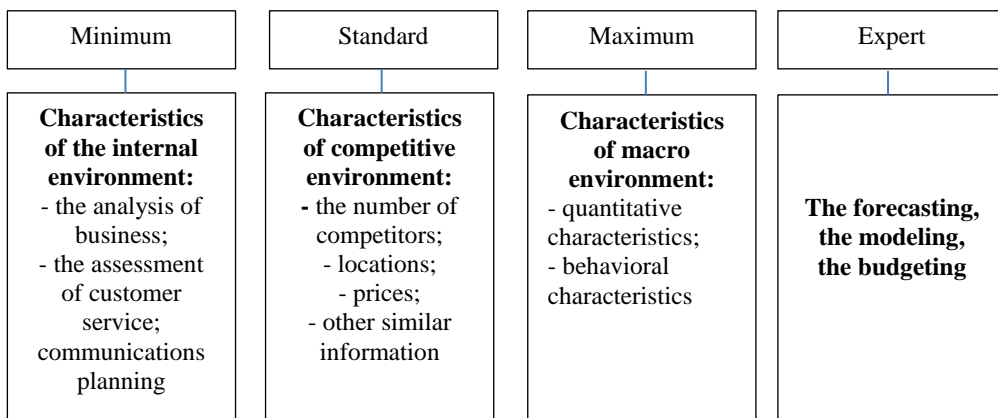


Fig. 4 Classification of MkIS of tourism enterprises

Source: own elaboration based on Шамян Л.С. *Побудова ефективної маркетингової інформаційної системи туристичного підприємства // Інвестиції: практика та досвід.* – К., 2012 – №4. – С. 78-82.

Analysis of tourism market of Ukraine showed that most tourism enterprises MkIS can be classified as Level 2. Managers do most of the enterprise processes themselves. This is due to the small size of the company and the absence of a single automated system that should automatically provide information upon request, receive and organize data from suppliers. Managers do only certain stages of analyzing information using a computer.

Manager collects the primary internal information directly while working with clients. Managers create a database using software MS Access, where they enter the data of tourists and their travel. To present this information, the companies use only tabular method. Information processing is made with using software by the manager request for a particular parameter.

Gathering information for internal reporting is made by the accountant on the basis of financial documents. Managers manually enter the information to the official reporting forms in software tool MS Excel. Synthesis entered information is also made by accountant. Then a software tool takes quantitative information processing with statistical methods.

The companies have a large number of reliable partners and therefore require no new information about suppliers, but collect information about current partners. Traditional gathering information on the economic situation of tour operators and providers of end services is made with monitoring of open financial statements of companies and with focus on rumors and "word of mouth". This information is processed and only transferred to managers and directors.

Tour agents receive the information about tour operators offers already in processed form (price lists). Tour agents have access to such information on a tour operator agency sites. The companies don't have the program that would aggregate all offers. Tour agents often use questionnaires and oral interviews among consumers to get information about their attitude to a particular tour operator services.

Agents do not make special market research to obtain information about potential customers. The data are only based on the opinion and the experience of the staff, the correctness of such information is questionable. Tour agents often have limited information about the activities of competitors. This information is also collected by manager and it is untreated, not generalized and based only on observation. Gathering information about the macro environment is made by observation, on the base of external monitoring of primary external sources and spontaneous awareness of the staff. This process is also made by manager and director sometimes. Tourism enterprises often do not have a system of collection and analysis of the data.

Measures to improve the Ukrainian tourism enterprises MkIS

Increased competition in the tourism market, information system development requires the improvement of marketing information system of tourism. Increasing automation of processes in the system is the direction of improving the efficiency of MkIS. This vector will solve the problem of the complexity and cost of the system. Based on this we can form conceptual model of MkIS (fig. 5), which can be used among the majority of small tourism enterprises.

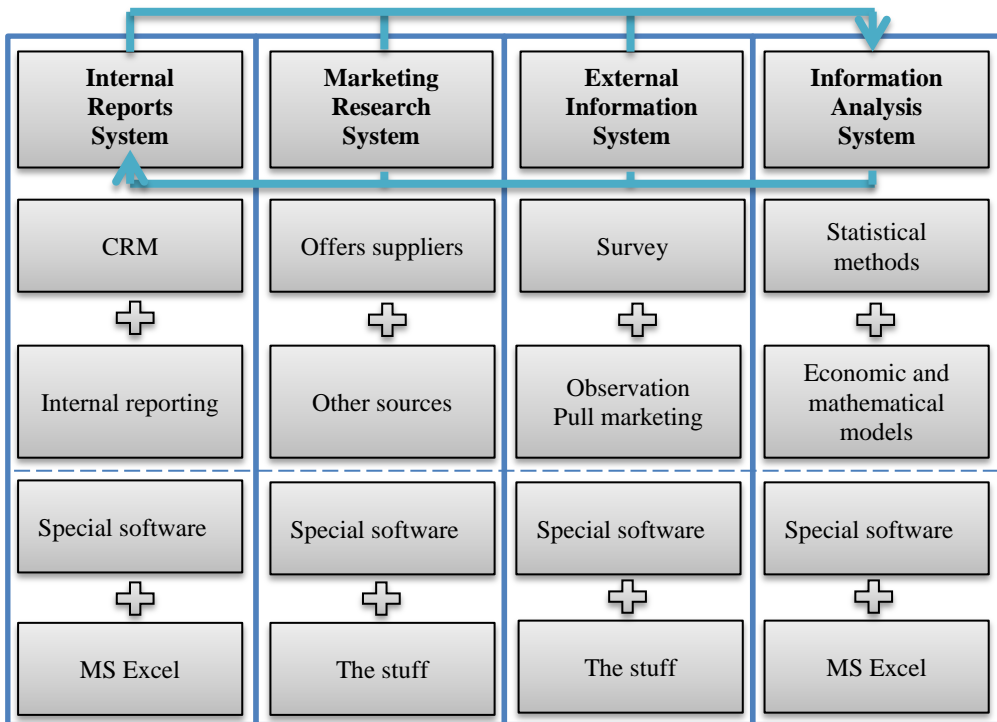


Fig. 5. The scheme of improving tourism enterprises MkIS in Ukraine

Source: own elaboration

It is necessary to create powerful methods and models for analysis and presentation of the information to transfer tourism enterprises MkIS on the third and maybe the fourth level. As a travel agent works directly with clients, it is advisable to organize MkIS activities on the base of CRM. This system will integrate the turnover, tourist flows, the company costs and other elements. To achieve this we need to:

- improve the analysis of CRM database
- modernize and adapt traditional methods
- optimize the statistical techniques by using computer programs
- implement some automated economic and mathematical models for forecasting, budgeting, modeling.

Implementation of this system saves manager's time, which he can use for other productive work. It may be, for example, contact with customers, which should lead to an increase in business income, an increase in productivity. The system provides a complete company CRM, including birthday reminders of regular customers. An important feature is its ability to integrate data from Excel, which will facilitate the keeping official statements. The system simplifies management by half, because it has the possibility of the Internet. In addition, the system neutralizes the human factor in the analysis of information, and therefore minimizes the possibility of errors. Regulation of external information system is the aggregation of aggregate supply tour operators, analyzing changes range. It increases quality of information used by manager in the process of choosing of tourism product for a concrete consumer.

Conclusions

The information is quickly loses relevance in terms of dynamic society. This situation complicates the management because making-decision is based on the analysis of received information. Marketing information system is designed to manage information in a company. Its main objective is the isolation and the presentation of the facts that provides a framework for making effective decisions. The marketing information system of most tourism enterprises Ukraine is characterized by inconsistency of processes and lack of communication between them. Only subsystem of the internal information gathering, which uses MS Access (customer database) and MS Excel (keeping financial statements) is at a sufficient level. The results of the study allowed identifying the main ways of MkIS development. Due to the small size and traffic, travel agency does not require complex mathematical economic models. The main objective of the proposed ways of MkIS development is efficient work of each individual subsystem and creating strong relations between them.

References

- ¹ Rezdy: *Online Booking Platform For Tours & Activities*. [Електронний ресурс]. – Режим доступу: <https://www.rezdy.com>
- ² D. Buhalis, C. Costa. *Tourism management dynamics* – Burlington: Elsevier Ltd, 2010. – 279 p. – P. 210-228.
- ³ P. Kotler, K. Keller *Marketing management*. – 15th ed. – New Jersey: Pearson Education, Inc, 2015. – 812 p. – P. 66-240.
- ⁴ I.Frochot, P. Legohérel *Marketing du tourisme*. – 3-e éd. – Paris: Dunod, 2014. – 336 p. – P. 118-124.

5 J.M. Lopez-Bonilla, L.M. López-Bonilla, J.C. Peña-Vinces *Sistemas de Información de Marketing: una visión integradora* // *Tourism & Management Studies*. – Sevilla, 2015. – №11 . – P. 197-203.

⁶ American Marketing Association: official site. [Електронний ресурс]. – Режим доступу: <https://www.ama.org>

⁷ В.А. Полторак, І.В. Тараненко, О.Ю. Красовська *Маркетингові дослідження*. – К.: Центр навчальної літератури, 2013. – 417 с.

⁸ J. Miranda, J. Zamora, John T. Bowen *Marketing turístico*. – 5.a ed. – Madrid: Pearson Educacion, S.A. 2011. – 798 p.

⁹ В. О. Лук'янов, Г. Б. Мунін *Маркетинг туристичного бізнесу*: навч. посіб; Ін-т економіки та упр. – 2-ге вид., переробл. і доповн. – К. : Кондор, 2012. – 335 с.

¹⁰ Шамян Л.С. *Побудова ефективної маркетингової інформаційної системи туристичного підприємства* // *Інвестиції: практика та досвід*. – К., 2012 – №4. – С. 78-82.

¹¹ *Quel avenir pour les SIT* [Електронний ресурс]. – Режим доступу: <http://www.etourisme.info/quel-avenir-pour-les-sit>.

¹² Забалдіна Ю.Б. *Маркетинг туристичного підприємства*: навч. посіб. - К.: Музична Україна, 2005. – 196 с.