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MANAGEMENT AND MARKETING TECHNOLOGIES IN THE DIGITAL ECONOMY OF TOURISM

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ТЕХНОЛОГІЇ МЕНЕДЖМЕНТУ ТА МАРКЕТИНГУ В ЦИФРОВІЙ ЕКОНОМІЦІ ТУРИЗМУ

As a phenomenon, the digital economy of tourism is rapidly being formed in the context of the development of the digital economy. This allows asserting that production, distribution, exchange, and consumption of tourist products at all levels of the given sphere of economy is increasingly integrated with unified technologies, telecommunication, specialized mobile downtime, and software, which for users forms an opportunity to create and book tours independently, bypassing agents and tour operators, for business entities, access to new management and marketing technologies is formed, expanding their content and scope of application. The article is aimed at the systematization and systematic description of management and marketing technologies in the digital economy of tourism. Within the framework of the study, attention is paid to the fact that the digital economy of tourism for business entities forms access to new management and marketing technologies, expanding their content and scope of application. It has been stated that within the framework of marketing in the digital tourism economy it is SMM and RTB systems change the nature of consumers communication in the direction of personalization and omnichannel). At the same time, the client service is improved without additional burden on the employees. The new approach to the selection of advertising areas is realized mainly based on SMM and SEM systems and SEO optimization. It is proved that within the framework of management in the digital economy of tourism ERP systems cause enterprises to refuse outdated disintegrated rules and approaches to management since they

are oriented on the integration of processes of tourist product production and labor resources management by balancing and optimization of all economic resources. BPR systems, digital benchmarking, controlling, and grading facilitate changes in planning, organization, motivation, and control processes. Prospects of further developments in this direction lie in the development of digital models of management and marketing and digital models of management of the new tourist products market entering process.

В умовах розвитку цифрової економіки, як явища, швидкими темпами формується цифрова економіка туризму. Це дозволяє стверджувати, що виробництво, розподіл, обмін та споживання туристичного продукту, у всіх рівнях даної сфери господарювання, все більше інтегрується з уніфікованими технологіями, телекомунікаціями, спеціалізованими мобільними простоями та програмним забезпеченням, яке для користувачів формує можливість самостійно створювати та бронювати тури, минаючи агентів та туроператорів, а для суб'єктів бізнесу формує доступ до нових технологій менеджменту і маркетингу, розширюючи їх зміст та сферу застосування. Стаття орієнтована на систематизацію та системний опис технологій менеджменту і маркетингу у цифровій економіці туризму. У межах дослідження звернено увагу на той факт, що цифрова економіка туризму для суб'єктів бізнесу формує доступ до нових технологій менеджменту і маркетингу, розширюючи їх зміст та сферу застосування. Констатовано, що у межах маркетингу у цифровій економіці туризму SMM-системи та RTB-системи змінюють характер комунікацій зі споживачами у бік персоналізації та омніканальності. При цьому клієнтський сервіс удосконалюється без додаткового навантаження на співробітників. При цьому новий підхід до вибору рекламної площини реалізується переважно на основі SEM-систем та SEO оптимізації. Доведено, що в межах менеджменту у цифровій економіці туризму ERP-системи зумовлюють відмову туристичних підприємств від застарілих та дезінтегрованих правил і підходів до управління, оскільки орієнтовані на інтеграцію процесів виробництва туристичного продукту та керування трудовими ресурсами, шляхом балансування та оптимізації всіх господарських ресурсів. BPR-системи, цифровий бенчмаркінг, контролінг, грейдінг сприяють змінам процесів планування, організації, мотивації та контролю. Враховуючи наведені вище положення перспективи подальших розвідок у даному напрямі полягають у розробці цифрових моделей менеджменту та маркетингу, та цифрових моделей управління процесом виведення на ринок нового туристичного продукту.

Key words: *digital benchmarking, controlling, grading, SEO optimization, SMM systems, SEM systems, Tourist Enterprise.*

Ключові слова: *цифровий бенчмаркінг, контролінг, грейдінг, SEO оптимізація, SMM системи, SEM системи, туристичне підприємство.*

PROBLEM SETTING (DESCRIPTION OF THE PROBLEM BEING ANALYZED IN GENERAL AND ITS CONNECTION WITH IMPORTANT ACADEMIC OR PRACTICAL TASKS)

As a phenomenon, the digital economy of tourism is rapidly being formed in the context of the development of the digital economy. This makes it possible to assert that the production, distribution, exchange, and consumption of tourist products at all levels of the given sphere of the economy are increasingly integrated with unified technologies, telecommunication, specialized mobile downtime, and software. This for customers to form an opportunity to create and book tours independently, passing agents and tour operators. This for business entities forms access to new management and marketing technologies, expanding their content and scope of application. In particular, as for management, there are currently formed quite specific technologies, implementation of which means refusal of outdated rules and approaches, and failure to take into account existing systems, structures, and procedures. If we talk about the latest marketing technologies for their implementation changes not only the approach to the choice of advertising area but also the nature of communication with consumers.

THE ANALYSIS OF THE LAST RESEARCH AND PUBLICATIONS IN WHICH THE SOLUTION TO THIS PROBLEM IS BEGUN

Currently, the problems of the description of management and marketing technologies in the digital economy of tourism are related to the work of Maslihan O, Medvid L., Gryshchenko O., Neesheva A., Lyashenko G., Motkaluk R., and others. At the same time, most of these publications are fragments, because not cover systematically each of the above technologies. In most cases, they are aimed at analyzing the use of digital technologies in marketing and management to transform the management cycle, defining
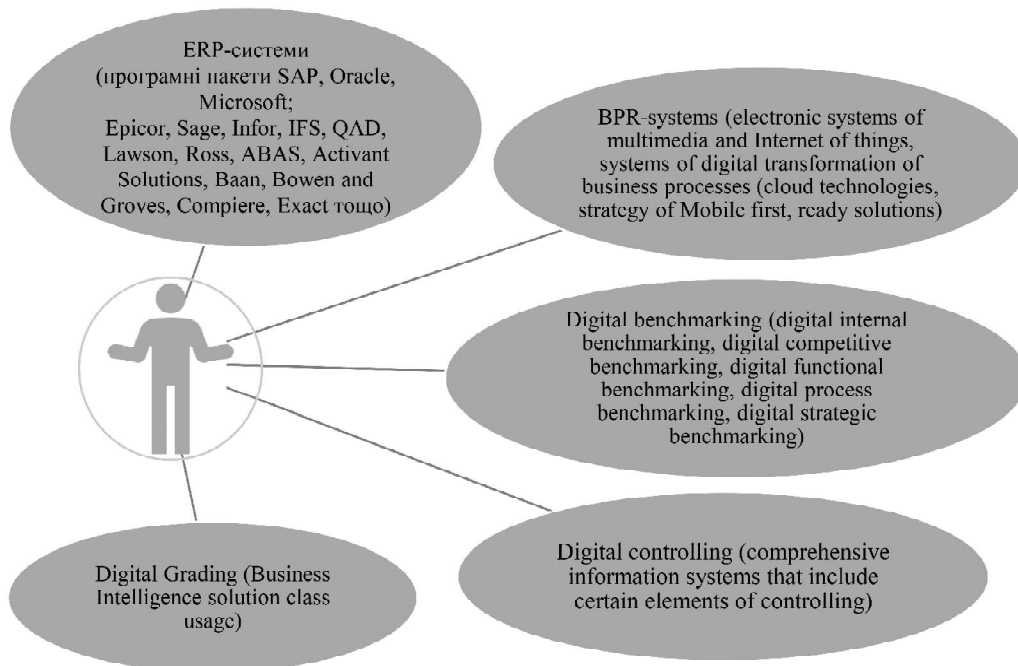
Fig. 1. Key management technologies in the digital economy of tourism

Source: created based on [1; 3; 6; 7].

the promotion of goods and services, and at the Internet resource. At the same time, new management and marketing technologies in the digital economy of tourism are quite a considerable combination of data processing or transformation methods that have not found coverage in scientific literature. Their study and description are important because of the specificity of tourist product manufacturing change, carrying out various economic operations, etc.

THE WORDING OF THE PURPOSES OF THE ARTICLE (PROBLEM)

Thus, the purpose of the article is the systematization and systematic description of management and marketing technologies in the digital economy of tourism.

THE PAPER MAIN BODY WITH FULL REASONING OF ACADEMIC RESULTS

As management technologies, we will understand the array of tools that transform management practices and are used by tourism enterprises. Among the basic management technologies used in the digital economy of tourism can be distinguished (fig. 1): ERP-systems, BPR-systems (reengineering/engineering), digital benchmarking, controlling, and grading. The technologies of management in the digital economy of tourism are detailed in fig. 1.

We shall consider in detail each of the above technologies in the specified area, as well as the specificity, which will lead to the refusal of tourist enterprises from outdated rules and approaches, not taking into account existing systems, structures, and procedures.

ERP systems should be considered as a specific software package, which implements the organizational strategy of ERP at the tourism enterprise.

This strategy envisages the refusal of tourist enterprises from outdated disintegrated rules and management approaches since it is oriented toward the integration of tourist production processes and labor resources management due to balancing and all economic resource optimization.

It is carried out with the help of specialized application software which:

1) forms a digital model of all enterprise data;
2) forms a digital model of all business processes of the enterprise.

Among the ERP systems, which are actively used by enterprises of tourism we have allocated software packages: SAP, Oracle, Microsoft; Epicor, Sage, Infor, IFS, QAD, Lawson, Ross, ABAS, Activant Solutions, Baan, Bowen, and Groves, Compiere, Exact, Netsuite, Visibility, Blue Cherry, HansaWorld, Intuitive, Syspro, etc.

BPR systems should be considered as a complex procedure that provides for the construction or digital transformation of business processes of tourist enterprises. This system uses electronic systems of multimedia and Internet of things, systems of digital transformation of business processes (including cloud technologies, Mobile first strategy, ready solutions), which in turn provide an opportunity to make quick decisions, to adapt rapidly to requirements of the current moment and to satisfy needs of clients.

Digital benchmarking should be considered as a digital analysis of the best world practices in tourism, digital analysis and modeling of competitors' actions, and search for the best offers on the market used in the own processes of the tourist enterprise. In this group you can define technologies:

— digital internal benchmarking (digital compactor and applications for comparison of similar actions or functions within the company or with the respective organizations.);

— digital competitive benchmarking (digital compactor and comparison programs with competitors using the same market);
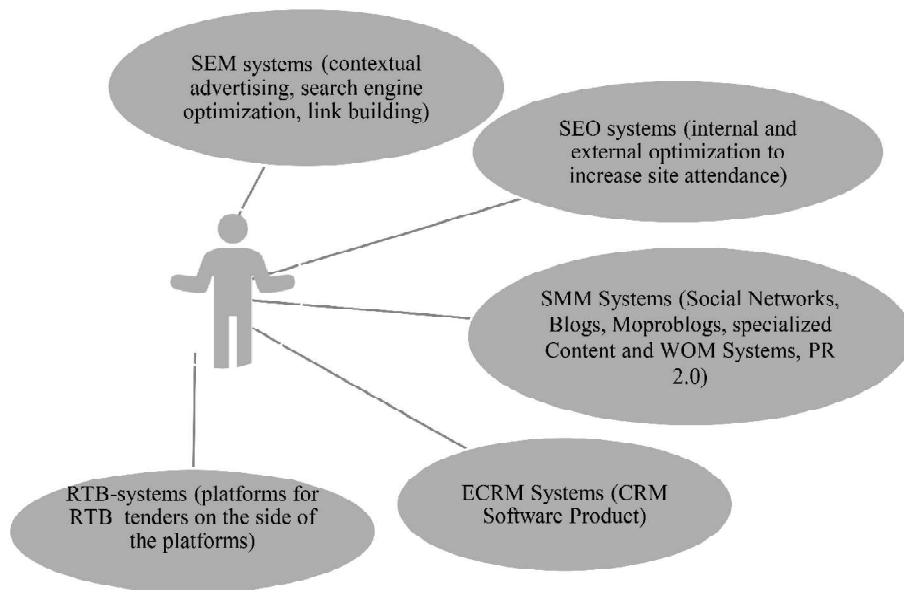
Fig. 2. Key marketing technologies in the digital economy of tourism

Source: created based on [2; 4; 5].

— digital functional benchmarking (digital compactor and data comparison programs between partners that do not belong to the same sector);

— digital banking processes (software for a definition of standard business processes models);

— digital strategic benchmarking (direct exchange programs between benchmarking partners).

Digital control should be considered as a goal-oriented collection, processing, and alternative interpretation of the received information at the tourist enterprise using complex information systems include certain elements of controlling (R/3 (SAP AG company), SAS System (SAS Institute company), Oracle Express (Oracle company), Galactica (Galactica company), FOLAGT-company (FOLAGT company), Alef (Alef Consulting and Soft company), etc. [7; 3].

Digital grading should be considered as a grouping at the travel enterprise, to build a motivation system using a class of solutions Business Intelligence, in particular, MapReduce (distributed calculations in computer clusters), NoSQL (nonrelational databases and repositories), Hadoop (utility sets, libraries, and freely distributed frames, for development and execution of distributed programs), etc.

By marketing technologies, we understand the combination of interconnected means that transform the content of management procedures, certain processes and their stages, methods and actions to achieve marketing goals of tourist activity. Among the main marketing technologies used in the digital economy of tourism can be distinguished (fig. 2): SEM-systems (or Search Engine Marketing), SEO-systems (or optimization of a site of a tourist enterprise in search systems), SMM-systems (or social media marketing); ECRM-systems (or strategy of development of a tourist enterprise in the Internet, which is client-oriented), etc. [6]. All the systems outlined are quite specific. We will consider each of the above technologies in the specified area in detail, as well as the specifics, which will lead to the formation of a new approach to the choice of advertising area and communications with

consumers (which becomes more accurate and per-sonalized).

The SEM systems should be considered as a technology aimed at increasing the visitors of the site of the tourist enterprise by its target audience from search engines due to contextual advertising in search engines, search optimization, and link building.

SEO systems should be considered as a technology aimed at improving the position of the site of a tourist enterprise in the results of the search engine issuance due to its internal and external optimization to increase the site's attendance. At the same time:

1) internal optimization of the site involves the transformation of the content of the resource (due to placement of new content, editing of meta-tags of descriptions and names, software code, changes of usage and design, etc.);

2) external website optimization overdoes the promotion of the resource using external forces and means (by placing press releases, responses, news, and other content on the external sites, registration of the site of the tourist enterprise in catalogs, and search systems, use of social networks and blogs, etc.).

SMM systems should be considered as a technology aimed at the promotion of a tourist enterprise product using:

— social networks, blogs, screeners, vibes (provided that their content is created and updated by the efforts of their visitors) [4; 5];

— WOM-systems (viral marketing increases the amount of information on the site, and increases its rating in search engines);

— PR 2.0 (image creation of a tourist enterprise on the Internet) [4].

ECRM systems should be considered as a technology for the development of tourist enterprises at the expense of the software product CRM is intended for:

1) automation of interaction with clients;

2) increase in sales level of tourist products;

3) improvement of quality of customer service;

4) optimization of marketing and business processes and further analysis of the obtained results.

RTB systems should be considered as a technology for the organization of tenders for tourist products in real-time mode with the help of instant auctions (with the help of a platform for RTB tenders on the side of platforms).

RESEARCH SUMMARY AND PROSPECTS FOR FURTHER TASKS IN THIS AREA

Within the framework of the study, attention is paid to the fact that the digital economy of tourism for business entities forms access to new management and marketing technologies, expanding their content and scope of application. According to the results of the study, the following conclusions were made:

1. Within the framework of marketing in the digital tourism economy, it is SMM and RTB systems that change the nature of communications with consumers in the direction of personalization and omnichannel. At the same time, the client service is improved without additional burden on the employees. At that, the new approach to the selection of advertising areas is realized mainly based on SMM and SEM systems and SEO optimization.

2. Within the framework of management in the digital economy of tourism, ERP systems cause enterprises to abandon outdated disintegrated rules and approaches to management since they are oriented on the integration of tourist product production processes and labor resource management by balancing and optimizing all economic resources. At the same time, BPR systems, digital benchmarking, controlling, and grading contribute to the classical planning change, organization, motivation, and control processes qualitatively increases the task execution efficiency.

Prospects of further developments in this direction lie in the development of digital models of management and marketing and digital models of management of the new tourist products market entering process.

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