



## Digital Marketing in Strategic Management in the Field of the Tourism

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### Abstract

The main aspects of using digital marketing tools in strategic management in the field of tourism have considered in the article. The study proved that the marketing strategy of the tourist enterprise is a determining factor in the choice of the main sales channels in the Internet environment. The article highlights the key digital marketing tactics and tools. In the main directions defined strategic management in the field of tourism on the basis of optimization of digital marketing tools. To implement the target approach in the implementation of the marketing strategy of the enterprise, a system of KPIs proposed.

**Keywords:** Digital - marketing, Tourism, Strategic management, Portfolio investment, KPI.

## Introduction

It is important for the tourism industry to constantly search for new and innovative ways to promote tourism brands and attract new visitors (Lasi H et al., 2014). Success in the field of tourism and travel formed from a combination of a number of components: marketing, organization of various cruises, providing a safe tourist environment, the formation of long-term relationships with customers based on positive impressions of the consumer of tourist services.

Marketing plays a very important role in the tourism business. After all, marketing tools affect the processes of interaction of market participants, the formation of supply, study and implementation of demand for a range of travel services. Marketing research has a decisive influence on the choice of a set of measures to stimulate the sale of tourist services. Assessment of customer needs, the result of price analysis, their dynamics becomes the basis for planning travel services, the range of products for the use of advertising in order to form long-term relationships with tourists and attract new customers (Mossberg, 2007). The specificity of tourism marketing expressed by the following qualitative characteristics: customer orientation; complexity in the implementation of services; specific features of realization of tourist and accompanying services in the off-season; holistic approach in coordinating the marketing of market participants in the field of tourism (Villaet al., 2019; Gontareva et al., 2020). The importance of digital technology in life has reached new heights, and more and more people are spending time online, solving more and more problems there. The number of Internet users in the world increased to 4.54 billion, which is 7% more than last year (+298 million new users compared to January 2019). In January 2020, there were 3.80 billion users of social networks in the world, the audience of social media grew by 9% compared to 2019 (this is 321 million new users per year). Today, more than 5.19 billion people use mobile phones - an increase of 124 million (2.4%) over the last year (McKinsey & Company, 2020).

Marketers are increasingly using digital technology to solve their problems. A significant proportion of meetings with the target audience go from offline to online. Therefore, the issue of implementation is relevant digital marketing tools as a priority area of strategic management in the field of tourism. The hypothesis of this study: to increase the effectiveness of strategic management in the field of tourism requires active implementation of instrumental marketing decisions to identify the target audience and convey to consumers the value of a product or service through modern digital channels and marketing tools. Thanks to this study, the main directions were identified strategic management in the field of tourism on the basis of optimization of digital marketing tools.

## Literature Review

In an economy of impressions, experience, hobbies, expectations, desires of potential travelers

was the driving force of tourism (Leiper, 1979; Cooper & Hall, 2008). Given the specifics of the tourism sector and current trends in marketing, the classic model of the marketing complex "4P" for tourism enterprises has been modified into the model "4P + E" (Fig. 1).

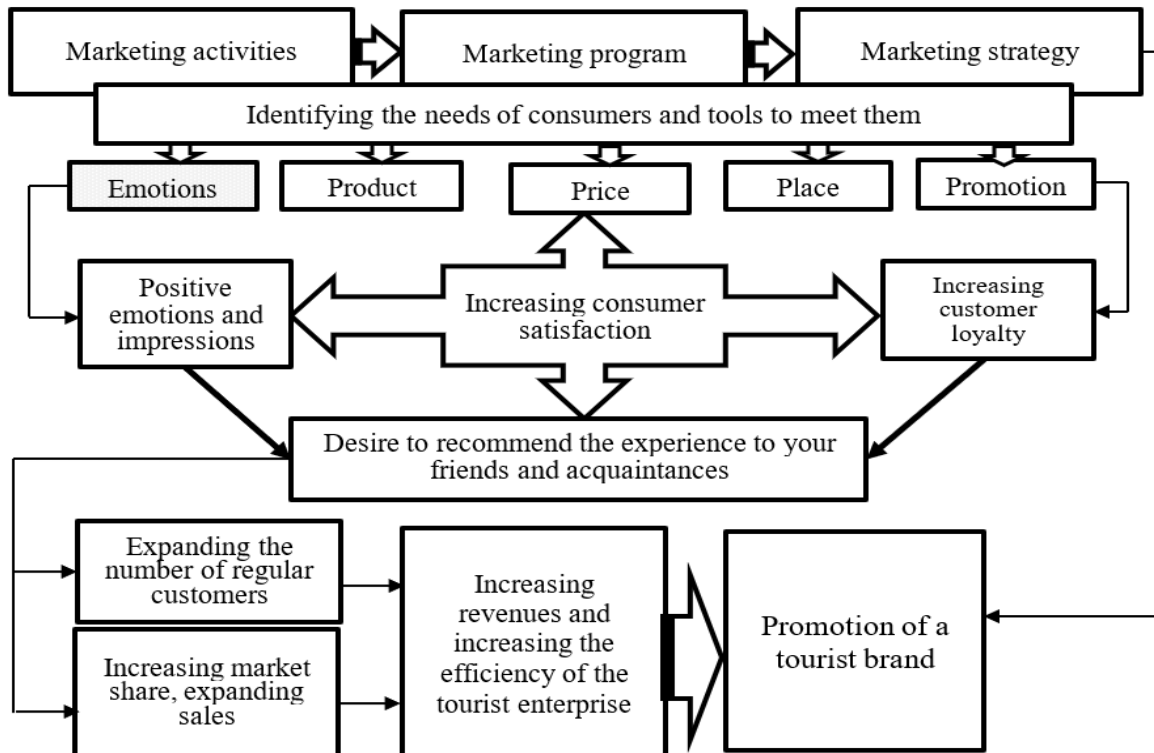


Figure 1. Model of a marketing complex for a tourist enterprise «4P + E»

This model takes into account the peculiarities of the tourism sector and together with the classic elements of the marketing complex (product, price, sales, communication policies) includes a specific component (emotion policy). The introduction of the element "emotions" is due to the need to form positive impressions and emotions based on the tourist experience, which will contribute to the high evaluation of the tourist product, tourist area and, accordingly, will promote the tourist brand. And this, in turn, is likely to lead to a desire to repeat the positive experience of the tourist, as well as to share their impressions with friends, acquaintances, who can also decide to purchase a tourist product. The main principle of marketing - focus on consumers and the choice of effective methods of influencing them, necessitate the search for effective marketing tools, primarily aimed at increasing their satisfaction, and this will contribute to a good mood, joy, positive impressions and hobbies. When developing a marketing plan for a travel company, we recommend following the model of the marketing complex "4P + E". The system of model elements and their characteristics have given in table. 1.

Table 1. Characteristics of the marketing complex in the field of tourism

Element of the marketing complex	Characteristic	Manifestation of specificity for the sphere of tourism
4P- model of the marketing complex (4P: product, price, place, promotion)		
Product	Ensuring the needs of the market and the target audience for consumer and technical characteristics of products	A set of measures to create and manage a tourist product: branding, functionality (uniqueness), quality, range, service
Price	Setting prices for products based on the perceived value of the product by the consumer, the cost of the product, the prices of competitors and the desired rate of return	Price levels are set depending on the type and class of tourist product, taking into account costs and consumer value; prices differentiated by product types; determine tariffs for services
Place	The point of sale ensures the availability of the product for the target market and means that the company's product must be present in the market in the right place (where the target consumer can see and buy it) at the right time (when the target consumer needs to buy it).	Decisions that can be reflected in the marketing strategy at the level of "point of sale": the markets in which you plan to sell the product; channels, conditions and type of distribution; logistics (set of services)
Promotion	All marketing communications that allow to draw the consumer's attention to the tourist product, to form knowledge, previous experience and it is key characteristics, to form the need to purchase goods and repeat purchases.	The promotion of the tourist product includes such marketing communications as: advertising, promotion on the Internet, search engine optimization, PR, direct marketing, digital marketing.
Specific elements of the marketing complex for tourism (E: emotions)		
Emotions	A set of tools, the use of which in the process of presentation and implementation of a tourist product should enhance the consumer's positive emotions	During a tourist trip, the consumer should have a positive relaxed state, a pleasant mood. This is possible due to the atmosphere (association, legend, accompaniment, presentation, etc.).

The basis for the formation of marketing policy of a tourist enterprise- a set of unique, different from competitors marketing tools to influence the consumer, the purpose of which is to form positive impressions and new knowledge that will increase consumer satisfaction.

Under these conditions, marketing tools and intensification of marketing activities become increasingly important and necessary (Fig. 2).

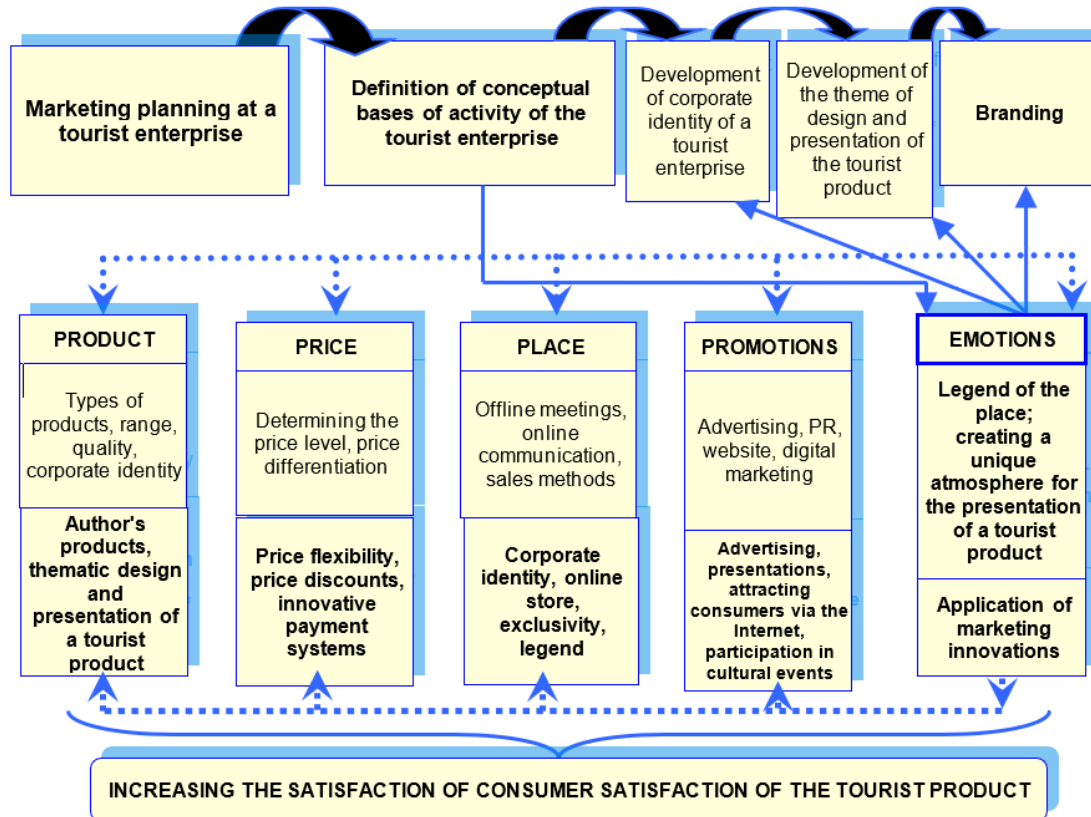


Figure 2. Tools of the marketing complex in the field of tourism

Principles: uniqueness, exclusivity, creativity, customer orientation. According to the proposed model of the marketing complex, in the field of tourism offered marketing mix, which includes all the necessary product parameters that can be controlled and developed by a marketer for the effective promotion of goods on the market (Hassan, 2000; Holovatyi, 2014). The purpose of the marketing complex is to develop a strategy that will increase the acceptable value of the tourism product, as well as help maximize the long-term profits of the tourism enterprise in the market. Marketing is a "end-to-end" system that permeates all other divisions of the enterprise, and pursues such goals (they are also part of integrated marketing) (Bondarenko S. et al., 2020):

- understanding the market through the analysis of supply and demand;
- development of proposals for the creation of a product (service), determining its price, creating sales channels, informing the consumer about the product;
- market penetration (capture of market share, its expansion, maintenance, care);
- following the chosen philosophy of interaction with the market.

According to modern trends in tourism marketing, experts highlight new technologies, personalization and development of conscious tourism. Travel marketing strategies can help you

find the best way to improve your business and regain your position in the industry.

Under the influence information and computer revolution is the convergence of information and communication technologies with tourism experience, their further expansion and integration into a platform that involves all stakeholders operating in the tourism sector: tourists, local tourist destination, municipal authorities, tourism service providers (Danylyshyn B. et al., 2020; Bondarenko S. et al., 2020). The tourist product offered to the consumer has integrated experience (complex of emotions and impressions) (Podgorna et al., 2020). Marketing is evolving towards a focus on services with a human-centered approach (Iatsyshyn, et al., 2019). In this sense, the focus of marketing is relationships and intangible resources (Sudomyr, et al., 2020). Marketing and management of tourism and service consider the tourist (consumer) as a partner, "cocreator" of the tourist product and the process of providing services (Romanenko & Chaplay, 2016). The marketing system for a tourist enterprise includes the following elements (Fig. 3).

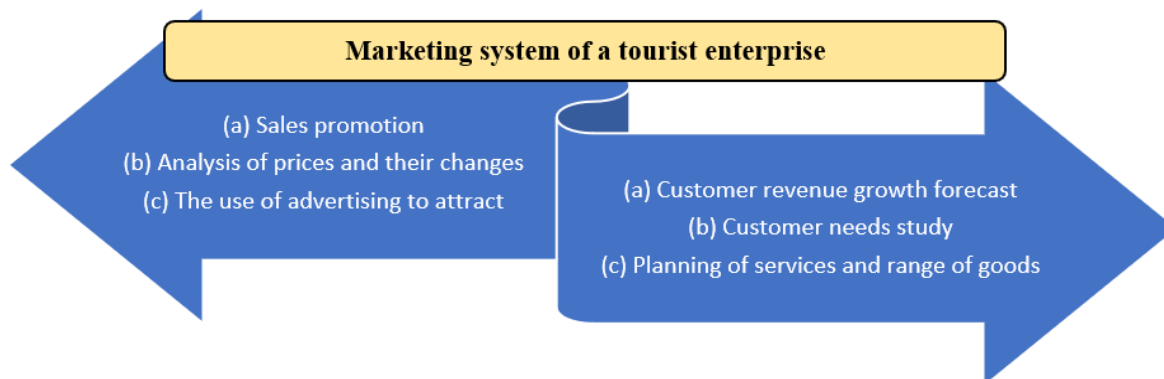


Figure 3. Elements of the marketing system of a tourist enterprise

To achieve its goals, the company chooses its own set of marketing tactics using digital tools and communication channels to establish contacts and opportunities to communicate with the target audience on the Internet. That is, to achieve marketing goals, digital technologies have been used, which allows access to a large amount of data for analysis and methods of work.

Digital marketing is a set of tools to promote brands using the Internet, which involves digital channels for communication with the consumer. With the help of internet marketing tools you can significantly expand the target audience of a travel company. The success of online promotion depends on the strategy chosen by the travel company. To take advantage of these benefits, you need to decide on digital marketing tools. Each of them is used to achieve different goals, according to which they are chosen during the development of the strategy.

Digital marketing includes not only e-mails, social networks and Internet advertising, but also text and multimedia messages. Advantages: wide coverage; lower cost compared to traditional marketing; availability of detailed information on the results of advertising

campaigns; reduction of the sales cycle; assistance in building brand loyalty; customer retention; sales promotion.

An integrated approach needed and, most importantly, a competent strategy (Fig. 4).



Figure 4. A comprehensive approach to the promotion of the tourist enterprise on the basis of digital marketing

Like all Internet technologies, digital marketing is very dynamic, which requires constant improvement and updating of approaches to solving strategic tasks. The use of different digital marketing channels creates the ability to interact with the target audience more efficiently and in a timely manner, which contributes to the growth of new customers, forms the loyalty of the audience. This creates endless marketing opportunities for brands.

## Data and Methodology

The theoretical and methodological basis of this article is the theory of marketing management concept, system approach to define marketing in the field of tourism. Digital marketing is considered as a set of various tools of Internet marketing, which in this context is considered the main communication intermediary, as well as channels that do not have a direct connection to the Internet: mobile phones, callbacks that contain ringtones, radio, digital television etc. To study the modern market of tourist services from the standpoint of digital channels and SMM-technologies, a comprehensive approach to the study of this problem through scientific methods of analogy, analysis and synthesis, methods of observation, statistical information processing, description and generalization. An analytical review of modern digital channels, SMM-technologies in the field of tourism. In order to develop a flexible promotion strategy and get the most out of digital marketing, it is necessary to competently set goals that are the key interests of the parties. To do this, it is proposed to use the KPI system as a reflection of goals. This simulates

all marketing activities that managers seek to link to the final profit, with the identification for each channel of their performance indicators. These indicators can more objectively reflect the result, but to be higher in the sales funnel, transformed into KPIs that are as close as possible to the ultimate goal. The integrated application of these measures will provide a synergistic effect. That is, the combined use of digital marketing tools will give a much greater effect than the sum of the effects of their individual use. The article uses a method of building a mathematical model that will optimally distribute financial investments in digital marketing. Developed digital marketing tools can be used by travel companies that want to ensure the successful promotion of their products, services and business in general in a digital economy.

## Results

### **Digital marketing tools in the field of tourism**

Marketing in the field of tourism business is a kind of management system that promotes the organization of travel companies. That is, the development of the most effective ideas for the implementation of services in the field of tourism and excursions, which will have a positive impact not only on income but also on the quality of the tourist product. The system that makes up the marketing of the tourism business includes the following elements: forecast of customer revenue growth; study of customer needs; planning services and product range. Marketing is one of the most effective and promising methods of promotion in the field of tourism. Given the high competition, it is necessary to develop a unique advanced concept, which will be the basis of digital marketing strategy of a tourist enterprise. A Digital Marketing strategy is a set of steps, with appropriate digital marketing tools and tactics, that serve to achieve specific business goals. Digital marketing strategy based on goals, and includes the following components (Saarinen, 2004): (1) identification of the current situation and the problem (or problems) due to which the goals not achieved; (2) the basic scheme of solving the outlined problems; (3) a set of key actions that are necessary to achieve the goals. The main purpose of developing a digital strategy is to obtain a holistic, clear and sound plan to achieve business goals. Integrity and validity provide a high probability (reliability) of achieving the selected goals. The conditions that determine the company's readiness to implement the Digital Strategy are as follows: the company has experience in using certain tools for online promotion of its product on the market; there were some positive results in this direction; the company has basic points of presence in the Internet environment (website, social networks, etc.); the company has traffic (to the site or social networks), there are applications, there is experience selling over the Internet; however, the company not satisfied with the volume of applications and sales, most of these goals are not met, there are difficulties in understanding the basic steps to radically change the situation; lack of experience and a very low level of work to promote the company's brand and products.



Therefore, to move the company to a new level of work on a holistic strategy, you need a digital strategy with which it is possible to solve these problems. When forming a strategy, the main tools of Internet marketing are selected. The main tools of digital marketing are presented in Figure 5. Market analysis is the foundation on which to further promote the business of a travel company. The study of competition and demand will develop a promotion strategy.





















 <b>Marketing market analysis</b>	 <b>Logo and corporate identity design</b>	 <b>Website development or updating</b>	 <b>Search contextual advertising</b>
 <b>Targeted advertising settings</b>	 <b>SMM promotion on social networks</b>	 <b>Development of a network of landing pages</b>	 <b>Crowd marketing</b>
 <b>Copywriting</b>	 <b>Organic promotion</b>	 <b>Promotion on exchanges and bulletin boards</b>	 <b>Loyalty programs</b>
 <b>YouTube channel management</b>	 <b>Automated sales funnel</b>	 <b>WEB analytics</b>	 <b>Scripts for the sales department</b>
 <b>Advertising on media platforms</b>	 <b>AV testing</b>	 <b>E-mail newsletter</b>	 <b>Infographics</b>

Figure 5. Basic tools of digital marketing digital strategies in the field of tourism

Logo and corporate identity design will be a beautiful package for business promotion. The brand book is of great importance in marketing. Website development or updating is an integral part of the corporate style for travel agencies, hotels and other travel business participants. Sites of the tourism sector divided into the following categories: sites of travel agencies; tour operator sites; travel and tourism information sites. The main task of the tourist site is the sale of tours. When developing a travel website, a lot of attention paid to the search module and information filters.

For the sites of travel agencies and tour operators, it is mandatory to have an online booking module, a module for accepting payments via the Internet, which requires automation of all business processes in enterprises. An online consultation module is important for the website

of a travel agency or tour operator. Agents and regular users get the opportunity in real time to get the necessary information, book a tour, find out the details of the previous trip. Such a module was not required for the information site, its main task is to keep the user on the page of the information resource. Stories, articles, travel reports - this information is usually used on travel portals. Users independently create content, create records, post photos and videos from the trip, leave comments. In addition, it is important to install elements of the social network, within which registered members can receive messages, add friends, etc. For all travel sites, it is important to have a development based on reference information. Usually there are forms, questionnaires for embassies, sample contracts and other documents necessary for tourists.

Contextual advertising (PPC) is a type of advertising on the Internet, in which ads relevant to the content are attracted to the site of users. Its main goal is to attract targeted traffic to the site, which will be converted into customers. Contextual advertising or pay-per-click (PPC) advertising usually refers to "paid results" in terms of search results (SERP). You can customize your PPC ads to appear when you enter certain key queries by creating audience-targeted ads. PPC channels: Google Ads; paid ads on Facebook; paid ads on Instagram; advertising messages on LinkedIn. With the help of statistics, you can find out which ads generate revenue and which - losses, in order to remove the latter in time and avoid spending the budget. Content marketing - creating and promoting content to increase brand awareness, increase traffic, communicate with the target audience, generate leads and attract new customers. Ice is a customer who has expressed interest in a product or service. As a rule, the user of the site is considered to be ice after registration, ordering a call back or multiple visits to the site. Content marketing is considered to be one of the most effective tools for promoting an online business. Channels for implementing the content marketing strategy: blog posts; e-books and articles; podcasts; deposits; ice magnets; infographics; online brochures and catalogs. Setting up targeted advertising will allow you to work with a specific audience on different platforms. In many niches, targeted advertising is extremely effective.

Tourism is actively promoted through social networks (SMM). Channels used by marketing in SMM: Facebook; Twitter; LinkedIn; Instagram; Snapchat; Pinterest. Users are attracted by high-quality thematic content, so the key component of promotion on social networks is the publication of posts by an SMM-specialist according to the content plan and approved strategy. But it is not enough to make interesting posts - it is vital for business to find those who will read them. Thematic hashtags, contests, work with bloggers, paid posts and stories are used for this purpose. As part of the promotion of social networks, an active loyal audience is recruited, brand awareness is increased and sales take place. Marketers create different types of SMM content - collages, photos, videos and GIFs, which receive millions of coverage and views. But the most powerful tool for promotion - targeted advertising on social networks. To set it up properly, the SMM-manager must have a good understanding of the market and the features of the site, SMM promotion in social networks facilitates interaction with its target audience in a user-friendly

environment.

Developing a network of landing pages will make advertising even more effective. Landing page is a special type of site, optimized to encourage the action of the Internet user. Landings is a sales tool. The choice of tactics depends on the product and the awareness of the target audience.

Working with reviews on the Internet - most often, this component is missing in many Internet projects. An important link in the mechanism of Internet marketing copywriting. This is the writing of slogans and texts in order to sound beautiful and stand out among the competition.

Search engine optimization (search engine optimization, SEO) - a set of measures aimed at raising the position of the web resource in search results for specific user queries. SEO the most often used to attract traffic from search engines, ensuring effective communication with the target audience that comes to the site from any source. SEO tools: websites, blogs, infographics, search engines. The relevance of the video format is now very high and almost any business can be competently developed using video content on YouTube. Automated sales funnel (sales funnel) is a concept based on the principle of placing customers in the stages of the transaction procedure, starting from the initial contact and ending with the purchase.

The automated sales funnel chooses an acceptable option, depending on the points of interaction with customers for maximum conversion. The funnel is fully automated using the latest technical solutions. The automatic sales funnel uses the following elements:

1. A site that sells goods and services, presents the organization, places favorable conditions for the purchase of products.
2. Landing page, offering to buy a particular product, provides comprehensive information and talks about its benefits.
3. Pop-up forms and banners announcing discounts, promotions, subscriptions, and other offers to keep users on the web resource.
4. Email newsletters that present a new product, inform about sales and promotions, invite you to explore the latest material in the blog or view the webinar.
5. Chatbots, which partially replace consultants, answer customers' typical questions.
6. Ice-magnet, which is a landing page with the announcement of free products, services or offers at a low price, is used to attract potential customers, increase loyalty to the brand and seller.
7. SMS notifications inform customers about the stages of the purchase and other situations, such as a completed but not yet paid order.
8. Advertising of various types, including contextual, targeted, retargeting, teasers, banners, etc.

Development of a funnel carried out in stages:

1. A product matrix designed that allows you to advertise one product at the expense of another. The increase in conversion using this tool is achieved by increasing the total check of all transactions together with increasing customer loyalty to the product.
2. Scenarios of consumer behavior are set, which, if possible, take into account different, including negative, customer reactions.
3. Configure communication with users. This step is the initial stage of creating a sales funnel. It involves the formation of mailings, messages, as well as automatic messages on social networks or messengers.
4. Sources of traffic created through the use of banner, contextual advertising and posting in messengers and social networks. In addition, retargeting have used to help retain customers. Links to previously published content posted, allowing the user to spend more time on the web resource while increasing conversions.

Therefore, automated sales funnel helps to automate operational work in the Internet environment as much as possible. Quite effective, the fastest and personalized marketing channel in the tourism industry is e-mail-mailing. In the tourism industry, emails are relevant throughout the life cycle of the client (involvement, retention, reactivation). The purpose of e-mail marketing in tourism is to create a trusting relationship between the agency and the client, increase loyalty and make one-time customers permanent. Personalization in tourism is a very promising way to improve communication with consumers. At the same time, there is a real opportunity to build a more trusting relationship with customers, because there is simple feedback. A new marketing trend in tourism is mobile first. Mobile advertising can be implemented in different ways: ads in applications; static advertising inserts; video advertising; ad playback; mobile web ads; native advertising. According to the latest analytical data, the website of a travel agency (tour operator) is visited by 40% or more of visitors from a mobile phone. If the site was not adapted for viewing on mobile devices, the travel agency loses it is potential customers. Google has started ranking sites on the basis of optimizing content for mobile devices. A business that uses different digital marketing channels has the opportunity to interact with the target audience much more efficiently and in a timely manner, thereby constantly increasing the number of new customers and audience loyalty to the brand.

### **KPI systems in the marketing strategy of a tourism enterprise**

The condition for the effectiveness of the strategy to promote and maximize the effect of Internet marketing channels is the correct and timely delivery of goals. The KPI system displays such goals (although it does not necessarily contain them in their original form). KPI is a key performance indicator that is usually measured as a percentage and has a certain norm. Balanced KPI (Key Performance Indicators) includes indicators from different groups, each of which

assigned its own weighting factor, according to the priorities of the customer and the degree of influence of the performer on a particular metric. The most popular indicators are the cost of ice, the cost of a click, the cost of conversion, the lifetime value of the customer. In addition, each area of Internet marketing has its own specific KPIs. For example, SEO the most often used to drive traffic from search engines, as well as to ensure effective communication with the target audience that comes to the site from any source. Some key performance indicators need to be focused on specific channels, while others need to be focused on general business goals. Key performance indicators and goals should be clearly understood by all participants. Therefore, all key performance indicators must meet the requirements of SMART: Specific; Measurable; Achievable; Relevant; Time-Bound. To understand marketing methods, their effective planning and measuring their effectiveness, it is advisable to use the REAN model (Reach; Engage; Activate; Nurture) (Jackson, 2009). The RACE model consists of four steps designed to help brands attract their customers throughout the customer life cycle (Chaffey D. & Patron, 2012) (Fig. 6).

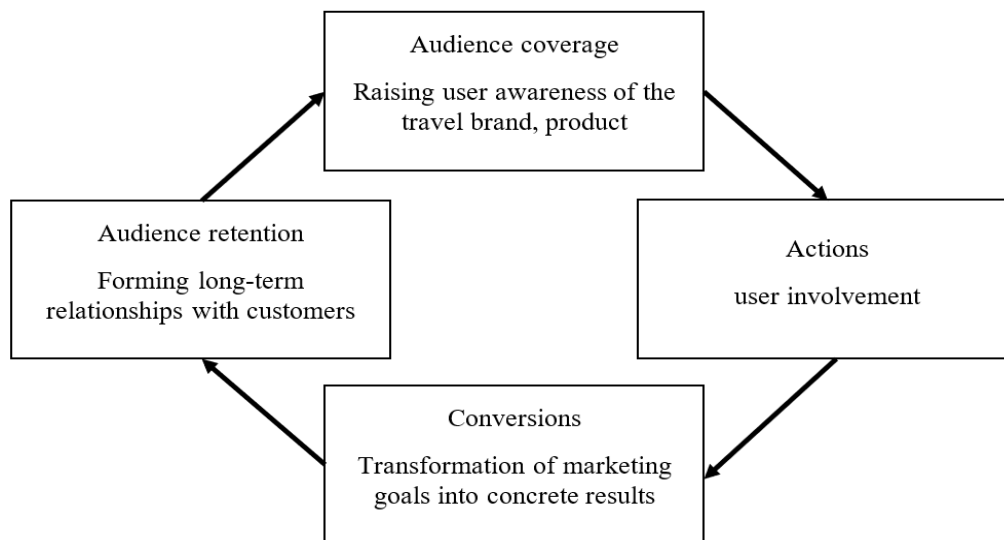


Figure 6. REAN model in the implementation of goals digital strategies in the field of tourism

RACE becomes the basis of planning, covers all points of contact with customers and uses critical thinking to develop an individual, flexible and strategic approach to the unique needs of the business. Digital marketing includes push and pull marketing tactics ("input" and "output" methods). Digital output tactics aimed at conveying the marketing message to as many people as possible in the online space (bright advertising banners at the top of many websites). Marketers who use digital inbound traffic tactics use online content to attract their target customers to their websites by providing them with useful assets (a blog hosted on a website). Inbound marketing tactics are a methodology that uses digital marketing assets to attract customers online. That is, digital marketing includes online marketing tactics for both inbound and outbound. Unlike most

offline marketing activities, digital marketing allows marketers to see accurate results in real time.

The KPI structure should clearly distinguish between the assessment of acquisition, conversion and retention of customers for reporting and analysis of the effectiveness of marketing activities for those responsible in each area. It is also necessary to define different classes of indicators: from operational to strategic. Some key performance indicators need to be focused on specific channels, while others need to be focused on general business goals. In larger organizations, different people or teams will manage separate channels, so each must be measured separately. The result of any project promotion should be a conversion - it is the receipt of leads or sales that generate revenue for the company. KPIs need to be reviewed at least once a year. Before launching an advertising campaign, it is necessary to determine which indicators will be used to evaluate the effectiveness of this advertising campaign. The digital marketer tracks the key performance indicators (KPIs) of each of these channels. This allows you to adequately assess the performance of the campaign for each of the marketing tactics. An effective digital marketing strategy combined with the right tools and technologies allows you to track all sales, up to the first digital contact with the customer. Such tools and technologies are called attributive modeling. This allows you to track how people interact with the company's content or website and buy the product. Such tactics help to make more informed decisions about marketing strategy: which areas deserve more attention, and which elements of the sales cycle need to be refined.

### **Optimization of digital marketing tools for consistency of tourism enterprise strategies**

The set of sales channels in the Internet environment and a set of tools formed, depending on the marketing strategy of the tourist enterprise. Travel agency marketers decide which elements of digital marketing will be involved in the implementation of the strategy. As a rule, for a particular travel agency, the digital marketing program includes several tools that form a permanent (or for some time permanent) set - a portfolio. For various reasons, often by expert method, the budget for digital marketing allocated, with identification for each tool. It has proposed to find the optimal number of experts for the case of 6 indicators (digital marketing tools) according to the formula:

$$m \leq \frac{3}{2 \cdot Q_{\max}} \cdot \sum_{i=1}^n Q_i \quad (1)$$

where  $n$  - the number of estimated source data (indicators);  $Q_i$  - the competence of the  $i$ -th expert, which evaluated in points (for example, from 1 to 5 points);  $Q_{\max}$  - the maximum possible competence of the  $i$ -th expert (for example, 5 points). Symbols of indicators used for functional analysis listed in table. 2.

Table 2. Symbols for functional analysis

Indicators (digital marketing tools)	Symbol
Advertising on web resources in thematic directories with a tourist theme	$x_1$
Social Media Marketing (SMM)	$x_2$
Contextual advertising Google	$x_3$
Advertising in mobile applications	$x_4$
Brand and travel product promotion in paid search	$x_5$
Newsletter, email, messengers	$x_6$

The survey involved 12 marketers working in the field of tourism. The results of ranking the survey data of experts given in table. 3.

Table 3. Ranking results

Symbol	Sequence number of the expert												$R_i$	$\Delta_i$	$\Delta_i^2$
	1	2	3	4	5	6	7	8	9	10	11	12			
$x_1$	2	1	1	1	3	2	1	1	1	2	1	1	17	-25	625
$x_2$	1	2	3	2	1	1	2	2	2	1	3	2	22	-20	400
$x_3$	6	6	4	4	2	5	6	3	3	6	4	6	55	13	169
$x_4$	5	5	2	3	6	4	3	5	5	5	2	5	50	8	64
$x_5$	4	4	5	5	4	3	5	6	6	4	5	4	55	13	169
$x_6$	3	3	6	6	5	6	4	4	4	3	6	3	53	11	121
Sum	21	21	21	21	21	21	21	21	21	21	21	21	252	0	1548

Next, a pairwise comparison of all parameters with the determination of the final score based on the majority of characters "<" or ">" and assigned numerical values of the coefficients.

The next step is to calculate the weight of the parameters using the coefficients of preference. The results of the calculation are given in table. 4.

Table 4. Calculation of the weight of the parameters

hee	Parameters $x_j$						The first iteration		The second iteration	
	$x_1$	$x_2$	$x_3$	$x_4$	$x_5$	$x_6$	$b_i$	$\phi_i$	$b_i$	$\phi_i$
$x_1$	1	1.5	1.5	1.5	1.5	1.5	8.50	0.24	49.75	0.25
$x_2$	0.5	1	1.5	1.5	1.5	1.5	7.50	0.21	41.75	0.21
$x_3$	0.5	0.5	1	0.5	1	1.5	5.00	0.14	28.25	0.14
$x_4$	0.5	0.5	1.5	1	1	0.5	5.00	0.14	27.75	0.14
$x_5$	0.5	0.5	1	1	1	0.5	4.50	0.13	25.25	0.12
$x_6$	0.5	0.5	0.5	1.5	1.5	1	5.50	0.15	30.25	0.15
Sum	3.5	4.5	7	7	7.5	6.5	36	1	203	1

In the first iteration,  $b_i$  is the sum of the parameters  $x_j$ , and  $\phi_i$  are the values of  $b_i$  divided by the sum of  $b_i$ . In the second iteration, the column of values  $b_i$  is the result of pairwise multiplication  $x_j$  by the corresponding elements  $\phi_i$ . The sum  $\phi_i = 1$ . It is important that the values of  $\phi_i$  in the

first and second iterations should differ by a maximum of 10%. The values of  $\varphi_i$ , found after the second iteration, and are the weights for determining the complex indicator of the factors of digital marketing strategy of the tourist enterprise:

$$I_{dm} = 0.25 x_1 + 0.21 x_2 - 0.14 x_3 + 0.14 x_4 - 0.12 x_5 + 0.15 x_6 \quad (2)$$

The values of the factors (digital marketing tools) that positively affect the implementation of the marketing strategy of the tourist enterprise are: advertising on web resources in thematic catalogs with tourist topics ( $x_1$ ), marketing in social networks (SMM) ( $x_2$ ), advertising in mobile applications ( $x_4$ ), mailing, email, messengers ( $x_6$ ) - taken with a "+" sign. The value of the factors influencing the implementation of the marketing strategy of the tourist enterprise is negative, namely: contextual advertising Google ( $x_3$ ), promotion of the brand and tourist product in paid search ( $x_5$ ) - taken with the sign "-". The budget of the advertising campaign determined by the involved digital channels. For example, if a travel agency focuses on input methods such as SEO, social networking and content creation for an existing website, then such activities do not require a large budget. Inbound marketing focuses on creating high-quality content that the target audience wants to consume, and if the company does not plan to outsource, the only investment that will be needed is the time and competence of travel agency marketers. For example, you can start by hosting a website and creating content using a CMS HubSpot. For those with a limited budget, you can start using Word Press hosted on WP Engine using simple ones from Studio Press, and create your site without code using Elementor Website Builder for Word Press. The use of source technologies such as online advertising and the purchase of mailing lists is certainly costly. The cost depends on what visibility the travel agency wants to get as a result of advertising. For example, to run contextual advertising with Google AdWords, you should bid against other companies in the industry so that they appear at the top of Google search results for keywords related to the name of the travel agency. Depending on the competitiveness of the keyword, it can be quite affordable or extremely expensive, so it's also good to focus on increasing organic reach.

To model the coherence of tourism enterprise strategies, it is appropriate to use hierarchical models, which group factors and criteria for assessing the degree of their impact on the vector of strategic development of the tourism enterprise, with further details on the selected complete dominant hierarchies at the appropriate model levels.

We present the model of organizational system ( $M_{OC}$ ) as follows:

$$M_{OC} = (\{x_0, x_1, \dots, x_n\}, r_{z_i}, (X_0, X_1, \dots, X_n), g_i, R_{org}, R_{max}, G, \mu_i) \quad (3)$$

where  $x_0$  - center (management of the tourist enterprise),  $x_1, \dots, x_n$  - participants of interaction;  $r_{z_i}$  - the resource needed to solve a specific problem  $z_i$ ;  $X_0, X_1, \dots, X_n$  - many strategies of



elements of the organizational system;  $g_i = f(v(z_i) / X_0, X_1, \dots, X_n)$  - the target function of the  $i$ -th participant of the interaction, where  $v(z_i)$  - the relative importance of a possible tourist resource of the  $i$ -th element to solve a specific problem  $z_i$  in situations  $X_1, \dots, X_n$ ;  $R_{org}$  - the total resource of the tourist enterprise;  $R_{max}$  - resource for project implementation;  $G: (R_{org} \geq R_{max} \ \& \ \sum_i r_i \leq R_{org} \ \& \ g_i \rightarrow max)$  - the purpose of the tourist enterprise;  $\mu_i$  - advantages of choosing digital marketing strategies.

The algorithm for constructing the priority vector of alternatives when evaluating them with a different number of criteria consists of the following steps:

*Step 1.* The primary problem structured in the form of a hierarchy of criteria  $E = (E_1, \dots, E_n)$  and alternatives  $B = (B_1, \dots, B_m)$ .

*Step 2.* Based on the hierarchical structure, the binary matrix determined  $H = \{h_{ij}\}$ ,  $h_{ij} \in \{0;1\}$ ,  $i = \overline{1, m}$ ,  $j = \overline{1, n}$ . If an alternative  $B_i$  evaluated by the criterion  $E_j$ , then  $h_{ij} = 1$ , if not, then 0.

*Step 3.* Expert evaluation of alternatives has carried out according to the relevant criteria using the method of comparison with standards. On the basis of matrices of pairwise comparisons of alternatives by criteria, a matrix of principal eigenvectors  $A$  constructed, the columns of which are vectors of priorities of alternatives to criteria, where  $a_{ij} = 0$  if an alternative  $B_i$  not evaluated by the criterion  $E_j$ . The vectors in this matrix have different numbers of non-zero values, can be normalized or non-normalized depending on the method used to compare alternatives.

*Step 4.* The matrix of pairwise comparisons of criteria formed and the normalized vector of priorities of criteria calculated  $x^{(E)}$ .

*Step 5.* A normalized matrix  $S$  formed for the matrix of vectors of priorities of alternatives  $A$  and the matrix of structural criterion  $L$ :

$$L = \begin{matrix} & \begin{matrix} E_1 & E_2 & \dots & E_n \end{matrix} \\ \begin{pmatrix} r_1/k & 0 & \dots & 0 \\ 0 & r_2/k & \dots & 0 \\ \dots & \dots & \dots & \dots \\ 0 & 0 & \dots & r_n/k \end{pmatrix} & , \end{matrix} \quad (4)$$

where  $r_i$  – the number of alternatives to the set  $B$ , which are compared by criterion  $E_j$ ,  $k = \sum_{j=1}^n r_j$ .

*Step 6.* Determine the vector  $p$  of the priorities of alternatives in relation to the criteria (components): a) for the case when the matrix  $A$  not normalized:

$$x = A \times S \times L \times x; B = \begin{pmatrix} \left(\sum_{i=1}^m x_i\right)^{-1} & 0 & \dots & 0 \\ 0 & \left(\sum_{i=1}^m x_i\right)^{-1} & \dots & 0 \\ \dots & \dots & \dots & \dots \\ 0 & 0 & \dots & \left(\sum_{i=1}^m x_i\right)^{-1} \end{pmatrix}, p = B \times x \quad (5)$$

b) for the case when the matrix  $A$  normalized:  $x = A \times L \times x$ ; similarly, as in the previous case, the matrix  $B$  has formed;  $p = B \times x$ .

The diagonal matrix intended for the final normalization of the values of the vector of priorities of alternatives. Using a structural criterion  $L$  allows the expert to change, if necessary, the weight of alternatives related to and relevant to the criteria, in proportion to the expression  $r_j/k$ . This approach provides an increase in the priority of alternatives that form large groups, and a decrease in the priority of alternatives in groups with a relatively small number of them (a group is formed by alternatives that are compared according to a certain criterion). Because the cost of keeping digital Marketing tends to increase, so planning, and control resource allocation in online promotion and sales are becoming major challenges for successful business.

The SOSTAC marketing planning system helps to move in the right direction. It includes six stages.

1. Situation. At this stage, the project has analyzed. It turns out how the tourist company represented in the market at the moment.
2. Objectives. At this stage, you need to understand what the travel company wants to achieve. The whole marketing strategy depends on the correct definition of the purpose.
3. Strategy is how a travel company will achieve its goals.
4. Tactics - is the planning of specific tools for the implementation of the marketing plan.
5. Action. When tactics prescribed, it determined what actions need to be taken in each of them. At this stage, it is important to determine who is doing what.
6. Control. At the last stage, an intermediate control of the results carried out and it is possible to evaluate the effectiveness in the future. To make sure that everything goes according to the given marketing plan, monthly or weekly reporting on the established KPIs adjusted.

After developing a digital plan on the SOSTAC system, the travel company will: understand where you are now; define adequate goals for business; will know the path of development and specific steps; determine what actions to take; by indicators will monitor the effectiveness of actions.

## Conclusion

This study considers the main aspects of the use of digital marketing tools in strategic management in the field of tourism. The main tactics and tools related to the concept of digital marketing considered, each of which used to achieve different goals, according to which they have chosen during strategy development. Efficiency digital marketing tools proposed to be determined on the basis of KPIs, according to the selected goals. The set determined by the method of expert assessments digital marketing tools that have a positive impact on the implementation of the marketing strategy of the tourist enterprise. To model the coherence of tourism enterprise strategies, it is appropriate to use hierarchical models, which group factors and criteria for assessing the degree of their impact on the vector of strategic development of the tourism enterprise, with further details on the selected complete dominant hierarchies at the appropriate model levels.

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**Bibliographic information of this paper for citing:**

Fedoryshyna, L., Halachenko, O., Ohiienko, A., Blyznyuk, A., Znachek, R. & Tsurkan N. (2021). Digital Marketing in Strategic Management in the Field of the Tourism. *Journal of Information Technology Management*, Special Issue, 22-41.