WEB TECHNOLOGIES FOR MARKETING STRATEGY OF INDUSTRIAL TOURISM DEVELOPMENT

IGOR KOMARNITSKYI, ALLA KHANENKO, SERGII HORCHYNISKYI, OKSANA BORISYUK, SERGIY POPOVYCH, LARYSA KUCHECHUK

1Faculty of the Hotel, Restaurant and Tourism Business, Kyiv National University of Culture and Arts, Kyiv, Ukraine
2Department of Management and Finance, SHEI "Ukrainian State University of Chemical Technology", Dnipro, Ukraine
3Department of Technological Education and Informatics, T.H. Shevchenko National University "Chernihiv Colehium", Chernihiv, Ukraine
4Department of International and Country Studies, National Aviation University, Kyiv, Ukraine
5Department of Tourism, National University of Ukraine on Physical Education and Sport, Kyiv, Ukraine
6Department of Travel Business and Regional Studies, V. N. Karazin Kharkiv National University, Kharkiv, Ukraine
E-mail: i.komarnitskyi@ex.ua

ABSTRACT

The article defines industrial tourism, notes its relevance and popularity in the modern world. The advantages of industrial tourism for tourists, enterprises and the region as a whole are highlighted. Also, the strategic marketing directions of industrial tourism are highlighted: educational, scientific, professional, business, investment, extreme, environmental, cognitive, social, cultural, event, hobby. Various objects of industrial tourism are distinguished by activity: active, inactive and restored objects. When forming a marketing strategy for industrial tourism development, its specifics should be taken into account. The importance and necessity of using digital technologies in a marketing strategy were also noted, which have several advantages: unlimited amount of information; the ability to combine text, graphic, video and audio data; instant update of information; storage of files and databases; the two-way nature of communication; unlimited number of users, no geographic attachment; unlimited access in time; no costs for expanding the audience; the possibility of integrating the system of direct Internet sales. Considering the peculiarities of industrial tourism and the relevance of digital tools, the result of the article is the compilation of the basic structure of a digital marketing strategy and a methodology for compiling a marketing strategy for industrial tourism.

Keywords: E-Commerce, Industrial Tourism, Marketing Strategy, Online, SEO, Web Technologies.

1. INTRODUCTION

However, as the COVID-19 pandemic forced tourism to slow down, 2020 has provided new opportunities for domestic tourism in all countries [1-4]. Due to several features, industrial tourism has become one of the most effective ways to bring an enterprise out of the economic crisis.

Industrial tourism is a relatively new phenomenon, and there is not enough research in this area [5-6]. Most often, they are limited to examples of successful tourism itineraries that include industrial enterprises.

Industrial tourism is the organization of excursions and tours to existing or previously operating industrial enterprises to familiarize themselves with the production processes of a particular product [6-7].

Industrial tourism emerged as an independent industry almost 150 years ago. The first industrial tourism destination is considered to be the Jack Daniel's plant in the United States, which has
become available to tourists since the day of its opening. The USA, Germany, France, Czech Republic, China and Japan were among the first to practice the development of tourism actively.

The popularity of industrial tourism is due to several reasons:

- new sources of income for an industrial enterprise;
- formation of the image of an open enterprise;
- increasing investment attractiveness;
- increasing consumer loyalty;
- expansion of business ties;
- attraction of valuable specialists.

The presence of mining or manufacturing enterprises in almost any region also positively affects the development of industrial tourism in them.

Despite all the advantages of industrial tourism, there are problems associated with the unwillingness of enterprises to organize tours [8-9]. This usually happens for the following reasons:

1. Unwillingness of the enterprise to receive sightseers. As a rule, this applies to old factories that are not intended for visiting by tourists.

2. Closeness or secrecy of enterprises. This applies to enterprises of the military-industrial complex, high-tech and strategically essential facilities.

3. Lack of understanding by the management of the enterprise of the purpose of organizing industrial tours.

Therefore, developing a marketing strategy plays an essential role in developing industrial tourism at the enterprise and in the region. And during the development of global Internet communications, the role of the electronic environment for the promotion of goods and services significantly increases.

In this regard, the marketing strategy of industrial enterprises that have decided to develop industrial tourism should include the use of marketing innovations, modern digital technologies and tools of the global information environment.

There are many studies on the topic of marketing strategy [10-15], but their main drawback is that they are not adapted for use in industrial tourism, which has its own specific characteristics.

To achieve the goal of the study, it is necessary to solve individual problems, namely:

- explore the characteristics and features of industrial tourism;
- to investigate the impact of this type of tourism on enterprises and on the region as a whole;
- to highlight the strategic marketing directions of industrial tourism at the enterprise;
- highlight the main digital tools of Internet marketing that are relevant to the industrial tourism industry;
- to propose a methodology for determining a marketing strategy using web technologies.

2. INDUSTRIAL TOURISM: CHARACTERISTICS AND PECCULARITIES

The economic development of the region is directly related to the increase in the competitiveness of the area. In this regard, the development of tourism potential is the most effective way of sustainable development since tourism in modern conditions is a catalyst for the regional economy. This task is easily solved in recreational regions; however, the development of industrial tourism and the inclusion of industrial cities in the composition of tourist regions requires the identification of prospects and strategic marketing priorities.

Industrial tourism is a new type of tourism, and its development in an industrial region can provide additional benefits both for tourists and the region and for an industrial enterprise (Fig. 1).
To form a marketing strategy and the optimal choice of tools is necessary to understand in which directions the enterprise is ready to develop industrial tourism: familiarization with technological processes, exchange of experience, attracting potential investors, increasing consumer loyalty, etc. The directions of orienting industrial tourism development and the corresponding motivation of tourists to travel are presented in Table 1.

Table 1. Strategic marketing directions of industrial tourism at the enterprise.

<table>
<thead>
<tr>
<th>Industrial tourism</th>
<th>Motivation of tourists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>Getting practical skills for students</td>
</tr>
<tr>
<td>Scientific</td>
<td>Study of production processes by specialists</td>
</tr>
<tr>
<td>Professional</td>
<td>Employee experience exchange</td>
</tr>
<tr>
<td>Business</td>
<td>Conclusion of contracts for the purchase and sale of products</td>
</tr>
<tr>
<td>Investment</td>
<td>Study for investment</td>
</tr>
<tr>
<td>Extreme</td>
<td>Getting the thrill</td>
</tr>
<tr>
<td>Ecological</td>
<td>Familiarization with the negative human impact on the environment</td>
</tr>
<tr>
<td>Informative</td>
<td>Observation of production technologies</td>
</tr>
<tr>
<td>Social</td>
<td>Formation of a positive attitude towards the company</td>
</tr>
<tr>
<td>Cultural</td>
<td>Acquaintance with the industrial, cultural heritage of the region</td>
</tr>
<tr>
<td>Eventful</td>
<td>Visiting abandoned facilities to participate in event tourism (festivals, concerts, etc.)</td>
</tr>
<tr>
<td>Hobby</td>
<td>Communication with like-minded people</td>
</tr>
</tbody>
</table>
Also, the marketing strategy, goals and set of applied web technologies depend on the activity of the industrial enterprise. According to the type of activity, industrial tourism facilities are divided into operating, inactive and restored industrial facilities (Fig. 2).

The peculiarities of industrial tourism, the variety of industrial facilities and directions do not allow us to single out a standard step-by-step strategy that works equally well for any business.

Before starting developing industrial tourism, it is necessary to determine the target audience, analyze competitors, and set goals. Then you can begin working with a choice of marketing tools, including modern web technologies.

3. RESULTS: MARKETING STRATEGY FOR THE DEVELOPMENT OF INDUSTRIAL TOURISM

The marketing strategy for the development of industrial tourism is aimed not only at the development of the enterprise. Since industrial tourism, in one way or another, involves related industries and seeks to develop the competitive advantages of the entire region.

![Objects of industrial tourism](developed by the authors based on [5; 7; 8; 9])

**Features of industrial tourism marketing.**

However, when forming a marketing strategy, one should take into account the specifics of industrial tourism.

Industrial tourism can be of interest to various distinct target audiences that differ in age and interests – schoolchildren and students, youth, adult specialists, families with children.

Another feature is that the object of industrial tourism in itself may not encourage travel to it but can easily be included in the tourist route. In this case, the marketing strategy should take into account its inclusion in the general tourist flow.

Also, the marketing strategy for the development of industrial tourism at the enterprise should consider the fact that industrial tourism should compete with entertainment facilities.

**Problems associated with the lack of a marketing strategy.**

The development of a detailed marketing strategy and modern web technologies and tools will help to develop an industrial tourism object and marketing goals. Lack of a marketing strategy can lead to the following problems:

- the object of industrial tourism will develop spontaneously without relying on actual indicators;
- the use of random promotion channels and marketing tools will lead to a waste of effort, wasted time and chaotic expenses;
- an incorrectly defined target audience or a message intended for a different audience can also lead to ineffective costs;
- the possible adverse effect, which will affect the attitude towards the product of the industrial tourism object and the brand as a whole.

**Marketing goals for the development of industrial tourism.**

Depending on the type of industrial tourism object, the goals may be different.
For restored and non-working industrial tourism enterprises, the goal may be to make a profit from excursions, sell products in a company store, or profit from selling souvenirs.

For working industrial enterprises, making a profit from excursions is far from the primary goal. Seeing the production process, sightseers usually increase loyalty to the company and its products and express their opinion to friends, which increases the preference for the product when choosing in the store.

Also, a marketing goal can be personnel hunting, improving the company’s image or early career guidance for young people.

**The role of marketing in the development of industrial tourism.**

The role of marketing in strategic planning for the development of an industrial tourism facility includes:

- analysis of the state of the enterprise, creation of the basis and starting point for development;
- determination of general principles for the development of an industrial tourism object;
- determination of consumers of the industrial tourism object, target audience, its interests and expectations;
- using a particular set of tools and promotion channels
  - orientation of the strategy to meet the target market;
  - providing initial data and providing an information base for strategic planning;
  - identifying opportunities and threats to the market;
  - assessment of the potential of the object of industrial tourism and the region as a whole;
  - determining the best ways to achieve goals.

**Industrial tourism development marketing plan.**

The marketing plan is the ultimate guide for executives, marketers, and all those involved in marketing activities.

A marketing plan, like a map with a tourist's route, fixes the current position of the enterprise, the directions it moves, target points, and, most importantly, fixes the actions that need to be taken to get to the target points [6; 16].

The organizational and methodological approach to determining the marketing strategy for the development of industrial tourism can be presented as follows (Figure 3).

**Internet Marketing in Overall Marketing Strategy**

At the beginning of 2021, 4.66 billion people worldwide used the World Wide Web, and the Internet penetration rate was almost 60% [17]. On average, an adult uses a computer, tablet, telephone and other devices with Internet access for about 6 hours a day. This consumer dependence on digital devices obliges businesses to emphasize the use of digital marketing tools in their strategy.

Internet marketing provides new ways to tell the world about a service or product of an enterprise, establish automatic customer heating, organize a customer notification system, collect information, present interactive details and in-depth analysis of the effectiveness of marketing and the entire operation of the enterprise.

The choice of Internet marketing technologies and tools plays a vital role in the overall marketing strategy, as it has many directions, types and is used at various stages of marketing.

In addition, digital marketing has several advantages that are very valuable for the tourism and entertainment industry:

- unlimited amount of information;
- the ability to combine text, graphic, video and audio data;
- instant update of information;
- storage of files and databases;
- the two-way nature of communication;
- unlimited number of users, no geographic attachment;
- unlimited access in time;
- no costs for expanding the audience;
- the possibility of integrating the system of direct Internet sales.
For a marketing strategy for the development of industrial tourism, three advantages of Internet marketing are significant, which distinguish it from the classic:

Interactivity. This allows to demonstrate the production process, for example, in closed enterprises, interact directly with the audience, and keep in touch with customers.

Targeting. This is an essential tool for advertising on the Internet, which allows you to address a clear dedicated target audience or several target segments for various reasons.

Analytics. Modern end-to-end analytics allows you to qualitatively determine the effectiveness of specific marketing actions, the conversion of site visitors into real tourists or product buyers.

Sales growth in online marketing is based on attracting visitors, increasing website efficiency and returning customers. In industrial tourism, attracting tourists to visit an enterprise may not have an immediate visible effect. Still, it can have a global impact on increasing consumer loyalty to the enterprise's products and further growing its sales.

In this case, it is not enough to attract visitors to industrial tourism; it is necessary to make the future customers and consumers of the company's products because this is what will bring significant profits to the company's business. All these points
must be taken into account by the Internet strategy of the industrial tourism enterprise.

Digital marketing is involved in all stages of the marketing strategy of an industrial tourism enterprise, from the production of online advertising and the presentation of information on the website or in social networks to communicating with customers in an automatic mode and analyzing the effectiveness of the campaign.

We can highlight the main digital tools of Internet marketing that are relevant to the industrial tourism industry (Fig. 4):

- Web site
- Content marketing
- Search Engine Marketing
- Internet advertising
- Email-marketing
- Social Media Marketing (SMM)
- Mobile Marketing
- Viral marketing
- AR and VR
- Video marketing
- Voice search
- Audio content
- Influencers and microinfluencer
- CRM
- End-to-end analytics

The main goal of an industrial tourism marketing strategy is not just an advertising campaign to attract tourists to an excursion. This is an innovative transformation of an industrial tourism object into an effective marketing tool for promoting the company's products. Without such measures, it can significantly lose its competitiveness in the market.

Developing industrial tourism and maintaining a leading position among competitors is necessary to use relevant digital marketing tools. Whereas broken or outdated tools can lead to chaotic spending. For example, there has been a recent rise in the popularity of content marketing. Mobile optimization and customization have become indispensable necessities when building a website. At the same time, there is a decline in the role of SEO, which confirms the need to create helpful content on the site. Given the specifics of industrial tourism and the relevance of digital tools, the basic structure of a future digital marketing strategy consists of the following stages.
The main goal of an industrial tourism marketing strategy is not just an advertising campaign to attract tourists to an excursion. This is an innovative transformation of an industrial tourism object into an effective marketing tool for promoting the company's products. Without such measures, it can significantly lose its competitiveness in the market.

Developing industrial tourism and maintaining a leading position among competitors is necessary to use relevant digital marketing tools. Whereas broken or outdated tools can lead to chaotic spending.

For example, there has been a recent rise in the popularity of content marketing. Mobile optimization and customization have become indispensable necessities when building a website. At the same time, there is a decline in the role of SEO, which confirms the need to create helpful content on the site.

Given the specifics of industrial tourism and the relevance of digital tools, the basic structure of a future digital marketing strategy consists of the following stages.

1. Study and definition of the target audience

Before developing a set of marketing activities, it is necessary to study the audience and determine the industrial tourism product's ideal customer profiles (ICP).

The most popular tools for this step are as follows:

- Analytics (statistics of visits to the website, email marketing platform and social media);
- Polls and feedback forms;
- Discussions with sales and customer support staff

These tools provide valuable information about who the enterprise's customers are, what goals they are pursuing, what problems they face, and how the enterprise can meet their needs and solve problems.

Perhaps, as a result of the research, not one but several market segments will be determined, and various profiles of the ideal buyer will appear. Knowing this information will help you target enterprise messages further.

2. Setting a goal

One of the best ways to target your overall digital marketing strategy is to use SMART (Specific, Measurable, Attainable, Relevant, Time-bound) or OKR (Objectives and Key Results) techniques.

Using these techniques, working through each stage will help you set specific goals to achieve maximum marketing campaign results.

3. Analysis of competitors.

Before applying any marketing tactics, you need to identify the marketing channels to focus on. Since dozens of marketing tools and marketing channels simultaneously work in some markets and do not work in others. Customer analysis (step one) and competitor analysis can help you identify the right channels.

Competitor analysis should provide answers to the following questions:

- Traffic source research using tools like SimilarWeb, Ahrefs, etc.
- Studying the sales process of competitors;
- Determination of strengths and weaknesses, pricing policy
- What tools are used to attract potential customers;
- What tools are used on the site to get contacts;
- Do ROI calculators use;
- Segment and send relevant content;
- Do they redirect to social networks.

In the process of studying competitors, you probably need to talk to the sales department and possibly leave a request.

4. Identification of resources and definition of marketing tools and channels

At the resource identification stage, the following factors need to be considered:

- campaign budget – how much can a business spend on digital marketing?;
- personnel – who is responsible for the result? Will you have to outsource some of the tasks or responsibilities to subcontractors?
- tools and channels. What marketing channels will be used, and what purpose is associated with each channel?

No matter how high the flight of creative imagination is, there are always many insurmountable circumstances that must be
reckoned with. At this stage, it is necessary to select the digital tools and marketing channels that will be most effective in reaching the ICP.

Different marketing channels and tools are needed to achieve other goals.

The marketing strategy as a whole and to each supporting element should also include:
- DRI (directly responsible person);
- Term;
- Budget;
- Expected Result;
- Execution and analysis.

5. Drawing up a plan

After passing through all the main stages, the enterprise will have all the basic elements - the audience, goals and resources that need to be combined into a single digital marketing strategy.

You can use simple spreadsheets or electronic calendars to plan and manage your marketing campaign and modern project management tools like YouGile or Wrike in which all the elements are collected.

The limited research does not allow to fully disclose all aspects of the application of web technologies for the marketing strategy of industrial tourism development, therefore, further research we see the development of a methodology for choosing web technologies for the marketing strategy of an enterprise in the framework of industrial tourism development, as well as the development of instrumental mechanisms of state support for the development of industrial tourism in the region.

In cases where it is not possible to organize a tour of the workshops with a demonstration of the working area, exciting technology and the process of manufacturing products, a visit to the enterprise's museum does not lose its attractiveness when using digital tools such as virtual or augmented reality, interactive demonstration of processes, robot guides, interactive maps, digital stands, etc.

It is also possible to use interesting objects and premises on the territory of the enterprise as a platform for conferences, briefings, online events and other business tourism events dedicated to topical issues of development of territories, attracting investments, lending to industry, etc.

5. LIMITATIONS

This research is narrowly focused; the developed recommendations without adaptation are suitable only for industrial tourism, the use of the proposed tools for other types of tourism requires additional research.

REFERENCES:


