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SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY OF ECONOMICS

**TOURISM AND HOSPITALITY IN CONDITIONS
OF DIGITAL ECONOMY: PROBLEMS
AND PERSPECTIVES**

Monograph

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The issues of the tourism and hospitality industry growth prospects in the digital economy, the features and specifics of digitalization of business processes, the relationship between the travel and tourism competitiveness index and world digital competitiveness ranking, the use of modern information systems and technologies as well as quality management, internet marketing and advertising in the tourism and hospitality businesses have been considered.

For employees and specialists of the tourism and hospitality industry, lecturers, university and PhD students.

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Introduction

The tourism and hospitality sector is a key factor for countries that are currently either in crisis or developing. The technological revolution and digitalization have changed no sector more than tourism and hospitality. Digitalization has completely changed the historical trade structures of the industry, facilitated professional activities, expanded the customer base, and made it easier for stakeholders to access market and management data to share information and create partnerships. Encouraging the development of e-business practices in tourism and hospitality in countries whose economy is in crisis facilitates the exchange of information and encourages cooperation between stakeholders.

This monograph was devoted to the problems of effectiveness and competitiveness of the tourism and hospitality sector in conditions of digitalization. The goal is to reveal the most relevant issues of sustainable development of the tourism and hospitality sector and to justify ways to improve tourism and hospitality economic and social performances.

There are principal tasks that are necessary to complete according to the goal:

- disclosure of digitalization peculiarities of business processes in tourism and hospitality;

- defining the conditions of digitalization such as information systems, information, and communication technologies, and information logistics for countries in crises;

- studying the influence of international indexes on the sustainable development of the tourism and hospitality sector;

- development of quality management as a strategy for the tourism and hospitality economic development;

- implementation of relevant marketing and management tools for sustainable development of small and medium-sized tourism and hospitality businesses.

The collective monograph is written by experts experienced in the tourism, wellness, leisure, and hospitality sector. All the authors lecture relevant courses, collaborate with scientific researchers of doctoral, Ph.D., and master programs, and conduct private scientific and practical research in the field of tourism and hospitality sustainable economic development in conditions of digitalization.

The authors used research of leading experts in tourism, hospitality, leisure, and wellness sector, official statistics, information portals of international organizations such as the World Bank, World Trade Organization, World Tourism Organization (UNWTO), United Nations publications, state laws, and analytical reports.

By studying the monograph the readers could improve their knowledge of modern tactics and strategic approaches to increasing tourism and hospitality companies' competitiveness.

Also, the reader will know the role and the meaning of the process of digitalization, its pros and cons, opportunities and threats.

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Section 1. Hospitality, tourism and leisure sector in conditions of digitalization

Hospitality, tourism and leisure sector is considered currently as a socio-economic activity that has a direct and indirect impact on the development of all related industries and infrastructure. It is based on a high level of development of transport, the social sphere and the sphere of services, which ultimately turns it into a highly profitable branch of the economy.

New technologies can make an important contribution to the development of hospitality, tourism and leisure sector. The definition of innovation in hospitality, tourism and leisure sector (for example, an innovative product or service) is difficult to formulate briefly and clearly because of opportunities of the Internet.

The Internet is of particular importance for the formation of innovations in hospitality, tourism and leisure sector. For tourist companies, the Internet offers potential for information support, booking, and sales. Such services are available to a large number of tourists at relatively low costs. The Internet is also a tool for communication between suppliers, intermediaries, as well as end consumers of travel services. The Internet is revolutionizing hospitality, tourism and leisure sector. There is a growing share of Internet users who buy goods and services online, and hospitality, tourism and leisure sector is gaining an increasing share of the e-commerce market. Electronic commerce as a process of buying and selling or exchanging products, services and information through computer networks, including the Internet, is based on information and communication technologies (ICT). In particular, the costs of network access, e-commerce dissemination, online training, skill development and human resources create great opportunities for small businesses.

Also, government support plays an important role in promoting the use of e-commerce for the tourism/hospitality industry and increasing the ability of Internet companies to take advantage of it. There are two main factors for successful e-commerce: "e-commerce system security" and "user-friendly web interface", thereby recognizing that customer-centric activities are necessary to be successful. Despite its recent rapid growth, we consider the emergence of e-commerce as an important trend that is only part of a more

general changing structure of the modern economy that has led to revolutionary changes in information technology.

The terms "digital economy", "information technology" and "electronic commerce" do not have standard definitions. Terminological references to e-commerce refer to the use of the Internet to sell goods and services. We interpret the digital economy, including both information technology and e-commerce in its structure. The digital economy is an economy based on electronic goods and services produced by e-business and implemented on the basis of e-commerce. That is, it is a business based on the processes of electronic production and electronic management, interaction with partners and customers and the implementation of settlement operations via the Internet and web technologies.

E-government is already playing its role in the digital economy by providing e-services. E-commerce has driven changes not only in travel services, but also in transportation and distribution, relying on the increased availability of air and courier services and local freight to deliver its product to the consumer. The growth of the digital economy is unprecedented and is a major factor in global economic growth, especially in the stock market and thanks to Internet technologies. The Internet was initially commercially nascent in some applications, such as commercial infrastructure and software for business use. This was due to the fact that additional Internet technology markets were implemented among tech-savvy users before moving to a broad commercial user base. The development of payment systems on the Internet in the early 1990s further expanded its potential applications, widening the gap between the technical limitation and the potential needs of the business user. The Internet is now the iconic technology of our age. Almost everyone knows how to connect, buy and sell in cyberspace. It is difficult for the state to control e-commerce, which can cross national borders. The dramatic decrease in the price of Internet technology is fueling the phenomenal growth of the Internet and its active use.

Thus, e-commerce has the potential to significantly change the classical situation of the economy. Conditions are emerging to prepare for the era of the digital economy, including recent positive signs of investment in information technology among companies, as well as the early adoption of e-commerce in some sectors. Information technology, which is the basis of the "digital economy", will continue to develop at a rapid pace, and for this reason there will be significant changes in classical economic activity. The

proliferation of e-commerce and digital information is being introduced into all aspects of people's lives. The rules that applied to the economy of the past (legal system, commercial practices, etc.) no longer apply to the digital economy as they are. For this reason, it is necessary to consider the creation of new regulators to deal with this situation. If problems arise as a result of the introduction of new technologies in the digital economy, these problems should be solved through new technological solutions, as well as through new business practices and business experience in the private sector. Even if, given the rules, problems become inevitable, they should take into account the interest of protection by law and harmonization with traditional solutions for such issues.

Security and trust are pressing issues. If electronic data exchanged in the process of e-commerce is subject to theft, falsification or unauthorized access, there is a decrease in the degree of trust in the principles of the digital economy. Also, the neglect of ethical problems accompanying the development of the digital economy, including the problems of circulation of obscene information and obstruction of privacy and problems related to cyber addiction of consumers, require ensuring security in economic activity. In order to realize the effective and useful development of the digital economy, these problems must be adequately addressed, mainly through technology and the market.

Universal access to the Internet is an unconditional factor in the development of the digital economy. Business opportunities for small and medium-sized enterprises as well as local industry will increase dramatically with the effective application of information technology, and thus, it will increase the relevant space. For this reason, an environment should be created in which all businesses and individuals can have equal access to the digital economy. International coordination with an understanding of the global characteristics of the networked digital economy is important, governments should promote the exchange of information and technology, political coordination between different nations. The tourism/hospitality sector is characterized by a growing demand for customer orientation, increased international competition, volatile markets in a dangerous environment, changing customer needs towards individualization and significant potential in various market segments. In addition, it is vital for the sector to be able to attract a workforce specifically for tourism/hospitality work. The problem was noted that some employers deliberately seek unskilled labor in order to pay

less. However, the question remains whether such policies will lead to higher profits and long-term competitiveness, or vice versa. Another important question remains: how staffing problems in the tourism/hospitality sector can be overcome in the context of insecure and often seasonal employment and relatively low pay. In recent decades, tourism/hospitality has undergone continuous growth and diversification to become one of the largest and fastest growing economic sectors in the world.

Over time, modern hospitality, tourism and leisure sector has turned into a flagship of socio-economic progress. For many developing countries, before the pandemic, it was one of the main sources of income and export activity, creating the necessary employment and opportunities for development. The World Wide Web has been identified as one of the technologies to help the hospitality, tourism and leisure sector meet a number of challenges, including direct booking, direct marketing. Also necessary technologies are multimedia and alternative transport systems, about which forecast information will be given below.

Infrastructure for hospitality, tourism and leisure business development is also divided into two parts, physical and IT infrastructure. Physical infrastructure includes water treatment, renewable energy and developed railways (also within the site), while IT infrastructure includes smart-card capabilities, satellite communication, etc. When determining the measures necessary for the purposes of socio-economic development and increasing the competitiveness of hospitality, tourism and leisure sector, the following advantages are obviously relevant: innovative power in the country; the potential of future markets; development of transport, information and infrastructure investment opportunities. Tourism/hospitality has become a fiercely competitive business. For the world's tourism/hospitality destinations, competitive advantage is no longer natural, but increasingly man-made and driven by science, technology, information and innovation. The hospitality, tourism and leisure system is very sensitive to information. A hospitality, tourism and leisure destination includes a combination of attractions and travel services and consists of a combination of interdependent elements such as attractions, infrastructure, transport and hospitality. In short, events attract visitors to an area, but it is services that serve the needs of visitors when they are away from home.

Thus, international and local trends and driving forces of global competitiveness, information technology and socio-cultural dynamics

significantly influence and shape tourism/hospitality destinations, places, culture and identities converge in the world of international travel. The global economy is being transformed by regional trading blocs, global alliances, deregulation, new technologies, the Internet, and e-commerce. It will be necessary to understand the powerful driving forces that the future will create and revise the principles of tourism/hospitality in accordance with research and technology. At the same time, travelers are becoming more knowledgeable, more informed and more demanding. The competition has shifted from productivity to quality, added value, flexibility and agility in the marketplace, and the need to respond to the customer anywhere, anytime with customized solutions. With decisions becoming faster and response times shorter, success will depend on your ability to lend products and services and respond quickly to customer needs.

While knowledge and innovation are critical to success, the global economy is also characterized by marked socio-economic disparities between developed and developing countries. The main feature of globalization is the mobility of information, capital and people, which are guided by the restructuring of economic relations and competition. Responding to a strategic challenge, local communities are increasingly formed through interactions between what is happening at the local and global levels. As the world's largest industry, tourism/hospitality serves the needs and interests of a global audience, but also addresses the cultural and leisure needs of the local community. The challenge is to integrate local interests with global ones in a relational context. The new digital paradigm in the field of hospitality, tourism and leisure policy affects the competitive position in the conditions of global competition. For travel destinations around the world, competitive advantage is driven by technology, information and innovation.

The economic impact of tourism/hospitality is a leading economic factor, so the World Tourism Organization calls on governments around the world to unlock the job creation potential of tourism/hospitality development by improving information networks and capitalizing on their human resource capital, including innovation and investment know-how. Travel and tourism/hospitality were the largest generators of jobs, GDP contributions, foreign exchange earnings and employment opportunities before the pandemic. Where hospitality, tourism and leisure sector is well integrated into the economy, there are prospects for the creation of additional jobs. A good

transport infrastructure is also crucial for the development of tourism/hospitality. For example, globally, the airline market has continued to expand, and this trend is expected to continue if the problems of quarantine and the pandemic are resolved. Thus, control and security in many regional airports are imperfect by international standards and require modernization in terms of equipment and personnel. Also, the problem areas require improvements in telecommunications infrastructure and satellite navigation, so the rapid application of technological developments will improve the current navigation and security situation. The global convergence of technology permeates and supports the travel industry through an array of underlying technologies. The global increase in consumer demand for tourism/hospitality products has provided one of the main driving forces behind the development of a wide range of technologies. Information is the basis of tourism/hospitality. Thus, timely and accurate information relevant to consumer needs is often the key to meeting tourism/hospitality demand. In a fiercely competitive global travel environment, prospective travelers are constantly faced with more information and options. The combination of these forces and the need for professionalism in the processing of information provided to the consumer requires the use of technology for the collection, management, distribution and transmission of information. In recent years, information technology has undergone an unprecedented degree of change.

The Internet and e-commerce are increasing at a rapid pace and perform vital support in activities such as global communication and foreign business activities. The application of information technology (IT) and telecommunications, as well as technology specifically designed for the tourism/hospitality industry, includes the management of various modes of transportation, travel systems, the hospitality and entertainment industry, and the entertainment components of tourism/hospitality. The use of IT technology in the management of ecosystems, wildlife populations and natural areas is becoming increasingly important and can be used in the hospitality, tourism and leisure sector.

The hospitality, tourism and leisure sector generates economic benefits for host countries and tourist countries. This is an especially important industry for developing countries. The main benefits of tourism/hospitality for any country are foreign exchange earnings, tax revenues, business opportunities for business associations, and employment of workers in the industry. The external level of earnings from exports is used to purchase

imports and increase inventories. Revenues for the host country are generated and consumer spending and investment in other sectors of the economy can be stimulated.

Tax revenues from tourism/hospitality are both direct and indirect. Direct tax revenues are generated from income received by enterprises and employees. Indirect taxes are duties levied on goods, and services purchased by tourist are a monopolistically competitive industry. It has many relatively small enterprises producing slightly differentiated products and services. Hospitality, tourism and leisure sector is an information-intensive industry with a fairly long value chain. Searching for information about reservations, transport, accommodation and destinations is a process where traditionally suppliers, intermediaries and consumers have had a role, using their own specific information systems. However, worldwide the tourism/hospitality industry is changing, and this can be easily understood if we focus on the distribution factor: e-commerce is incredibly appropriate for the tourism/hospitality industry, since consumers are usually not close to the places where production occurs. It also advocates for all intermediaries between suppliers and end users.

Insufficient adoption of information and communication technologies (ICT) is considered a barrier to equal opportunities for commercial activities: people and businesses without access to the Internet and related technologies are unable to benefit from electronic services, and may be gradually out of competition with global markets. In fact, ICTs have contributed to the massive growth of tourism/hospitality and increased supply and demand. ICT has changed the way travel companies do business. Thus, e-tourism/hospitality has emerged as a term describing the entire range of ICT applications in the tourism/hospitality industry – tour operators, travel agencies, hotel companies, car rental, cruise companies, etc. Everyone can benefit from ICT because these technologies can support many functional activities such as: marketing activities for tourism/hospitality products such as internet advertising rather than traditional means such as brochures, advertising catalogs, etc.

In addition, ICTs enable direct and interactive relationships between tourism/hospitality organizations and customers. But the most interesting prospect of applying ICT to marketing is that companies can build a customer profile and make personalized offers. The sale of tourist services can be successfully carried out without the need for any intermediaries. For example,

a customer can make an online reservation without the intervention of a travel agent. There is also the possibility of using intelligent agents in some stages of the sales process, which leads to an increase in the overall productivity of the travel organization by optimizing human resources. Business operations management information systems, enterprise resource planning, customer relationship management (CRM) and other ICT-based systems can accelerate and facilitate information flow, including the acquisition, storage, processing and transfer of information related to internal processes and the business environment in tourism/hospitality. It is the fact that the increase in staff mobility in tourism/hospitality organizations with seasonal demand (for example, hotels, travel agencies) generates higher costs for personnel management, which leads to the active use of ICT, which allows for online recruitment, training and evaluation, reducing efforts, time and costs.

Buying the best opportunity provider worldwide can be discovered through the internet, buying and selling transactions are easily done in a completely electronic environment.

Of course, the important question is whether to create separate Internet strategies or to integrate the Internet into the overall strategy. First of all, it is necessary to study the impact of the Internet on the structure of tourism/hospitality. According to Porter (2001), the main competitive forces that determine the structure of an industry are the same regardless of whether the industry belongs to the traditional or the new economy. These forces are: intensity of rivalry among competitors, barriers to entry for new competitors, threat of substitute products or services, communication power of suppliers, and communication power of buyers. Let's try to explain very briefly how the Internet affects the structure of the tourism/hospitality industry. Yes, the competition of tourist organizations via the Internet is much more intense. It is basically price competition instead of offering a better quality product or differentiating the service package. Another argument that competition will continue to increase is that numerous organizations that are not in the sector but are starting to provide online travel services. Therefore, the effect of the Internet on competition is strongly negative.

Barriers to new entrants to e-tourism/hospitality have been minimized, as the technological barriers as well as the resources required to start an online business (capital, personnel, etc.) are very limited compared to traditional tourism/hospitality businesses. As more traditional businesses turn to the online channel and more online businesses enter the market,

tourism/hospitality organizations will be exposed to increasing threats. The effect of the Internet on barriers to entry is moderately negative, and there is also the threat of substitutes: for example, using the Internet to find substitutes for any tourism/hospitality business through the Internet (apartments instead of hotels, transport by rail, car or water instead of airlines, etc.). Even if we look for substitutes for tourism/hospitality products and services outside the tourism/hospitality sector, we will be amazed by the many alternatives that the Internet provides (entertainment, cultural and sports activities, etc.). Thus, the effect of the Internet from the point of view of threats of substitutes is moderately negative.

According to the communication power of suppliers: tourism/hospitality organizations are able to offer their goods and services through the Internet to a larger number of customers without any traditional intermediaries. This means a better position for suppliers. However, suppliers will continue to work with online intermediaries, which leads to a different kind of dependency. So, the Internet seems to have a slightly positive parallel to a slightly negative effect on this factor. Communicative power of customers: direct relationship between customers and e-tourism/hospitality organizations increased this factor.

Also, as customers become more savvy with Internet technologies, their loyalty to specific service providers will decrease; coupled with the low costs of switching providers over the Internet will be bolstered by the cash power of buyers. So, the effect of the Internet on the bargaining power of buyers is quite positive. The use of the Internet can indeed create several advantages for the tourism/hospitality organization, but on the other hand, it is associated with some important negative consequences in the field of tourism/hospitality. To deal with these consequences, we need to realize that ICT (including Internet technology) is something other than additional tools that must be integrated into an overall strategy. Indeed, ICT does not guarantee profitability if its use is not related to the company's strategy.

Regarding the implementation of ICT in small and medium-sized tourism/hospitality enterprises, being the vast majority of tourism/hospitality enterprises worldwide, three of the most common obstacles are: inadequate and unreliable telecommunication infrastructure (to date only in developing countries), the cost of implementation and use of ICT services, and lack of relevant knowledge and skills among personnel. Thus, two strategic directions can be followed: tourism/hospitality organizations could offer a

variety of differentiation by developing high-quality personalized arrangements that customers will be willing to pay for, a premium for, or they can offer value for money by delivering less expensive products than competitors through standardization, high volume, and consolidation

The role of the government is very important in the development of tourism/hospitality. A key principle is that the private sector shapes the market, but the government should avoid excessive barriers to e-commerce, and the goals of government support should be to support and ensure a predictable, minimal, consistent and transparent legal environment. Active state support for promoting entrepreneurial culture in tourism/hospitality is important.

The main policy programs should include in the context of digitalization: 1) improvement of the legal and regulatory framework, 2) moving public procurement on the line, 3) facilitating electronic transformation in industry sectors. Finally, the government could help the growth of e-commerce in various ways, planning, creating a legal and regulatory framework, building capacity in information technology infrastructure, skill building and workforce planning, and implementing promotional and incentive measures. ICT is transforming the global economy and creating new business connections and opportunities that cross business sectors, cultures and distances.

According to the World Tourism Organization (WTO) [201], the share of tourism accounts for about 6 % of the world gross national product, about 5 % of all tax revenues. International tourist arrivals (overnight visitor stays) worldwide increased by 4 % in 2019 to reach 1.5 billion, based on data reported by destinations worldwide [201]. In turn, 2019 was another year of strong growth, albeit slower compared to the exceptional rates of 2017 (+7 %) and 2018 (+6 %). Thus, today tourism is one of the highly profitable and most dynamic branches of the world economy [201]. In this regard, in many countries the field of tourism is actively developing with state support [201].

However, in relation to 2020, experts put forward an opinion about the losses that tourism suffered from the spread of the corona virus: the tourism sector met losses of up to 22 billion dollars due to COVID-2019 [60]. We believe that the losses are underestimated because, if we analyze the period of the SARS virus pandemic in 2003, more than 8,000 cases of the virus were recorded and about 37 countries were affected. The SARS epidemic reduced China's economic growth rate from 2.8 % to 1.8 % and cost the world economy more than \$30 billion in losses. The number of people infected with

COVID-2019 has already exceeded the number of infections due to the SARS epidemic. Concerns about the spread of the virus have led to the assumption that its impact on the economy will also be significant, which is quite justified, since in 2003 42 % of China's GDP was made up of service industries. Due to the travel ban, commerce, restaurants, entertainment and tourism have suffered the most, with a projected loss of 850 million or even 1 billion to 100 million tourists, 910 billion to 1 trillion in tourism revenue, and a loss of 100 to 120 million jobs [94]. Also important is the fact that China's GDP in 2003 was 4 % of world GDP, and now it is 17 %. "The epidemic of the Chinese coronavirus may become the "black swan" of 2020, which will affect the world economy more significantly than the financial crisis and recession of 2008 – 2009" [58].

According to the World Business Travel Association, the losses of the tourism industry due to the spread of the coronavirus can be up to \$47 billion per month, the losses of airlines – up to \$30 billion, according to the International Air Transport Association [57; 201]. Italy's Lake Como hotels have canceled more than half of their room bookings, and many business travelers, who normally fill the downturn in the tourism industry during the winter months, have also canceled trips as companies like Facebook and Google cancel in-person meetings and events in favor of online communication. And L'Oreal, Nestle and Cargill have suspended staff travel around the world in the coming weeks. Moreover, due to the spread of the coronavirus, the Geneva Motor Show, one of the largest music festivals in the world "Coachella" in California, the pop culture festival Comic-Con International in San Diego, the Disney+ Europe Launch Event in London, and more than 250 other events in the world were canceled or postponed [67; 96].

We can observe a similar trend in Ukraine. According to forecasts of the International Air Transport Association, the losses of world airlines in the field of passenger air transport for 2020, taking into account the spread of the coronavirus, amount to 63,111 billion dollars and even to 113 billion dollars. Thus, we agree with Bloomberg that the spread of the COVID-2019 coronavirus has become the biggest crisis in the world tourism industry since the terrorist attacks in the USA in 2011, the war in Iraq and SARS in 2003 [57]. Also, the World Health Organization (WHO) and the World Tourism Organization (UNWTO) published a joint statement [89]: "The tourism sector is fully committed to putting people and their well-being first. International

cooperation is essential to ensure that the sector can contribute effectively to contain the spread of the COVID-19 virus. Travel restrictions that go beyond these recommendations may cause unnecessary interference in international traffic, which will have negative consequences for the tourism sector" [89]. The result of current socio-economic phenomena is the conclusion that the tourism business instantly reacts to crisis changes in world trends: pandemic, war or economic crisis. As soon as there is socio-economic instability or fluctuations, potential tourists immediately postpone their trip or cancel it altogether. It is this, psychological attitudes and pessimistic expectations that can cause a decrease in the demand for tourist services and the bankruptcy of many tourist enterprises.

The demand for tourist services is characterized by mass and sociality. It is formed on the basis of factors that can increase or decrease demand. The most important and significant factors influencing the change in demand in the tourist market are the factors presented in Table 1.1.

Table 1.1

Factors influencing changes in demand in the tourism market
(summarized on the basis of [13; 20 – 22; 33; 51])

Factors	Characteristic
General economic	The level of material well-being of the mass consumer; the ratio of working and free time in the working population; special investment zones; development of tourism development programs
Socio-demographic	Age; sex; profession; education; social group; marital status; property status; family members; region of residence; city or countryside; the size of the settlement where tourists live; occupation
Psychological	Psychology of consumption target settings; motives
Cultural and socio-psychological	Priorities in the value system of society; traditions and social norms
Personal and behavioral	Individual lifestyle features; interests in free time; system of spiritual values; mentality

The tourism market performs multiple functions (Table 1.2).

Table 1.2

Functions of the tourist services market
(summarized on the basis of [13; 33; 51; 201])

Basic	Additional
Realization of the value and consumer value included in the tourist product	Informational
Organization of the process of bringing the tourist product to the consumer (tourist)	Intermediary
Economic provision of material incentives for work	Regulating
	Price-forming
	Stimulating
	Creatively destructive

In the process of performing the first basic function by the tourism market, there is a movement of value in the form of an exchange of money for a tourist product.

Completion of this exchange means completion of the act of commodity-monetary relations, realization of the value contained in the tourist product, and public recognition of its consumer value. As a result, the normal course of social reproduction is ensured, money appears and accumulates for the development of the tourism industry.

The tourism industry has a multi-element structure; it is characterized by an interconnected process of activity of various branches of the service sector, which forms both positive and negative consequences (Table 1.3).

Table 1.3

The dialectic of the consequences of the development of the tourism industry (summarized on the basis of [20 – 22; 33; 201])

Positivity	Negativity
Increase in tax payments by service producers	Economic monoculture of tourism
State, transport fees, airport fees, visa payment	Tourism as a factor of labor force outflow from other industries
Increased investment in the tourist region	Violation of the natural landscape in places of mass tourism
Creating additional work places	Rising cost of living in the tourist region
Reduction in the cost of transportation	Intensive population migration

Thus, the government's investments in the infrastructure, material and technical base of tourism stimulate additional investment by numerous small business enterprises. Over time, initial investments in tourism attract even larger investments in auxiliary and supporting industries: hotels, restaurants, shopping centers, ports, airports.

The improved tourist infrastructure of the region, which includes numerous small business enterprises, is also used by local residents; income from tourism is quickly distributed among the broadest sections of the population of the host region, that is, the entire society receives an economic benefit.

Tourists come mainly from other countries and regions, and their costs to the host country's government means an increase in taxes, such as airport and visa fees, city tax. These are just a few examples of tourist tax methods used. Apart from these special cases, traditional tax revenues are increased due to tourism expenditure. Thus, tourism positively affects the growth of regional incomes and investments, increases employment

Along with the positive consequences of the development of tourism, one should not forget about its negative impact – the development of the so-called monoculture of tourism. In the competition for land, resources and capital, tourism is crowding out agriculture and other traditional sources of income for local residents. A higher level of wages in the tourism industry causes an outflow of labor from agriculture. As a result, the volume of agricultural products decreases, while the volume of consumption increases due to numerous tourists. At the same time, the traditional way of life and the natural landscape in places of mass tourism are disrupted or completely destroyed. So, unfortunately, instead of contributing to the diversification of the economy, tourism sometimes replaces other sectors of the economy.

Understanding this trend, one should conclude that it is undesirable for tourism to become a substitute industry.

Firstly, tourism is a branch of production, which is characterized by seasonality, in connection with which there are always fluctuations in demand. Therefore, if tourism is the main industry in the region, then the "low" season causes problems with employment, revenues to the budget, and economic activity of the population.

Second, the demand for travel depends largely on the income and tastes of tourists, and these factors are beyond the control of the host region.

Thirdly, tourism generates certain social costs and additional costs for the maintenance of the environment, which fall on the host region and its inhabitants.

Thus, the dependence of any region on the tourism sector of the economy is extremely irrational. The excessive development of tourism and the region's complete dependence on this industry create a problem: the cessation of further development threatens economic decline, but if tourism development is not limited, the natural and cultural resources of the country will become impoverished, become unusable and depreciate.

Sometimes the governments of developing countries look at tourism very optimistically. They conduct active investment programs aimed at the development of tourism and are of a priority nature. In certain cases, this approach may lead to the dissatisfaction of more significant national investment needs, for example, in education, health care and other social needs.

At times, the hospitality, tourism and leisure sector generates an increase in inflation in the region where it dominates; an increase in income at the expense of "tourist" money can cause an increase in the prices of essential goods: food, clothing, housing and transport, i.e. inflation. In tourist regions, as a rule, land prices rise particularly rapidly, the price that tourists are willing to pay to live in a tourist region during the vacation period can sharply reduce the affordable demand for housing from local residents, whose incomes are relatively small, and therefore they have to change the area of residence, or use their home as a means of obtaining additional income. In any case, a district with a developed tourism industry changes the social and economic conditions of living of local citizens.

Thus, although the hospitality, tourism and leisure sector has significant potential as a factor of economic development, it is not a tool for solving all economic problems. Therefore, in the aspect of tourism and hospitality, the priority is the optimization of activities, and not the maximization of profit. In addition, it should be emphasized that the possibility of significant losses from tourism in developing countries is much higher than in developed countries. Thus, developed countries have a diversified economy, and government investment programs are not fully focused on the development of tourism.

One of the features of the development of modern tourism is the uneven distribution of international tourist flows in different regions and countries. At the same time, 20 – 30 % of the total number of people traveling

abroad are mass or group tourists, and the other 70 – 80 % are individual tourists who mainly travel to neighboring countries [81].

In recent years, the development of mass tourism has been observed, which is the result of the influence of the following factors:

price (decrease in air transport prices, increase in the number of charter flights, increase in the number of tourists who choose the bus as a mode of transport due to the low price);

economic (opening of new economically profitable tourist destinations, increased competition between tour operators in the field of mass tourism);

personal (increase in free time, growth in social motivation of involvement).

The trends presented in Table 1.4 can be noted in the development of mass tourism.

Table 1.4

Trends in the development of tourism

(developed on the basis of [13; 20 – 22; 33; 51; 58; 60; 201])

Trend	Characteristic
1	2
Individual tourism is growing more slowly than mass tourism	Although tourists plan their vacations individually, it is difficult to implement individual trips, especially over long distances, due to the high cost of individual programs
A shift in the purpose of travel to a recreational purpose	At the beginning of the development of international tourism, the business segment prevailed, now the ratio is changing in favor of recreational tourism. In all economically developed countries, employees receive paid vacations, and their duration also increases
Increasing customer requirements for service	Tourists travel more and more often, learn about modern service and demand more comfort. Some tourist regions offer a fairly high standard of service. The leadership of many countries takes a serious part in tourism development programs; serious capital investments are being made to create an amusement park, new attractions and fashionable attractions
Increasing mobility of the population	Many have their own cars in which they travel independently

Table 1.4 (the end)

1	2
Increase in spending by tourists during travel	Credit programs allow tourists to spend more money than they have available
Increasing competition between tour operators and airlines	Airlines began to sell their own tours, combining a plane ticket with the services of direct providers of travel services (hotels, tour agencies)
Increasing importance of psychological factors	For successful work in the tourism business, it is necessary to form emotional contact with customers. Friendly employees are required in the hospitality industry
The formation and management of the image of territories is being developed, territory brands are being created	Each territory, city, locality and even country has its own image, reputation. For example, Italy is the country of pizza and spaghetti, Finland is the birthplace of Santa Claus, Paris is the city of love. The scientific direction of brand territories is developing
Emergence of new tourist regions	The new tourist regions include the countries of Southeast Asia: Vietnam, Cambodia, Laos, as well as some former republics of the Soviet Union; in Latin America – Chile; in Africa – South Africa
Preservation and development of recreational resources	A problem is that a priceless gift of nature needs to be treated with care so that humanity can enjoy this gift even in the third millennium. For the maximum use of recreational resources, it is necessary to achieve a ratio between the increased demand for these resources and the creation of the most favorable conditions for their use
Increasing the value of eco components	Development of a separate area of eco-tourism, eco-certification of tourism enterprises
Digitization of the tourist business	Use of Big Data, retargeting, email marketing, viral marketing, SMM social media marketing and other forms of digital optimization of business activities
Use of 3D technology	Visualization and modeling of tourist facilities, printing of food products, production of souvenirs
The problem of mass tourism	Venice is experiencing the most difficulties due to mass tourism. More than 30 million tourists come here every year. The Philippine island of Boracay was closed to tourists in April 2018 due to an environmental disaster caused by mass tourism

The trend of using 3D technologies in tourism is most widespread in the aspect of visualization as a process of obtaining high-quality 3D images and models. This results in high-resolution printable images or animated videos.

At a high level of development of the tourist market, we have the opportunity to compensate for significant costs with the help of 3D technologies (Table 1.5).

Table 1.5

3D technologies in tourism

3D process	Example	Advantages
Visualization	3D maps 3D guides	Possibility of detailing, use of additional functionality: audio, video guides, informational materials, formation of connection with other information resources
Modeling	3D museums, 3D locks, 3D monuments, 3D attractions	Free movement, storage and reconstruction of cultural heritage, 3D uncertainty compensation by calculating possible design options
Food printing	Dishes made of minced meat and dough in a non-standard form and non-standard size	Automation, to reduce the cost of the cooking process by focusing on the ingredients; standardization – creation of a single standard for a certain dish; manufacturability – creating forms that cannot be made by hand; customization – interesting, unique and unusual dishes
Printing of small series of small items	Souvenirs	Uniqueness of souvenirs, speed of production

3D visualization technology is widely used in the modern market of information services. On the other hand, the growing demands of consumers of tourist services, as well as motivating marketing approaches to the formation of an innovative offer and the opportunity to occupy a new niche in the market are the main reasons for the development of the concept of 3D visualization in tourism. For example, the demonstration of the usefulness of 3D modeling is realized with the help of two typical monuments of Italy: Pompos Abbey near Ferrara and Scrovia Chapel (Arena) in Padua [127]. The innovative approach allows 3D models to consider not only quantitative estimates, but also to compensate for uncertainty by calculating possible design options [195]. Among the advantages of visualization of tourist routes

are: the possibility of free movement; high-quality digital models and additional functionality such as audio, video guides, training materials. A complete model of the current state of Palmyra was presented in Paris in December 2019: a unique product allows, without leaving Syria, to assess the degree of destruction of the monument in order to plan restoration [56]. One of the prerequisites for the sustainable development of tourism in Ukraine is the presence of a wide resource base that is not attractive enough for a potential tourist. And Google Ukraine launched a 3D tours site under the Ministry of Culture of Ukraine as part of the "Authentic Ukraine" project. 3D projects include "Opera Theaters of Ukraine", "Open-Air Museums" and "UNESCO Wooden Churches" [55]. An important object to study in 3D visualization is the heritage of the castle, as it is the least preserved of the tourist locations. The main advantage is the maximum ease of understanding the information message. Through visualization, we get a tool for exploration and further exploration that draws the user into an interactive exploration of the location. This is an opportunity to walk around the facility and get as much information as possible. 3D models of tourist attractions allow those who cannot physically travel to visit them.

The active use of 3D printing in food preparation began a few years ago, when the American company 3D Systems opened a culinary printing center in Los Angeles, where you could test, come up with and implement your ideas with the help of a 3D printer. The FoodInk restaurant is operating in London – the world's first 3D kitchen restaurant. Everything here – from dishes and utensils to desserts – is printed on a 3D printer, and the chefs only bring the dishes to mind, adding culinary creativity to the plates, which machines are not yet capable of. Recently developed food printers will make it possible to produce multifaceted disposable forms of sweet culinary creations – from non-standard candies and cakes to large cakes and other desserts [161]. There are already many printer models on the market, such as 3D Systems ChefJet Pro, the Foodini printer works on FDM (layer-by-layer material deposition), Chef 3D developed by BeeHex, the exclusive chocolate printer Choc Creator performs printing as 2D images on the surface of cakes and sweet pastries, as well as in 3D format. The main advantage of such devices is the speed of cooking. Users can independently create recipes and adjust the content of certain components in the dish. Thus, a person can create interesting, unique and unusual dishes with the help of such devices.

The digital economy is a new term used for the production and marketing of goods and services to attract customers through the use of digital channels. The most used methods of digital marketing include: Google Adwords contextual advertising; Big Data technology – data arrays of large volumes; retargeting; mobile marketing; email marketing; viral marketing; RTB (real time bidding); SMM (social media marketing); SMO (social media optimization); SEO (search engines optimization); SEM (search engine marketing) [22]. Therefore, the use of digital economy tools is a very important factor for success in the field of tourism.

The creation of specialized large tourist centers and the intensive use of local tourist resources are especially dangerous for individual regions and for the biosphere as a whole. Overpopulation and overloading of the tourist infrastructure, caused by the concentration of tourists, leads to excessive use of natural resources, significant pollution of the environment, an increase in the volume of waste, the consequence of which is a violation of the ecological balance, the occurrence of irreversible changes in the environment, a decrease in the attractiveness of a natural object and its degradation. However, for the successful development of the tourism industry, the state of the natural environment is decisive. Among the measures to stimulate the rational use of natural resources and the protection of the natural environment is the provision of tax incentives for tourist enterprises when switching to resource-saving technologies and the introduction of cleaning equipment. An effective way to solve the problem is the development of ecological tourism [20].

After all, today it is possible to ensure real financial support for nature protection and increase the importance of those natural areas that must be preserved in an unchanged state. Ecotourism offers a unique solution that will provide jobs and sustainably high incomes for the population and preserve untouched wildlife. Ecologically oriented directions of tourism include restrictions on the construction of tourist infrastructure, the use of ecological modes of transport, the introduction of ecological technologies for the most common types of tourism, and the raising of the ecological awareness of tourists and the local population. Today, this direction should become the main factor in the development of tourism, when instead of receiving short-term benefits from communication with nature, a long-term viable ecological strategy will be implemented, which is able to provide real financial support for nature protection and increase the significance of those natural areas that must be preserved in an unchanged state.

Section 2. The digitalization of business processes in tourism and hospitality

In a constantly changing external environment, enterprises are forced to improve their activities permanently. This requires the development of new technologies and methods of doing business, improving the quality of the final results of activities and, of course, introducing new, more effective methods of managing and organizing the activities of enterprises. A well-functioning system of business processes is very important for an enterprise.

The value of any enterprise is revealed in internal business processes, which are the driving force behind enterprise strategy. Describing and modelling business processes determines the way of the strategy implementation. The company needs to identify the main business processes that distinguish it from its peers and are the most important in terms of customer value for consumers. Continuous improvement of business processes increases the efficiency of the organization and determines its competitiveness in the market.

To improve the efficiency of their activities, companies are forced to constantly implement changes in their business processes, initiate new projects, diversify their activities, and the like. The implementation of various types of projects presupposes compliance with many requirements for them, namely, compliance with project management standards, compliance of the team that implements the project and management with the necessary competencies. The set of such requirements is found in the choice of specific methodologies in accordance with which the management of specific projects is carried out. The choice of project management methodology depends on many criteria, however, first of all, such a choice depends on the type of project (investment, infrastructural, etc.), on the structure of the project team (number of people), on the requirements of project documentation, on the duration of the project and other factors.

Today, enterprises in Ukraine demand from managers more in-depth knowledge of theoretical provisions and practical approaches to the activities of managing the performance of companies. Correct implementation of work planning, as well as the definition of strategy and tactics in personnel management is the basis for the effective functioning of the entire life cycle of the enterprise, its further development. Therefore, day after day, economists

are engaged in solving management problems, developing scientific approaches to management, as well as introducing modern technologies into it, in order to increase production efficiency and labour productivity.

With the development and strengthening of the influence of scientific and technological progress, the role of innovations, the types and number of technologies that contribute to the emergence of new products with new characteristics and criteria, which are highly valued in the market, increases. Therefore, now the management system is being rebuilt from production and market to technology orientation. An important factor for each company is the strategic management of the technological development of the enterprise – technology management. Technology management involves the application of management skills to discover, develop, operate, and independently use technology. Technology managers help to create value for their organization by leveraging technology and other resources to solve problems and improve business performance.

The 21st century technology manager must ensure that technology creates the optimal conditions for the future successful development of the enterprise. The main modern management technologies include: ERP systems, reengineering, engineering, benchmarking, controlling, and grading. The introduction of any technology is accompanied by an increase in the costs of the company, so it is advisable to do it gradually. Now, a significant part of Ukrainian enterprises in tourism and hospitality is in a crisis state, a large number of them do not have competitive ability. Therefore, the present of Ukrainian firms requires radical changes.

Reengineering of business processes is one of the most effective innovations in management activities. This technology is advisable to apply in three cases:

- the company is in a state of deep crisis (crisis reengineering);

- the company is in a satisfactory condition, but the forecasts for its development are disappointing;

- the company is trying to achieve greater success than its competitors (development reengineering).

For the majority of Ukrainian tourism and hospitality enterprises, crisis reengineering is the most relevant. Reengineering can be classified as a radical technology, as it involves the abandonment of outdated rules and approaches, neglect of existing systems, structures and procedures of the organization and a radical change in the way of economic activity. This

technology makes it possible to significantly improve the state of the company in a fairly short period of time.

Now Ukraine requires the introduction of precisely innovative and information technologies in the field of management. Rational use of information technology provides: the ability to coordinate employees; coordinate the process of the firm's work. The use of innovative technologies provides for: the reproduction of innovations in goods or services; the emergence of new sales markets; growth in demand; increasing income; attracting foreign investment.

The main principle that should be the basis for the functioning of any enterprise is the principle of rationality and optimization, because no matter how many resources a company has, if it does not know how to use them correctly, there will never be enough of them.

Modern society is on the verge of great transformations and great transformational processes in the digital sphere. The active development of digital and information technologies has formed a qualitatively new market – the information services market, which unites a large segment of consumers. Individuals, employees, business representatives operating in this market, are aimed at optimizing business processes, increasing the companies' productivity, improving the experience of market interaction based on the constant use of large volumes of relevant information.

In the new digital economy, demands and consumption patterns are changing. According to leading experts, more than 60 % of global corporations are already developing their own digital transformation strategy aimed at simultaneously taking into account technological changes and the specifics of the market situation. The main feature of digitalization is the creation of conditions for more comfortable and efficient interaction between business and consumers.

In the conditions of the national economy, the issue of digitalization is gaining relevance and requires perfect research. The procedures for creating effective management systems focused on market trends in a single information space deserve special attention. Modern market trends, such as changes in consumption patterns, technological transformations and the informatization of society, are increasing interest in digitalization issues.

The adoption of information technology development programs, the use of interactive management systems, the involvement of specialists in the dissemination of information exchange, the creation of official websites, the

formation of communication channels (social networks) and the connection of services affect the development of business digitalization. New digital technologies make it possible to create structured and complete information about the activities of enterprises, to spread the possibilities of trading platforms (marketplace) and their social networks (Facebook, Instagram), accelerate the use of product advertisements, services for processing online payments, scheduling meetings, events, affairs (for example, a Google service).

Now the main factors in the development of digitalization passages are: the emergence of new digital technologies, the formation of new needs and demands of consumers (focus on saving time, searching for and purchasing goods according to clear parameters) creating new values, properties of goods; changing conditions of the competitive environment. Such transformations require changes in the state policy of support and development of certain types of activities, revision of traditional models of business and customer service.

In Ukraine, at the state level, conditions are being created to facilitate the development of digitalization. The adopted laws, decrees and orders focus on the infrastructural development of mobile telecommunications, digital television, radio and technology, the substructure of computing, virtualization and data storage (cloud), and the revision of cybersecurity tools. Some of the main regulatory documents are: Order of the Cabinet of Ministers of Ukraine "On the Concept of Development of the Digital Economy and Society of Ukraine for 2018 – 2020", the Law of Ukraine "On the Concept of the National Informatization Program", the Law of Ukraine "On the National Informatization Program", etc. The purposeful policy is focused on the innovative development of business, the use of the latest information technologies in economic activities, the conquest and improvement of the quality of interaction in the market environment.

Significant changes taking place in the information environment cover a variety of aspects of life: technological, social, economic environment, labour market, human identity, etc. The development of technology created the conditions for the emergence of the fourth industrial revolution, founded on new management solutions and focused on the mass introduction of cyber-physical systems into production. Along with this, fundamental changes are taking place in the system for predicting the event, planning the conditions for servicing needs (business, everyday life, work, leisure). The digitization of a

variety of information ensures the economic feasibility and attractiveness of consumption.

The constituent elements of digitalization are cyber-physical systems, the Internet of Things, big data, robotics, and 3D printing.

Cyber-physical systems (CPS) are an integral part of business digitalization, it is a mechanism based on computer algorithms associated with the Internet and users. The main idea of the FSC is the distribution of methods for obtaining and providing various information, communicating with other devices via Internet access, and distributing software using mobile applications.

The Internet of Things (IoT) is a network of interconnections of connected objects (things) that have sensors, software, which allow transferring and exchanging data between the physical world and computer systems via personal or Internet networks.

Big Data is structured and unstructured data of large volumes processed by scalable software tools: big data management technologies (SQL, NoSQL, Hadoop); data mining (Data Mining, Web Mining); machine learning; building and using data warehouses.

Robotics is robotic systems intended for the automation of technological processes aimed at the design, development, construction, operation and use of robots, control over computer systems, feedback, information processing of automated technical systems (robots).

3D printing is a technology that allows the sash of a three-dimensional object by imposing successive layers of material according to the data of a digital model. This technology is carried out using a 3D printer, which provides the process of design modeling using visual and graphic means.

The listed constituent elements of digitalization are most typical of enterprises involved in the service sector, but they can be applied in various sectors of the economy, among which are: chemical, food, processing, automotive industry, shipbuilding, metallurgical engineering, and rural government zeal. The existing levels of implementation of the industrialization of the Industry 4.0 business distribute the companies according to certain criteria.

Regardless of the level of implementation of digitalization, most companies are focused on:

introduction of cyber-physical systems into operation, which will allow you to instantly receive, process, transmit a variety of information from devices and access points;

the use of the Internet of Things, to encourage the creation of a unified information space within one company, regardless of the level of management;

the introduction of big data, that will impede the efficiency of the analysis of structured and unstructured large-volume data that come from the internal and external environment;

the use of autonomous robots, which makes it possible to independently provide services without bothering a person and at the same time improve the process of customer service;

designing new services using 3D modeling and 3D graphics, which helps significantly save resources and implement new solutions by optimizing virtual models.

Understanding the prospects of introducing information technologies on the part of business accelerates the choice of new business models based on the challenges of the fourth breakthrough revolution. Under such conditions, it becomes important to analyze and assess the characteristic features of the market environment in which digital-oriented companies operate.

The dissemination of the latest technologies and management systems has a positive effect on the quality of services, the customer service system, and information support for market participants. At the same time, modern business at different levels is faced with a number of problems: the issue of technological equipment of networks, economic security, and optimal management decisions for creating a unified digital infrastructure remains not fully determined.

Changing the sectoral structure requires a simultaneous review of approaches to the management system, the introduction of the latest models of business organization.

In the article by Mark Sen Gupta "What is Digitization, Digitalization, and Digital Transformation" the terms are highlighted that describe the introduction of digital technologies into business [138]:

digitization as converting information from paper and other media into digital format for further use in computer systems; a similar definition is contained in Gartner's IT dictionary;

digitalization as the translation of operations, communications, business functions, business models and processes into the digital plane, often allows

you to combine traditional business functions with digital ones (for example, traditional marketing with digital marketing, physical after-sales service with digital marketing service).

J. S. Brennan and D. Kreis define digitalization as a way of restructuring many spheres of public life with the help of digital, communication and media infrastructures, that is, they concentrate mainly on the social aspect of digitalization [42].

Whereas Gartner's vocabulary emphasizes the business component of digitalization: "Digitalization is the process of moving towards digital business" digital transformation is a deep and accelerated transformation of activities, processes, competencies and business models in order to fully use the changes and opportunities of digital technologies and their impact on society in a strategic and priority way [124].

As J. Mancini emphasizes, real digital transformation requires much more than simple digitization (automation) of input and output processes [151].

Agreeing with the position of foreign researchers, we emphasize that these three terms reflect the logical sequence of the introduction of digital technologies in the business models and business processes of companies (Fig. 2.1).

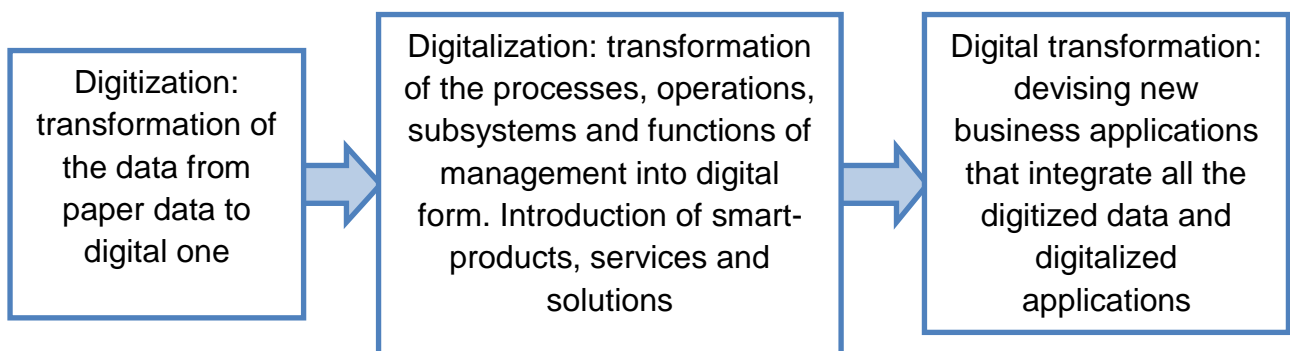


Fig. 2.1. The process of digitalization

As can be seen from Fig. 2.1, the process begins with digitization (transferring data to digital media), thereby increasing the speed of information movement, the execution of processes, saving resources, then through digitalization, which provides for the introduction of digital technologies into individual processes of the enterprise (banking, financial and management accounting, etc. management, marketing, recruiting, sales, etc.), leads to a

digital transformation, where an enterprise with all subsystems, functions and processes is integrated into the digital environment.

An example of the effective digitalization of one of the important business processes of an enterprise in synergy with the state, namely the procurement of goods, works and services, is the implementation of public procurement through electronic platforms, including through the PROZORRO public procurement system, introduced in 2016 and being a single platform, created on the principles of open access, uniting all authorized e-auction sites, between which the automatic exchange of information and documents is carried out.

Potential participants in the procurement procedure using an authorized platform, which is part of the electronic procurement system, are registered in the system, receive and transmit information during the procedure, and automatically exchange information through special services [25, 76].

Thus, both digitalization (translation into electronic format) and digitalization of the procurement process take place.

In the conditions of market relations, ensuring the economic security of enterprises consists in the timely identification and neutralization of threats to economic stability. Based on this, this type of security can be characterized in such aspects: interests, threat to interests, reliability, increase in income.

The characteristics of these aspects allows us to assert that the economic security of enterprises is a system of protection of the vital and legitimate interests of the enterprise from external and internal threats in various forms, which ensures its stable development in accordance with the statutory goals in the context of competition and economic risk. This understanding of the economic security of the enterprise allows us to assert that the management of the enterprise, being in a situation of uncertainty, unpredictability, periodic changes, both in internal economic conditions and external (political, macroeconomic, environmental, legal), makes risky decisions in conditions of fierce competition and achieves prevention or mitigating threats, as well as protecting against existing or foreseeable threats, ensuring the achievement of business objectives [65].

At the same time, the system of economic security of an enterprise cannot be template, it is individual for each enterprise, since it depends on the level of development and structure of production potential and the efficiency of using it, the focus of production activities and the qualifications of

personnel and production discipline, the state of the environment and production relations of the enterprise, competitive environment and risks [13].

At the same time, the individuality of an enterprise's economic security system is relative, since it is an integral element of the country's security. Consequently, the organization of an enterprise's economic security system and its successful implementation should be based on the methodological foundations of scientific theory, as a result of which the purpose of functioning is determined. Its main tasks are the timely identification and prevention of both external and internal threats, ensuring the protection of the enterprise's activities in achieving economic efficiency and a high level of competitiveness, increasing technological potential, ensuring the security of legal aspects of economic activity.

The solution of such problems refers to the main condition for the ability of the entire enterprise to ensure profitability as a response to the possibility of the owner's business processes. It is possible to achieve what has been planned on the basis of solving a whole complex of tasks, which include three key elements: prevention, mitigation, elimination of real and forecasted economic threats by their timely identification, establishing the causes and conditions that prompted such a situation, using the method of operational response to threats to economic security and manifestations of negative trends in the functioning of an enterprise [30].

Thus, the economic security of an enterprise can be viewed as a timely response to changes in the external environment, as well as one of the main provisions of modern management theory, which is characterized by a quick and adequate response that can ensure the adaptation of the enterprise to the objective conditions of its existence. In this case, such an approach should be aimed at assessing the effectiveness of the process of justification and implementation of management decisions related to minimizing the impact of external and internal risks on the state and development of the enterprise, that is, assessing the quality and effectiveness of risk management in a broad sense. At its core, risk management supplements bottom-up economic information with safety indicators, the presence of which makes it possible to identify early signs of risk and to diagnose it [34].

Depending on the degree of changes in the indicators of economic security in relation to risk threats and their planned and normative values, the financial condition of the enterprise is identified and the levels of financial stability are determined in resisting real risk threats. This is relevant from the

standpoint of the need not only to make adjustments to the current activities of the enterprise, but also to make decisions in planning, organizing and motivating the financial and economic activities of the enterprise for the future. Depending on the degree of riskiness of financial and economic activity in the context of the economic security of an enterprise, in a transient and variable production process, the financial position of an enterprise can be in three categories of different economic security: normal, pre-crisis or crisis state. Hence, risk management measures should be aimed at ensuring the economic security of the enterprise (Fig. 2.2).

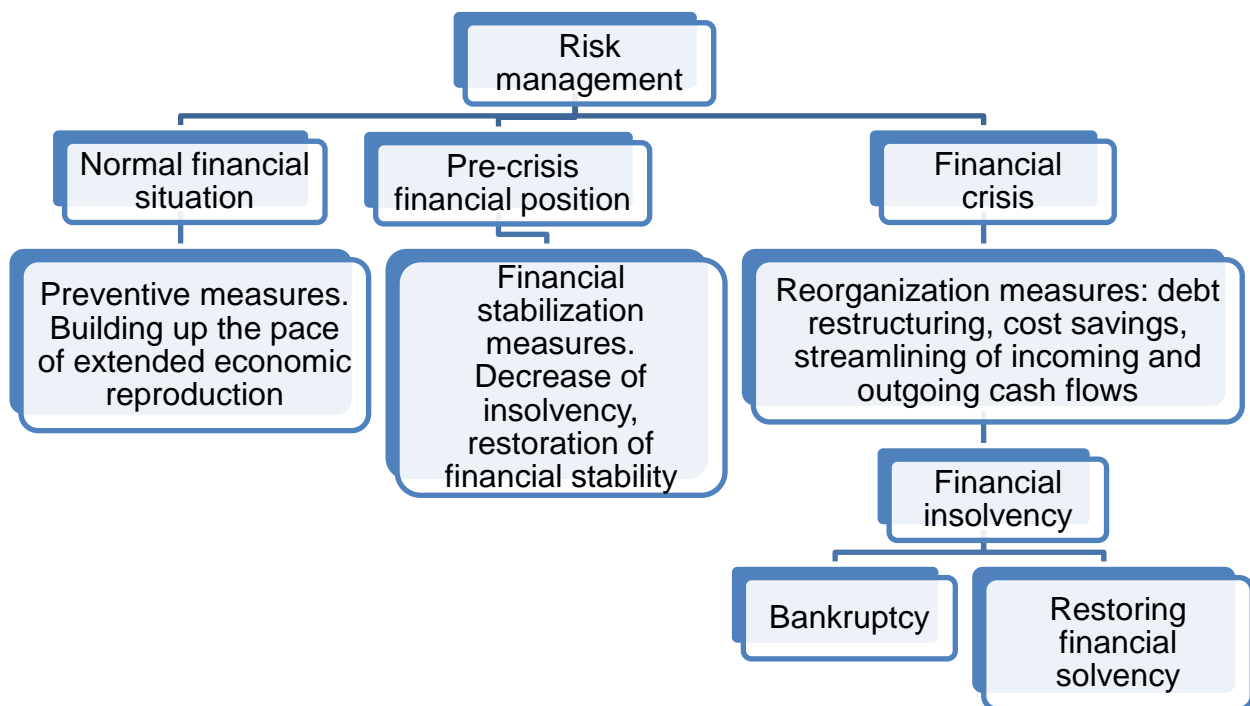


Fig. 2.2. **Enterprise risk-management**

Consideration of the fundamental provisions of the organization of effective risk management in ensuring the economic security of the enterprise shows that the success of their implementation largely depends on the effectiveness of diagnosing the financial condition of the enterprise, that should show reliable symptoms of monetary ability and the reasons for their appearance, which serves as the basis for organizing an adequate system of financial recovery in targeted measures of financial rehabilitation [36].

The effectiveness of diagnosing the financial condition of an enterprise and determining the causes of financial insolvency can be ensured by consistently carrying out the following stages:

1. Identification of the impact of the external and internal economic environment on the emergence of financial insolvency (the establishment of dominant ties, the emergence of real riskiness (objective and subjective) and crisis manifestations).

2. Determination of the system of economic indicators and indicators of financial insolvency, taking into account the characteristics of the enterprise (organizational, industry).

3. Identification of signs of insolvency, analysis and assessment of the riskiness of the business and indicative values of the defining parameters of the financial and economic range of the enterprise.

4. Calculation of the level of financial insolvency, forecasting the likelihood and feasibility of preventing bankruptcy.

5. Application of a comprehensive methodology for diagnosing financial insolvency, including an assessment of the financial condition and possible scenarios for prevention or elimination of insolvency.

6. Making a detailed plan of measures to restore the financial solvency of the enterprise, calculate its value and argumentation of its effectiveness for the enterprise [37].

This step-by-step approach to diagnosing the financial condition of an enterprise and determining the level of its financial insolvency allows for a comprehensive analysis of its activities. At the same time, it is important that the results are obtained at each stage of the diagnosis, and these results are specific. In particular, at the first stage of diagnosing financial insolvency, the assessment of external and internal risk factors can reveal not only their interconnection, but also cases of mutual compensation of negative impact, partially compensate or enhance the effect of one factor by another, which in itself is already an important basis in making managerial decisions.

An important aspect of identifying the real state of the enterprise is the information on the basis of which decisions are made. At the third stage, the financial statements are assessed to identify the symptoms of financial insolvency: primary, the identification of which is carried out on the basis of the data of the first two forms of financial statements (losses, decrease in assets, increase in debt), and secondary, the identification of which requires analysis of the data of the accounting with counterparties, penalties, etc.). Of great importance is the adoption at the fourth stage of the decision on the choice of methods for assessing financial insolvency and forecasting bankruptcy, of which there are several and which can give divergent results. Each of the

available methods is based on the use of certain indicators for assessing the activities of an enterprise, therefore the most reliable result will be the result of the complex use of all of them [23].

Under the influence of globalization changes, there should be a transformation of business processes in any sphere, especially in such a rapidly responding sphere of services as tourism and hospitality. Understanding and effective use of the elements of business processes in tourism can create resistance to global challenges and encourage sustainable tourism development at different levels.

In Ukraine, there are also prerequisites for the intensive development of tourism and hospitality, but they are clearly not used enough. Political, economic, scientific and cultural relations of Ukraine with the countries of the world, the economic and political course of the country, a significant change in the outlook of its inhabitants have greatly contributed to the active development of the domestic tourism industry in the last decade. However, this development is dominated by outbound tourism, while domestic tourism and the attraction of foreign tourists are still slowly developing. Therefore, in Ukraine, the problem of enhancing the potential for the development of the tourism industry, ensuring sustainable development of tourism and the sustainability of the tourism industry has been significantly actualized and requires the use of modern approaches to business modelling.

As indicated, globalization is characterized by the instability of the main economic indicators characterizing the external environment, therefore, any business entity seeks to use methods and models to relieve it from the pressure of an unfavourable environment and fierce competition.

Many economists have proven that the main means of objective management in current conditions is the use of a process approach, which in turn emphasizes the determination of business processes as a set of mutually agreed operations aimed at achieving the goals of economic activity.

The main prerequisites for effective management of business processes is the use of a synthesis of management concepts and techniques, the complex of which ensures the preventive levelling of the negative influence of the factors of the background and business environment and is a powerful tool for strengthening the competitive position of tourism and hospitality enterprises, expressed in an increase in economic benefits and an increase in market share.

Business process management is able to provide a prompt and adequate response to changes in the external environment and the internal

state of tourism and hospitality enterprises, which will allow coordinating the interaction of departments and increasing the degree of coordination of operations, reducing costs, increasing labour productivity and quality of service for consumers of tourism products. The need to implement effective management of business processes is due to a decrease in the volume of net profit of tourism and hospitality enterprises in recent years and an increase in the volume of expenses.

The activity of any individual travel company or hospitality entity is a set of business processes of different levels. However, the formation of the conceptual apparatus of this problem for the tourism and hospitality sector requires the study of the concept of business process. A business process is a set of interrelated operations within individual activities of an enterprise that uses the resources of the enterprise to obtain the final result in the form of a product (service) at the output to satisfy the end consumer.

Since the tourism and hospitality sector is part of the service sector, there are a number of criteria for the selection and development of business processes in this area, such as: complexity, dynamism, focus, harmony, regularity, sociality, cost, repayment, democracy, balance, consistency, regulation. Of particular importance for tourism is such a criterion as dynamism, since this type of economic activity is in a state of intensive development. It is also advisable to single out such a criterion as complexity, because the tourism sector combines a fairly wide list of auxiliary industries, without which tourism cannot fully exist.

The main goal of a tourist enterprise, both a tour operator and a travel agent, is to meet the needs of consumers in services of a tourist, recreational, excursion (educational) nature. Therefore, in our opinion, the business process of a tourist enterprise is an interconnected set of specific operations (work) that transforms incoming resources into a tourist supply to meet tourist demand. The essence of the business process of a tourist enterprise is characterized by its inherent properties. These properties reveal the nature of the business process of a tourist enterprise, structure the key features discussed above. Having analysed a wide list of general properties of the business process described in scientific literary sources, and based on the characteristics of the tourism industry, we can highlight the main essential properties of the business process of a tourism enterprise, characterizing it as a set of interrelated operations [10]:

organization of the business process including a certain number of sub-processes (operations, actions, certain types of work);

interdependence, which excludes the possibility of independence of the flow of the business process, that is, the beginning of a new subprocess depends on the completion of the previous one;

continuity, that characterizes the business process as a continuous system of periodically repeated operations, actions, procedures;

parallelism meaning that the end result (output) of several subprocesses becomes the primary resource (input) of the next sub-process within a separate business process;

discreteness, which means that under the influence of external and internal factors, the output parameters of the business process can be changed in accordance with the existing conditions, which ensures its flexibility.

To highlight the specifics of the business processes of a tourism enterprise and the specific features of the business process management, the peculiarities of this type of activity should be considered. So, let us consider the sequence of the implementation of the main business processes of tourism enterprises [10].

The main business processes of a tourism enterprise are aimed at creating a tourism product. The process of designing and preparation of a product for implementation requires the involvement of a significant amount of resources (human, material, financial, informational, etc.). The process of designing a tourism product begins with monitoring the needs of consumers and finding ways to satisfy them. Tourism product design covers a significant number of business processes and subprocesses within a separate business process. Most of the business processes of a tourist enterprise are focused on finding suppliers of tourist services (accommodation establishments, transport companies) and the process of forming a tourist product (developing tours). The specificity of the business process aimed at the implementation of a tourism product is manifested in the differentiation of tourism enterprises into travel operators and travel agents. The former directly form the tourism product and can independently implement it; while travel agencies, according to the specifics of their activities, are only engaged in the sale of travel products of various travel operators under pre-signed contracts.

Taking into account the definition of the essence of the business process of a tourist enterprise and the determination of its properties, it can be argued that the management of business processes of a tourist enterprise is a managerial influence on the process of forming a tourist offer by

implementing a set of techniques and measures that ensure the effective and rational functioning of business processes in order to fully meet tourist demand.

On the basis of certain features of the implementation of business processes of tourism enterprises, it is possible to form a list of business processes inherent in a tourism enterprise, reflect its features and distinguish them from the totality of enterprises in other areas:

- strategy development;
- analysis of the market and consumer needs;
- formation of a tourist product;
- personnel management;
- financial management;
- provision of resources;
- control over the efficiency of activities.

So, the consistency between the priorities of a tourism enterprise and the goals of the general set of business processes is an indispensable condition for effective future development of the enterprise. The process of managing a tourism enterprise should be based on making balanced and meaningful management decisions, which will rationalize and see the relevance of management techniques that are actively used by the enterprise [10].

The activity of any individual travel company is a set of business processes of different levels. However, the formation of the conceptual apparatus of this problem for the tourism sector requires research into the essence of the concept of business process. The concept of a business process consists of two terms – business and process. Business is an economic, commercial, stock exchange or entrepreneurial activity aimed at making a profit it. Process is a sequential change of states or phenomena that occurs naturally [26].

The combination of the concepts "business" and "process" led to the emergence of the term and formed the initial meaning of the essence of the category of business processes as a set of sequential actions of an economic, commercial, stock exchange or entrepreneurial nature, focused on making a profit. There are many definitions of a business process, each of which provides a view of the process from different perspectives.

All definitions are united first of all by the emphasis on the fact that business processes are indispensable, have certain inputs and outputs. So,

we come to a conclusion that in scientific circles the concept of a business process has acquired a more or less stable definition. There is a traditional technological approach to the definition of a business process with the emphasis on a set of actions (rather than a separate operation), which, by systematic execution, generate a result that has value for the client.

Such a definition also presupposes interdependence and organizational subordination of actions, which leads to the rationality of the use of resources and the efficiency of the process. Thus, a key feature of the business process is recognized as the focus on creating added value for the client (consumer) (Fig. 2.3).

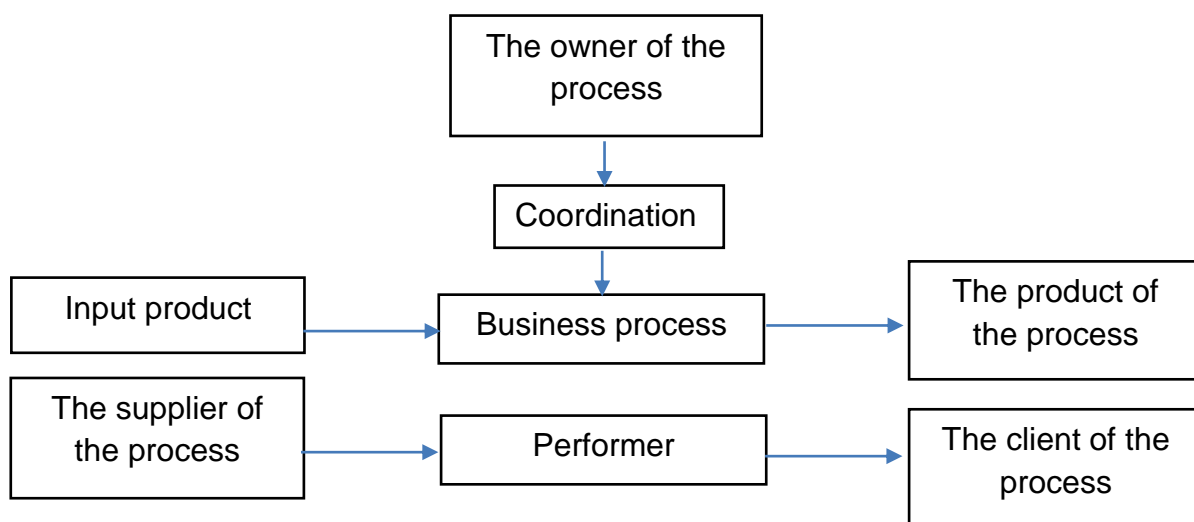


Fig. 2.3. General characteristic of business processes

The main goal of a tourism enterprise, both a tour operator and a travel agent, is to meet the need of consumers for the services of tourism, recreation, excursion (cognitive) nature, therefore, in our opinion, the business process of a tourism enterprise is an interconnected set of specific operations (work) that transforms incoming resources into a tourist supply to meet tourist demand. If necessary, the list of business processes can be changed, they can be removed and added depending on the specifics of the activity and the size of the tourist enterprise.

In the field of tourism services, the interaction between producers of tourism services and its consumers in the process of market exchange is saturated with social, cultural and psychological components, dictates its requirements for the specifics of tourism management, which, on the one hand, is considered as a branch of human knowledge that helps to carry out management functions in the field of tourism and, on the other hand, as a

function, a type of activity of a manager of tourism enterprises. The activity of a manager in tourism management is determined by a number of specific features of tourism only, namely: the specificity of the tourism product, seasonality, high depth of tourism penetration and the complexity of interaction between its constituent elements, significant influence on the part of the interested clientele, the inseparability of the tourism product from the source of formation, the complexity of tourism services [18].

The theory of modern tourism management identifies the object and subject of management. The object is a tourist enterprise that has a unique, formed under the influence of external factors, internal environment formed by such components as: goals, objectives, structure, technology and people, and the subject is a manager, a highly qualified tourism specialist able to solve the problems of developing the production of tourism services, increasing labour productivity, efficiency, profitability and competitiveness of a tourism enterprise.

The needs of adaptation of a tourist enterprise to dynamic changes in external factors are dictated by the increased attention of managers to the application of the process approach in management. The concept of the process approach proposed in the early 20s of the twentieth century by the representative of the administrative school of management A. Fayol considered the general management functions defined by him as interconnected and interdependent, carried out in a certain sequence.

This concept received a new impetus for development in the 60s. It was associated with the development of systems theory, the formation of a life cycle model and the development of product quality management models. The finalization and widespread dissemination of the concept of the process approach took place in the 80s, when all the activities of an organization began to be considered as a set of processes by which horizontal relations are established between departments and employees involved in the same process, which makes it possible to independently, without the participation of the top management level, coordinate their work within the process, respond more quickly to current situations and influence the final result of the activity.

The activity of a tourist enterprise can be considered as a set of business processes, where the business activity of the enterprise is combined with the aim of making a profit and technological processes for the development and implementation of a tourist product, allows the provision of a complex of tourist services in accordance with the needs of consumers and

thereby ensures an increase in business. By definition of S. Melnichenko "Business process management is the process of applying specific techniques, methods, measures in order to purposefully influence the functioning of business processes, namely, ensuring the effective implementation of a set of operations to obtain a high level of economic benefits" [17].

Tour operators are suppliers of travel products for travel agencies, the latter, in turn, act as an intermediary between the tour operator and the potential consumer of the travel product. At the same time, a travel agency is a full-fledged enterprise consisting of an interconnected set of business processes that ensure the well-coordinated work of this type of enterprise [18].

For effective management of business processes of a tourism enterprise, various techniques and methods can be used, namely:

benchmarking – the restructuring of business processes of an enterprise, in which the performance of other similar enterprises is measured and internal goals are set based on the best results;

quality management system (TQM) which assumes a comprehensive approach to the issue of quality management of tourist services;

ABC (Activity Based Costing) – cost management method, based on identification of cost sources, distribution and control of overhead costs according to the type of activity, accurate tracking and elimination of types of activities which do not bring additional value to the consumer;

CSF (Critical Success Factors) – a method of critical assessment of key success factors, which allows you to explore the competitive potential of an enterprise and identify specific opportunities to ensure competitiveness;

QFD (Quality Function Deployment) – a system for developing a new product/service, which effectively responds to the needs of consumers, reduces the time to enter the market and ensures an increase in the company's share in the market;

TBC (Time-based Competition) – the method of "time competition", creating the ability to manage the competitive advantages of an enterprise over time, i.e. launching a product/service on the market, which is most in demand during a given period of time;

BSC (Balanced Scorecard) – a method that allows you to translate the vision and mission of an enterprise into a system of clearly set goals and objectives, as well as indicators that determine the degree of achievement of

these settings within the main projections: finance, marketing, internal business processes, training and growth;

TCA (Transaction Cost Analysis) – a method for assessing the critical cost of business processes, allows you to determine the edge of the profitability of individual business processes and reduce the cost of coordinating these processes [18].

In the context of total digitalization, it is not surprising that digital business transformation is a basic condition for the survival of service companies in the competition. The main driver of these changes is the consumer; it is he and his needs that dictate the conditions in the digital service delivery market. It is difficult and unaccustomed for a modern person to write a lot with a pen, it is much easier, more familiar and faster to tick off an electronic questionnaire. The company is able to process the received data faster and more efficiently. That is, digitalization allows you to process large amounts of data and, as a result, improve and speed up your work.

It was stated that in the domestic information space there is very little specificity about the results of digitalization, and therefore, this process tends to systematize. The technology of transformation in a digital travel services company should consist of three parts: strategy, digitalization of marketing and automation of operational processes. The strategy starts with embedding digitalization into the business development strategy as a whole. A business where automation has been established with the digitization of the growth zone (that is, where there is communication with customers and sales), can sharply break out an order of magnitude ahead, outstripping non-automated counterparts. However, there is a vague understanding among leading companies of how digitalization helps business and affects efficiency.

Among other things, the owners are overcome by the false fear that automation is a restructuring, it is too difficult, the employees of the enterprise will not cope with the software, a new approach to work. The next step is the restructuring of business processes for digital technologies, and it will be relevant to make a decision on investments, including the purchase of software, equipment upgrades and employee training. The strategy also includes the development of digital thinking in the company, in general (employees need to understand how "digital" makes life easier).

Marketing digitalization should be overseen by marketing and sales executives; it includes: website of the company and brands; CRM system; sale via the Internet (both presence on marketplaces and your own online

store) a system for collecting, storing and analyzing data; search engine optimization; direct digital communications; advertising on the Internet through intermediaries; integration with social networks; digitalization of pricing; centralized marketing management system; data processing, the use of artificial intelligence to create a personalized digital brand experience. So, the digitalization of operational processes should include: digitization of workflow; installation of an ERP system; IoT in service delivery technologies; digitalization of management, logistics, financial system, personnel management, tender procurement, etc.

Thus, the digitalization of the business processes of domestic companies for the provision of international travel services in the modern conditions of the digitalization of the global economy is an uncontested strategic direction for their sustainable development. It provides for mastering this phenomenon in three stages: recognition of the need for digitalization and haphazard decisions; drawing up a digital business model and integrating individual initiatives and breakthroughs; new customer value and business model and integrated business digitalization [35].

After the start of the process, it may have a significant amount of secondary inputs. For example, management information that provides the information systems department, may be needed at various stages. Thus, process inputs can be primary and secondary. Primary inputs arise at the beginning of the process. Secondary inputs appear during the implementation of a process on its sub-processes. Just as there are secondary inputs, there are secondary outputs that arise as by-products of the process and are not its main purpose. Primary output is a direct, planned outcome of a process. Secondary output is a by-product of the process, not its main purpose. The business process is not in itself, it is managed (i.e. organized, planned, controlled) and implemented by a specific performer (group).

A number of participants (individual specialists or groups) are involved in the business process. At the input of a process, a participant is the process provider, that is, the one who provides input resources (input resources can be the result of a previous process). Example: to process a part (process), a blank must arrive at the entrance, the supplier of the process is the composition of materials, and the supply of blanks is a warehouse process [15].

Business processes in tourism are increasingly moving into the digital space, because the use of modern algorithms increases the speed of work, which in turn allows solving larger-scale tasks:

1. Transition to digital space. Digitalization of tourism can be divided into external and internal. In the first case, we are talking about the systematic transfer of communications with the client into a digital environment, because most people do not have time for personal meetings with travel agents to discuss options for recreation. Most often, a tourist, who travels not for the first time, planning his vacation, in advance independently chooses for himself a country and a hotel. Therefore, it remains to find a point of contact with the tour operator, which usually becomes his site. On the tour operator's website, the client communicates either with an employee in a chat or with a chat bot. The determining points here are the promptness of the reaction and the efficiency of resolving the client's question. In European countries, people more and more seldom turn to traditional tour operators – no more than a third of travelers come to the office.

2. Development of CRM systems. Within companies, the trend continues towards the development of CRM systems, automatic tools for setting tasks and planning. When applied correctly, implementation of these tools is a factor increasing the competitiveness of an organization. Automated work of the enterprise frees up the main resource for the management – free time, which is spent on learning new business technologies or developing parallel niches. The second point is especially important in a dynamically changing environment, when the percentage of independent tourists is raising, and travel companies have to increasingly search for new sources of income in order to survive.

3. Applications for standalone booking. The trend towards abandoning the classic service scheme of companies selling package tours will intensify. Tourists are buying air tickets in droves using SkyScanner, and Booking.com has long changed the traditional hotel booking market.

4. Registration of insurance is also in the perspective of automation and transition to digital and other standard operations. Modern apps like Tripinsurance allow you to issue a policy in a matter of minutes.

5. Blockchain is the security of transparent transactions without the participation of banking structures of different countries, the chance of a sudden blocking of the card, while there is the possibility of protecting your cryptocurrency wallet, at least with two-factor authorization. The advantage of blockchain for tourists is the possibility of long trips without the need to carry documents and a wallet with you.

6. Online sales also continue to increase their growth rate. For them, two areas are relevant: first, tourists pay money for tickets and hotel rooms, thereby planning their trip on their own; second, travel agencies are also going online, promoting their own stocked tours [31].

Summing up, it should be noted that modern business and organizations of the traditional economy must address resistance to change, relying on independent scientific and technological research, having this as a cultural digital imperative in order to be successful in the digital transformation model and setting itself the task of becoming a digital leader [31].

Digital technologies make it possible to engage in post-support, that is, accompanying and receiving feedback. The travel of tourists is monitored at all stages, if possible, we get from them an assessment of the service for different positions. The introduction of innovative technologies radically changes the business processes in the tourism industry and improves the customer experience. Tourism innovation is most often viewed as a new market proposition; at the same time, the novelty is in demand, since it creates new value for consumers, satisfies new needs and desires, or satisfies existing needs in a new way, in a qualitatively different way. For example, tourists can book tickets online to visit selected locations, get quick access using QR codes, ID, face or fingerprint recognition. Fingerprint recognition technology is also relevant for electronic and multiple-entry tickets.

The term "smart" describes technological, economic and social development and is supported by technologies based on large databases, new ways of exchanging information and using complex analytics, modeling, optimization and visualization to make effective decisions. Previously, it was used in cities (smart city) and technologies (smartphone, smart card, smart TV). It is important to note that the term "smart" was introduced by the management theorist, an American scientist of Austrian origin Peter Ferdinand Drucker in his scientific work "The Practice of Management" (1954) – achievable, realistic, defined in time. Thus, the scientist believed that when the goal is "reasonable", that is, meets the criteria, it will be achieved.

Marketing research has shown that existing approaches to the problem of "smart" tourist destinations can be divided into two groups: a group of scientific papers focusing on the role of "smart" technologies in the process of marketing and consumption of travel services, and a group of scientific

publications considering "smart" destinations as a special case of a "smart" city [11].

International company Deloitte reported that there are already more than a thousand smart cities in the world, half of which are in China. Also among the leaders of "smart" urban development are the countries of Europe, North America, Japan, South Korea. The study shows that every year states attract more and more investments for the development of smart cities, providing interaction between the city and its inhabitants based on the most modern technologies. For example, in Barcelona, special sensors show free parking spaces, which helps to unload traffic. And in Amsterdam, sensors on garbage cans signal when they are full [11].

The idea of smart tourism derives from the concept of a smart city, as technology has become a leading factor in promoting the development of tourism destinations. A smart travel destination focused on e-tourism, where consumers have new technologies and are constantly using them. It contains many components such as booking systems, social media, various communication programs and the like.

A key aspect of smart destinations is the integration of information and computing technologies into the physical infrastructure. In other words, smart travel destinations are smart cities that use information technology and innovation to deliver a satisfying and fulfilling travel experience. In Barcelona, for example, travelers are provided with interactive bus stops, which not only provide tourists with various information and bus arrival times, but also USB ports for charging mobile devices. The city of Brisbane has installed more than one hundred special beacons to transmit information to tourists through a mobile application, if they are within a certain radius of the location.

Amsterdam uses lighthouses, so tourists can translate signs in different languages. Seoul is investing heavily in providing free Wi-Fi as well as smartphone applications. Thus, smart tourism is understood as the application of information and communication technologies to develop innovative tools and approaches to improve the customer experience in tourism. Information and communication technology tools used for smart tourism include the Internet of Things (IoT), mobile communications, cloud computing, end-user Internet service systems, artificial intelligence, and virtual reality. This allows the physical, informational, social and commercial infrastructure of tourism to be combined with these tools to foster the development of smart tourism.

From the literary sources, it follows that the principles of "smart" tourism are to improve the tourist experience in tourism, increase the efficiency of resource management, increase the competitiveness of a tourist destination with an emphasis on aspects of sustainable development. It should also collect and disseminate information for efficient allocation of tourism resources and integrate tourism offerings at the micro and macro levels, ensuring good distribution of benefits.

Most researchers agree that smart tourism should be considered at several levels. The first is an innovative tourist destination based on the infrastructure of a smart city (ecology, convenience of living, modern management systems, etc.). The second level is the intellectual direction, which provides for the integration of information and computer technologies with physical infrastructure objects (interactive information pavilions, Wi-Fi, travel programs for smartphones, etc.). Smart tourism involves coordinated actions and strategic investments in the development of innovative activities to improve the quality of life, sustainable development of the physical infrastructure of the tourism industry. In other words, smart tourism combines travel experience with information technology, allowing you to customize information for a specific client. In addition, the level of quality and satisfaction with travel services is monitored in real time. The client not only consumes the travel service, but also actively participates in its creation and development (photo reports, comments, experience). The third component of smart tourism is an innovative business environment that supports the necessary business processes and operational flexibility (payment, booking, service, management). An extremely important part of this type of tourism is innovative tourism logistics, which provides for the use of the latest logistics developments to create a unified tourism infrastructure.

In the face of challenges, the real satisfaction of people's needs for recreation includes a number of elements that are combined in a way to achieve goals. This is the smart model in smart tourism. The experience of China confirms the practical application of the advantages of the considered smart model in tourism.

For example, the Chinese province of Guizhou, known for its scenic landscapes and ethnic culture, uses an online platform for smart tourism services using artificial intelligence and big data technologies. The platform provides information about popular tourist places, famous attractions, restaurants and hotels, tourists can also book tickets through it and receive a

QR code for verification when visiting tourist places. In addition, tourists can check the weather forecast. The platform is an application for the popular Chinese messenger WeChat and covers 415 tourist destinations in the province. It is useful for integrating all the tourism resources of the region in one place and helps tourists to systematize their ideas about the tourism sector in the region [11].

The world's largest online travel agency Ctrip has partnered with the Internet giant Baidu to make its travel services smarter. Baidu Cloud provides cloud computing services and artificial intelligence technologies to improve Ctrip's operational efficiency, improve customer experience and optimize costs. It is significant that the sphere of cooperation between the two companies concerns not only the IT infrastructure, but also such specific business scenarios as the digitization of Ctrip customer service and the development of individual travel plans based on the analysis of big data on the interests, habits, preferences, and hobbies of customers. Ctrip customer service is available 24x7. According to the company's statistics, one Ctrip customer service employee on average corresponds to one hundred calls every day.

Thus, Ctrip has transformed from a provider of basic traditional travel services such as airline tickets and hotel reservations to a provider of intelligent solutions and services. The company continues to strive to diversify its activities and provide a variety of personalized travel recommendations and travel suggestions based on modern intelligent technologies. Using big data technology, Ctrip provides customers with more personalized travel experiences by recommending transportation, sightseeing, attractions, restaurants, and more. The company also plans to add a wide range of smart services in such areas as voice technology, autonomous driving, and more [11].

Thus, smart technologies form the basis of innovative solutions not only in the integrated management of cities, but are also widely used for the formation, development and promotion of "smart tourism". This, in turn, improves the quality of service for both the local population and the customer experience of tourists.

The process of coordinating the management of innovative development of tourism enterprises should be structured and sequential, which provides for the feasibility of observing it within the clearly defined phasing of actions. The organization of the management system for the

innovative development of tourism enterprises requires compliance with a strategic focus on the development of effective measures to minimize the risks of globalization of world tourism and provides:

implementation of preventive mechanisms to overcome the destabilizing impact of transformations on the functioning of domestic tourism enterprises based on the development of a countering threats of an internal and external nature;

minimizing the likelihood of disrupting the implementation of joint international innovation and investment projects of tourism enterprises by introducing the practice of insuring their potential risks, taking into account the regional and industry specifics of the latter;

implementation of a set of measures to ensure an appropriate level of economic security of tourism enterprises in the context of its functional components (financial, market, personnel, material and technical, environmental, informational, legal, etc.);

formation and development of adaptive properties of tourism enterprises in the process of interaction with factors of the external market environment;

harmonization of the institutional basis for regulating the activities of the tourism industry in the context of globalization and liberalization of the world market for the provision of tourism services;

establishing effective transnational consulting support for the coordination of the process of innovative development of domestic tourism enterprises on the basis of strengthening the participation of the latter in international innovation grant projects, conferences, exhibitions, symposia, and the like;

transition to the practice of prompt response by enterprises to anticipate globalization challenges by taking into account the parameters of predictive scenarios for the innovative development of the world tourism industry [3].

For management of business processes in tourism it is extremely important to pay attention to the experience of other countries and to implement already verified successful strategies. That is why one of the solutions to this issue is the creation of a series of free podcasts concerning related topics. The concept is to create podcasts on management, marketing, sales and communication skills, productivity, talent and human resources management for people occupied in the sector of tourism and hospitality using best world practices.

The tourism and hospitality industry is a special area of entrepreneurial activity, characterized by the integrated nature of the functioning of various businesses.

Training and retraining of personnel in the field of tourism and hospitality can become one of the main advantages of the organization, since the quality of the services provided directly depends on the qualifications of the personnel, and the satisfaction of the customers of the hotel sector services is reached by the staff competence.

During the training of personnel, the formation of a personality and his skills is of particular importance, which helps to raise the competitiveness in the labour market, as well as to facilitate the process of personnel adaptation to the professional activity [74].

The mission of the competency-based approach is to align education with the needs of the labour market. The modernity of this approach lies in the culture of self-determination, that is, the ability and the will to flourish, to self-determine and to develop. A future specialist must develop skills that would help him to quickly adapt to the changing situation in the labour market and to new demands. The difference between a competent specialist and a qualified specialist is that a competent specialist not only has specific knowledge, skills and abilities, but can also apply them in his work. However, at present, the problems of the quality of training of specialists have not yet been resolved:

with a shortage of qualified personnel for the tourism and hospitality industry, there is a lack of demand for graduates of specialized universities due to their lack of practical skills and knowledge in specific specializations, it should be also noted that specialized higher education is too academic with a lack of necessary skills;

with the increase in the number of specialized secondary and higher education establishments that graduate specialists and graduates of the tourist profile, the need for qualified teaching staff with modern professional knowledge and practical experience in the fields of tourism and the hotel industry is increasing, due to this an insufficient number of the most trained workers are involved in the conduct of master classes, seminars, conferences, scientific research related to the problems of tourism and hospitality, as well as in participation in scientific and practical conferences and in the management of practices in tourism and hotel companies;

educational institutions increasingly need appropriate support in the educational process, in the study of new technologies in tourism education and in the introduction of means and methods of distance learning.

the advanced training and retraining programs for personnel implemented in the tourism vocational training system do not provide the necessary innovative practical professional skills and knowledge and are often of a formal nature, unrelated to the in-company training programs for the employees [17].

This educational product will play the most important role for people occupied in the sphere of tourism without education in the same sphere and for entrepreneurs who just have started their own business in tourism and need to deal with all business processes.

The topics, duration, and content of proposed podcasts are presented in details in Table 2.1.

Table 2.1

The topics, duration, and content of proposed podcasts

Module	Theme	Duration	Content
1	2	3	4
1	Sales in tourism and hospitality	2 hours	1.1. What is sales? Basic types of sales strategies. 1.2. Sales in tourism. No discounts, but special offers, bonuses. 1.3. How to work with objections. 1.4. Tips and must-haves in sales in tourism
	Communication skills for people occupied in the tourism and hospitality sphere	2 hours	2.1. Negotiations. Types of negotiations. How to find partners and investors. 2.2. Win-win strategy doesn't work anymore. 2.3. Communication in tourism. How to solve different situations with tourists and staff
	Marketing for tourism and hospitality products	2 hours	3.1. What do we know about marketing in tourism. 3.2. Digital marketing. How to promote your business through tourists' Instagram stories. 3.3. What to do in the marketing department of a tourism enterprise. 3.4. Promotion strategies for tourism business. 3.5. Marketing department or outsourcing?
2	Productivity. How to avoid outburning on tourism-related positions. How to prevent your employees from outburning	2 hours	4.1. What makes us unproductive during work? 4.2. How to stay productive and motivated? 4.3. Outburning. How to prevent outburning and how to deal with it?

Table 2.1 (the end)

1	2	3	4
	Management in tourism and hospitality	2 hours	5.1. Management in tourism. Types of management. 5.2. A good boss, a bad boss. Different strategies of management. 5.3. Project management. How to prepare events in tourism? 5.4. Crisis management. 5.5. How to work with big and small teams?
	Human resources management. How to hire the right person? Myths about an ideal candidate	2 hours	6.1. The importance of HR processes in tourism business. 6.2. Paying attention to these candidates while hiring. 6.3. Onboarding. Who is responsible for onboarding? How to prepare onboarding for different positions? 6.4. Why is the very first month of work the most important?
	Talent management. How to keep your employees interested and motivated	2 hours	7.1. Your business is your team. 7.2. Employees. The principle of 20/80. 7.3. How to motivate your employees? 7.4. The boss is the main indicator of quality

These podcasts would help to educate people occupied in tourism and hospitality in a short period of time and to give them the most important information they need irrespective of their position in these sectors. For entrepreneurs it would mean a higher professional level of their employees, greater satisfaction of their clients and consequently an increase in their profit.

Summarizing the mentioned issues, it should be stressed that business processes in the tourism and hospitality are the universal management and enterprise technology for business development and control. In general, all business processes of tourism organizations aim to achieve a dual objective: the production of value for consumers of tourism products and the maintenance of their own business activities, including its optimization and development. In this context, the definition and classification of business processes in each organization make it possible to identify the types of business processes, to build a flexible system for implementation, modeling and automation of these processes.

Section 3. Tourism in the digital economy: an assessment of the relationship between Travel and Tourism Competitiveness Index and World Digital Competitiveness Ranking

The development of digital technology is affecting the economy by changing the chain of creating goods and services and bringing them to the end consumer. However, the transformations of the digitalization era differently influence various spheres and sectors of the economy. Tourism is one of the industries that has proven to be the most sensitive to digital transformation.

The contribution of the travel and tourism sector to the global gross domestic product (GDP) is significant. A large number of countries and regions, both developed and developing, identify tourism as a strategic development priority. For countries with transitional economies, tourism is an important source of growth, as it provides foreign exchange and has a relatively short investment payback period. According to the World Tourism Organization (UNWTO), in 2018 the number of international tourists worldwide reached 1.4 billion. The same year was also the seventh consecutive year that the growth in tourism exports (+4 %) exceeded the growth in merchandise exports (+3 %) [201]. This demonstrates the important role of tourism in the global economy.

To a certain extent, tourism can stimulate economic growth both directly, by bringing revenue into the budget and generating employment in the tourism sector, and indirectly, by initiating the development of tourism-related industries. Consequently, the travel and tourism industry plays a vital role in the global economy and society. In 2018, the industry helped create 10.4 % of global GDP and a similar share of employment, and has shown tremendous resilience over the past decade [182, p. 3]. Nowadays, new opportunities for the tourism industry development are offered by the digital economy, with e-goods and services produced by e-business and sold through e-commerce at its core.

According to N. B. Sadova [84], tourism is more affected by digitalisation than other sectors of the economy, with corresponding changes in tourism activity. Information technology ensures the high quality of tourism

products and services and makes it possible to use the latest promotion and sales tools. D. Dredge, G. Fee, R. Mahadevan, E. Meehan, E. S. Popescu note that digital technologies have led to a significant transformation of the tourism industry, revolutionizing tourism businesses, products and experiences, business ecosystems and destinations. Digitalization has also changed the traditional roles of tourism producers and consumers. New roles, relationships, business models and competences have emerged [123]. Analysing consumer behaviour S. Bozhuk, N. Pletneva, T. Maslova, K. Evdokimov [164] came to the conclusion that digital technologies have a major impact on tourism, expanding tourist demand and popularizing tourism as a form of recreation. In particular, the flow of self-organized tourists is growing, and, according to the researchers, their number will increase further with the development of digital technology.

Digitalisation is not only changing the economic content of tourism; it is also affecting other aspects of tourism. S. I. Dichkovsky's research focuses on the cultural context of the changes taking place in tourism due to digitalisation. The scholar notes that the proliferation of digital technologies is shaping updated patterns of tourist behaviour and transforming the principles of socio-cultural interaction [61]. Some scholars emphasize that transformations in the sphere of leisure, recreation and tourism caused by the introduction of digital technologies give rise to certain social transformations, in particular increase interest in such types of tourism as dark, dystopian, horror quests, etc. O. Styzhak explores the specifics of tourism industry development in the context of digitalisation [90; 91].

Ukrainian researchers study the specificities of digitalisation in tourism activities in the context of domestic realities. R. B. Kozhukhivska, V. A. Nepochatenko came to the conclusion that digitalization, in particular the use of digital technologies, contributes to the efficiency of tourism in Ukraine [70]. V. Kifyak, O. Kifyak, based on the example of western Ukrainian border destinations, focus on the need to analyze the digitalization of tourism in the regional aspect [68].

So, despite the differences in approaches and research methods, all authors agree that digitalization is rapidly embracing the tourism industry. At the same time, the impact of digital technologies on tourism is more significant compared to other industries. Digital technology covers all aspects of tourism activities – from designing a chain of tourism product creation to generating hotel ratings in the digital space.

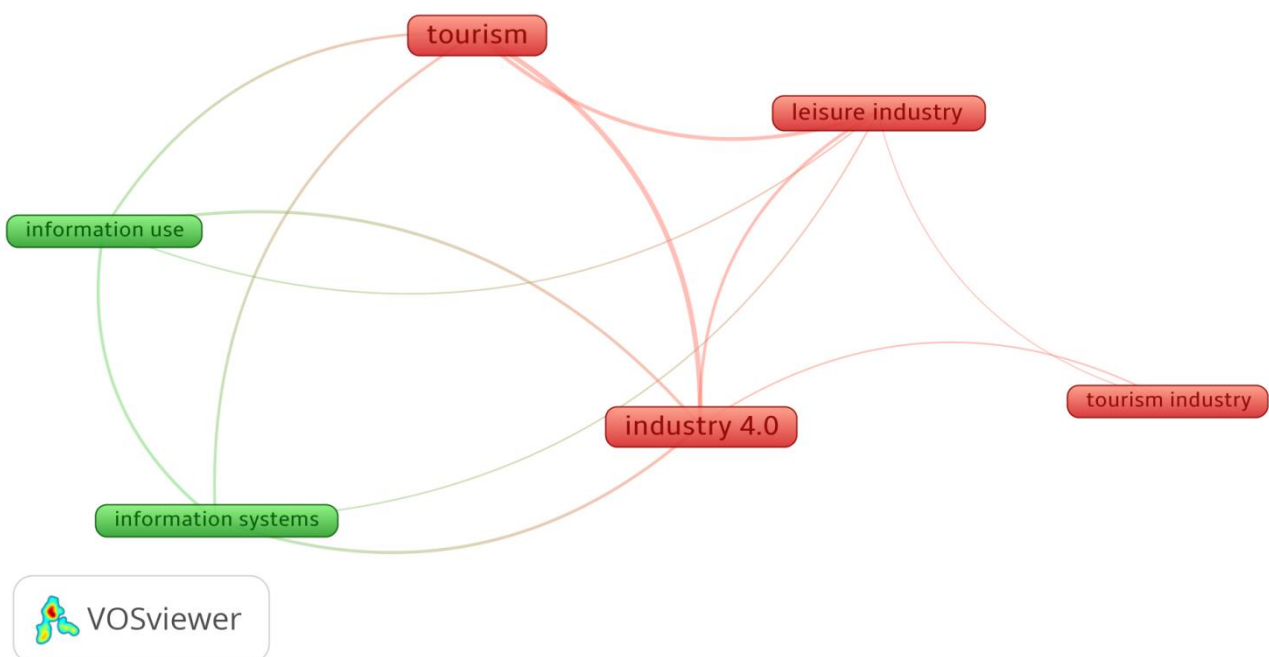
The digital economy refers to a wide range of economic activities that include the use of digitised information and knowledge as a key factor of production, modern information networks as an important activity space and the effective exploitation of information and communication technologies (ICTs) as an important driver of productivity growth and economic structure optimization. The Internet of Things (IoT), cloud computing, big data, fintech and other emerging digital technologies are being used to collect, store, analyse and share information digitally and transform social interactions. Digital, networked and intelligent ICT make modern economic activity more flexible, dynamic and intelligent [137, p. 1]. Due to the use of modern digital technologies, labour productivity has increased significantly, the time for production operations has decreased, the quality of products and services offered to consumers has improved. In addition, the system for selling products has also changed, a large proportion of which is now ordered and purchased via online channels. As a result, trade is gradually shifting to the digital plane.

The digital economy is an economy based on electronic goods and services produced by e-business and sold through e-commerce. The Ukrainian Digital Economy and Society Development Concept 2018 – 2020 defines the digital economy as an activity in which digital (electronic, virtual) data, both numerical and textual, are the main tools of production. As noted in the concept, the digital economy is based on information, communication and digital technologies, whose rapid development and diffusion are already affecting the traditional (physical-analogue) economy, transforming it from a resource-consuming to a resource-creating economy. Data is a key resource in the digital economy. Data generate and provide electronic communication interaction through the operation of electronic digital devices, facilities and systems [71].

The US Bureau of Economic Analysis (BEA) defines the digital economy primarily as an economy based on the Internet and information and communication technologies (ICT). The BEA estimates that between 2006 and 2016, the average annual real growth rate of value added created in the digital economy was 5.6 % and exceeded the average annual growth rate of the economy as a whole (1.5 %). In 2016, the digital economy made a significant contribution to the development of the entire economy: it accounted for 6.5 % of GDP at current prices, 6.2 % of gross output at current prices, 3.9 % of employees and 6.7 % of the wages fund [169]. Depending on the approach to defining the term, the size of the digital economy ranges from 4.5 % to 15.5 % of global GDP [137].

The development of the digital economy is strongly linked to the emergence of Industry 4.0. Broadly, the term "Industry 4.0" describes the expected digitalization of industrial value chains. However, despite considerable international interest in this concept, there is not yet a single officially recognised interpretation of this phenomenon. Typically, Industry 4.0 is associated with the real-time intelligent integration of people, machines and objects to control systems [184]. Industry 4.0 is gradually embracing all areas of society, creating new opportunities for development and improving the quality of life for people around the world.

The objective trends that characterise the development of society are reflected in a certain way in the scientific literature. Based on a bibliographic analysis of the articles in the Scopus database, it is possible to identify the main areas of research on the relationship between tourism development issues in Industry 4.0. To this aim, links between the keywords "tourism" and "Industry 4.0" in the research studies were detected using the VOSviewer software (Fig. 3.1).



**Fig. 3.1. The terminological map of publications based on keywords:
Tourism, Industry 4.0, 86 articles**
(compiled by the author using VOSviewer)

As can be seen from Fig. 3.1, according to the Scopus database, there are currently two main areas of research in this field. The publications in cluster 1 (green) focus on researching the challenges of developing the tourism and hospitality industry in the context of Industry 4.0. Cluster 2 (red) draws attention to the issues of information support for the functioning of tourism industry in Industry 4.0. Ukrainian scholars have also contributed to the study of this problem. Thus, K. V. Kostyanchuk, O. V. Zozulev [72] concentrated on the socio-economic relations of marketing activities in the conditions of forming Industry 4.0. N. E. Skorobogatova [88] and S. B. Voytko [59] studied the problems of economic and social development in their works. It should be noted that the relatively small number of publications in this subject area confirms the relevance of the chosen direction of scientific research.

Industry 4.0 is identified with the fourth industrial revolution and is associated with the widespread implementation of cyber-physical systems in manufacturing, the creation of highly customised goods and services, flexible and autonomous production processes, modelling of production chains and value chains, increasing data volumes, higher processing requirements, new forms of human-machine interaction such as augmented reality, service interface, etc. Industry 4.0 is based on the Internet of Things and new technologies, but it is not an extension of trends in mechanisation and automation. This is the result of changes in the philosophy of creating and implementing management systems that are responsible for the production of goods and services.

Table 3.1 illustrates the changes taking place in production in the conditions of Industry 4.0 compared with previous periods.

Table 3.1

Production evolution [49, p. 467]

	Past	Present	Future
Communication system	Analog	Internet and Intranet	Internet of Things Cyber Physics System
Concept	Neo-Taylorism	Lean production	Smart factory
Solution	Mechanization and automation	Automation and computerization	Virtualization and integration

Industry 4.0 is the next stage of digitalisation of manufacturing and industry, where technologies and concepts such as the Internet of Things, big data, predictive analytics, cloud and fog computing, machine learning, machine interaction, artificial intelligence, robotics, 3D printing, augmented reality play a major role [71]. New technologies and communication tools are not only changing the nature of industrial relations and the organisation of technological processes, they are gradually being introduced into all spheres of the economy.

The idea behind Industry 4.0 is to use new technologies to implement IoT and services in such a way that different integrated business processes, transforming the value chain, enable production to operate efficiently and flexibly, with low costs and high quality. This German strategic initiative "Securing the future of German manufacturing industry" [146] has created a technological benchmark for the entire international community regarding a fundamentally new level of organisation of the single value chain by integrating ICT into the creation, production and sale of goods and services. Cloud technologies make it possible not only to accumulate significant amounts of data, they also increase the speed of data exchange both within organizations and between the organization and its environment.

Industry 4.0 will allow different machines to collect and analyse different data, allowing faster, more efficient and flexible processes to produce higher quality goods with lower costs [172]. This, in turn, will contribute to increased productivity, economic shifts and accelerated industrial growth, changing the competencies of workers and the conditions of competitiveness of regions and organisations.

Countries, industries and individual enterprises can ensure sustainable competitiveness in the digital economy through Industry 4.0 applications. The widespread use of computer tools, data collection systems, digital technologies for the design and production is changing the relationship between producers and consumers of goods and services. Production is increasingly adapting to the individualized needs of people and a dynamic external environment.

The expansion of Industry 4.0 is changing relationships across the board. The introduction of modern information systems into production processes requires the appropriate knowledge and skills of personnel to operate them. It is clear that with the introduction of new Industry 4.0 technologies, machines will do most of the simple, routine activities that do

not require high skills. Despite the fact that automation and robotization processes are increasingly affecting the manufacturing sector, machines cannot replace some individual skills and abilities. Requirements of creativity and communication will be put forward to employees with the subsequent digitalization of industrial relations. Accordingly, the structure of demand on the labour market will also change over time. The most in-demand professions will be those requiring such skills and abilities that cannot be replaced by machines.

It should be noted that while Industry 4.0 was predominantly oriented towards the industrial sector from the outset, nowadays it concerns all industries without exception and extends not only to the manufacturing sector but also to the service sector, in particular leisure, recreation, tourism and travel. The potential for the use of modern digital technology in tourism is significant. Internet tools make information and booking services available to a large number of tourists at relatively low prices. The possibilities of communication between providers of tourism products and services, intermediaries as well as end consumers are greatly enhanced by the use of modern services.

The tourism sector ranks fourth in terms of world GDP production after fuels, chemicals and food in international trade [202], and with the development of the digital economy, tourism will gain an increasing share of the online commerce market. Thus, according to UNWTO, international tourism accounts for 29 per cent of world services exports and 7 per cent of total exports of goods and services. Export earnings from tourism are an important source of foreign income in many destinations around the world, helping to create jobs, promote entrepreneurship and boost local economies [199, p. 29].

The cross-sectoral and labour-intensive nature of tourism sets the stage for the expansion of other sectors of the national economy, highlighting tourism's important contribution to national strategies for economic growth. Tourism development allows the country to attract additional investment and create new jobs. In this way, the travel and tourism industry has a positive impact on other sectors of the economy and expands business opportunities.

The Travel and Tourism Competitiveness Index (TTCI) is an indicator that reflects the state of development of the country's tourism sector.

Published biennially, the TTCI benchmarks the T&T competitiveness of 140 economies and measures "the set of factors and policies that enable the sustainable development of the Travel & Tourism (T&T) sector, which in turn, contributes to the development and competitiveness of a country" [182, p. IX].

The Travel & Tourism Competitiveness Report is a strategic benchmarking tool for policy makers, companies and complementary sectors to further growth of the T&T sector, providing a unique insight into the strengths and areas of development of each country/economy to enhance the competitiveness of the industry. The report also provides a platform for multi-stakeholder dialogue to understand and anticipate emerging trends and risks in travel and tourism around the world, to adapt their policies, practices and investment decisions, and to accelerate the implementation of new models that ensure the longevity of this important sector.

14 components and 90 separate indicators distributed on different components form the Travel and Tourism Competitiveness Index. The structure of the TTCI index is given in Fig. 3.2.

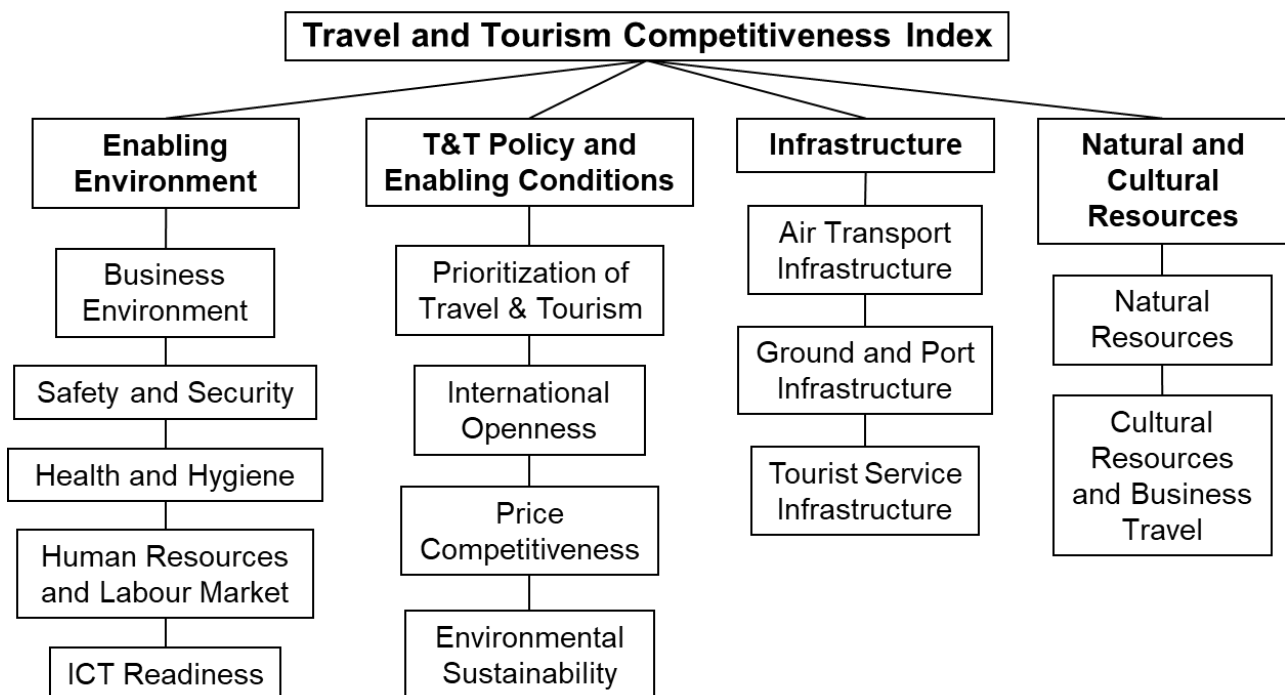


Fig. 3.2. The structure of the Travel and Tourism Competitiveness Index [182]

The report's results [182, p. VII] demonstrate the healthy growth of the industry, with increased competitiveness worldwide set against the slower

improvement and adoption rates of necessary infrastructure and sustainable tourism management practices respectively. An analysis of country/economy and regional performance at a granular level provides interested and responsible stakeholders with an integrated understanding of gaps and opportunities for not only driving competitiveness, but ensuring that the right policies, infrastructure and management systems are in place for welcoming the tourism demand that such competitiveness will activate – while preserving the tourism assets, both natural and cultural, that the industry depends upon.

As has been an ongoing trend over the last four years, T&T competitiveness continues to improve worldwide, and connectivity enabling – and enabled by – the industry remains on an upward path. The TTCI 2019 results show that air transportation, digital connectivity and international openness are advancing in a global context of growing trade tensions and nationalism. Air transport infrastructure improvements show a noticeable increase on route capacity and the number of airlines providing services in individual countries. International openness is progressing, with lower-income economies leading the way. Digital connectivity has been bolstered by a growing number of individuals using the internet and mobile internet subscriptions, meaning more economies are now in a position to leverage the growing list of digital T&T services.

The level of digitalization of the country can be assessed by the World Digital Competitiveness Ranking (WDCR). Digital competitiveness is defined as an economy's ability to apply and explore digital technologies leading to transformations in public practices, business models and society as a whole. The WDCR calculation methodology defines digital competitiveness in terms of three main factors: knowledge, which captures the intangible infrastructure necessary for the learning and discovery dimensions of technology; technology, which quantifies the landscape of developing digital technologies; and future readiness, that examines the level of preparedness of an economy to assume its digital transformation [181, p. 18]. In turn, each of these factors is divided into 3 sub-factors highlighting each facet of the areas under consideration. In total, the WDCR has nine such sub-factors (Fig. 3.3). The ranking covers 63 countries in 2019. Ukraine is ranked 60th.

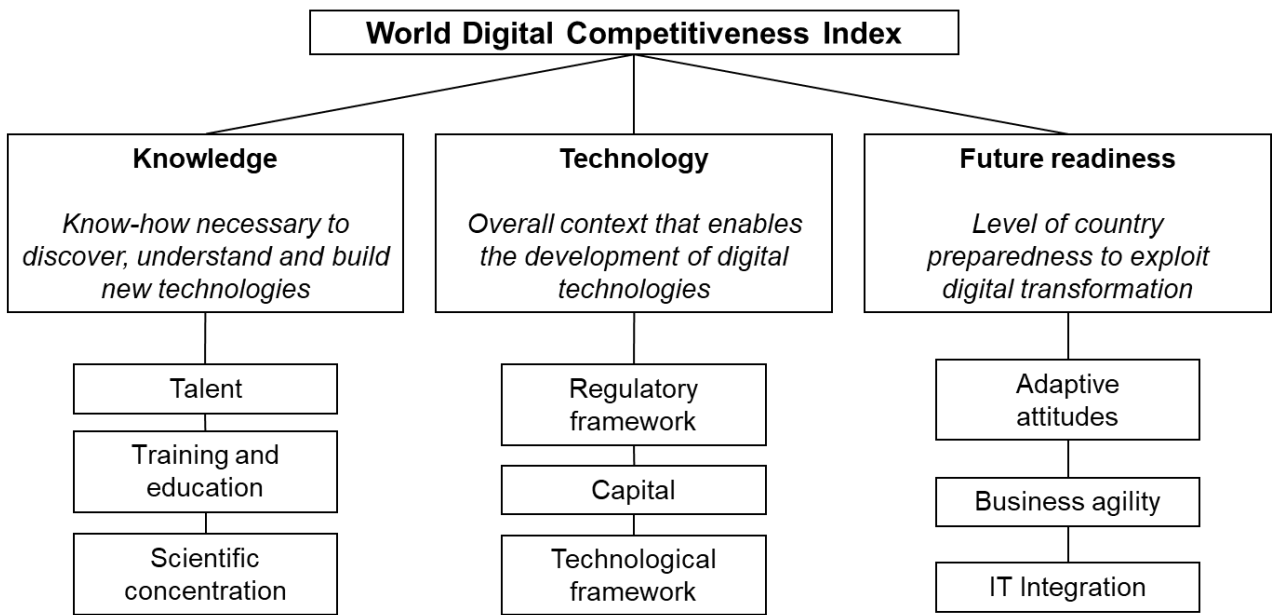


Fig. 3.3. The structure of the World Digital Competitiveness Index [178]

This study explores the relationship between TTCI and WDCR. The research covers 63 countries over 2019. A graphical representation of the correlation between the TTCI and WDCR indicators is shown in Fig. 3.4.

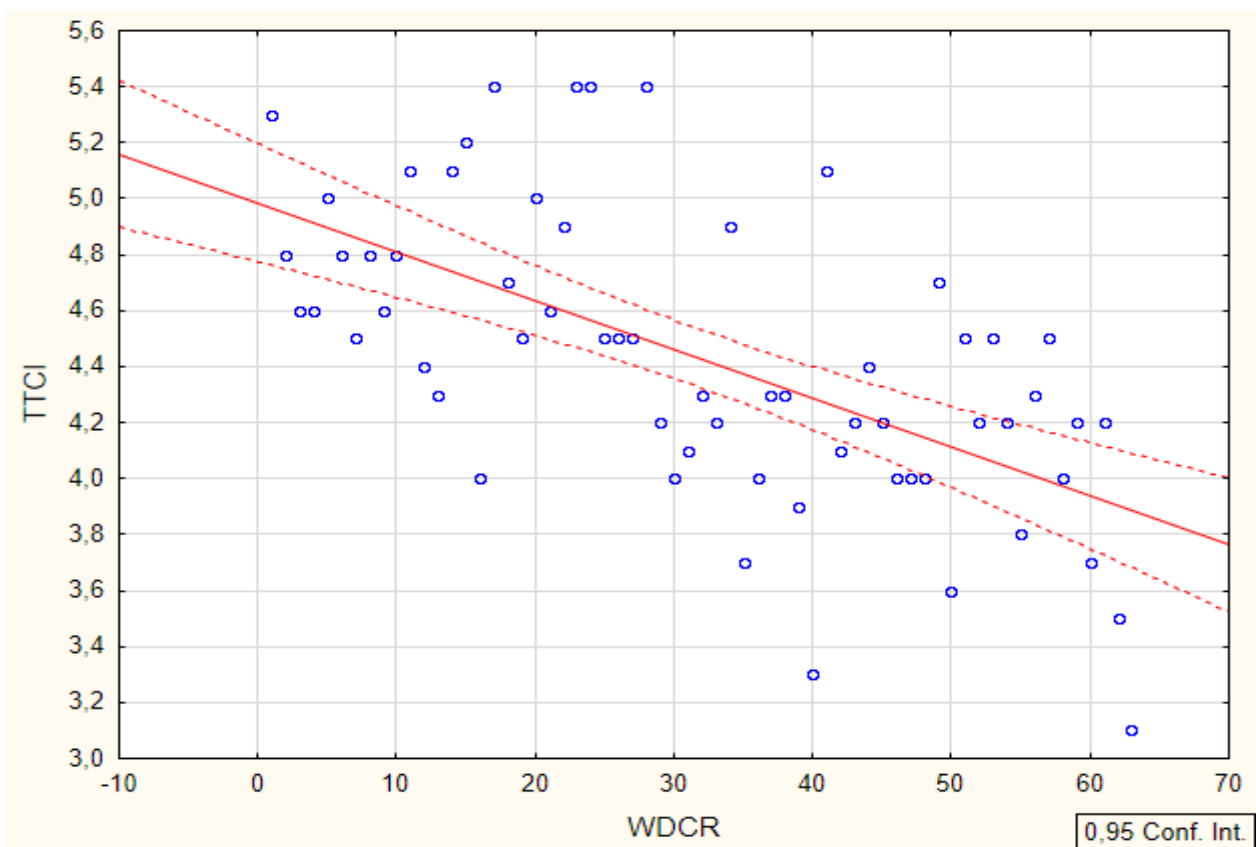


Fig. 3.4. The relationship between TTCI and WDCR (calculated by the author)

As seen from Fig. 3.4, there is a relationship between TTCI and WDCR. This demonstrates that further development of tourism in the context of the emerging digital economy is impossible without focusing on the specifics of digital technology implementation in all areas of the economy and society and in the tourism industry in particular.

The next step in analysing the relationship between TTCI and WDCR involves determining whether this relationship is homogeneous across the sample, or whether it varies between countries according to the value of the indicators.

Primary, it is necessary to find out whether the indicators form clusters or not. The first step is to normalise the indicators. We take the method of complete linkage as a rule, with the Euclidean distance as a measure of proximity. The analysis results are shown in Fig. 3.5.

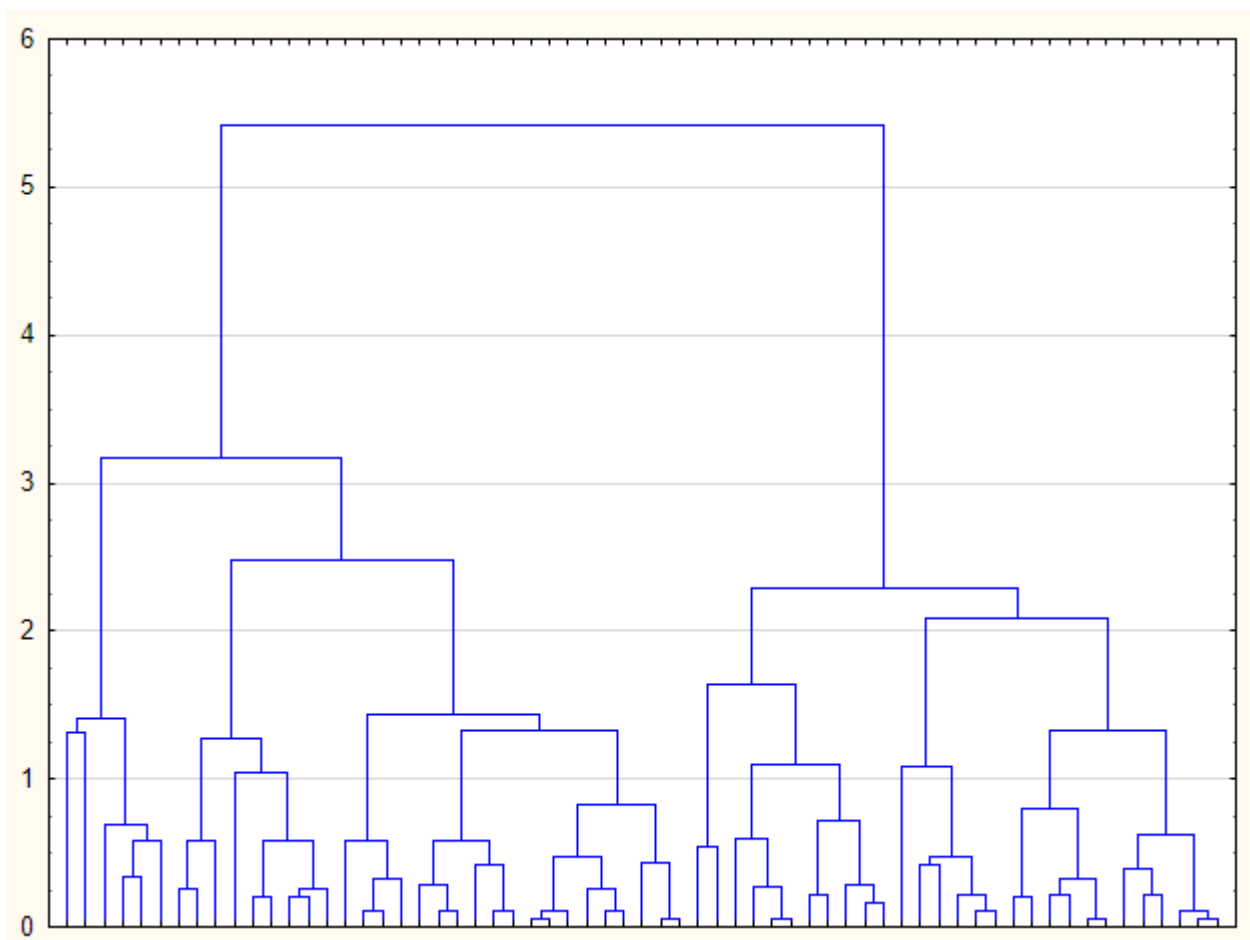


Fig. 3.5. Distribution of countries by groups
(calculated by the author)

Based on the visual presentation of the results, it can be assumed that the indicators form five natural clusters. Table 3.2 shows the normalized

values of the considered indicators for 63 countries, the value of the Euclidean distance and the cluster number.

Table 3.2

Data across countries

Country \ Indicator	WDCR	TTCI	Cluster	Distance
1	2	3	4	5
Belgium	-0.4	0.140418	1	0.49
Czech Republic	0.3	-0.24421	1	0.28
Estonia	-0.2	-0.43652	1	0.08
Iceland	-0.3	0.140418	1	0.46
Israel	-0.9	-0.82114	1	0.63
Kazakhstan	0.2	-1.39807	1	0.67
Latvia	0.2	-0.82114	1	0.31
Lithuania	-0.1	-0.82114	1	0.25
Malaysia	-0.3	0.140418	1	0.48
Poland	0.1	-0.43652	1	0.08
Qatar	-0.1	-0.62883	1	0.11
Russia	0.3	-0.24421	1	0.32
Saudi Arabia	0.4	-1.01345	1	0.49
Slovenia	0.0	-0.24421	1	0.17
Jordan	1.0	-1.59039	2	0.24
Mongolia	1.6	-1.7827	2	0.27
Philippines	1.3	-1.20576	2	0.41
Thailand	0.4	-2.16732	2	0.64
Ukraine	1.5	-1.39807	2	0.33
Venezuela	1.7	-2.55194	2	0.63
Denmark	-1.5	0.33273	3	0.23
Finland	-1.4	0.140418	3	0.22
Hong Kong	-1.3	0.717353	3	0.22
Ireland	-0.7	0.140418	3	0.41
Korea Rep.	-1.2	0.717353	3	0.21
Luxembourg	-0.6	0.33273	3	0.44
Netherlands	-1.4	0.717353	3	0.26
New Zealand	-0.8	0.525041	3	0.33
Norway	-1.3	0.33273	3	0.07
Singapore	-1.6	0.717353	3	0.37

Table 3.2 (the end)

1	2	3	4	5
Sweden	-1.6	0.33273	3	0.27
Switzerland	-1.5	1.101976	3	0.52
Taiwan. China	-1.0	-0.24421	3	0.48
UAE	-1.1	-0.05189	3	0.34
Argentina	1.5	-0.43652	4	0.32
Brazil	1.4	0.140418	4	0.42
Bulgaria	0.7	-0.43652	4	0.24
Chile	0.5	-0.62883	4	0.40
Colombia	1.4	-0.82114	4	0.43
Croatia	1.0	0.140418	4	0.34
Cyprus	1.2	-0.43652	4	0.14
Greece	1.1	0.140418	4	0.35
Hungary	0.6	-0.43652	4	0.31
India	0.7	-0.05189	4	0.34
Indonesia	1.3	-0.24421	4	0.21
Mexico	0.9	0.525041	4	0.62
Peru	1.6	-0.43652	4	0.40
Romania	0.8	-0.82114	4	0.39
Slovak Republic	0.8	-0.82114	4	0.37
South Africa	0.9	-0.82114	4	0.35
Turkey	1.1	-0.43652	4	0.08
Australia	-1.0	1.294287	5	0.29
Austria	-0.7	1.101976	5	0.25
Canada	-1.1	1.294287	5	0.40
China	-0.5	0.909664	5	0.39
France	-0.4	1.871222	5	0.32
Germany	-0.8	1.871222	5	0.33
Italy	0.5	1.294287	5	0.79
Japan	-0.5	1.871222	5	0.31
Portugal	0.1	0.909664	5	0.64
Spain	-0.2	1.871222	5	0.40
United Kingdom	-0.9	1.486599	5	0.23
USA	-1.7	1.67891	5	0.78

To test the assumption of five groups, the raw data must be divided into five clusters using the K-means method.

To determine the significance of the difference between the obtained clusters, it is necessary to determine the mean values for the clusters and the Euclidean distance (Tables 3.3 – 3.4).

Table 3.3

Mean values across clusters

Indicator	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
WDCR	-0.054554	1.25475	-1.21189	1.030117	-0.609192
TTCI	-0.477726	-1.78270	0.41515	-0.346017	1.454547

Table 3.4

Euclidean distances between clusters

	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Cluster 1	0.000000	1.708618	1.068324	0.596930	2.020651
Cluster 2	1.307141	0.000000	5.457425	1.057256	6.977020
Cluster 3	1.033598	2.336113	0.000000	2.802981	0.721796
Cluster 4	0.772612	1.028230	1.674211	0.000000	2.964682
Cluster 5	1.421496	2.641405	0.849586	1.721825	0.000000

The results of analysis of variance for clusters are presented in Table 3.5.

Table 3.5

Analysis of variance

Indicator	Between SS	df	Within SS	df	F	signif. p
WDCR	52.54230	4	9.457703	58	80.55479	0.000000
TTCI	52.09991	4	9.900089	58	76.30726	0.000000

The $p < 0.05$ value indicates significant differences for the clusters. Now for each cluster it is necessary to determine the value of the indicators (Fig. 3.6) and calculate the main descriptive statistics for each of the cluster indicators (Table 3.6).

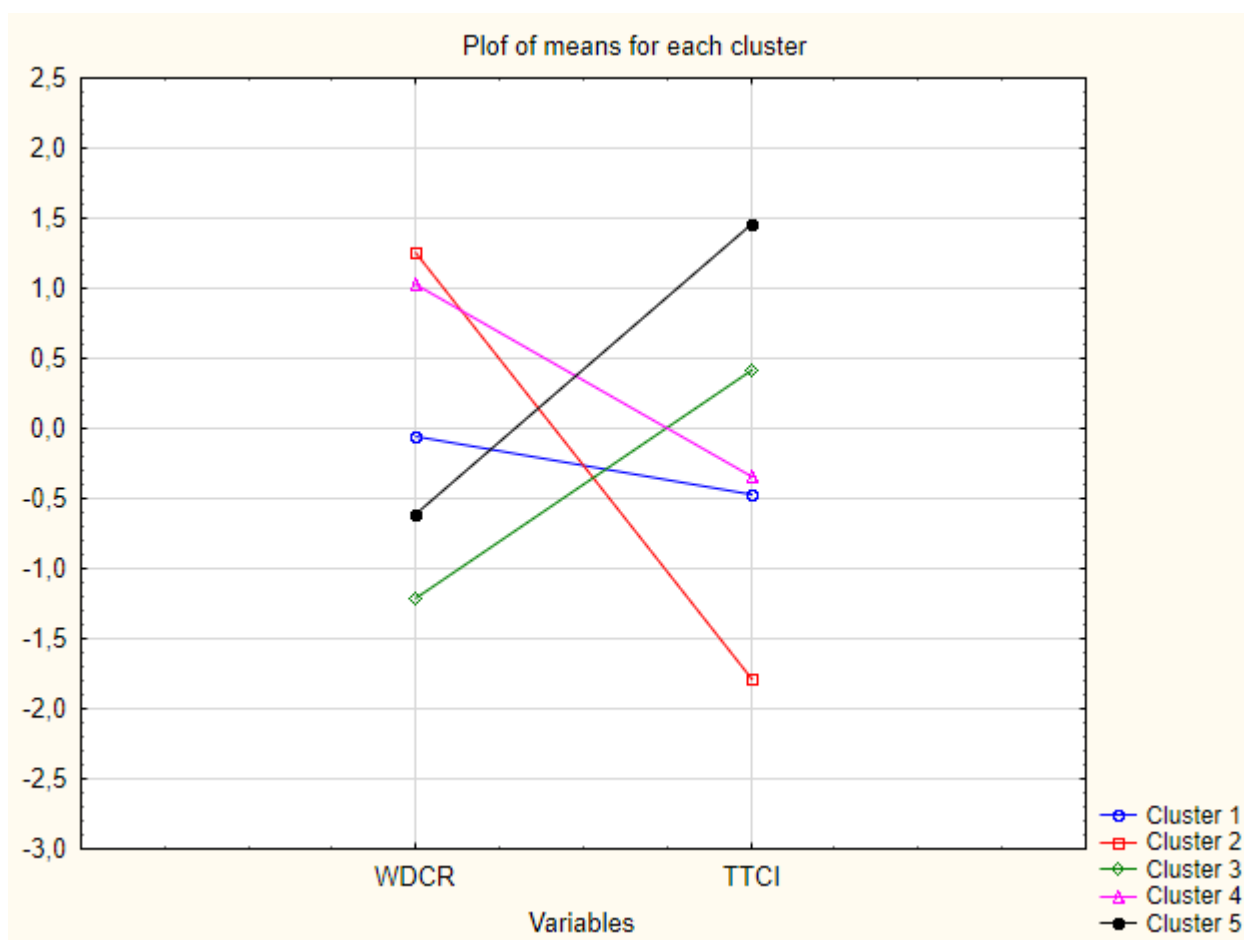


Fig. 3.6. The value of indicators in clusters (normalised values)
(calculated by the author)

Table 3.6

Descriptive statistics for clusters (non-normalized values)

Cluster	Number of countries	WDCR		TTCI	
		Means	Std.Dev.	Means	Std.Dev.
1	14	31.00000	6.21413	4.178571	0.242356
2	6	55.00000	8.80909	3.500000	0.260768
3	14	9.78571	6.09134	4.642857	0.186936
4	17	50.88235	5.97790	4.247059	0.209516
5	12	20.83333	10.59016	5.183333	0.194625
Total	63	32.00000	18.33030	4.426984	0.519990

Thus, the analysis found that countries form five clusters: Cluster 1 (14 countries): countries with mean values of TTCI and WDCI; Cluster 2 (6 countries): countries with low WDCR and low TTCI; Cluster 3 (14 countries):

countries with the highest WDCR and TTCI above average; Cluster 4 (17 countries): countries with low WDCR and medium TTCI; Cluster 5 (12 countries): countries with high WDCR and high TTCI. The mean values of the characteristics across the clusters are shown in Figure 3.7 (in the case of WDCR, a higher score means a lower level of digital competitiveness development).

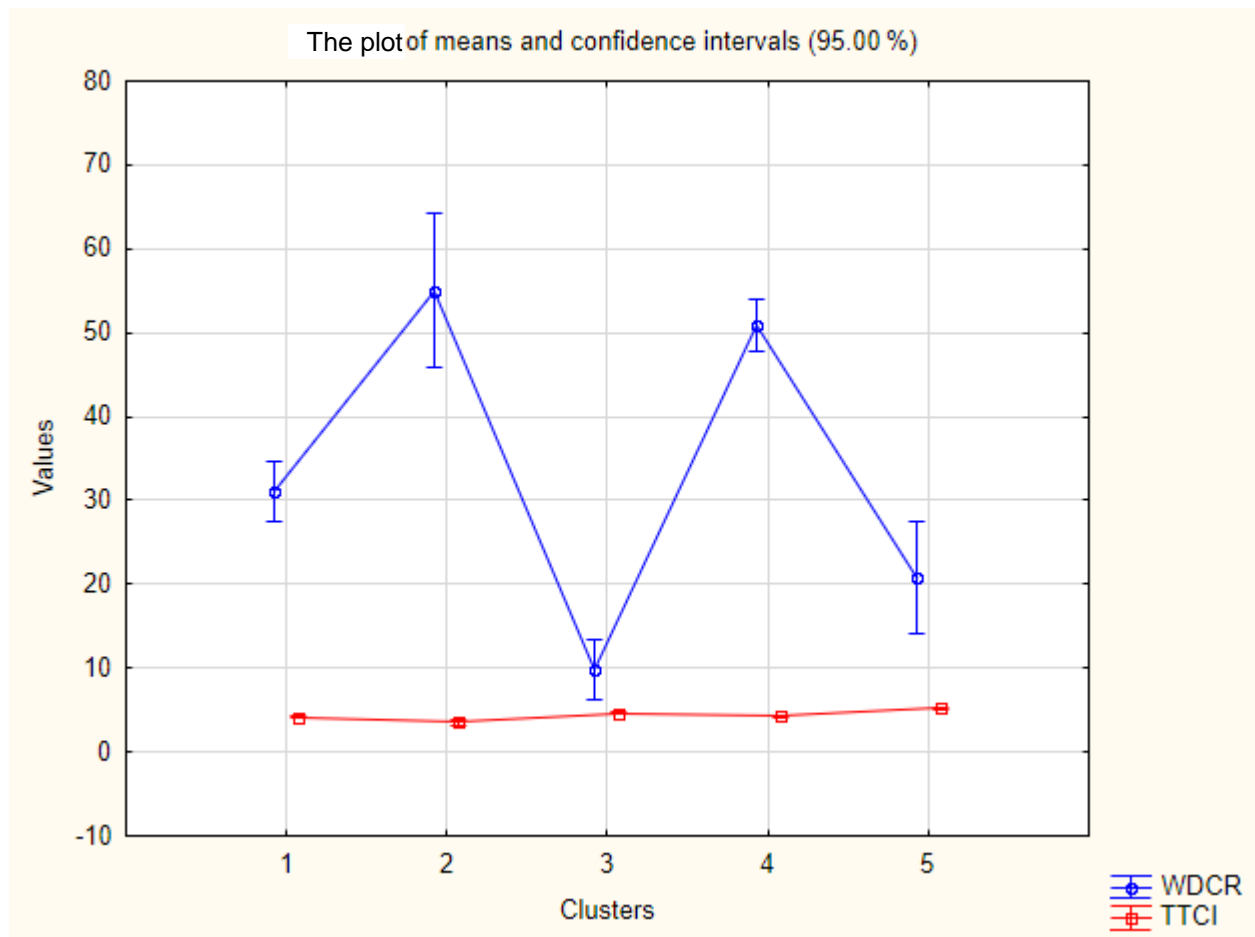
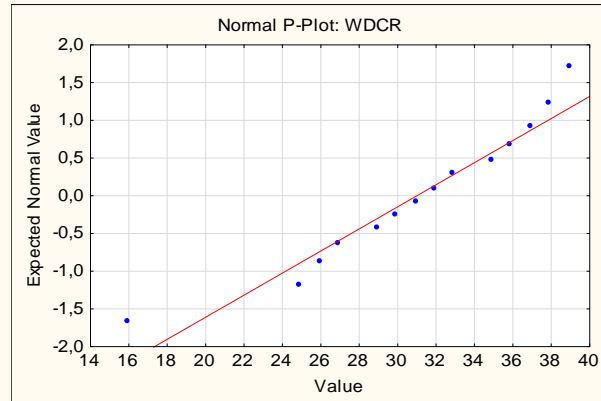
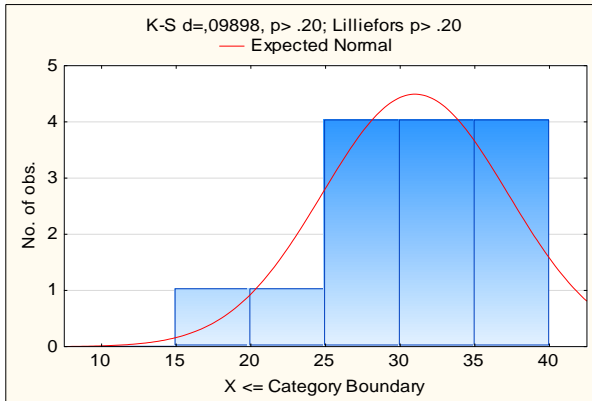


Fig. 3.7. Mean values of indicators across clusters (non-normalised values) (calculated by the author)

The distribution of countries according to clusters makes it possible to identify specific patterns in each cluster and can be used to substantiate development strategy for the tourism industry in the context of the digital economy. This is particularly relevant for Ukraine, because it is difficult to bridge the huge gap between countries with weak digitalisation of economic relations (of which Ukraine is one example) and those with a high level of digitalisation without taking appropriate measures.

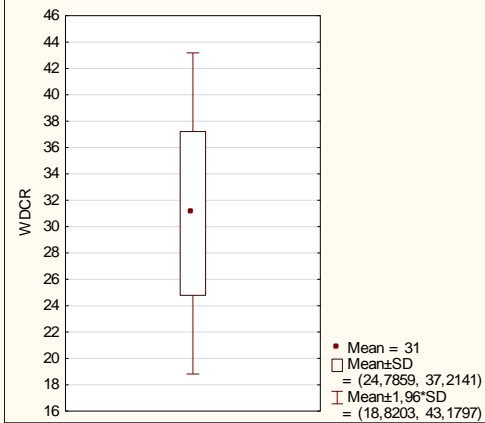
Figures 3.8 – 3.12 present descriptive statistics for the WDCR and TTCI scores for each of the five clusters respectively.

Summary: WDCR

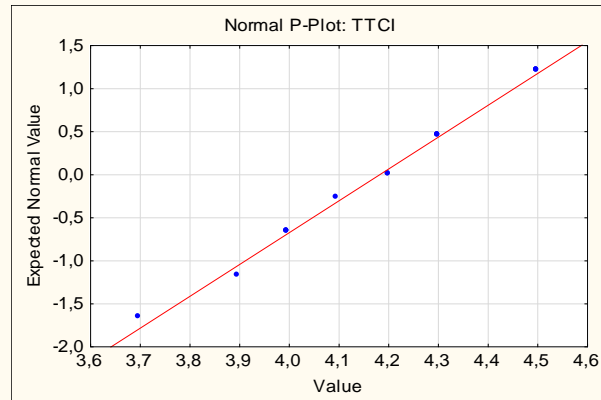
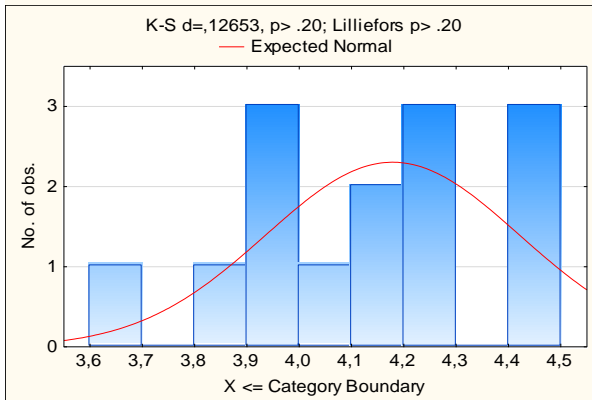


Summary Statistics:WDCR

Valid N=14
 Mean= 31,000000
 Minimum= 16,000000
 Maximum= 39,000000
 Std.Dev.= 6,214128



Summary: TTCl



Summary Statistics:TTCl

Valid N=14
 Mean= 4,178571
 Minimum= 3,700000
 Maximum= 4,500000
 Std.Dev.= 0,242356

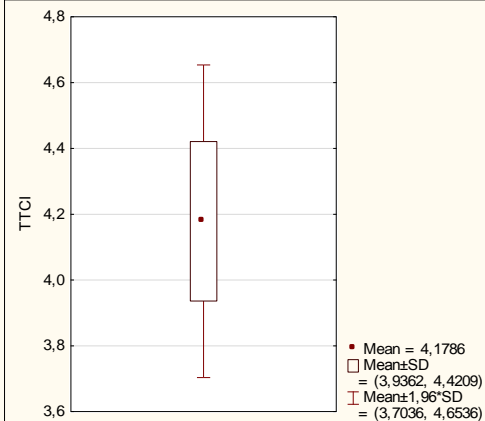
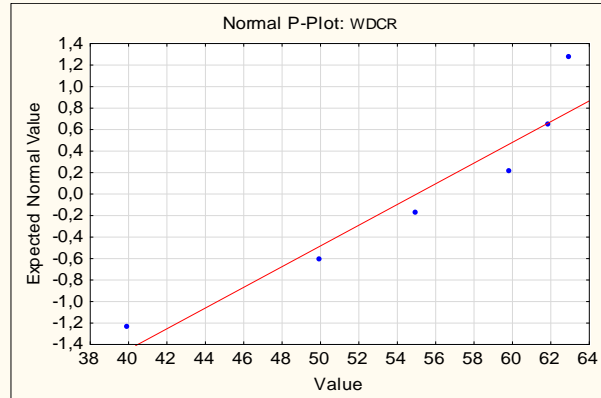
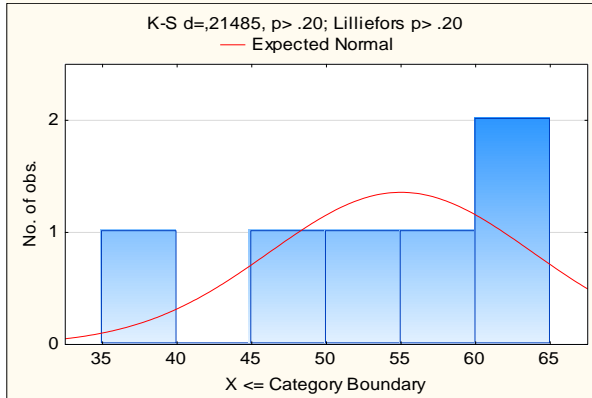


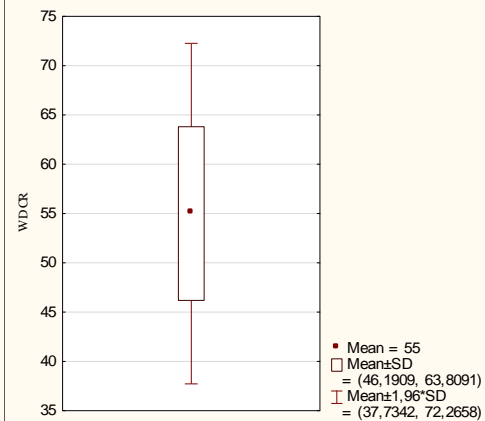
Fig. 3.8. Descriptive statistics for cluster 1

Summary: WDCR

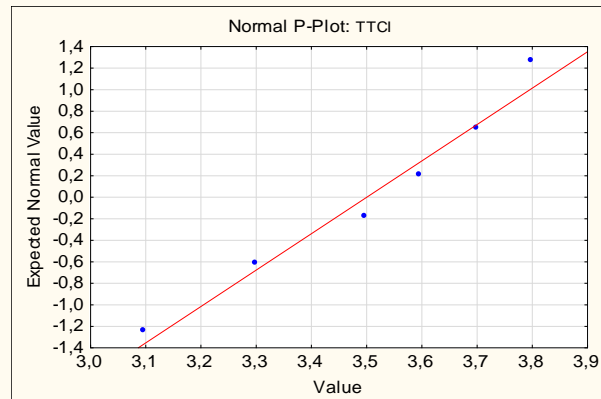
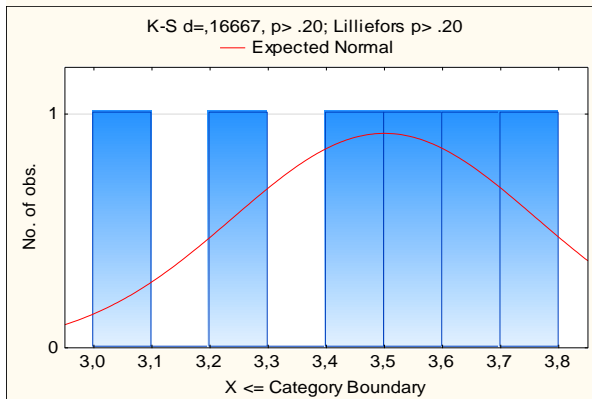


Summary Statistics:WDCR

Valid N=6
 Mean= 55,000000
 Minimum= 40,000000
 Maximum= 63,000000
 Std.Dev.= 8,809086



Summary: TTCl



Summary Statistics:TTCl

Valid N=6
 Mean= 3,500000
 Minimum= 3,100000
 Maximum= 3,800000
 Std.Dev.= 0,260768

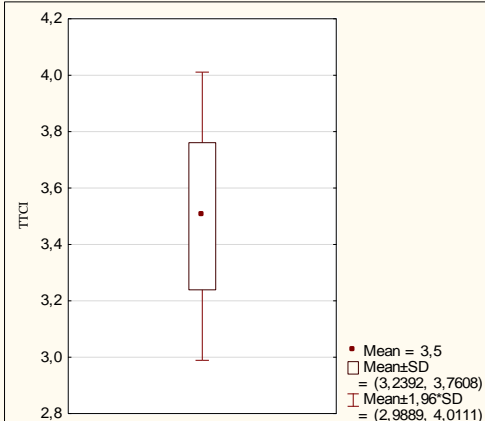
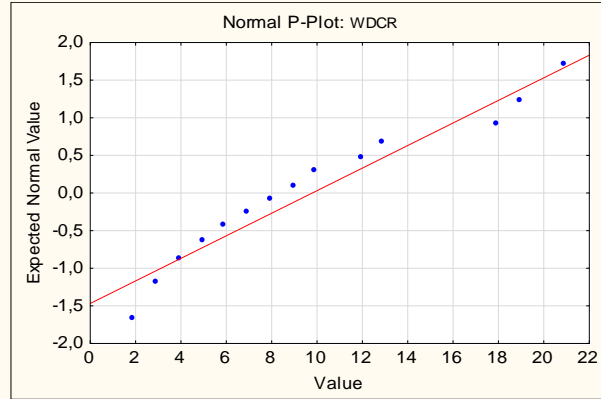
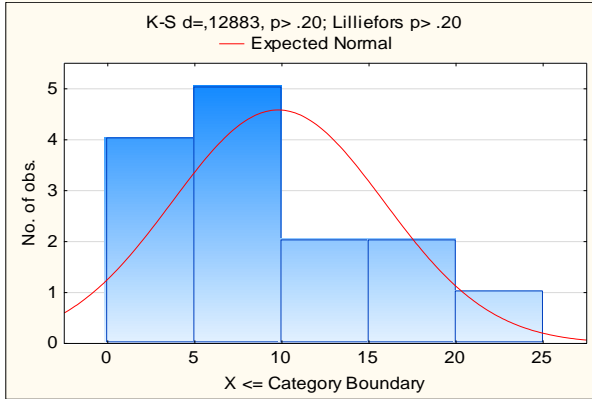


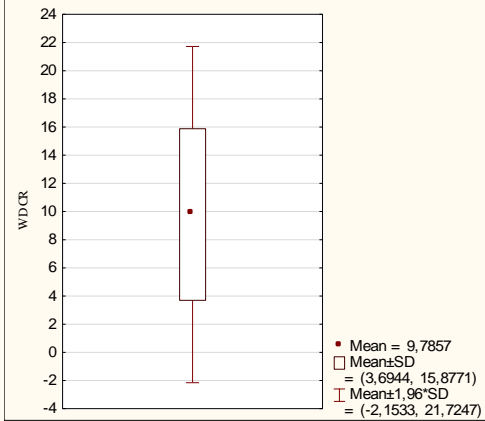
Fig. 3.9. Descriptive statistics for cluster 2

Summary: WDCR

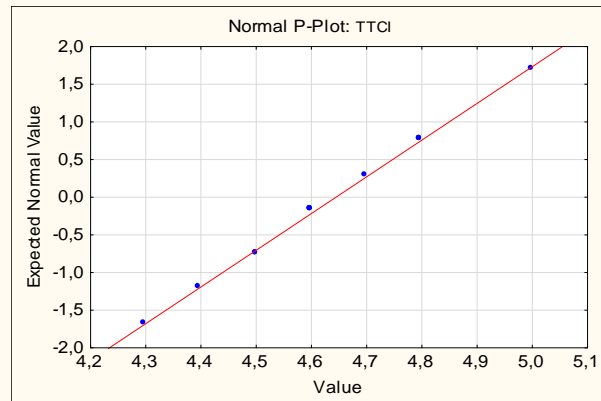
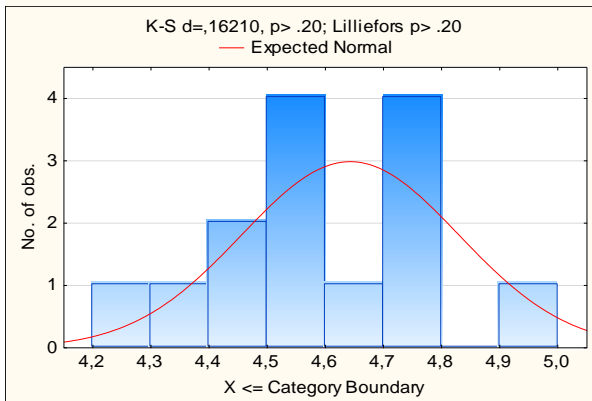


Summary Statistics:WDCR

Valid N=14
 Mean= 9,785714
 Minimum= 2,000000
 Maximum= 21,000000
 Std.Dev.= 6,091338



Summary: TTCl



Summary Statistics:TTCl

Valid N=14
 Mean= 4,642857
 Minimum= 4,300000
 Maximum= 5,000000
 Std.Dev.= 0,186936

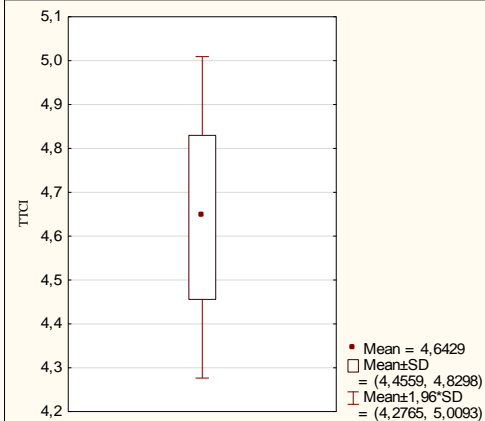
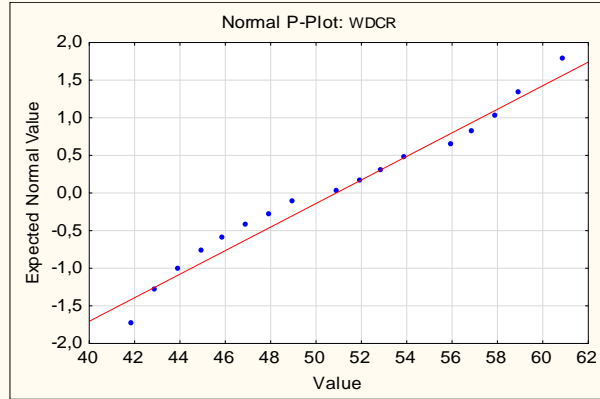
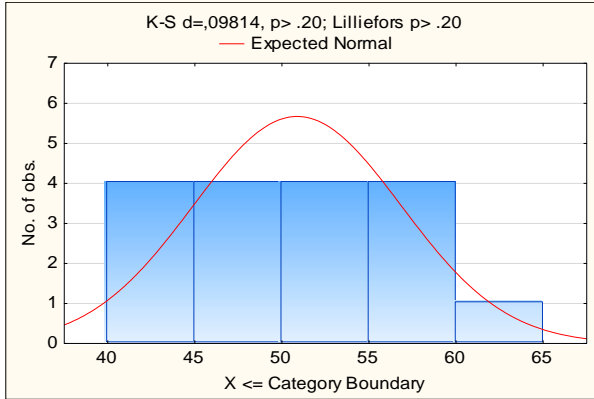


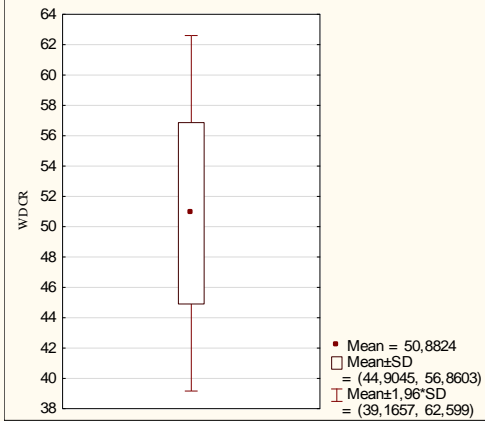
Fig. 3.10. Descriptive statistics for cluster 3

Summary: WDCR

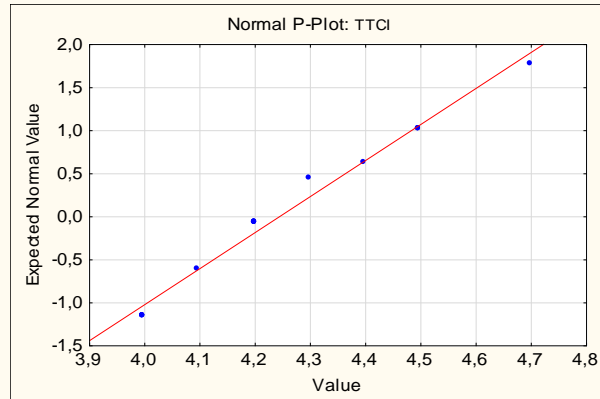
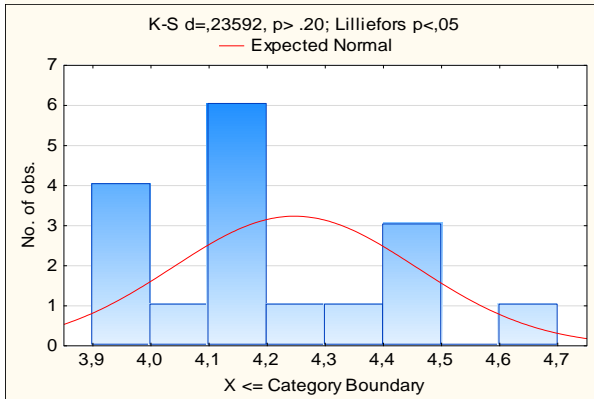


Summary Statistics:WDCR

Valid N=17
 Mean= 50,882353
 Minimum= 42,000000
 Maximum= 61,000000
 Std.Dev.= 5,977900



Summary: TTCl



Summary Statistics:TTCl

Valid N=17
 Mean= 4,247059
 Minimum= 4,000000
 Maximum= 4,700000
 Std.Dev.= 0,209516

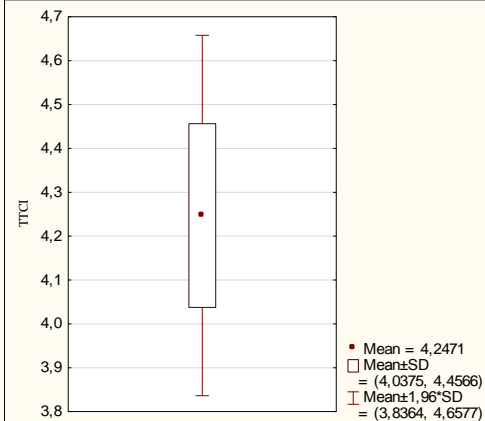
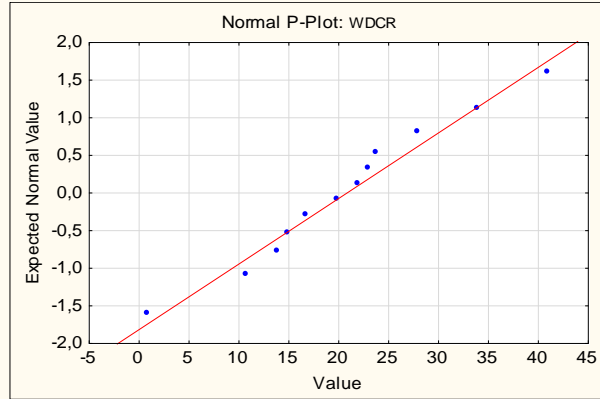
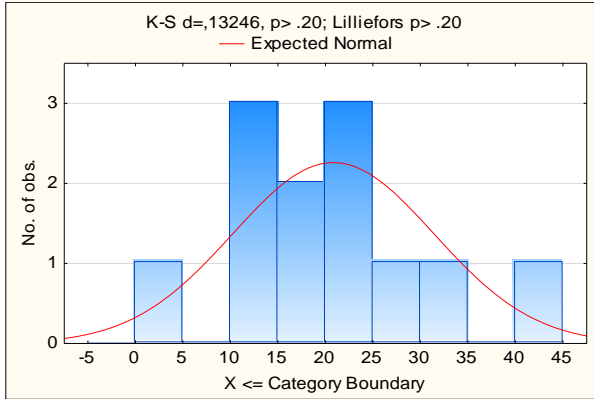


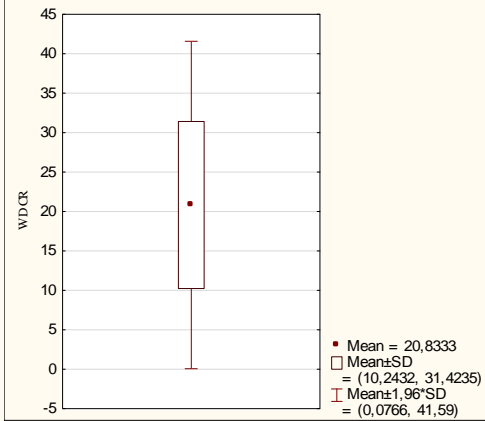
Fig. 3.11. Descriptive statistics for cluster 4

Summary: WDCR

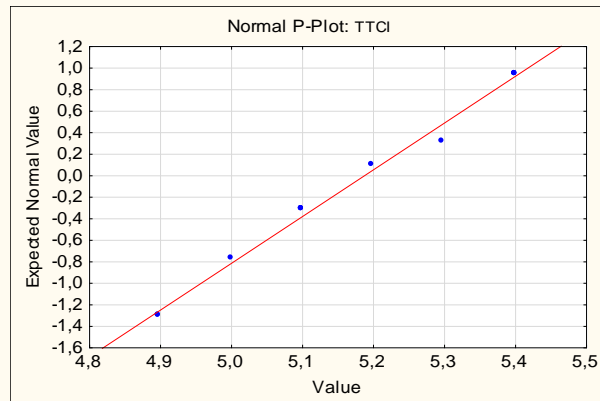
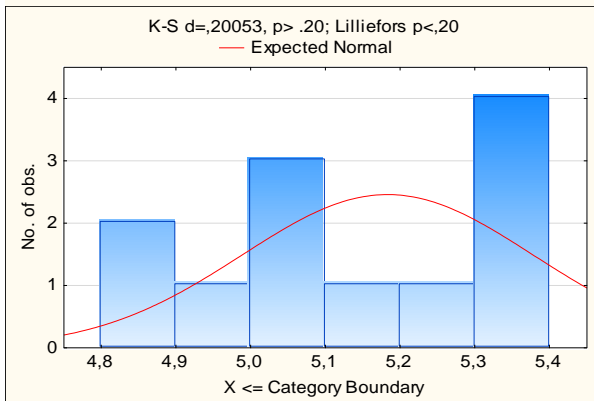


Summary Statistics:WDCR

Valid N=12
 Mean= 20,83333
 Minimum= 1,000000
 Maximum= 41,000000
 Std.Dev.= 10,590161



Summary: TTCl



Summary Statistics:TTCl

Valid N=12
 Mean= 5,18333
 Minimum= 4,900000
 Maximum= 5,400000
 Std.Dev.= 0,194625

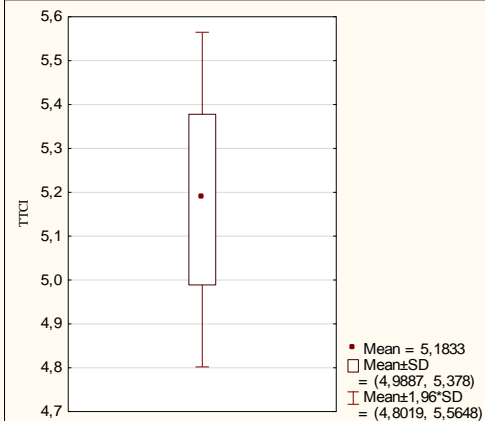


Fig. 3.12. Descriptive statistics for cluster 5

The data shown in Fig. 3.8 – 3.12, confirm the conclusion about the qualitative differences between the clusters. Consequently, for each group of countries, there are certain patterns regarding the relationship between tourism development indicators and the degree of digitalisation of society. The identified differences between the clusters can be used to develop scientific and practical recommendations for the management of the tourism industry, taking into account the quality of the digital environment.

Industry 4.0 is changing both the structure and the means of consumption of goods and services. These systemic changes affect all areas of society without exception. Tourism is not an exception. And times are coming for the tourism industry to renew and evolve with the digital economy in mind. The advancement and widespread use of digital technology is causing corresponding changes in global society. Undoubtedly, technological changes will also affect the tourism sector.

As K. Schwab notes, the fourth industrial revolution provides an opportunity to live a longer, healthier and more active life. Since we live in a society where life expectancy of more than a quarter of children born in developed economies is one hundred years, we should reconsider such issues as working-age population, retirement age and individual life planning [45, p. 30]. This means that rising life expectancy, along with increasing average incomes, will change the structure of demand for tourism services. The proportion of elderly people among travellers will grow. Accordingly, the target market for tourism products and related tourism services (such as health and wellness and rehabilitation tours, medical and nursing services, escort services, etc.) for this age group will become larger.

The expanding digitalisation of economic relations and the corresponding implementation of hotel and transport reservation systems will boost the requirement for online platforms and reduce the need for travel agency intermediary services. The possibilities for individual tour and itinerary planning by tourists will grow, which will consequently increase the travel market demand for online consultation, logistics services and itinerary optimisation, visualisation and 3D modelling of the tour.

The development of social networks and Internet resources that make possible online communication and promote objectivity of information about resorts, hotels, restaurants, etc., provide opportunities for consumers both to leave reviews and to analyse them and on that basis form their own

opinions. Unbiased judgments shape public opinion through independent online platforms and influence the motivation to visit a particular tourist destination. Thus, service providers have to monitor quality carefully, otherwise, in the face of heightened competition in the digital age, the provision of inadequately priced services can lead to a significant reduction in demand.

The proliferation of augmented reality technologies and the use of related applications in the tourism industry will reduce the demand for the services of guides and translators, but increase the demand for computer modelling specialists in tourism and hospitality and related sectors, digitisation of data and images, etc. The number of visits to digital exhibitions, expositions, galleries, museums, etc. is already increasing.

The movement of a large number of monetary transactions into the online sphere will increase the need for cyber security by tourism stakeholders. The protection of personal and banking data, payments and other information flowing through Internet channels is already being mainstreamed. Consequently, data security costs for companies operating in this field will continue to rise.

The globalization of economic relations is also bringing the issue of global risks up to date. The relationship between countries and economies increases the opportunities for openness of economic activity, resource mobility, on the one hand, and makes countries vulnerable to global dangers, on the other.

In a globalized society, emerging crises also have a global dimension, affecting all areas of the country, with greater repercussions each time. The most recent example is the global pandemic caused by the coronavirus, which has negatively affected all sectors of the economy without exception. At the same time, the tourism sector has been one of the hardest hit due to decreased tourist flows, border closures, increased tourist formalities, more difficult conditions for accommodation and catering facilities, and restrictions on tourism and recreational activities in most tourist destinations. The pandemic has affected the vast majority of areas of social and economic life, negatively impacting sectors of the economy as a whole.

Ukraine has a significant untapped potential for the development of the tourism industry, determined by its favorable territorial location and rich natural and recreational resources. However, despite its abundant resources, Ukraine is only 78th out of 140 places in the ranking of competitiveness in the

travel and tourism industry, with a share of tourism in GDP of 1.4 % [182]. This indicates that tourism is not receiving enough attention, either at the state or local level.

It should be noted that Ukraine's digital economy and society development concept for 2018 – 2020 [71] identifies priority areas of tourism digitalization, which include, among others, the development of fast and accessible networks on transport infrastructure, along tourist routes, in nature reserves, on objects of culture and history, leisure and recreation which will ensure full realization of the tourist attraction of Ukraine. It also notes that due to digital technologies, Ukrainian cities will be able to fully exploit their tourism potential and create new opportunities for its growth. The Smart Tourist Destination model at the regional and local levels is a new model of territorial development, management and marketing of tourist destinations to fully meet the needs of today's tourists.

Apart from the digital infrastructure and the smart tourism destination model, other important initiatives for the digitalisation of tourism are:

- creation of tourism destination websites with content localised to the needs of tourists;

- collecting and analysing statistics in real time using IoT, big data and open data technologies;

- creating virtual tours, 3D-modelling, equipping tourist attractions with web-cameras, implementing QR-codes, RFID tags and a cashless payment system;

- implementation of loyalty programmes and electronic tourist cards;

- creation of mobile tourist applications (with route maps, audio guides, geolocation);

- electronic ticketing at tourist sites and leisure facilities;

- digitalisation of museums (electronic multilingual catalogues, virtual and augmented reality, audio guides and e-guides);

- electronic tickets at tourist sites and leisure establishments;

- digitalization of museums (electronic multilingual catalogs, virtual and augmented reality, audio guides and electronic guides).

However, the concept does not determine the necessary volumes and directions for attracting resources (including budget financing) for the implementation of these measures, does not justify the stages with clear terms of the tourism industry digitalization. This indicates the absence of a well-founded state policy for the tourism sector development, which fully

corresponds to the conditions of a digital society. As noted in the report, the peculiarity of Ukrainian digital development is that individual users and business are significantly ahead of the state and industry. Ukrainian small and medium-sized businesses already use ICT and mostly digital methods to promote their services, while the state and large industry in Ukraine dramatically lags behind [73, p. 228].

In addition, O. Pishchulina focuses on the fact that there are a number of problems in Ukraine today that need to be eliminated by public policy instruments:

lack of declared devices for electronic payments;

the activities of the majority of electronic commerce entities are not regulated by law (except for marketing and offer agreements);

the issues of using electronic trust services as a component of electronic commerce have not been settled;

there is no unified system of protection and regulator of consumer rights in the field of e-commerce;

absence of institutional mechanisms for creating an effective system for protecting personal data in this area [73, p. 252].

In our opinion, state support for the tourism sector, especially in the post-crisis period, should be designed based on the strengths, weaknesses, opportunities and threats to the development of the Ukrainian tourism sector in the digital economy (Table 3.7).

Table 3.7

The SWOT analysis matrix for the development of Ukraine's tourism sector in the digital economy (developed by the author)

Strengths	Opportunities
1	2
High level of IT expertise	Development of information and communication technologies
Low cost of the tourism product	Expanding the scope of mobile applications and services
Significant natural, recreational and cultural-historical tourism potential	Widespread use of systems for booking and reserving tourist services
Favourable geographical location	Deferred demand for a tourism product during a pandemic

Table 3.7 (the end)

1	2
Weaknesses	Threats
Low level of investment in the tourism sector development	High risk of quarantine restrictions
Inadequate level of technological support for the digital economy	Insufficient legislative regulation of the tourism sector activities
Insufficiently developed infrastructure	Lack of state support for the tourism industry
Low income of the population	High level of competition in the industry

Thus, applying the proposed approach to identify opportunities, threats, strengths and weaknesses of the domestic tourism sector increase in the context of digitalisation of economic relations will allow tourism entities to implement a balanced development strategy. Ukrainian tourism enterprises will be able to ensure their competitiveness on the international tourism market and improve the quality of services on the domestic tourism services market by putting into practice the opportunities and technical means relevant for Industry 4.0 and by developing a step-by-step strategy implementation plan.

The necessity of developing the tourism sector in the emerging digital economy is confirmed by the experience of the least developed countries (LDC). Many of them have identified tourism as a national economic development priority, which has contributed to a significant inflow of investment, foreign exchange and employment. Tourism has been a driver of economic growth, boosting government revenues and creating opportunities to improve the well-being of their citizens. And some of these countries have lost LDC status because of the development of the tourism sector.

Conclusions. The digitalisation of economic relations has a significant impact on the tourism industry. However, this impact is ambiguous. On the one hand, the possibilities of differentiating the tourism product are greatly increased by involving the consumer in the process of creation of this product through interactive means, expanding the list of tourism services, raising the level of quality, widening marketing channels, etc. On the other hand, the conditions of the digital economy put forward new requirements for tourism

enterprises. They must adapt to rapid technological changes, integrate into the digital economy, offer a unique, inimitable, customer-oriented product in the face of increasing competition, integrating markets and expanding the ability of tourists to design tours on their own.

Under such circumstances, the use of evidence-based tools in tourism activities, taking into account the latest trends in the digitalisation of the tourism industry, is relevant. Tourism actors will be able to implement a balanced development strategy by applying the proposed approach to identify opportunities and threats, strengths and weaknesses in the development of the domestic tourism sector in the digital economy.

With the application of modern digital technologies, the tourism industry is gaining new opportunities for sustainable development. But at the same time, the requirements for tourism stakeholders to implement ICT are increasing. This reinforces the need to build certain skills of the staff and to create a modern infrastructure.

Based on the application of the cluster analysis procedure using the Statistica software product, the study found that there is relationship between tourism development and Industry 4.0 indicators. This relationship is similar for some countries, allowing them to be clustered within a panel sample. At the same time, there are differences between the groups identified during the analysis. This leads to the conclusion that the relationship among the analyzed indicators is variable in each cluster. Further analysis using the Granger causality test will determine the direction of the relationship between the indicators and can be used to develop the tourism industry in the context of Industry 4.0.

Therefore, the development of tourism in middle-income countries, such as Ukraine, taking into account Industry 4.0, will increase the budget revenues, improve the country's image and its attractiveness to investors. Furthermore, the digital divide and the varying degrees of countries' readiness to integrate into the digital economy point to the need for new policies and regulations. These provisions will contribute to a more equitable distribution of the benefits of the digital transformation process in recent years.

Section 4. The use of modern information systems and technologies to improve the competitiveness of tourism and hospitality businesses

Under current conditions, it is difficult to imagine a business that would not use a variety of software products whose main purpose is to improve selected business processes. Standard software programs have already become commonplace, where every movement of a potential consumer takes its life cycle from registration on a website to the desired effect, specifically – the purchase of a product or service. The tourism and hospitality business is no exception, they are rather those areas of activity where information systems and technologies are leading both in quantitative diversity and qualitative content. Information systems help to optimize the interaction of all participants in the tourism market, effectively combining the tourists' desires, the capabilities of tourism industry players and market opportunities.

The electronic space is expanding and is being updated rapidly, online platforms, e-guides and services (cars, delivery, concierge service, etc.), online reservations, self-registration desks, chat bots, blogs and channels are becoming integral elements of doing business.

The use of modern information systems stimulates the development of an enterprise, increases its competitiveness and allows it to qualitatively stand out from its competitors. Domestic tourism and hospitality businesses are leaders in this area of innovation as far as the market is dynamic and, accordingly, it is necessary to adapt quickly and effectively both to changes in the environment and to the consumers' preferences directly. According to the competitiveness and innovation data of the world rankings in 2021, Ukraine occupies the following positions. In particular, according to the world competitiveness rankings, Ukraine takes 54th place among 64 countries represented in the ranking. The Ukraine's ranking dynamics during 2016 – 2021 is presented in Fig. 4.1.

Moreover, innovation, digitalisation, supportive policies and social cohesion are identified as key factors.

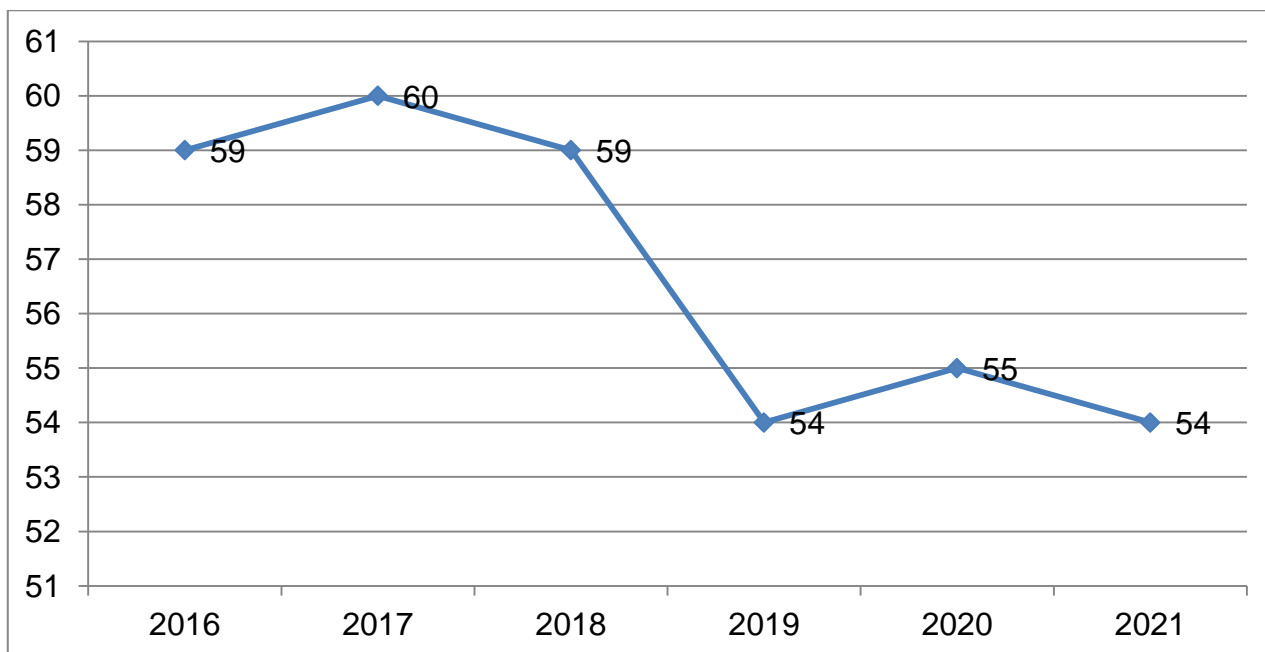


Fig. 4.1. Ukraine's place in the world competitiveness rankings
(compiled by the author based on [198])

Besides, the human resource capacity and digitalisation are ranked in the study separately with Ukraine ranked 42nd and 58th respectively. The competitiveness analysis demonstrates an improvement of Ukraine's position in the global rankings during this period, in particular, in terms of innovation activity as well as in the Technology and Knowledge blocks.

In 2021 the Global Innovation Index (GII) ranks Ukraine 49th among 132 countries [200]. For this rating an analysis of almost 80 indicators, aimed at assessing innovation resources and results, is carried out to measure the country's innovation activity. Thus, for comparison, the country's position was better in 2020 and was determined as 45th while in 2019 it was 47th. According to the study of the World Intellectual Property Organization [200], there is a link between income (GDP per capita) and innovation development, and the stronger the link, the stronger the country's position in this field. In particular, Fig. 4.2 shows a positive correlation between innovation and income levels (the X-axis represents GDP per capita, the Y-axis shows GII Score). What is more, if the country's economy is higher than the trend line, it shows a better position than expected, and if it is lower, the expected results from innovation are lower than the corresponding income level.

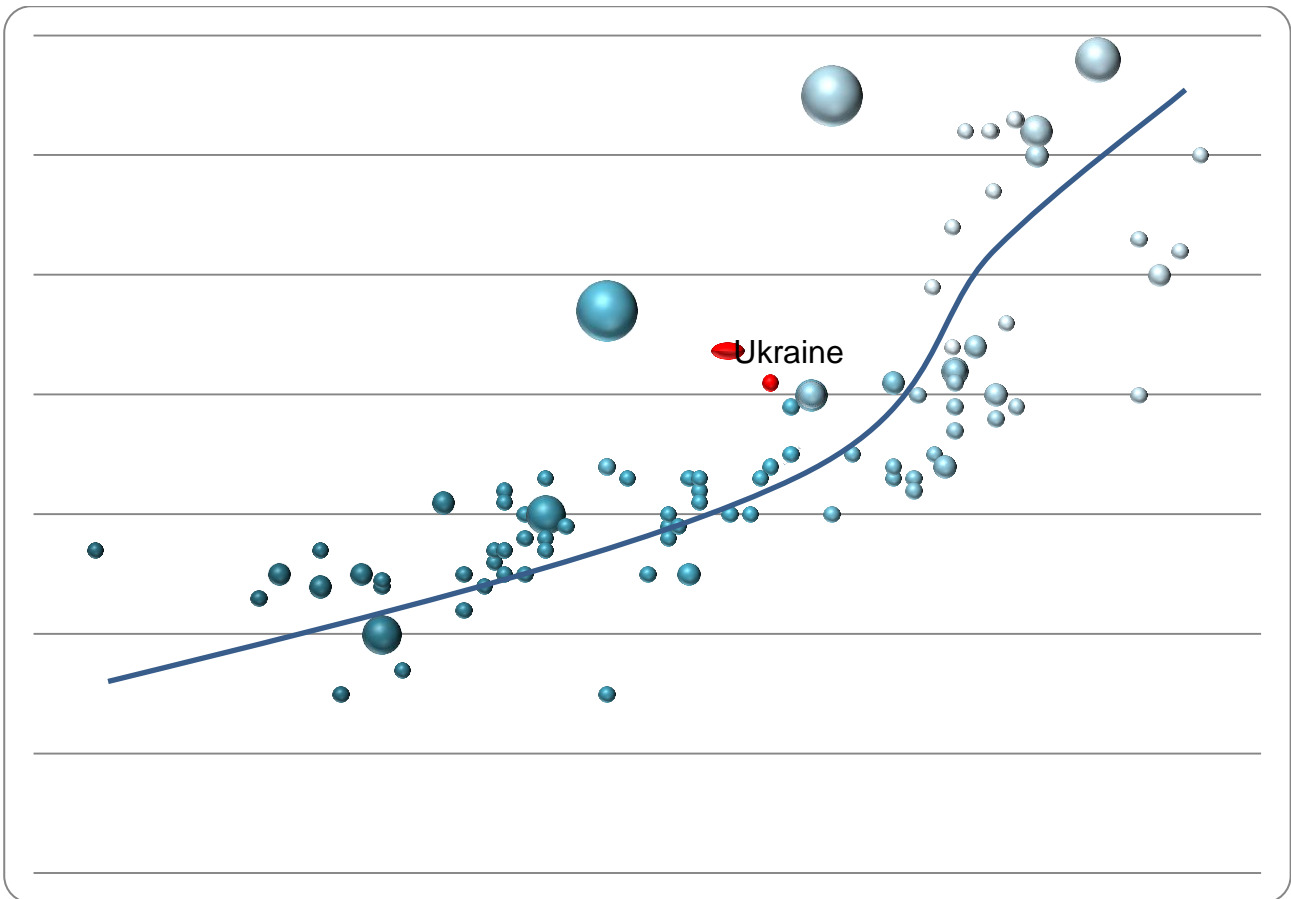


Fig. 4.2. The relationship between innovation and development
 (compiled by the author based on [200])

When assessing innovation performance in relation to the level of investment in these innovations, there is an excess over investment. Therefore, it is necessary for investment policy to encourage investments in innovation for economic development to grow. The use of innovations, in particular the creation of domestic competitive information systems, should be an important component in order to increase the competitiveness of the country and, consequently, of the enterprises themselves.

The last ten years have seen a qualitative leap in the development of information technology which has encompassed all areas of the economy. And the events of 2020 have stimulated development even more rapidly when an active combination of the so-called online and offline formats has begun. It is only natural that the tourism and hospitality businesses have used information systems and technologies intensively prior to these events but in contemporary conditions the software products have been modified and the

functionality of the programmes has considerably expanded. Moreover, services that do not require direct contact with the company's staff have been introduced or further expanded. Thanks to special applications that do not require additional skills, it is possible not only to book a tour or a room, but to fully check in or to make a payment. And the list of such services is expanding in every information system.

The consumers have also begun to refocus from the conventional mode of visiting a travel agency office to online mode, where, starting with chatbots, it is possible to obtain all the necessary information, view relevant videos, read real reviews and make payments. The latter, however, is still questionable for a customer especially if an agency or hotel services are used for the first time. Nowadays, there are numerous ways to pay securely which has become commonplace for consumers aged under 40 – 45. As for the older age group, the percentage of information programmes usage compared to the previous age group is much lower, and, consequently, the level of distrust of online payments is high. As a rule, consumers who frequently use booking services such as hotels or airline tickets, do not have any problems with the process. Those who are not quite confident in buying online deal with agencies specialising in these activities or take advantage of the relatives' help.

When considering this area scientifically, there are many works devoted to the use of information systems and technologies both among foreign scholars and domestic ones. Of particular attention is the study carried out by I. Khatri [45] where the author conducted a detailed analysis of key researches illustrating the use of information systems and technologies in tourism. The study focuses, first of all, on the importance of introduction of information technologies into activities of the tourism industry enterprises as well as on the resulting competitive benefits for these enterprises. Secondly, the analysis of more than 60 scientific papers allowed the researcher to come to the generalizing conclusions that the use of information technologies in the work of service sector enterprises is caused by the study of information needs, consumer behaviour at various stages and formation of competitive advantages for the enterprise.

Z. Xiang' research [54] draws attention to the peculiarities of the Internet technologies use while planning the travel, as does the work of E. No and J. Kim [52] which aims to study the use of travel resources through smartphones.

In S. Ivanov's study [44] devoted to the impact of information technologies on the tourism industry, it is emphasized that information technologies can have both a positive impact on the enterprise development in this sphere and a negative one. In the future the result of the new technology introduction is viewed as a division of tourism and hospitality enterprises into high-tech ones, which will offer automated but cheaper standard services, and companies with a high level of service quality where personnel will play a significant role.

There are many works devoted to this direction of scientific research by domestic researchers, among them are S. Melnychenko [16], M. Benko [2], M. Skopen [29], O. Rudkivsky [82].

It is worth emphasizing that in the literature there is a simultaneous use of both concepts – information systems and information technologies in tourism. Since these concepts are not synonymous, therefore, it is important to distinguish them on the basis of scientific research. Thus, it is necessary to analyse the essence and main differences between them.

In particular, an information system is considered to be a set of elements that collect, process, transmit, store and provide data that are united by a common objective [12]. M. Benko provides a detailed analysis of the various approaches to defining an information system [2]. The author notes that the main objectives of an information system include:

- identifying sources of information;

- collecting, recording, processing and issuing information concerning the state of the object of study;

- disseminating information among the relevant system participants.

Availability of a direct database is another important element of the information system. At the same time, M. Benko also considers different approaches to the interpretation of information technology, which is understood as transformation of source information into result information.

That is, information technology is a part of the system, thus, it is narrower, but a mandatory element of the use of technical means. Therefore, in the practical activities of tourism and hospitality enterprises information systems are used when within them a significant place is given to the technology application.

Quite often, information products emerge as start-ups which then continue to gain popularity and become the unchanging totalizer of the

service sector. In the tourism and hospitality sector this is evidenced by the large number of start-ups that have been growing in recent years.

Businesses are trying to be the first to find such products in order to improve their own competitiveness further enabling them to distinguish significantly from the competitors and, more importantly, to become market leaders with a large number of competitive advantages.

Thus, every year the European Union promotes the best travel start-ups and publishes a ranking of "100 Best European Startups". In particular, the "EU – Startups Summit" is a global event to present, promote and capitalize on Europe's most popular startups [128].

For example, in 2021 representatives of different countries attended this event and the finalists were represented by participants from Poland, Romania, Greece, Cyprus, Croatia, Italy, Spain, Hungary, Ireland, Ukraine and Belgium and they presented their startups in 18 categories [178].

In the "Tourism" category, "Live Electric Tours", which was also the winner of the "World's Best Startup" in the "Sustainability" category of the "Tourism Startup Competition" organised by the UNWTO, took the lead.

Besides, according to Crunchbase research [183], 2021 began to revive in both the number of start-ups and their funding. In 2021, the event combined two years at once – 2020 and 2021 due to relevant events. Therefore, the previous year for startups consideration was 2019.

As reported by Crunchbase research, in 2019 the total startup market was estimated to be worth more than \$1 trillion. Moreover, the largest and most frequent investors are from the EU and the US.

In the Travel & Tourism category, the most profitable startups were [133]:

Airbuy, a service that optimizes the process of purchasing in the duty-free zone [103];

Heycars, a service for corporate clients and travellers for professional chauffeur-driven service around the world [139];

Timeshifter, a mobile app that helps tourists prepare for jet lag and reduces the difficulties of flying [186].

Startups in tourism growing in popularity are:

KLOOK (a tour booking platform) [147];

OYO (a platform for selecting budget hotels) [161];

Evaneos (personalized travel management) [129];

Omio (first known as GoEuro (a search for air and train tickets in Europe)) [158];

Traveloka (an online travel agency) [189];

TripActions (a business travel service) [193];

Adara (analytics of metabase for airlines and hotels) [101].

The innovators of international tourism development in the 5 last years are considered to be [83]:

Flio (Hamburg), whose the main purpose is to optimise the consumer's time who is waiting for the flight at the airport [134];

Medigo (Berlin), providing online search and communication of tourists with doctors worldwide [153]. This service brings together more than 1,000 leading doctors in the field of medical tourism. The platform is free and available in five languages: English, German, Spanish, Italian and French;

HotelChamp (Amsterdam), a service offering hoteliers a set of data collection and processing tools that increase direct revenue of hotels [141]. This service operates in more than 1200 hotels in more than 40 countries;

Comtravo (Berlin), an artificial intelligence platform that uses speech recognition and provides support by travel specialists to book tours [117];

MindSay (rebranded Destygo (Paris), a chatbot for travellers) [155]. The service allows artificial intelligence to create chatbots and voice communications between tourists.

Amadeus, a global distribution service provider that is actively involved in the startups development in the field of tourism and hospitality. In particular, the company initiates new projects in this area through access to the database and the possibility of testing startups with customers. The company has a special division dedicated to startups – Startup Universe Amadeus [109].

Amadeus for Startups consists of the following units:

Amadeus Ventures, which is an investment launch program;

Amadeus Nexwave, a business incubator that works with startups to identify and develop transformational ideas;

Amadeus for developers, that aims to discover, connect and create new solutions through APIs;

Amadeus Startup Launchpad, a global startup launch and growth program.

In 2021, the company has identified the top 14 most promising tourism startups:

Airalo, an electronic SIM card shop providing reliable communication in over 190 countries of the world [102];

Airobot, an automated platform offering online booking and after-sales services [34];

Airside (a project of Amadeus Ventures investment), offering a privacy service which gives people full control over their digital identity [104];

Atza, a service that provides simulators for corporate training in the aviation industry using Extended Reality (XR) [112];

CitizenPlane, a service that resells the remaining tickets on competing routes to increase occupancy. It integrates free seats of airlines, tour operators and charters in around 120 distribution channels [116];

Gamitee, a platform that integrates with the travel booking company's website and turns customers into real consumers by creating groups [135];

Journera (a project of Amadeus Ventures investment), a platform that uses data during the journey to obtain a holistic view of its customers [145];

Local Measure, a service that provides tools and data for creating a personalized visitor experience which increases guest satisfaction and encourages guest loyalty [150];

Questo, an application for gamified tours which enables tourists to discover new places [165];

Sion, a cloud web application for the tourism industry [175];

TakeMe, a service that connects various international payment brands to each seller using a QR code [180];

Travaxy, a platform that provides accurate accessibility information for people with disabilities and the elderly [188];

Trip Ninja, a platform that allows creating complex itineraries in seconds, thereby offering more competitive offers [192];

Troop, a service that helps groups planning corporate routes by finding the optimal meeting places taking into account various factors [194].

These are the key projects that are perspective and of great interest to both consumers and tourism businesses.

For comparison, only 8 key startups were selected by the company in 2020 [110], in particular:

AirPortr, baggage check-in and delivery;

ClimaCell, the analysis of meteorological data;

Dawex, about data exchange in ecosystems;
GeoSure, that concerns travellers' personal security;
Pana, an organisation of corporate trips;
Refundit, VAT refund;
Smartvel, which is about tourists' impressions;
Volantio, maximising airline profits.

2019 was also fruitful for quality startups, with 18 start-ups identified in particular: 30K (bonus mileage calculation), Applango (increases call centre productivity), Assaia (information on cross-flight aircraft preparation), Avuxi (destination popularity assessment), Betterez (a global platform for carriers), BookingPal (integrated marketing solution), Civic (personal identification), Crowdvision (passenger traffic flow analysis for airlines), Fluo (insurance services), FLYR (evaluation of real airline offers), Koddi (matching hotel marketing strategy to different meta search channels), Lumo (optimizing actions in case of flight delays), MyLittleAdventure (finding things to do while travelling), Relay42 (online travel management), Sherpa (e-visa facilitation), Situm (tourist environment information), StubHub (selling tickets for concerts and entertainment events), Yapta (quick flight and accommodation price comparison tool) [108].

As for Ukrainian tourism startups, Tripmydream is the world-famous and globally recognized [75]. It can truly be considered an innovative domestic competitive product that allows online search for the most profitable travel products of airline and hotel services according to a given budget. Having topped the first position in 2016 at the Seedstars Summit 2016 international competition, the startup received a reward of 500 thousand USD. The key idea behind the startup, and now a successful business, is that travel should be easy and enjoyable. Besides, the service also has its own travel blog providing quality information on travelling, peculiarities of visiting a certain country and assistance in solving travel-related issues.

The main destinations offered to the consumer by the company are given in Fig. 4.3.

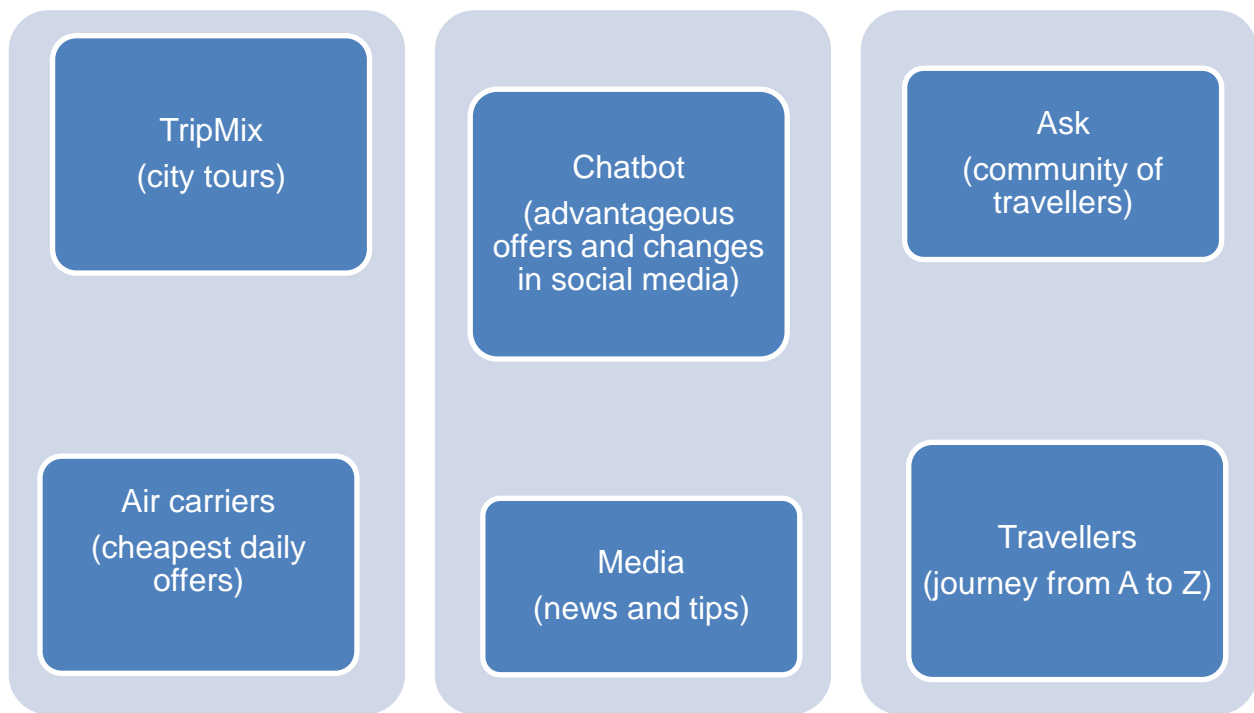


Fig. 4.3. The key products of Tripmydream
(compiled by the author based on [75])

In Ukraine, the Ukrainian Startup Fund deals with startups at the state level in addition to global contests and funds [96]. Based on the results of the thirteenth Pitch Day, three winners at the seed-stage were determined:

Outloud. Ai, a platform that automates voice communication with consumers through artificial intelligence;

Esper Bionics, a project that creates a prosthetic arm and a cloud platform that teaches the prosthetic arm the necessary skills;

IGNation, an application that develops and monetizes social media profiles.

The number of startups in Ukraine has increased significantly over the last 3 years, which, in turn, has ensured an increase in the ranking position by 5 points. It is worth noting that the highest startup activity is observed in Israel and Sweden. Analysis of the ecosystem according to 2020 results shows positive trends in both the number of key investments and rankings in Ukraine [96]. As to the Ukrainian regional distribution, the leader in the number of startups in 2020 was Kyiv (Fig. 4.4).

Despite the significant number of startups, which is growing every year, there are a few problems that are further solved.

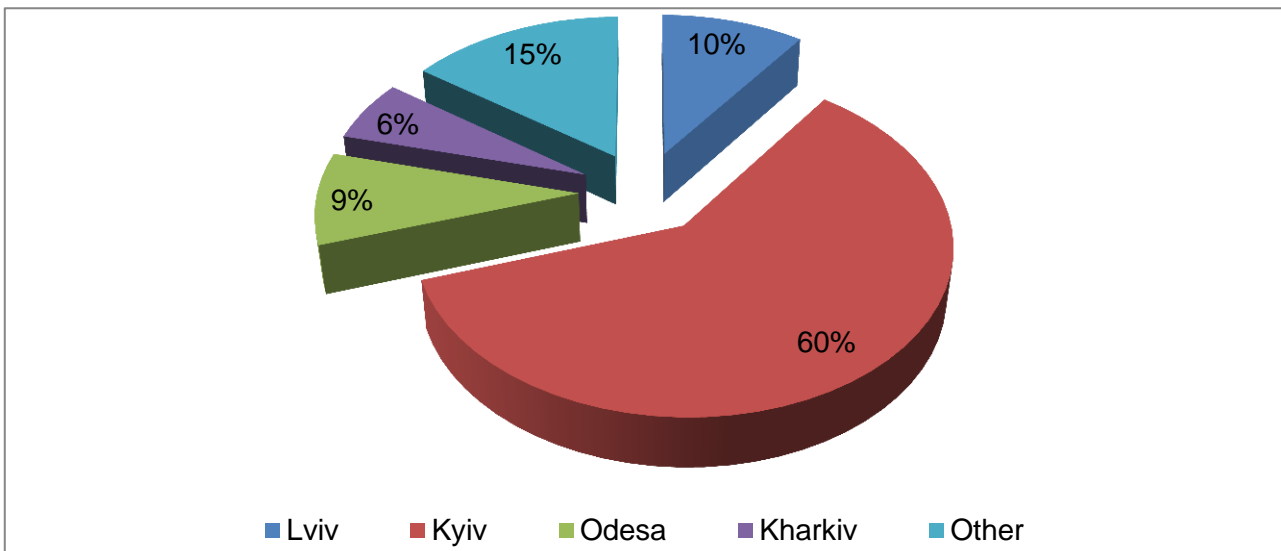


Fig. 4.4. The number of startups across regions, 2020
(compiled by the author based on [96])

In particular, M. Rutynsky [83] identified key challenges that are specific to domestic tourism and hospitality startups. Firstly, domestic tourists prefer vacations abroad and choose English-language services, therefore, Ukrainian startups are not in great demand. Secondly, lack of favourable conditions and appropriate organizations that help to develop startups specifically in Ukraine. Thirdly, investment attractiveness is very low for platforms in this field. Fourthly, and this is the point that is closely related to the previous one, promotion of both the country and regions as tourist destinations is insufficient. Lack of demand hinders the development of startups as well as tourism itself. Fifthly, insufficient government support for both the service sector and IT service providers.

At the same time, if tourism and hospitality startups are viewed as a whole, despite various obstacles, a positive trend is traced and, consequently, the desire to rest, conquer unexplored heights, discover new places, savour local food and drinks, recuperate and expand the lists of the already visited countries, encourage online platform and service developers to realize the desire of every tourist.

Not every startup becomes a successful business but with the right promotion and support it can become a leader in the travel services market. The mentioned online services are primarily aimed at direct use by tourists but also by representatives of the tourism business.

If the information systems and technologies used in the activities of tour operators and travel agents, hotels and restaurants, airlines or liners are

considered in detail, there is also a great variety that differs according to the specific nature of each business entity and the tasks that one or another system must perform.

According to the Tourism Act [80], a tourism product is defined as a pre-designed set of tourism services that combines at least two such services and is sold or offered for sale at a certain price, comprising transportation services, accommodation services and other tourism services not related to transportation and accommodation. Thus, it is appropriate to start by considering the information systems that provide transportation services.

Global Distribution Systems (GDS) are globally recognised, competitive and they enable air services to be booked anywhere in the world and to the customer's desired destination. Of course, it is also possible to use the airline services directly, for example through the booking module on the website or directly at the specialised offices, or by contacting a travel agency which provides this type of service, or using websites which compile information and enable bookings to be made, but not all of these channels are simple and, most importantly, effective.

For a customer it is possible to make reservations on an airline's website without much difficulty but the first complication is the lack of trust on the consumer's part and the possibility of incorrect data being entered; secondly, if the consumer wants to continue travelling with another airline, it is necessary to use the website of another airline and so on. Besides, when purchasing tickets through different airlines, one should not forget about the necessity of connecting time between flights which is not taken into consideration when this option is chosen. One can use search engines like Skyscanner [177], which allows searching online for relevant airline tickets, hotels or car rentals, but the main drawback of this search is that one can only read this information while for making a reservation it is necessary to go back to the airline's website. It should be also kept in mind that the information on these resources is not updated very quickly and, therefore, there may be a price discrepancy.

Alternatively, aggregator sites such as Tickets.ua [185], which compensate for the disadvantage of search engine sites, can be considered, i.e. bookings can be made there as well. Apart from air tickets, it is also possible to book hotel, railway or bus tickets, car rent and insurance services, but the main disadvantages are related to price. First of all, the final price is indicated only when paying for the ticket and, secondly, there is the possibility of hidden fees as well as problems with returns and exchanges.

Therefore, buying through an agent who uses the Global Distribution System (GDS) in his activity will help avoid these problems.

There are four GDS used around the world:

Sabre [173];

Amadeus [107];

Galileo [191];

Worldspan [191].

Globally, the share of GDS is somewhat uneven, as presented in Fig. 4.5.

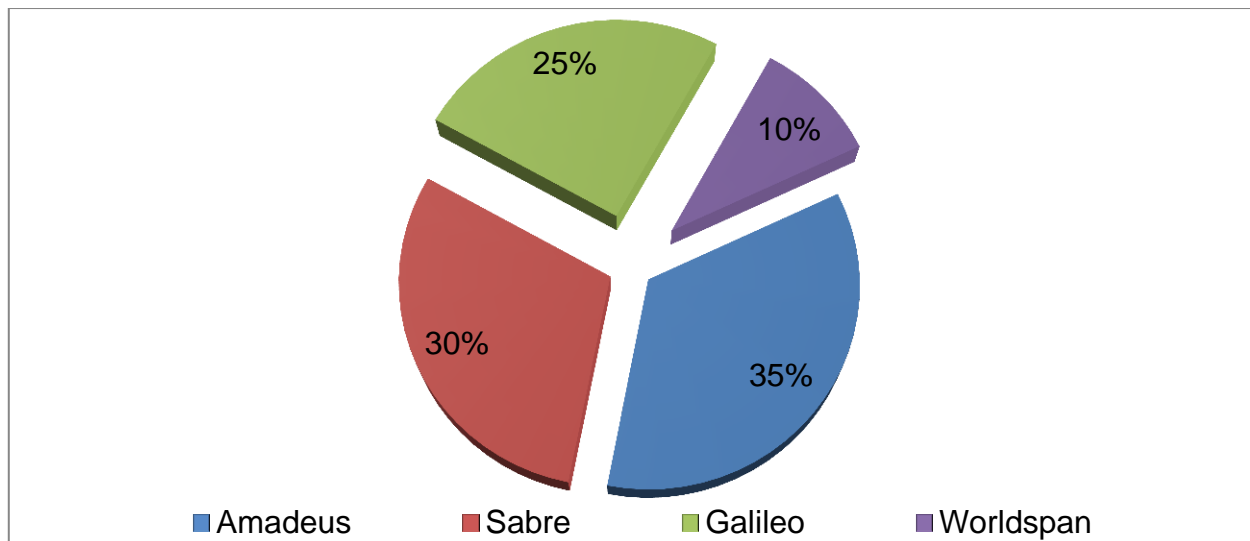


Fig. 4.5. **The share of global distribution systems in the world**
(compiled by the author based on [6])

In addition to the global distribution systems, there are regional systems such as Abacus, Sirena, Fantasia, Axxess and Sita that specialise in specific regions.

These 4 GDS are used in Ukraine but Amadeus is the leader. With reference to official data, the company has been operating for more than 30 years, with more than 19 thousand people employed and services provided in 190 countries. Reservation system make it possible to book air tickets to any destination, hotel or car rental, ferry, airliner or directly a tour.

The services offered by the company are divided into four groups:

Distribution & Content;

Sales & e-Commerce;

Business Management;

Services & Consulting [85].

With this system travel agencies can make use of services of more than 750 airlines, more than 100 thousand accommodation facilities with the

guaranteed reservation confirmation, price stability, 50 car rental companies, almost 30 ferry and cruise companies. Unlike other GDS, the Amadeus booking system also enables travel insurance, trains staff to work in the system and additionally informs about weather conditions, visas, exchange rates and medical requirements.

Sabre is the world's first GDS and also the market leader in booking and reservation systems. America is the main market where the company operates. Along with the airfare booking services, it is also possible to make hotel or car reservations and select excursion services. At the same time, the system, which is popular on the American continent, is beginning to conquer other markets, including Ukraine. Compared to GDS Amadeus, which has more than 220 thousand terminals and 65 thousand travel agencies that use it, GDS Sabre has more than 210 thousand terminals, and it is used by more than 55 thousand agencies in 108 countries. At the same time, it is worth mentioning that the company has become active in other world regions as well, thereby increasing competition in regional markets.

In Ukraine Travelport company provides two GDS services, namely Galileo and Worldspan, the latter is the least common in the world. Galileo is actively represented in Europe and the USA, while Worldspan is represented in America. In addition to the flight reservation services, these systems offer car rental, hotel and travel agency interactions as well as supplementary services for sports or cultural events.

The main differences between the GDS are the geographical representation of one or another system and a variety of additional services, which are the most widely provided by Amadeus. Galileo services are used in Ukraine by more than 40 companies which have more than 2 terminals. In this system the total number of terminals reaches 120 thousand, while Worldspan has almost 48 thousand terminals.

While comparing the pricing policy of each GDS, some differences can be traced which is explained both by the modules used by the enterprise, and the number of segments. These systems provide a monthly payment which can be compensated by a certain number of active segments (as a rule the deposit starts from \$200, the price of the segment from \$1.5). Details of the terms and conditions and the corresponding cost can be found on the official websites of these systems.

Moreover, in contemporary conditions, Ukrainian tour operators also offer such a service as GDS tour, which is commonly understood as a dynamic tour

packaging. This tour is a package tour on regular flights in the online mode. The main difference is that the booking is made for regular flights, not for charter ones. The advantage of these tours is a wide range, the ability to choose different flight options and appropriate rates. That is, these tours allow the consumer to discover any destination, to create a unique tour and choose the appropriate route.

An analysis of GDS tours among the offers of domestic tour operators showed that the commission for such tours ranges from 7 to 20 %.

As for the accommodation service, it can be booked using both GDS and hotel websites, applications, OTA-channels, search engines and aggregator websites.

The analysis of the hotel services market demonstrates that the number of accommodation facilities in Ukraine [85] (the legal entities directly, separate units) in 2020 amounted to 1337 units, including hotels and similar accommodation facilities – 728 units. For comparison, there were 1626 units in 2019 and 1591 units in 2018. Kyiv is the leader as to the number of hotels and similar accommodation facilities (Fig. 4.6).

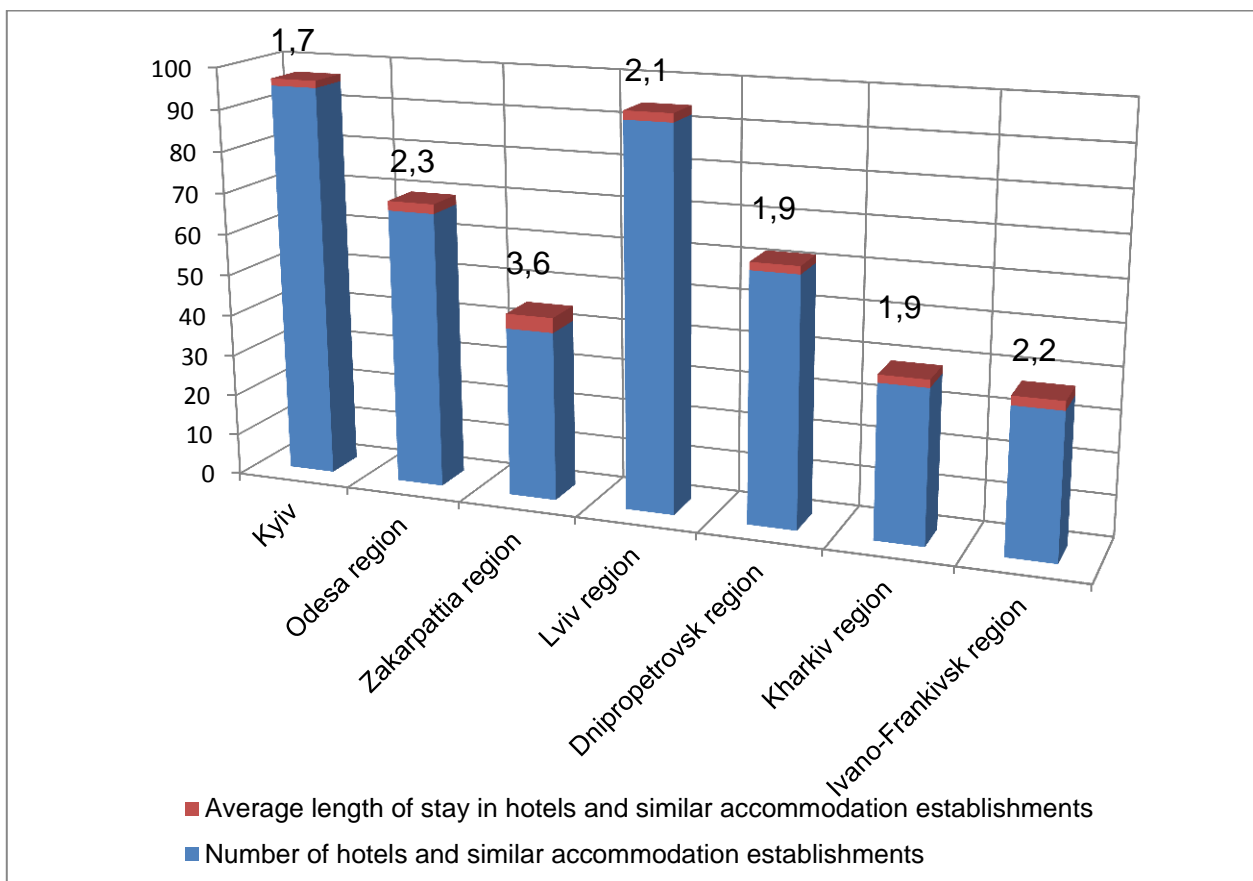


Fig. 4.6. Top 7 Ukrainian regions as to number of hotels and similar accommodation establishments, 2020
(compiled by the author based on [85])

In Ukraine, both international and domestic hotel chains operate in the hotel services market. This market is characterized by a high level of competition among both foreign and domestic businesses.

In particular, the Radisson Hotel Group has hotels in three Ukrainian cities: Kyiv (3 hotels), Odesa (1 hotel) and Bukovel (1 hotel) [166], Hyatt hotels corporation (one hotel in Kyiv) [143], Hilton Worldwide (one hotel in Kyiv) [140], InterContinental Hotels Group (two hotels in Kyiv) [144], Marriott International (two hotels in Kyiv), Wyndham hotel group (one hotel in Kyiv, one hotel in Lviv) [203] and Accor Hotels (four hotels in Kyiv, two hotels in Lviv, one hotel in Odesa) [100].

In other words, the domestic market of hotel services is attractive for investors and demonstrated the dynamics to increase the presence of various global chains. It is clear that the events of 2020 introduced certain adjustments in prospective projects, and their recovery is possible only when the situation stabilizes, the tourist flows increase and if there is a demand for services in this price segment.

As for the national and regional hotel chains, the best known of them are:

Reikartz Hotel Group, the most dynamic national chain that covers various parts of Ukraine. The network unites more than 55 hotels and resorts from 3 to 4 stars [168];

Premier Hotels and Resorts, which includes 15 hotels from 3 to 5 stars in 11 cities of Ukraine [163];

Royal Hospitality Group, which includes 9 hotels in Kyiv and Truskavets [171];

Ribas Hotels Group with 8 hotels in Odesa, Bukovel, Kherson and Hrybovka [169];

Sion Tour, a regional chain that focuses on the Western Ukraine, owns 8 hotels that are mainly situated in the ski resorts [176];

Black Sea Hotel Group, a regional hotel chain located in the south of Ukraine and having 6 hotels [114].

Accordingly, in order to take advantage of an accommodation service, the customer may choose to phone directly to the respective hotels, to leave an application on the hotel's website or to make a reservation directly through the website by entering the hotel's name in the search engines. The use of a corporate website is characteristic for chain hotels where a customer can book any hotel within the chain. In this case, the website has a specially built-in module, which is usually a component of the Property Management System (PMS).

A variety of both global and domestic information systems and technologies can be used for private booking of the relevant services in hotels or similar accommodation facilities. It should be noted that a feature of chain hotels is the use of specific software products that are generally the same for all chain hotels. This can be explained by the typical reporting and calculation forms; the use of national forms is undoubtedly encouraged as well, but a requirement is to use identical software. As an example, it can serve not only identical software, but also the use of the same coffee or tea suppliers, so that the guest could feel a familiar taste no matter where the hotel is located. In addition, PMS allow accessing all the hotels in the chain, comparing similar performance and business efficiency. Besides, the hotel chains that take care of staff development consider the possibility to be employed in the various regions where the chain's hotels are represented as an important part of the career path. Therefore, the use of the same information systems does not cause any difficulties or requires some adaptation to changing the region. It is obvious that global hotel chains use systems that are popular and effective around the world. However, there are also PMS specifically designed for hotel chains or individual hotels that are used exclusively by these hotels.

A PMS is a hotel management system that allows for efficient automation of operations, thereby integrating the work of all departments into a single system. Typically, these systems manage the following: reservations, room stock, rates and tariffs, customer relations, billing, financial and management reporting. There are many similarities between PMS components, although they are offered by different systems, at the same time there are certain differences which determine the use of a particular system.

The most popular PMS used for accommodation services in Ukraine are:
Fidelio (for example, Hotel Kharkov);
Opera (for example, Hilton Kyiv, Accor Hotels);
Servio (e.g. Reikartz Hotel Group, Ribas Hotels Group [56]);
Roomswizard (for example, Premier Hotels and Resorts) [86].

There are many hotels that are not part of a network but use PMS or separate modules in the same way. All details as to which hotels or similar accommodation establishments use which definite hotel management systems can be found on the service provider's website in the "Our clients" section.

There are other PMS, such as Hotellogic, LightSpeed, eZee, and modern cloud-based PMS, the use of which is determined by the customers' wishes

and financial capabilities, and by the variety of functionality offered by each PMS. Moreover, these PMS can be stored both on the server and in the cloud.

It should be immediately noted that very often the software product developers for hotels or similar accommodation establishments also offer a Restaurant Management System (RMS) that is an automated management system for a restaurant or other catering establishments. If there is a restaurant in a hotel or if this is a hotel-restaurant complex, an automated management system for the whole establishment is offered for implementation immediately which combines the work of different departments into a single system. For example, when a hotel has a restaurant, a gym, a spa and a swimming pool, the modern information systems combine the work of all departments effectively without any difficulties.

In Ukraine R-keeper [170] (prohibited software in Ukraine), Servio POS [56], RARUS [167] and Poster-POS [162] are common restaurant or catering establishment management systems. Each of these systems can be supplemented with food delivery modules, additional kitchen functionality, and are effectively integrated with automated systems of hotels or similar accommodation facilities, fitness studios or bowling alleys.

The pricing policy depends on the type of establishment and the functionality, modules and wishes of the deputy. Let's compare the main proposals based on the example of two companies: Servio POS and Poster-POS (Table 4.1).

Table 4.1

Comparison of the price based on key metrics of restaurant / catering establishment management systems, UAH
(compiled by the author based on [56, 162])

RMS	Servio	Poster
Server	Purchase or rent, price from 1,300 UAH per month	Not required
Workplace in the back office	12 000	included in the subscription price
Installation and configuration	9600	free
Mobile POS terminal	600	free
Automation	48 000	1020 per month

For example, Servio POS is a software product which easily customizes the requirements of small catering outlets, as well as large chains, or restaurant establishment with a large number of points of sale. It is a workplace for maintenance personnel. All the necessary equipment is connected to it and integrations with other software modules of the automation system are configured. It allows a manager to keep records and control of sales, services, helps optimally allocate resources, minimizes costs, increases the level of service, as well as it allows personnel to organize a loyalty program and monitor its effectiveness [56].

The analysis of Poster POS demonstrates that one POS system closes all issues: from online cash register to finance and analytics. The basic proposals of Poster POS are given in Table 4.2.

Table 4.2

Tariff plans, UAH (compiled by the author based on [158])

Plan (in case of payment for the year) per month	Start-up (Food truck)	Mini (Coffee house)	Business (Cafe)	Pro (Restaurant)
Price	360	720	1020	1620
Goods according to the technical card	50	100	300	1500
Number of warehouses	1	unlimited	unlimited	unlimited
Reporting and analytics, warehousing and financial accounting, loyalty system and smartphone sales control	*	*	*	*
Promotions	–	–	*	*
Table reservation	–	–	–	*

Typically, an automated management system for a catering establishment includes the following management modules, namely: ordering, kitchen, warehouse, hall operations, billing, accounting and operations control, and the like.

The analysis of modern hospitality management systems used by domestic hotels has demonstrated that domestic Servio software products are in high demand and their range is constantly expanding. The competitiveness of the domestic enterprise is ensured not only by a wide range of information systems but also by their high quality and appropriate service. Therefore, as an example, a closer look has been taken at the PMS Servio system, which can comprehensively ensure the operation of an accommodation establishment.

First of all, when comparing it with foreign PMS, it should be noted that the pricing policy of the well-known Opera or Fidelio, for example, is much higher, which also makes PMS Servio system more attractive for the domestic consumer. As far as the developers are also from Ukraine, they are well acquainted with and take into account the features of doing business, the specifics of certain types of services, along with financial and management accounting. The unified management system of the hotel complex combines the following modules:

SERVIO HMS, an automation system for hotels or similar accommodation establishments, which enables room reservations (for both single guests and groups), customer service (check-in, charges, check-out, etc.), CRM for housekeeping, efficient tools for conference or banqueting, working with tariffs, integration with various software products, working with differentiated sales channels, a flexible system of special conditions that allows taking into account both seasonality factor and different holidays, financial and managerial accounting, generating more than 130 reports, staff performance records and synchronization with special equipment. The system can be used by hotels of any size and can be integrated with the necessary modules;

Servio HMS Reservation, a module that integrates into the website of the respective accommodation establishment and receives orders directly from its own website and works as a website component rather than as a separate page. This module enables to quickly make not only reservations in real time, but also to pay for the selected additional services, avoid overbooking and simplify the guest's check-in procedure. The system works in such a way that once the reservation is made, the guest's details are immediately displayed in the hotel management system. Once a reservation has been made and the corresponding amount calculated, the

payment is handled online in a completely secure manner. The advantages of this system are also the immediate allocation of a tourist tax for the relevant categories of citizens, adaptation to the mobile version of the website, authorisation of contractors, possibility of partial payment, bookings without participation of personnel, operation in different languages;

Channel Manager, a software module that automates the management of hotel sales via online channels acting as an intermediary between PMS and Online Travel Agencies (OTA). The main functionalities of this program are integration with SERVIO HMS, customization to individual hotel desires, variety of sales channels, price policy and special rates settings, setting of appropriate exchange rates, online sales management control. The system makes it possible to reduce costs, to obtain information on customer demand and competitor pricing policies and to formulate effective strategies. The advantages are that the information is immediately entered into the hotel management system, there is the possibility of setting special rates for these channels and their validity period.

Online Travel Agencies (also known as Internet Distribution Systems (IDS) or Alternative Distribution Systems (ADS) are systems that allow making reservations without intermediaries. It is obvious that a reservation can also be made via the website of the respective accommodation establishment, but this requires the guest to be aware of the hotel in question. The use of OTA channels is therefore a way to overcome uncertainty about the availability of these particular accommodation establishments.

There are more than 400 OTA channels in the world but the best known and most popular are:

Booking (over 120,000 objects, traffic is 614,1 million visits in 2023), according to Similarweb [196] most requests are from the USA (10.9 %), Great Britain (7.56 %), Italy (7.41 %), Germany (7.0 %) and France (5.75 %). In comparison with July 2021, the top 5 countries were the same but the requests were slightly different. Specifically, from the USA (10.25 %), Italy (8.64 %), France (7.91 %), Germany (7.72 %) and Great Britain (6.75 %);

Airbnb (traffic is 108,9 million visits), top 5 requests: the USA (74.39 %), Philippines (1.31 %), Germany (0.99 %), Malaysia (0.98 %) and Mexico (0.92 %);

Expedia (traffic is 102 million visits, compared to traffic of 94 million in July 2021), top requests are from the USA (90.65 %), Canada (0.72 %), Mexico (0.41 %), Great Britain (0.35 %) and Dominican Republic (0.34 %);

Agoda (traffic is almost 83,3 million visits), the most popular channel among the citizens of India (9.06 %), Taiwan (8.72 %), Thailand (8.7 %), Republic of Korea (8.03 %) and Malaysia (7.98 %);

Hotels (traffic is 60 million visits), the most popular channel in the USA (48.47 %), Great Britain (8.46 %), Republic of Korea (4.0 %), France (3.93 %) and Canada (3.69 %).

The top 5 most popular OTA channels in the world demonstrate the consumers' regional choice which depends on the range of accommodation facilities representation in each of the channel. At the same time, the US residents lead in the number of requests for popular channels. This is also explained by the choice of OTA channels on the part of accommodation providers that creates a corresponding demand among the potential hotel service consumers.

A comparison of leaders based on key metrics is presented in Table 4.3.

Table 4.3

**Comparison of key metrics of the world's top-5 OTA channels,
August 2021** (compiled by the author based on [196])

OTA channel	Total visits, million people	Average duration on the website, minutes	Pages per visit	Number of refusals, %	Traffic From social networks, %
Booking	517.9	8.56	8.87	30.74	1.71
Airbnb	88.2	8.31	20.44	27.84	2.13
Expedia	73.04	5.46	5.79	37.43	0.68
Hotels	52.19	5.41	6.65	36.64	0.60
Agoda	29.39	5.43	4.62	37.36	1.31

Thus, according to the data given in Table 4.3, a conclusion can be drawn that there is a significant gap in the number of visitors between the

market leader and other channels. In addition to an extensive database of accommodation establishments, there is also a longer time duration that visitors stay on the company's official website and a flexible system of cooperation and support on behalf of a company. A peculiar difference of Booking is also the fact that reviews can be left by real visitors, thus, creating a transparent system of communication and trust on the consumers' part.

In Ukraine, Hotels 24 (with traffic over 500,000 visits as of July 2021) and Doba (with similar traffic) are the most popular after Booking [196].

For comparison, let's consider the leaders as to key metrics in winter season (Table 4.4).

Table 4.4

**Comparison of key metrics of the world's top-5 OTA channels,
December, 2021** (compiled by the author based on [196])

OTA channel	Total visits, million people	Average duration on the website, minutes	Pages per visit
Booking	349.63	8.03	7.70
Airbnb	72.61	8.26	20.37
Expedia	64.15	5.33	5.61
Hotels	35.81	5.27	6.43
Agoda	49.23	6.13	5.00

Table 4.4 shows the impact of seasonality, which can place great pressure on remote or isolated tourism destinations. As a result, the winter period is less popular among visitors to these online-channels:

Booking (the number of visits has dropped more than 12 % in relation to November) [196]. And the average duration on the website, as well as pages per visit have decreased. The most requests are from the USA (10.66 %), Great Britain (6.45 %), France (6.04 %), Russia (5.78 %) and Italy (5.77 %);

Airbnb (traffic is 72,61 million visits in December and 71,29 million visits in November), top 5 requests: the USA (76.44 %), Mexico (1.49 %), Philippines (1.48 %), Malaysia (1.32 %) and Spain (0.80 %);

Expedia (traffic decreased more than 6,5 %, compared to traffic of 68,85 million in November 2021);

Hotels (traffic is 40,03 million visits in November). The top requests are similar and is the most popular in the USA (53.74 %), Great Britain (6.61 %), France (4.49 %), Canada (3.11 %) and Turkey (2.52 %);

Agoda (traffic increased by 6,14 %, compared to traffic of 46,38 million visits in November 2021), the most popular among the citizens of India (13.89 %), Thailand (10.85 %), Malaysia (10.81 %), Taiwan (8.30 %), the USA (6.76 %).

The high web traffic of these sites are testimony to their popularity. According to the Top Websites Ranking for Accommodation and Hotels in the world, the 1st place belonged to Booking, 2nd to Airbnb and 3rd to Expedia in 2023. In Ukraine the most popular are Booking, Otpusk and Doba (data is updated to the beginning of 2023) [196].

A study of online booking statistics [118] found out that 76 % of bookings were made through OTA channels. The main advantages of using OTA-channels is the accuracy of work with the target audience, as the vast majority of consumers make reservations through these channels, the availability of real reviews and feedback, which is the cause of the consumers' trust and confidence, as well as the possibility of the additional hotel promotion. At the same time, the disadvantages are high commissions (15 – 20 %) and limited information about the client.

In accordance with the tariff plan (pricing policy is ranging from 10 to 90 Euros), the use of Channel Manager offers a possibility of placing information in the OTA-channels that are necessary and interesting for the hotel and using only one such module.

SERVIO BackOffice Room Management (RM) is a marketing and sales, supply and purchasing, stock and warehouse, production, payroll and staff, finance and money resources management module. This system integrates with the specific accounting and management programs, thus providing the possibility to create reports on various areas of accounting.

Integration of PMS SERVIO HMS with additional modules (Fig. 4.7).

Offers for the hotel:	Offers for the restaurant:	Offers for SPA:
<ul style="list-style-type: none"> • PMS for hotel SERVIO HMS; • Booking module for the site SERVIO Reservation; • Channel Manager for OTA-channels; • Mobile application for the SERVIO Loyalty program; • RFID-controller for elevators; • Mobile key; • Mobile application for statistics SERVIO Mobile Statistics; • SERVIO BackOffice; • CRM Housekeeping in PMS SERVIO HMS; • Mini-bar PolarBar; • Mobile application Mobile Access for keys VingCard; • Bathroom lock; • Electronic safe Elsafe; • Sending messages SERVIO Notify; • Chatbot; • Integration of Servio HMS with the "Diya" application 	<ul style="list-style-type: none"> • Software SERVIO POS; • SERVIO POS Reservation; • Kitchen module SERVIO POS Order Monitor; • SERVIO POS InfoPoster; • Module for a single network base SERVIO POS StorageServer; • Integration of SERVIO POS with delivery services (for example, Glovo); • Mobile application for staff SERVIO POS Mobile; • SERVIO POS Mobile Statistics; • SERVIO POS Mobile Inventory; • SERVIO POS Workdesk; • SERVIO Loyalty; • SERVIO Notify; • Ving Card electronic locks 	<ul style="list-style-type: none"> • SERVIO POS SPA; • Locker assignment

Fig. 4.7. PMS Servio HMS complete solutions for hotels
(compiled by the author based on [56])

Thus, the considered example of PMS shows that domestic service providers propose quality services in the hotel and restaurant industry, which are gaining popularity among domestic accommodation establishments every year. The choice of the management system depends primarily on the price of the system, which is much higher for foreign PMS, as well as on the

functionality required to implement all the functions of a hotel or similar accommodation establishment.

The basic information systems and technologies that provide the basic components of a tour (in accordance with the Tourism Act [80]) have been considered, therefore it is important to get acquainted with the systems that are used directly by tour operators and travel agencies.

These business entities use special systems as well as GDS and PMS, aggregator sites and search engines that have been mentioned above. It is a characteristic feature of most businesses to use Enterprise Resource Planning (ERP), the main purpose of which is business process management that integrates finance, personnel, production, accounting and related reporting. That is, unlike other enterprise management systems, this system is designed to manage all resources rather than individual parts.

For example, OneBox, MS Dynamics ERP, Perfectum, IT-Enterprise, Parus: Enterprise, DeloPro are popular ERP in Ukraine [93]. Moreover, most ERP are combined together with Customer Relationship Management (CRM), which will be discussed below. However, the specifics of tourism business necessitate the use of special systems and technologies.

In particular, the following systems are the most popular in the activities of tour operators:

Master-Tour [154] is used in more than 20 countries of the world (prohibited software in Ukraine). It was developed for tour operators engaged in outbound tourism. It is integrated with airline and hotel systems. It provides for automation of all the tour operator's operational activities: from creation of a company base to managerial accounting. The main advantages of this program are: the dynamic pricing and packaging, automatic price and quota updates, increased productivity, financial and accounting module. The tour operator ADRIA HIT, for example, uses this system;

Master-Interlook [154] is designed for host tour operators (prohibited software in Ukraine). The program provides: flexible price formation (dealing with the prices of service providers in different currencies, mechanisms of individual and group price setting, automatic price formation taking into account the trade margin), online sales (a large number of search criteria, different formats of price presentation, the possibility of changing the tour components), quotas (working with the blocks of seats, stop-sales, loading

services, selection of optimal quotas), working with reservations and vouchers, integration with Master-Tour;

SAMO-tour [174] is a comprehensive system which acts as a platform for solving absolutely all the tasks of a tour operator: product creation and management, order management, online sales optimisation (but prohibited software in Ukraine). The peculiarity of this system is an online exchange of tours between tour operators, dynamic pricing, effective system of reporting, statistics and analytics. It is supposed to manage tourist product, sales, integration with service providers, partner and consumer payments and attachment of the electronic payments. For example, the tour operators "Pegas Touristik", "Orbit" use this system;

SAMO-incoming is designed for the inbound tour operators (prohibited software in Ukraine). It combines all the necessary tools to manage this type of activity from the preparation of tour operator centres to the sale of excursions and obtaining statistical data;

Parus: Enterprise – the developer offers management systems for a travel agency, a hotel, a medical institution, management and marketing solutions [4].

Each of the systems takes into account directly the specifics of the tourist operator's work. In addition, there are special systems developed by tour operators themselves and used by the corresponding network of travel agencies (for example, the tour operator "TPG").

Pricing policy of the most popular programs among the tour operators is presented in Table 4.5.

Table 4.5

**Price comparison of the main information systems of tour operators
(5 work places)*, USD**

System	Price
Master-Tour	from 1800
SAMO-tour	from 4770
SAMO-incoming	from 5000

* The cost depends on the tariff plan, configuration and number of modules selected. Detailed pricing information can be found on the company-producer's website

Travel agencies can use both CRM systems in their activities, as well as personal accounts on the tour operators' websites or aggregator sites (e.g. IT-Tour), or search engine sites or specialised aggregators providing information on hotel services, booking tickets or car rent, excursion organisation or insurance service provision.

CRM-systems, as a rule, makes it possible to create the enterprise's own customer base, to organise an individual approach to each customer, to improve sales efficiency, to increase conversion rate and generate reports based on various criteria.

Initially, these systems performed the functions of the client base maintenance, documents and accounting report systematization, analytics of enterprise sales.

However, it soon became clear that it was not enough and the lack of data leads to some limited actions, therefore, the functionality of CRM-systems has greatly expanded and became more qualitative. In particular, CRM makes it possible to automate the operational activities of a travel agency or a tour operator, to automate document management, to monitor all transactions, to form a clear and effective system of contractual relationships, to be in touch with the client 24/7, to increase the employees' productivity, to build a flexible and efficient system of data analysis and appropriate communication with customers. That is, the whole process of interaction with a client becomes easy and fast, controlled and more efficient, starting with the customer data formation and analysis, ending with the receiving a feedback or review.

These types of systems enable the travel agency to increase the work efficiency in the areas of sales, finance, marketing and analysis of key indicators of its work. A simplification of accounting is also an essential benefit because very often developers add special modules, which do not only direct the payment to the tour operator, but also track the debt collection or the deadlines for submission of the relevant reports.

Travel agencies in Ukraine take advantage of such systems as:

SAMO-touragent (prohibited software in Ukraine), a CRM that was designed to optimize the managers' work with the client, to make a full cycle of reservation, to manage sales and to analyse advertising efficiency, to integrate both the accounting software and the IP-telephony, which significantly affects the costs and efficiency of the enterprise, to adjust bonus programs;

Overia-Tourism [160], a flexible tourism business management system used by both tour operators and travel agencies. A wide range of services allows identifying target groups of consumers, selling tickets, generating relevant reports and adjusting the necessary mailing through the various promotion channels;

MoiTouristy [156], a system that along with the similar functionality, helps to optimize financial costs for accounting and management, to reduce costs for calls and mailing, to propose a fully automated document management, to facilitate employee interchangeability without any difficulties, to plan and monitor the activities of each employee. Besides, the system is customized in such a way that in addition to providing information on customer birthdays or mailing reminders, it allows potential customers, who have just once visited the company's website, to be added to the database;

Bitrix24 (prohibited software in Ukraine) [113], a CRM that successfully combines the classic features of these systems together with an effective integration of requests via the website and calls. It controls the work with contracts, leads and the company's customer base, and has an effective system for analytics and forecasting;

CRM OneBox [119], an effective tool for the sales department because it allows using the sales funnel when dealing with customers, mass mailings, integration with Binotel and a wide range of additional services;

Tourcontrol [187], a cloud CRM that makes it possible to generate quickly all the necessary documents, to integrate with a large number of services, thereby increasing the productivity of travel agencies (the price varies depending on the number of employees who will use it – from 40 USD (for 1 manager) to 600 USD (up to 30 employees));

Parus: travel agency – the system details information on each client, keeps records of each client, generates relevant invoices and agreements, allows keeping management accounting;

CRMTravelers [120], a system that has a mobile version and allows a travel agency not only to maintain the client base and to make reservations and payments, but also to keep a database of leads, generate tasks for the company' employees, keep effective records of each employee, create a client's personal account, provide the possibility of customizing the appearance of CRM.

The list of programmes described does not end with those considered, the sample includes the programmes which are popular among service providers.

The pricing policy of the most popular programmes for travel agencies is presented in Table 4.6.

Table 4.6

Comparison of price offers for travel agencies, USD
(based on data provided by the development companies)

System	Price
SAMO-touragent (5 – 7 working places), Server	from 1360
SAMO-touragent (5 – 7 working places), Cloud	from 600
Overia-Tourism (tour agent + CRM) (5 working places)	from 1150
Overia-Tourism (tour operator + CRM) (5 working places)	from 2450
MoiTouristy (CRM + Search for tours + website) (5 working places)	from 500
Bitrix24 (Cloud) (5 working places)	from 1760
CRM OneBox (Cloud) (5 working places)	from 1440
Tourcontrol (5 working places)	from 80
CRMTravelers (5 working places)	from 150

Most of the reviewed information systems and technologies that are used by hoteliers, tour operators or travel agencies also have cloud-based versions.

This, in turn, makes it possible to store large amounts of data, to have constant access from anywhere, to promptly obtain the necessary reports and to maintain a corresponding client base.

Other advantages of cloud-based versions include:

- ease and simplicity of operation;
- instantaneous exchange of information;
- unified storage of data;
- the ability to work remotely (especially important when there is a remote work format);
- automation of operational activity;

efficient communication within the team;
easy interaction with other software products and services;
cloud telephony and CRM that increase sales and the efficiency of the entire enterprise.

The cost of cloud versions is considerably lower, which in turn, minimises the costs of the enterprise. At the same time, despite the significant number of advantages, cloud-based versions have a significant disadvantage, such as the possibility of other people accessing the data and the disappearance of the data itself. It is true that the developers of such services guarantee security and data safety but this possibility should not be ruled out.

Every year the number of information systems and technologies in tourism and hospitality industry grows, which is explained by the significant demand. World-famous software programmes that were previously more often used in the entrepreneurial activities of service enterprises in the domestic market of information products are gradually losing popularity and are being replaced by domestic systems and technologies that can fully satisfy the demanding entrepreneur. The move to an online format has also had an impact on this business, thereby accelerating the emergence or development of new types of services.

The use of cloud technologies continues to be promising (almost 60 % of CRM already have cloud versions) with certain improvements in data storage security and the availability of appropriate mobile applications to facilitate the work of both enterprise employees and customers directly (as it is becoming customary to use mobile phones as a workplace). The availability of own channels (especially for travel businesses), blogs (whose popularity is rapidly growing) and social media pages (whose use makes it possible to reach different target audiences of consumers) should not be forgotten as well. Deep personalisation will play a considerable role while developing or improving information systems and technologies, which will be aimed at creation of individual tours, will be shaped for each client and will not be offered to other customers, will provide additional services and take into account the guest's desire. That is, in order to be competitive in the market of tourism and hospitality services, companies should provide not only high-quality services, but also those that will stand out with their range of services, speed, uniqueness and innovation.

Section 5. Quality management in tourist and hospitality sector as an methodological approach of strategic development

Management of a tourist enterprise is based on a generalized assessment of opportunities to ensure functioning and strategic development. Such an assessment can be defined by the integrating concept of enterprise potential. As a generalizing category, potential means stocks and sources that are available and can be mobilized to achieve a certain goal, solve any problem, as well as the ability of an individual, society, state in any field.

In economic theory and practice, a number of developments regarding the assessment of the potential of enterprises, its components and efficiency of use have been formed. Most economists propose to divide the methods of assessing the effectiveness of the use of resource potential into cost, resource, effective and complex.

In addition, in practice, such methods as expert, scoring, rating, comparative, economic-mathematical modeling, simulation modeling are often used to assess the effectiveness of the use of the potential of an enterprise or its individual components.

In crisis conditions of activity, which are characterized by the lack of stability of external economic factors, the management of a tourist enterprise must balance the existing potential with the conditions of the external environment in order to achieve strategic goals and survive in competitive conditions.

Strategy is an important component of ensuring the development of a tourist enterprise, which is closely related to other elements of business management and determines their effectiveness. In the scientific literature, there is no single approach to defining the concept of strategy for the development of a tourist enterprise. For many enterprises, the formation of a development strategy in the conditions of the dynamism of the tourist market involves a classic scheme of strategic management of the formation of tourist products. In our opinion, it is appropriate to consider the strategy of the development of a tourist enterprise as a system of measures aimed at ensuring effective functioning by satisfying consumer demand and achieving the interests of tourism business owners. The formation of a development strategy should involve the development of measures to achieve a flexible

response of a tourist enterprise to changes in the market situation. In order to form a development strategy, a tourist enterprise must take the following steps: determine the target market, develop a scheme and form positioning features, research and improve the service offer, analyze in detail the price policy and marketing communications, determine its competitive advantages, develop a strategy implementation mechanism and measurement methods. The main methods of evaluating and choosing a strategy for the development of a tourist enterprise, their disadvantages and advantages, are given in Table. 5.1.

Table 5.1

**Peculiarities of methods of assessment and selection
of the development strategy of a tourist enterprise**
(summarized on the basis of [123])

A group of methods	Method, indicator	Benefits	Disadvantages
Graphic methods	Radial diagram of competitiveness	Easy to use, high level of visibility	Does not make it possible to determine the value of the generalized criterion of the enterprise's competitiveness
	Polygon of competitiveness	Provides a detailed assessment of development strategy options	Does not take into account the different weight of competitiveness factors
Matrix methods	Various types of matrices: McKisey, Shell, A. Ansoff matrix, etc.	Provides a detailed assessment of development strategy options	Does not take into account the different weight of competitiveness factors
Index methods	Analysis of the comparative advantages of competitors' enterprises	Provides a detailed assessment of development strategy options, taking into account an integrated approach	Requires a significant amount of time, there is no generally accepted methodology for assessing the competitiveness of an enterprise
	A method based on the theory of effective competition		
	Integral index		
	Self-assessment method		

So, according to the data in Table 5.1, it can be argued that today in the arsenal of strategic management of tourist enterprises, various methods are used in different situations and with different goals. The use of certain methods primarily depends on the tasks of strategic analysis.

Quality management in tourism institutions is one of the most important components, because there is high competition in the market. A consumer who did not receive a quality travel service will prefer a travel company to a competitor. The level of service quality depends on the following factors: the need satisfied by the tourist enterprise; correctly defined target audience; excellence in the provision of tourist services; establishment of clear standards for the provision of tourist services; control over the implementation of established quality indicators; technological equipment of the enterprise; qualifications of employees; service methods. Standardization of tourist services is the most important factor. Prescribed service quality standards help streamline the work of a tourist enterprise. Standardization includes: determination of requirements for the process of production and provision of tourist services; methods of development, improvement and modernization of production; establishment of product quality control methods; creation of a unified classification of products [33].

Standards that must be followed in the tourism enterprise: international standards ISO series 9000; National Standards of Ukraine; industry standards [33]. There are the following methods of determining the quality of services (Table 5.2).

Table 5.2

Methods of determining the quality of tourist and hospitality performance (summarized on the basis of [18; 33; 95; 123])

Groups of methods	Method	Use in tourism
1	2	3
Objective	Trial control measurements; laboratory analysis	Restaurant business
Organoleptic	Sight, hearing, taste, smell, touch	Restaurant business
Differentiated	Comparison of individual indicators of services with corresponding indicators of reference services; comparison with basic indicators of standards (technical conditions)	Hotel and restaurant business transport

Table 5.2 (the end)

1	2	3
The comprehensive method is a generalized indicator of the quality of the evaluated services	Integral indicator average weighted arithmetic value using weighting coefficients of all calculated indicators for its calculation	All types of tourist business
Sociological	Questionnaire interview	
Expert	Group or individual expert assessment Delphi, pattern	
Modelling	BPMN simulation modelling	

The method of assessing the quality of the ambassador is chosen in accordance with the strategic goal of a tourist enterprise. The reasons may be the solution to an already existing problem, the establishment of aspects that do not satisfy the tourist, the determination of a number of necessary changes to maintain a competitive position in the market. The main goal is to improve the service, which is the basis of a successful business model. Evaluation of the quality of services at the establishment can be carried out by employees of this restaurant, other outsourcing companies, creation of a special department at the establishment to ensure the quality of services at the tourist enterprise. Most often, companies use the sociological method of assessing the quality of tourist services. In practice, the sociological method is combined with the expert method. Combinations of these two methods allow you to get better and more accurate results. Surveys can also be conducted online, both in a special application and in social networks, on the restaurant's website. This type of questionnaire is more modern, the role of online resources is increasing, it is easier for the consumer to fill out the questionnaire using the phone.

Thus, the methodological basis for ensuring the development of the tourist services market in the conditions of globalization is based on the combination of three systems for evaluating the activity of a tourist enterprise: the assessment of the effectiveness of the use of the resource potential of a tourist enterprise, the assessment of strategic management, and the assessment of quality. A comprehensive assessment should consist of the following stages:

- 1) justification of the most priority resources for a tourist enterprise;
- 2) evaluation of the effectiveness of the use of each component of the resource potential;

3) evaluation of the quality of tourist services;

4) evaluation of the effectiveness of strategic programs and substantiation of the strategic directions of the development of a tourist enterprise;

5) determination of reserves for the activation of unused opportunities for the use of the resource potential of a tourist enterprise;

6) adjustment of strategic development programs.

Based on the results of such analytical work, it is possible to draw a conclusion about the biggest problems at a tourist enterprise, which reduce the efficiency of the use of resource potential, and to prepare a system of management solutions to optimize the work of the tourist enterprise and minimize the risks of economic activity. It should be noted that the proposed comprehensive evaluation method helps to identify the emergence of difficulties associated with the quality of tourist services and the inefficiency of the staff, and therefore requires further research into operational methods of analyzing business processes and identifying problems. This is possible through the implementation of CRM management systems that automate part of the work of assessing business processes, quality assurance and identifying problems with the use of certain types of resources.

Analysis of foreign practice, as well as theoretical research, shows that servicing and digital transformation of socio-economic systems are carried out on the basis of digital platforms that integrate economic, social and technological processes that form digital service ecosystems.

In this regard, a new institution, a new category of business structures in the service sphere is emerging in the economy – service integrators, whose role in progressive economic development is significantly growing, but the mechanisms of their functioning, methods of management, network service interaction with other economic entities, as well as many other issues remain insufficiently studied, which practically restrains the development of enterprises – service integrators.

One of the service integrators is CRM. There are several attempts to define CRM from the point of view of digital transformations, that CRM is "an enterprise's approach to understanding and influencing customer behavior through meaningful communications to improve customer acquisition, customer retention, customer loyalty, and customer profitability" [115]. The word "enterprise" in this definition is very important because CRM is an this approach that should be integrated into everything a company does and

should involve the entire company. Furthermore, at its core, CRM involves the integration of technology and business processes used to meet customer needs. Started in the early 1990s, customer relationship management (CRM) is a marketing term for "a group of ideas and technologies designed to improve customer-related business practices" [119]. It was certainly a logical extension of companies' long-term efforts to keep up with ever-changing customers, markets and competitors, and the rise of PCs and the Internet in the 1990s exacerbated these challenges. Although CRM grew out of a desire to combine customer support, help desk, enterprise resource planning and intelligence, it is still unclear who introduced the term "CRM" to the business world, but the term emerged as a still ongoing approach. P. Bligh and D. Turk further added that "the use of technology in CRM increases the pressure on companies to meet the expectations and needs of customers, as a result CRM has become the main tool for effective sales, customer service and marketing of any business enterprise" [40]. J. Kincaid viewed CRM as "the strategic use of information, processes, technology and people to manage the customer's relationship with your company (marketing, sales, service and support) throughout the customer's life cycle" [47].

According to A. Parvathiyar and J. Sheth, "Customer relationship management is a comprehensive strategy and process for attracting, retaining and partnering with select customers to create superior value for the company and the customer. This includes integrating the organization's marketing, sales, customer service and supply chain functions to achieve greater efficiency and effectiveness in delivering value to customers" [53].

Marketing, sales, service and support are the three main functional areas that make up CRM and IT. IS (industrial security) is another important component to support these three functional areas as well as CRM process. The value of any company lies in how it uses knowledge to manage customer relationships. If customer relationships are built, it will lead to loyalty and then profits. A company can get many benefits with CRM that can mainly be found in one of these areas, such as higher customer profitability, not having to recruit as many customers to maintain a steady volume of business, lower customer acquisition costs, lower cost of sales, profitability estimation customers and increasing customer retention and loyalty.

It is worth noting that digitalization plays a significant role in the CRM arena. Digitization is perceived as a means to completely help redesign

business processes to achieve organizational goals (J. Chen and K. Popovych) [43].

Today, there are many definitions of digital transformation. Some experts are categorically against the "freezing" of this concept and its specification in a stable definition, justifying it by the fact that the evolution of digital technologies continues, and the meaning of this term evolves along with them. This is beyond any doubt. However, in our opinion, outlining the boundaries of understanding the meaning of digital transformation is not only an important task, but also extremely necessary at today's stage of the development of the digital economy, which allows us to form a unified understanding and, accordingly, to highlight the main directions of digital transformation. Let's start with the fact that within the concept of digital transformation there are many terms that have different interpretations. In this case, terms that have the same sound in English, but radically differ in meaning, which is clearly manifested in Russian-language publications, are key: digitization is the transformation of information "from physical media to digital media." As part of digitization, there are no changes in the quality and content of information, it is simply transformed into an electronic form for further processing in digital format, which allows you to improve existing business processes by adding information in digital format to them.

The digital economy is a component of the economy, which is dominated by the knowledge of subjects and intangible production – the main indicator that characterizes the information society.

The concepts of digital economy, knowledge economy, information society, experience economy and their analogues, presented in modern scientific literature, form a new socio-economic system that replaces the former industrial paradigm.

In modern market conditions, the need for systemic transformations and actions aimed at the development of the digital economy in domestic socio-economic systems at all levels is obvious. The whole world is covered by the idea of digital transformation, it is one of the most popular topics of discussion, but in fact it is far from a new concept, the discussion about it has been going on for several decades. We are in solidarity with the point of view that digitalization of the economy is a modern form of manifestation of a more fundamental regularity of its informatization. Despite the relatively good development of this category, a stable understanding of the essence and meaning of the term "digital transformation" has not yet been formed in the

scientific sphere and the business community. At the same time, it is important to note that the meaning of the term "digital transformation" has evolved along with the change and development of technologies. For a long time, digital transformation meant the translation into digital format or digital storage of traditional forms of data. This is also one of the directions of digital transformation, its interpretation in the "narrow sense".

However, in today's world, this concept is much broader than the conversion of data into a digital format. As businesses and organizations realized all the possibilities of using digitized data, they began to rapidly develop these processes. From that moment, digital technologies began to develop, and the ability to quickly implement them directly determines the competitiveness of the organization on the market.

If we classify this approach, it can be correlated with the 3rd industrial revolution, which lasted from 1969 to 2010; digitalization is initially the creation of a product in digital form.

Therefore, the key difference of digitalization is the creation of a new innovative product with new functionality and consumer properties. And while digitization is primarily aimed at improving existing business models and changing business processes, digitalization allows you to get a significant boost in business and new competitive advantages. Digitalization is already an element of the 4th industrial revolution (Industry 4.0). A November 2016 PricewaterhouseCoopers (PwC) study also revealed inconsistencies in the definitions of digital by enterprises and companies. More than three out of ten business and IT executives worldwide attribute digital to all activities related to technological innovation, 29 % believe that digital is synonymous with IT, 14 % define digital as a user-oriented technological activity, and 14 % more say that digital refers to all the investments a company spends on integrating technology into the business. The only obvious conclusion of this survey is that there is no consensus. Just 6 % of respondents to the PwC survey said that digital "goes beyond technology alone and reflects a mindset that embraces continuous innovation, level-playing field decision-making and the integration of technology into all aspects of business."

In the new economic conditions, all subjects of the socio-economic system, which strive for sustainable functioning, are forced to go through the process of digital transformation.

Digital transformation is the introduction of modern digital technologies into the business processes of socio-economic systems at all levels. This

approach involves not only the installation of software, but also fundamental changes in management approaches, corporate culture, and external communications. As a result, the productivity of each employee and the level of customer satisfaction increase, and the company acquires a reputation as a progressive and modern organization. In fact, this means creating a system of end-to-end business processes, which can be called a digital business ecosystem.

Digitization of processes is relevant not only at the level of individual enterprises: entire industries choose this path of development as the only opportunity to meet the rapidly changing conditions of the surrounding world. Thanks to this, the digital transformation of industry, retail trade, the public sector and other areas is already changing the life of every person and every company today. This makes it necessary to study the issues of digital transformation from the standpoint of a systemic approach in relation to all spheres of the socio-economic system and the life of societies.

In economic science, there are many definitions of the concept of socio-economic system. We will use the definition of the socio-economic system as "an integrated set of interconnected and interacting social and economic institutions (entities) and relations regarding the distribution and consumption of material and non-material resources for the production, distribution, exchange and use of goods and services" [48]. Accordingly, with this approach to socio-economic systems, it is fair to include enterprises and organizations of all forms of ownership and branches of the economy (and their associations), various funds, banks, territorial entities (region, district, municipal education) and their authorities and other institutions, where the main system-forming factor is a person.

The term "digitalization" is used to describe a transformation that goes beyond simply replacing an analog or physical resource with a digital or informational one. For example, books are not simply converted into e-books, but provide a whole set of interactive and multimedia files that have an independent meaning. Accordingly, in the socio-economic system, processes can become online dialogues between parties who previously did not even communicate directly. So, in a business context, an organization that wants to become "digital" should focus on automating processes to make them more efficient, initiate eMarketing, CRM.

eMarketer defines digital transformation as a process by which business leaders use the opportunities and benefits of new technologies to

digitally re-engineer their companies: their operations, products, marketing, culture and goals for future growth. CRM is a means of transformation, not an end in itself. The focus should be on setting a goal for the future and then creating a strategy based on that vision.

In the framework of our research, it is significant to define digital transformation as a process of integrating digital technologies into all aspects of business activities of the socio-economic system, which requires fundamental changes in technology, culture, operations and principles of creating new products and services, such as CRM. For the most effective consumption of new technologies and their prompt implementation in all spheres of the socio-economic system, it is necessary to abandon the former principles and completely transform processes and work models. Digital transformation requires shifting the focus to the edge and increasing the flexibility of the data centers that must support the edge. This process also means the gradual abandonment of outdated technologies, the maintenance of which can be costly to the socio-economic system, as well as a change in culture, which must now support the acceleration of processes provided by digital transformation.

Digital transformation provides the maximum full disclosure of the potential of digital technologies through their use in all aspects of business – processes, products and services, approaches to decision-making. It must be emphasized that the presence of technology as such will never be enough for digital transformation. In order for the process of digital transformation to be full-fledged, clearly formulated business tasks and data are necessary.

Thus, digital transformation can be considered only at the intersection of all three dimensions (a formulated business task, availability of data and actual technologies), "digital transformation involves a fundamental rethinking of how the organization works and how it interacts with the environment" [123]. The main driver of changes is the modern consumer – business changes under the influence of new factors. That is why digital transformation is not only a service of consulting companies, but also a fundamental process experienced by the global community, adapting to the new conditions and benefits of the digital economy society. That is, digital transformation is as much a technology as a change in thinking under the conditions of the new digital economy.

Let us indicate the main advantages that digital transformation brings to all business entities (Table 5.3).

The main advantages of digital transformation

Benefits	Description
1. Process optimization	New technologies allow enterprises to automate simpler processes and eliminate intermediate stages in more complex processes. An advantage for businesses that can now use their resources much more efficiently
2. Search for new streams of income	With the advent of new technologies, new ways of earning profits that were previously unavailable are opening up
3. Creation of a personalized and attractive service infrastructure	Today's customers expect businesses to listen to their opinions and meet their specific needs

Modern technologies are developed to such an extent that they can solve these tasks. The analysis of the advantages presented in Table 5.3 shows that they are most significantly manifested in the provision of services, which is determined by the well-known properties of services, such as their personalized nature, focus on the interaction between the performer (producer) and the customer (consumer), intangible and – most often – informational nature, etc.

That is why the processes of using CRM are most active in the service sector (retail trade, tourism, consulting, entertainment services, etc.), as well as in those segments of the economy that receive added value from the development of service activities (for example, in the banking sector). Enterprises and organizations, both in the service sector and in other sectors of the economy, are rapidly replacing traditional interaction processes with digital ones, using the most modern technologies. Very often, the use of CRM is not because organizations choose to do so, but because they need it to survive.

Today, the market has grown in demand for effective digital technologies of enterprises in the service sector. Those who are unable to adapt to the new model of the digital consumer will surely cease to exist. Organizations that welcome and are ready for change, and are able to adapt to more flexible working models, have great potential for success. This is due to the fact that the use of CRM covers all aspects of business and offers

effective ways to improve it along with the development of digital technologies. Big data and "advanced" analytics make it possible to make more accurate and faster decisions – from preventive production repairs to the prevention of fraudulent operations.

However, the most difficult change for traditional sectors of the economy, in our opinion, will not be the creation and integration of technologies, but the fundamental restructuring of corporate culture and organization. An iterative, adaptive approach, a higher tolerance for risk, characteristic of an entrepreneurial mentality, are in many ways far from established approaches to managing a large business. It is difficult to accept that the structure of any industry and company today should be perceived as a major variable rather than a constant. In this sense, the changes taking place are similar to the approach to cost analysis adopted in microeconomics. It is well known, that in the short term the management of fixed and variable costs can be customised. Variable costs are also called by specialists as crucial, because they significantly affect the management of an enterprise (company). In this structure of costs, there are those that are perceived as constant – these are constant costs. But when moving to a long period, all costs become variable. There are no more fixed costs, management gets more freedom of action, it can conduct all aspects of business related to costs without exception. But, on the other hand, such a situation leads to fear of growing uncertainty, which can lead to the market failure of the firm. It is as a result of the digital transformation that "economic time" is being compressed, in connection with which the calendar segments of time, which were previously traditionally perceived as "short period", are increasingly being evaluated as "long period".

In the term "using CRM", it is expected that the biggest difficulties for traditional business are caused by "using" as a conscious sequential restructuring. Today, the use of CRM is penetrating all sectors of the economy at different rates. It should be noted that the effect of using CRM in different industries is different. It is obvious that the easiest way to use CRM is high-tech industries, initially highly digitized. There is no doubt that the use of CRM will affect all sectors of the economy.

However, to effectively use digital data, organizations must constantly implement new technologies, test them and use the results obtained to better adapt and be ready for the challenges of the future (Table 5.4).

Using CRM for modern socio-economic systems

Identification category	Description
1. Growth driver	ensures the construction of digital business models by: stimulating growth within and beyond the organization's core business; identifying and creating new digital business models; provision of long-term competitiveness
2. Efficiency improvement tool	is based on the transformation of the operational business model to digital technologies due to: optimization of business processes at all levels and reduction of costs; rational use of existing competences and infrastructure; translation of the entire value chain to digital technologies and IT architecture modernization
3. The basis for breakthrough innovations	is the basis for creating a corporate incubator and venture capital by identifying promising opportunities for future growth; early creation of conditions for access to new and complementary technologies; positioning as a partner in the long term

Although the introduction of new technologies is a riskier approach than the use of already familiar systems and devices, the potential opportunities and returns will, in our opinion, be significant. The four technological foundations of digital development, on which it is expedient to build the process of digital transformation, traditionally include: Big data, which foresees an explosive growth of data storage and processing capabilities in all types of computer systems, the future basis of artificial intelligence; sociality – the need to involve a large number of users performing various roles; mobility – availability of information from any point in space; cloudiness – a method of data storage. Their combination makes it possible to significantly reduce the cost of business processes, analytically adapt products to the needs of each specific client (customization), and deliver goods and services when and where they are needed. It is customization that we want to emphasize, it is the reason for the rapid servicing of economic activity, which is manifested in the economies of all countries of the world, even underdeveloped, but in developed countries it is one of the key trends of development. Thus, the use of CRM is closely related to the anticipatory development of the service sector.

The modern market of hospitality, tourism and leisure sector cannot be imagined without marketing and the use of CRM. World practice shows that the use of CRM is the most targeted tool for bringing information to the consumer in the market of tourist services. At the same time, the constant complication of the implementation of tourist services and the intensification of competition have led to the fact that in modern conditions the use of CRM has become an important factor in the competitive struggle, no less important than achieving advantages in the market by introducing technical innovations or reducing the cost of services.

In market conditions, the struggle for the consumer is becoming more and more refined and intensified. The novelty and uniqueness of tourist services are now often more important to him than the price. Therefore, in the modern market of tourist services, the winner is the one who adequately takes into account the specifics of the advertising industry, because a unified approach has long been a thing of the past.

As a rule, the following features of the use of CRM in the market of tourist services are distinguished: impersonal character, one-sided focus, uncertainty from the point of view of measuring the effect, credibility, visibility and persuasiveness, information saturation.

The peculiarities of using CRM in tourism are determined by the specificity of tourist services, namely their intangibility and uniqueness. Despite the significant work done by scientists on the outlined issues, the specifics of advertising of tourist services remain insufficiently researched and concrete, the issues regarding the factors that determine the specifics of advertising on the market of tourist services are debatable.

The peculiarities of using CRM, in our opinion, are determined, firstly, by the characteristic features of the tourist services themselves, and secondly, by the specifics of the tourist business. As for the characteristic properties of services, the following are traditionally distinguished among them: intangibility, non-preservability, inseparability from the source of provision, inconstancy of quality. The sign of intangibility of a tourist service requires informativeness, objectivity and persuasiveness from the use of CRM. The consumer cannot evaluate the quality of the service without receiving it, so he is forced to trust CRM and tourism business specialists.

Any marketing campaign of non-material goods should tell the tourist, as well as visually show this service: the process of providing it, the result, or satisfaction from receiving the service [41, p. 56]. Therefore, a characteristic

feature of the use of CRM of hospitality, tourism and leisure sector services is visibility, which foresees the wide use of visualization elements.

It is known that the use of CRM forms the expectations of consumers, but this does not mean at all that the expectations of a tourist service coincides with the actual service received. If we are talking about a product that the consumer did not like, then he has the right to return it to the seller.

It is impossible to return the service, including the tourist service, due to its non-preservability. A sign of non-preservability of tourist services requires some degree of flexibility in advertising policy. Unprovided tourist services are not subject to storage, they burn, bringing only from the bat, therefore an important task of advertising in the tourist business is demand smoothing.

Therefore, the purpose of using CRM is to ensure constant demand, and hence, an essential condition for the effectiveness of using CRM in the market of tourist services is the economic and communicative validity of the time, place and content of the developed CRM. The inseparability of the service from its provider is typical for almost any type of service, in particular for tourism and recreation services. In fact, the staff of the tourist enterprise, the hotel staff become an element of CRM. At the same time, this feature of the service requires a clear selection of the target segment by criterion. The specificity of the services is that the target segment can be very far from the receiving destination. Therefore, the use of CRM should take into account geographical, national, ethnic, mental and other differences between the service provider and its potential consumer. The use of CRM in this case must be adapted to the culture of the target segment so that there are no problems with double interpretation of advertising texts.

Thus, a characteristic feature of the use of CRM in the market of tourist services is targeting a particular segment, taking into account all its psychological and behavioral features, lifestyle. At the same time, with such a focus on the consumer, the use of CRM of tourist services should not lose its flavor, and even on the contrary, use ethnic or religious stereotypes to attract attention. All this is the basis for serious marketing research of consumers of tourist services, which not only increases the effectiveness of the use of CRM, but also makes it an effective tool for competition in the market of tourist services [54].

Despite the fact that the use of CRM is a very powerful tool for influencing consumers of tourist services, there is always a difficulty in

assessing the quality of services, especially since services are characterized by inconsistency in quality, which is due to the significant role of the human factor in the process of provision of services. This requires the use of CRM to be responsible for the reliability, truthfulness and accuracy of the information provided in it. Even a slight exaggeration can be perceived as a fake, unreliable marketing campaign.

When choosing a hotel or resort, the tourist draws information only from the description in the advertising catalog or on the hotel's website, which does not give him the opportunity to try the product before buying.

The use of CRM in tourism is a form of indirect communication between the tourist product and the consumer. This means that by providing some information about the company and its tour product, the marketing campaign is forced to convince potential customers to make their choice in favour of this company and products, to strengthen the confidence of regular customers in the correctness of their choice [164, p. 32–36].

It is difficult to imagine the development of tourism without bright, accurate and effective advertising. It has a significant psychological and sociocultural impact on society. However, such influence should not be considered as coercion or encouragement of consumers of tourist services to certain actions, because a modern civilized marketing campaign is not a manipulation of public opinion, but a professional formation of actual needs aimed at self-development of the individual. For example, such an advertising message, which, promoting sports and a healthy lifestyle, offers to relax at a ski resort with the help of a travel company and use a full range of services to improve a person's health, can be considered apt [22, p. 48–49].

The marketing campaign of a tourist product has a number of features determined by the specifics of tourist services.

Tourist services are not ordinary, but each tourist route is complex and unique [49, p. 25].

The specificity of tourist services dictates the need to use visual aids that more fully illuminate the object of tourist interest. For example, a high-quality photo of an advertised sanatorium can have a much greater emotional impact on the audience than the most eloquent stories about the same sanatorium.

A tourism marketing company that promises consumers certain benefits and advantages over competitors' offers, primarily of an economic nature, best achieves its goal. Thanks to advertising, a potential consumer should

believe that this particular company will save him money and allow him to get maximum satisfaction from tourist services [106, p. 12–13].

A high-quality and professionally conducted marketing campaign has a double effect. On the one hand, it helps tourism enterprises to develop new sales markets, to expand sales volumes, on the other hand, to increase the company's own income, due to which it is possible to ensure proper remuneration of personnel. This, in turn, contributes to the growth of the staff's interest in the results of joint activities.

The use of CRM is of great importance in forecasting and planning the work of a travel company. Through it, you can establish feedback with the market, that is, consumers of services. For example, with the help of questionnaires or coupons that can be distributed together with various products, the firm receives information that allows it to better predict the demand for its services and accordingly build a strategy of action.

Thus, establishing feedback with consumers using this method can be considered appropriate and promising, as it allows you to control the promotion of tourist services, make adjustments to sales activities, and form and consolidate among consumers a stable perception of the benefits of the services of a certain trip company. It is important to emphasize that, as the experience of advertising campaigns of the world's leading tourism companies shows, the marketing campaign should take into account the peculiarities of the country, region, socio-political position in society.

A hospitality, tourism and leisure sector marketing campaign should not mask the poor quality of the product and customer service. A quality marketing campaign must be truthful. The organization of advertising events at tourism enterprises is very important and depends on many factors. Most enterprises in the service sector independently organize advertising events.

At large enterprises, in particular, in hotels and travel agencies, marketing and advertising departments are created, which advertise the company's products and services. The presence of such a department at enterprises has a number of advantages:

1. Specialists of the department have a good knowledge of the company's products and services, as well as the relevant market sector.
2. They have all the information related to both the company's development strategy and its current tasks, and can promptly take this into account when conducting an advertising campaign.

3. Employees of the department are directly interested in the effectiveness of the advertising campaign.

However, sometimes the costs of maintaining an advertising or marketing department are higher compared to paying for the work of an advertising agency. In addition, these departments do not always consist of professional specialists, and also cannot directly ensure the creation of advertising and informational materials, including the creation of radio and video clips, printed products, etc. Therefore, the organization of an advertising campaign for tourism is rarely done without the involvement of advertising agencies.

In small enterprises working in the field of tourism, advertising activities are usually carried out by the director or one of the managers. The best option for organizing advertising activities at tourist enterprises is obviously the following. The company envisages the position of director of advertising and public relations. Its main function is the coordination of all advertising activities of the enterprise and work with advertising agencies on the creation and implementation of an advertising campaign. Advertising agencies are engaged to carry out work on the creation of advertising and informational materials and their placement [48, p. 14–16].

It is impossible to imagine a world without advertising. Sometimes a marketing campaign annoys, sometimes amuses, but it always gives rise to a certain image which is bright, expressive and encouraging.

The use of CRM is a phenomenon that exists in its own right as a way of communication or an attention-grabbing message. The use of CRM is closely related to the development of production, product exchange, and society as a whole. In the modern world, the marketing campaign has firmly taken a leading position and comes to the fore as an economic, information-communication, general cultural phenomenon (after all, the marketing campaign is one of the most striking phenomena of mass culture). A marketing campaign, in particular a tourist campaign, carries information that is usually presented in a short, artistically expressed form, emotionally colored and brings to the minds of potential consumers the most important information and facts about the tourist product and the tourist enterprise.

An important role in the implementation of the strategy of a travel company is played by the use of CRM, which carries out any other type of marketing communication. Civilized CRM is the formation of actual human

needs, it gives the consumer new knowledge, experience, and enhances the satisfaction of the purchase. With the help of advertising, travel companies master the newest sales markets. Being a means of competitive struggle, the advertising campaign exacerbates it, contributing to the improvement of the quality of tourist services [138].

Using CRM allows you to increase sales. Large-scale marketing of tourist services provides the travel company with an increase in income and a decent salary for the staff.

In our time, when the pace of CRM development lags significantly behind the pace of development of the tourist services market itself, the expansion of the assortment and the growth of competing firms, the problem of the quality of creation, implementation and demand for CRM is undoubtedly relevant.

Distinctive features of CRM as one of the main means of marketing communications in the field of tourism are determined both by the specifics of CRM and by the peculiarities of the tourism industry and its product – a tourist product (Table 5.5).

Table 5.5

Distinguishing features of tourist services

Feature	Description
1	2
Impersonal character	The communication signal comes to the potential client not personally from a company employee, but through an intermediary (mass media, prospectuses, catalogs, posters, etc.)
Uncertainty in terms of effect measurement	This feature is a logical continuation of the previous one. Feedback in advertising is probabilistic in nature. The fact of purchasing a tourist product depends on a large number of factors, which are often not directly related to advertising, are subjective in nature and practically cannot be formalized
Complexity	The impression left by a tourist after consumption of a tourist product is influenced by many factors, even such as the behavior of the maid, waiter, representative of the meeting party. This is what complements the impression that remains after consuming a tourist product

Table 5.5 (the end)

1	2
Brightness and persuasiveness	The specificity of tourist services necessitates the use of visual aids that provide the most complete picture of the object of tourist interest
Intangibility or intangible nature	The travel service cannot be demonstrated, seen, tried or studied prior to receipt. The buyer is forced to take the seller's word for it. The seller can only describe the benefits that the buyer will receive after providing the service, and the services themselves can only be evaluated after they are performed

Since the use of CRM has the ability to influence the tourist not only before and during the trip, but also after it, it becomes especially important to define the target audience and the appropriate advertising means and activities. At the same time, the use of CRM should influence the staff of travel companies, interest them in the implementation of everything advertised.

According to Art. 6 of the Law of Ukraine "On Tourism" tourism is one of the priority areas of economic and cultural development and creates conditions for tourism activities.

The main task of tourism development and, as a result, the use of CRM in Ukraine is the formation of a modern strategy for the promotion of a tourist product on the domestic and international markets. To perform this task, you need to provide in CRM:

- development and implementation of advertising and information programs for outbound and domestic tourism, including the creation of television and radio program cycles for Ukraine and foreign countries, as well as regular advertising and information campaigns in mass media;

- publication of catalogs, booklets, posters, maps and other advertising and informational printed products;

- organization and holding of international tourist exhibitions;

- ensuring the activities of foreign tourism representative offices, performing the functions of advertising and information offices within the framework of the activities of trade representative offices of Ukraine;

- maintaining and updating the official Internet portal of the executive authority in the field of tourism;

conducting educational trips to tourist centers of Ukraine for foreign journalists;

organization of presentations of tourism opportunities of Ukraine in the main countries that send tourists to Ukraine;

formation of modern tourism statistics that meet international requirements, within the framework of the decisions of the UN Statistical Commission, taking into account the indicators of related industries and determining the total contribution of tourism to the country's economy.

So, taking into account the above, it is possible to highlight the following features of hospitality, tourism and leisure sector marketing when using CRM:

1. For marketing in tourism, the task of stimulating demand is less important. The demand for travel services is constantly increasing, and the travel industry is less dependent on market fluctuations than other sectors. For tourism marketing, the most important task is to ensure the right direction of demand.

2. A reliable information policy towards the consumer is of great importance, especially at the stage of selling services, as well as thoroughness in the development of a tourist product.

3. Taking into account the special role of the subjective factor in the process of purchasing tourism services, tourism companies should pay attention to the protection of the rights of consumers of these services.

4. The influence of the seasonality factor determines the need to diversify tourist services or pay special attention to marketing activities in the off-season in order to make the enterprise less dependent on the time factor.

5. In the process of CRM marketing management, not only material aspects should be taken into account to a greater extent than in other industries, but also psychology, spiritual and emotional state and characteristics of the consumer.

6. Taking into account that tourist products are, as a rule, a complex of material and ideal components, the consistency of marketing of all participants in the production of tourist services, tourist centers, state bodies regulating tourism activities, and associations is of great importance in order to achieve the final result of marketing activities.

Section 6. Organization of the food and beverage services in a hotel

Restaurants are part of the hospitality industry and an integral part of the global tourism industry. In any country restaurant establishments significantly contribute to meeting social, cultural, economic and entertainment needs.

Food and beverage services are among the main sources of the hotel's income. Thus, according to the Head of the food and beverage management department of the Hilton hotel, Kyiv, in 2018 the revenues from restaurant service amounted to 32 % of the total profit of the hotel (which corresponds to 52 million UAH per year). Almost every hotel has its own restaurant or cafe which are one of the main divisions of the hotel complex.

Unfortunately, COVID-19 had a devastating effect on the tourism industry in general and on the restaurant industry in particular. The closure of restaurants has caused a crisis in many related areas – food production, agriculture, fisheries and others. For example, a report made by the American National Restaurant Association [179] offers a comprehensive view of the damage the pandemic has caused to the industry and millions of its employees across the country. There are some key conclusions:

- the restaurant industry ended 2020 with total sales of \$240 billion lower than the Association's forecast for the year before the pandemic;

- as of December 1, 2020, more than 110,000 restaurants of various levels were closed temporarily or permanently;

- the food sector ended 2020 with jobs almost 2.5 million below coronavirus levels. At the peak of the initial closures, up to 8 million workers were laid off or sent on free leave, according to the Association.

After analyzing the general tendencies in various areas of the restaurant industry, the experts identified the main trends that have affected the restaurant service and continue to change this area:

- restaurants have considered a number of ways to hold traffic and generate revenue. For example, restaurateurs have focused on building businesses off-premises, especially in the full-service segment. About half of the restaurant establishments have allocated more resources to expand this side of their business since the start of the COVID-19 outbreak in March 2020;

the possibility to order a takeaway or home delivery with the third-party companies set up a drive-through system, improve and enhance packaging for the delivery of ready meals – and these are just a few of the tools used by restaurants to support their business. Thus, during the pandemic, the delivery service in Ukraine began to develop very rapidly. But at the same time some territories are not covered by the services of the delivery companies, sometimes food is not delivered on time and with delays, often hot food is not of the temperature it is supposed to be. In such cases, restaurants offer discounts or special offers for self-pickup. Millennials and Generation Z are priority audiences for delivery services. They are the ones who, compared to other generations, spend the largest share of their budget on ordering ready-made food. They also have the highest demands: instant delivery, gamification, personalisation and tracking of the delivery process. In the US, for example, pizza from Pizza Hut can be ordered and paid for directly from the car's digital menu, and from Domino's Pizza simply by retweeting the pizza emoji. Pizza Hut had also implemented a digital menu that detects the focus of the customer's eyes and suggests the best ingredients for pizza from 4,896 possible combinations in just 2.5 seconds [179].

Multichannelling in public catering is a combination of online and offline sales. Most offline restaurant establishments that have already adopted this service effectively use their resources to increase sales inviting customers not only to visit the establishment but also order food at home, or place an order and pick it up themselves.

Service styles have also changed. In addition to providing services outside the premises, much of the meal and food intake was also taken outside as far as the weather, the restaurant territory and quarantine restrictions allowed.

The COVID-19 pandemic has in some ways had a positive impact on the restaurant industry. We can see the acceleration of the technology development and implementation: the use of contactless and mobile payment methods, mandatory electronic menu available by QR-code, the possibility of online orders and online payments, the creation of special applications, inevitable expanding of the presence in social networks and messengers have become crucial for survival of many enterprises. 40 % of entrepreneurs in the restaurant industry (in all segments – from luxury restaurants to cafes and snack bars) have confirmed the addition of technological solutions to their business [179].

Slowing down of business processes and restrictions on the ability of food consumption indoors have forced entrepreneurs to reduce stocks of food and raw materials, streamline menus and develop new menu offerings that are in greater demand, can be prepared by smaller teams and are easier to deliver to customers. The implementation of the contemporary technologies such as RFID-technology (Radio Frequency Identification), which help to effectively manage stocks and their movement, to set up a system for personnel control and work with customers, to identify the most popular dishes, the level of satisfaction with service and ways of improving online services.

Some restaurateurs have significantly expanded the menu range by offering ready-made sets for breakfast, lunch, dinner, etc. for different groups of consumers (vegan, Muslim, lactose-free, dietary, kosher dishes) and even offered groceries and food items – everything that was in demand and everything that consumers were willing to buy. Of course, the most popular have been and still are burgers, pizza, noodles, sushi, a variety of snacks, i.e. food that is convenient to eat outside the restaurant and in cramped conditions.

At the same time, during the summer period 2021 between severe lockdowns and the relatively steady epidemiological situation in Ukraine, the country was visited by tourists from Arab countries, such as Saudi Arabia, Qatar, Lebanon, Sudan, etc. Thus, according to Vitaliy Tytovets [81], head of the Boryspil-1 border service department, almost 30,000 of such foreign tourists entered Ukraine as of August 26, 2021. The State Tourism Agency of Ukraine considers the countries of the Persian Gulf a promising direction for the industry affected by coronavirus restrictions. In June, 2021 the agency invited representatives of Saudi travel agencies to undertake a tour around Ukraine, and their positive feedback on Ukrainian nature and Ukrainian cuisine, as well as hospitality, led to an increase in tourist flows from this geographical area.

The tourism industry reacted immediately to this opportunities having proposed not only special halal dishes in restaurants and cafes, but also proposing menus translated into Arab language with the indication of dishes cooked in accordance with the prescribed Shariah rules important for Muslims. It is only natural that in hotels welcoming tourists from Arab countries all the titles of buffet breakfast also have variants in Arab language. And this tendency will only increase.

Prior to the pandemic, it was predicted that the restaurant and food industries would continue to provide high levels of employment in this area. But the effects of restrictions due to the coronavirus led to a drop in staff employment in all segments of the restaurant business and affected the most efficient group of people aged from 18 to 45 years.

During the pandemic, restaurants suffered more than any other industry and are likely to have the longest employment and development recovery period to reach the levels of the pre-coronavirus development rates.

Nevertheless, it should be noted that most restaurant owners and managers have significant creative potential, they are able to be flexible and are ready to adapt to drastic changes, they are fast in their response and have a desire to resume and improve their own business. Restaurant businesses have been able to adapt for the sake of survival and have already set new trends that will continue into the post-pandemic period.

The most obvious trend is the emphasis on health and safety. During the pandemic, strengthening health measures was and is a necessity introduced by the government. After a pandemic, some measures (such as wearing a mask, for example, or a large distance between visitors) will become optional, but most of them will remain a factor in preventing future risks (frequent hand washing, disinfectants for guests and proactive sanitation and hygiene). Increasingly popular are special metal utensils and metal coating with nanoparticles for sterilization and disinfection of kitchen equipment. In this way, health care protocols reach a new scientific level.

The second trend is an increasing focus on technology and innovation. Innovations such as e-menus do not only make restaurants safer but also more efficient, and efficiency gains will be crucial in the nearest future. Even smaller cafes and establishments attract various technologies because this experience satisfies customers more and increases their loyalty to the establishment.

After a while, the industry will move from digital services to automation. The work is already crucial in food packaging plants. Robotic cashiers and cleaners will help companies serve more guests faster and more efficiently.

Restaurateurs should also focus on the Internet marketing tools which nowadays not only stimulate promotion of the restaurant product, the restaurant business itself and its brand through the use of social media, the content of which is created or updated through the the social media marketing (SMM), but sometimes serve as the most effective way of the restaurant

product sales and efficient mode of communication between the customers and restaurant staff.

The appropriate SMM aims at attracting more and more of supporters, expanding the target audience, developing, improving and protecting the company's reputation by building consumer loyalty to the brand. The social media audience is now being compared to the TV audience, however more focused and responsive. The social media reach, through direct and covert interaction, a target group of users.

Among the well-known platforms used by consumers are not only the popular "Facebook", "Instagram" and "Twitter", but also the social Internet and photo hosting service Pinterest, the business social network LinkedIn, microblogging services "Tumblr" and "Flickr", the video hosting sites "YouTube" and "Vimeo", the new video posting formats "Coub", "Vine", as well as the personal messengers "WhatsApp", "Viber" and "Telegram".

The above-mentioned features of service in restaurants during the COVID-19 pandemic are also valid when organizing meals in hotels. Thus, it is necessary to conduct temperature screening of guests and staff, information on the prevention of coronavirus infection is placed on the stands at the entrance to the hotel and restaurant, it is mandatory to organize racks for hands disinfection in a well visible place, wearing protective masks and personal protective equipment in public places. Meals are provided by delivery to rooms or in open areas in compliance with all epidemiological standards. The distance between the tables should be at least 1.5 m, there should be no more than four people at the table at a time (not including children under 14 years) [78]. The new resolution issued by the Chief State Sanitary Physician of Ukraine [77] additionally specifies duties of:

a business entity has to ensure the fulfilment of conditions to prevent the formation of queues and crowds of visitors; constant availability of liquid soap, antiseptic and paper towels in the sanitary/nursery rooms, the use of reusable towels is prohibited; damp cleaning of production areas and surfaces of contact of the personnel and customers' hands (door handles, seating areas, sinks, tables, etc.); using detergents and disinfectants (at the end of the shift) at least every 2 hours, before the opening and after the end of the working day/shift; centralized collection and disposal of used personal protective equipment (PPE), paper tissues in separate containers/urns (cardboard or plastic), with lids and plastic bags; personnel of the restaurant/cafe must be provided with PPE at the rate of 1 protective mask

per 3 hours of work, there has to be a stock of PPE available for at least 2 working days;

the personnel of the establishment is allowed to work with the use of PPE, after the temperature screening. If an employee has a body temperature over 37.2 °C or demonstrate the signs of acute respiratory illness (ARI), the employee is not allowed to work and is recommended to seek medical assistance. After each removal of PPE and before putting a clean PPE on, the employees must thoroughly wash their hands with soap and water or clean them with an antiseptic. Personnel must also wash their hands regularly with liquid soap or clean them with alcohol-containing antiseptics at least once every 3 hours and after visiting public places; refrain from touching the face with the hands; refrain from contact with persons with symptoms of respiratory illnesses – cough, fever, body aches; self-isolate when symptoms of respiratory illness occur;

organisation of the work of an establishment: inside (at the entrance) of the establishment and/or near the place of give-away (when the establishment operates as a take-away outlet) the places for handwash with alcohol-based antiseptics should be arranged. The visitors' body temperature is measured by the non-contact method; the visitor is not allowed to the establishment in the case of body temperature over 37.2 °C or with the signs of acute respiratory infections; places of potential crowding are marked with the signs of obligatory queueing with the distance observance between customers; accommodation of visitors in accordance with the requirements established by sanitary and epidemiological service should be ensured; menus are placed for non-contact viewing at the entrance or the place of an order taking;

the orders are made in reusable dishes only if there are conditions for mechanized washing of dishes with the use of a dishwashing machine; it is allowed to use disposable dishes made of cardboard or paper. Drinkware and drink extras (sugar, stirrers, tubes, etc.) must be in individual packaging; the availability of cashless (contactless) payment;

visitors have to: wash their hands with an antiseptic before entering the catering facility; wear a respirator or protective mask covering the nose and mouth, including self-made (except while sitting at the table for of eating and/or drinking); adhere to the requirements provided by the sanitary and epidemiological service.

Besides, in red zones, in order to visit a restaurant or a hotel, all the guests should have a vaccination certificate or negative PCR test, which is valid for 72 hours, the same is applied to the staff.

It should be noted that the rules of restaurant service in the hotel are temporary and vary depending on the level of contamination of the territory and the general situation in the country.

1. The special features of hotel catering.

When deciding whether or not to provide catering services in the hotel, and if so, how many restaurants are needed for the hotel and what the level of service offered will be, owners and managers must determine the goals and missions of the restaurant service process in the hotel:

- to provide an appropriate level of restaurant services for guests of the establishment;

- to support the general purpose of the hotel;

- to help the hotel gain a competitive advantage over other accommodation establishments;

- to function fruitfully and efficiently for the purpose of making a profit.

It is difficult to provide a generalized description of the organization of catering in the hotel due to the great variety of accommodation establishments.

The resort hotel, for example, will focus on functional restaurants that can accommodate a large number of vacationers and entertainment outlets, such as restaurants, bars, lounge areas, coffee shops, banquet halls. The resort provides all the facilities for entertainment and relaxation of guests, focusing on specialized restaurants and room service. Managers of resort hotel complexes face problems of seasonality as both hotels and restaurants in these hotels are, as a rule, located in hard-to-reach areas which considerably affects operating costs.

Conference hotels have large conference rooms and offer more services for a variety of events such as banquets, buffets, coffee breaks.

This section is based on the example of the work of the Hilton Kyiv business hotel where the author underwent an internship in 2019.

Catering services in hotel restaurants consist of several processes:

- production – cooking in the kitchen;

- trade – sale of ready-to-eat meals, alcoholic and soft drinks;

- service – serving guests in a restaurant, bar, café or hotel rooms.

The food service has the following structural subdivisions: kitchen, food and drink venues (restaurant, cafe, bars, cafeterias, canteens, etc.), banquet service (event service), room service.

The food and beverage service of a large hotel is headed by a director or manager of food and beverage management who is subordinate to the hotel director or manager. The director of the food service cooperates with the kitchen and the procurement department to order components for cooking and beverages, directly supervises the managers of food companies, the head of the cleaning and dish washing subsection, the manager of the event service.

According to DSTU 4281:2004 "Restaurants. Classification" [62], restaurants are divided into restaurants and bars (luxury, premium, first class) and cafes, canteens, snack bars, cafeterias. Each establishment of the catering trade is characterized by a combination of indicators: menu, quality and quantity of dishes, professional level of staff, interior design and furnishings, form of waiter service, duration of service (time from order to dish serving), availability of additional services, functional purpose of the establishments of the catering trade, prices. The organization of the hotel's food and beverage service depends on the hotel size, the hotel type and the list of services it provides.

In four- and five-star hotels, in accordance with DSTU 4269:2003 "Tourist services. Classification of hotels" [64], premises for providing food services must meet the following requirements:

- a restaurant or cafe: the number of seats is not less than 75 % of the number of guests that the hotel can accommodate;

- a restaurant, several halls, separate rooms: the number of tables is not less than 75 % of the number of rooms; service class should not be lower than "high";

 - a banquet hall (s), possibly convertible into a conference hall;

 - a bar;

 - an additional bar in the reception area;

 - a separate premise for staff catering.

Besides, the catering services of such hotels must include the possibility of providing breakfast, operation of at least one bar around the clock, 24-hour room service. Luxury restaurants are characterized by luxury interior, high level of comfort, professionalism of staff, a wide range of

services provided to visitors and, of course, a huge range of original and special dishes. The luxury bars are filled with signature gourmet drinks and cocktails.

Services in the premium hotel are characterized in a similar way.

From the first class hotel the guests expect a comfortable hall, staff attention, a wide range of dishes. Drinks and cocktails at the bar are less expensive than in previous classes. Thus, the first class hotel is the most affordable to the average citizen.

The additional factors that affect the organization of food and beverage service are the category of guests staying at the hotel; the purpose for which they travel – leisure or business; the hotel location – in the center or on the outskirts; type of hotel – a regular hotel, a resort hotel or one that specializes in business visitors; product range (specialization); whether there is access for non-hotel residents to its restaurant and bars; the form of service provided and the level of guest service.

As a rule, most hotels earn extra income by attracting locals to their restaurants, especially in large cities, when organizing celebrations, events, banquets, etc. The main task of the food and beverage manager is to organize the work of this segment in such a way as to constantly provide exactly those services that will attract the attention of the largest number of guests. Nowadays, there is a tendency to create special conditions for guests' rest and leisure in the restaurant to create a special unforgettable atmosphere: the involvement of famous chefs as the hotel's additional competitive advantage; gifts, playgrounds and recreation areas for children where they are entertained and supervised by specially trained staff; themed lunches and brunches with unlimited drinks, live music, entertainment program; culinary schools at the hotel restaurants; wireless electronic menus that are updated in real time and provide complete nutrition information about dishes including proteins, fats, carbohydrates within the daily calorie limit.

The meal plan depends on various factors, such as country, hotel category and specialisation category of guests, the ratio of the number of rooms in the hotel and seats in the restaurant and some other factors. Currently, the type of catering provided is indicated by Latin letters (BB, HB, FB) which can be found in the hotel catalog or in the description of the tour if we talk about the resort hotel.

The existing division of restaurants into classes is very general. In fact, there is a large number of food schemes in the hotel. The main ones are the following [179]:

BO, OB (only bed) – meal is not provided.

BB (bed and breakfast) – only breakfast is proposed. There are the following types of breakfasts:

a) Continental breakfast – a light breakfast consisting of coffee or tea, juice, rolls, butter and jam;

b) English breakfast – a full breakfast, usually includes fruit juice, scrambled eggs with ham, toast, butter, jam, coffee and tea;

c) American buffet – similar to continental breakfast + various platters (sausage, meat, cheese) and hot dishes (scrambled eggs, sausages, omelet with bacon or meat);

HB (half board) – the host offers only breakfast and lunch (buffet), free tea, coffee, water for breakfast.

HB+ (half board plus) – extended half board, breakfast and dinner (buffet) are provided, besides free alcoholic and non-alcoholic local drinks are also offered.

FB (full board) – the hotel provides all three daily meals. The main difference from the "all inclusive" system is that during breakfast only soft drinks are served free of charge, at lunch and dinner time all drinks must be paid for additionally.

FB+ (full board plus) – includes breakfast, lunch, dinner and alcoholic drinks of local production during the evening meal.

AI (all inclusive) – includes breakfast, lunch, dinner, locally produced alcoholic and soft drinks, tea and coffee at certain times during the day. Additional food between main meals is also offered.

MAI (mini all inclusive) – is a full board, locally produced drinks are offered not only during meals but in limited quantities during the day.

UAI (ultra all-inclusive) – food is provided during the whole day with a wide selection of dishes, including alcoholic beverages of local and foreign production.

"A-la carte" is a menu in which each dish is listed with a price, weight and nutrition value and the guests order as they wish. The guests are served by the waiter/waitress in the pleasant atmosphere. The restaurants of this type are often themed (Mexican, Italian, Japanese and so on) and are of higher level of individual service, gourmet meals and fine beverages.

"A part" is a type of restaurant service when guests, having made an order in advance, are served in a set period of time. This method of service is often used in holiday homes and resort hotels.

"Table d'hote" is a form of waiter service for groups of tourists for lunch or dinner with a limited range of dishes at pre-set tables for 4, 6, 8 people. "Table d'hote" differs from "A part" in that all guests are served at the same time and on the same menu. The service begins when all the guests gather at the table. It is often used in boarding houses, rest homes, recreation centers, other accommodation facilities where food production capacity and kitchen capabilities are quite limited.

A very popular means of service in hotels is a buffet – a system of serving meals when food is placed in rows in a restaurant or in a special hall (during a reception, seminar, conference or any other event) and visitors usually serve themselves, although some assistance on the part of restaurant staff is also provided (Fig. 6.1).



Fig. 6.1. Organization of a buffet
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This type of catering is common when serving a large number of people, especially breakfasts, which are attended by most hotel guests.

There are certain rules of the buffet service: on a separate (serving) table all the necessary utensils and tableware are placed: glasses, cups, cutlery, clean portion plates of different sizes, salt cellars, cups, pepper castors, saucepans, napkins. Snack plates are placed in stacks of 10 – 12 pieces at the rate of two plates for each guest. The pie plates are stacked up in the same way. Glasses, goblets, wine glasses are placed in two rows in symmetrical groups. Drinks are placed next to glasses [24].

The serving items are placed radially on the round serving tables. There should not be many items on the tables and they must not be overloaded with food.

The coffee machine must be switched on, the coffee must be freshly ground. The choice of tea, including herbal teas, is fully provided. Sugar (white, brown, sugar substitute), honey, sliced lemon, several types of jam, hot milk in sufficient quantities, a bucket of ice, etc. have also to be prepared in advance.

The buffet menu includes several types of salads, cold appetizers, special dishes, hot snacks, desserts and fruits (Fig. 6.2). The menu and serving of dishes are determined by the level and purpose of the reception.



Fig. 6.2. Serving hot dishes at the buffet
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Several waiters who assist guests in putting food on the plates, pouring tea, coffee or juice, recommending on menu items always stand at these

tables. The waiters are also obliged to inform the kitchen in time about the products that are running out (food warmers and platters with dishes should not be empty by more than 1/3). Products must be replenished and freshened as needed throughout the service period.

During this service, guest tables are served according to the hotel standards and/or meal times. Standard serving may include:

- cutlery (plate, fork, knife);
- a glass for water/juice;
- a filled sugar bowl;
- filled salt and pepper castors;
- a napkin for utensils and a napkin for the guest;
- a vase with flowers or a central decorative ornament (Fig. 6.3).



Fig. 6.3. Table setting for breakfast
(© Hilton, © Ahmedova Olena, 2019)

Food must be stored at the correct temperature in accordance with current legislation and regulations of sanitation/safety/hygiene/health care. It is also necessary to make sure that the juices and all products have an appropriate expiration date, refrigerators are completely filled with everything necessary within the restaurant.

Waiters should always check that there are enough plates, bowls, cups and cutlery, tea and coffee cups and saucers on the serving tables.

Some hotels also offer special menus (vegetarian, Muslim, kosher, vegan, low-carb, etc.), children's menu and/or baby products. But the main thing is the high quality of service and the creation of a positive image of the hotel restaurant (Fig. 6.4).



Fig. 6.4. **Creative good-day wishes offered to guests by hotel staff**
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Each hotel has a standard preparation procedure for meeting guests, which includes cleaning, rational arrangement of chairs, armchairs, shelves for dishes and table linen, serving tables for waiters, arrangement of utensils and cutlery, special table setting if this is required by the restaurant rules. The furniture is arranged in such a way as to create comfortable and convenient conditions for the rest of consumers and the work of staff, as well as for the most efficient use of retail space. As a rule, round tables are placed in the center, rectangular and square are put near the walls. The central passage in the hall of the restaurant should be at least 2 meters, side aisles between groups of tables are around 1.0 – 1.5 meters. The recommended distance between individual tables is 0.70 – 0.75 meters [106].

Restaurants in luxury hotels have their own creative concept which is also subject to the location of furniture regardless of its shape and size. The distance between the tables is usually much larger than above stated in order to create a certain individualized atmosphere of luxury and exclusivity of the hotel and restaurant, and the service provided.

The responsibilities of the restaurant staff include the following standard operating procedures:

1) Before receiving guests it is necessary:

to make sure the administrator/hostess desk is clean, repaired, neat and tidy;

to make sure that the entrance area is clean and tidy (no fingerprints on doors, windows, mirrors, the floor and carpets are clean and dry, etc.);

to make sure that all the furniture is located correctly and in accordance with the layout plan;

to make sure that tableware and utensils, glasses, table linen are in good condition and in sufficient quantity and are available at the service counters/serving tables for waiters to ensure fast uninterrupted service;

service racks/serving tables are kept clean, filled with the necessary equipment, quickly cleaned of dirty dishes and linen during the service period;

POS-terminals, their cells, screens and printers are clean and contain a sufficient amount of cash register tape for printing checks;

tables are arranged according to the hotel standards and/or depending on the meal period;

the tables must be free of dirty dishes, disinfected and re-covered within five minutes of the guests leaving the table;

the menu must be in good condition, accurate and include only those dishes that are available;

all team members must be on shift; in case of absence or delay of any of the team members, the team leader must take appropriate measures to ensure that guests do not feel discomfort from lack of staff;

all team members must be dressed in appropriate uniforms and meet the standards of appearance adopted in the hotel and restaurant complex.

In addition, restaurant staff, as a rule, is instructed daily before the start of each shift to discuss all important topics (availability of products, special events, additional sales, VIP services, table reservations, problem situations related to the behaviour of guests or staff, etc.).

2) During the reception of guests it is necessary:

to greet the guest with a smile and keep an eye contact with them within 15 seconds; it is desirable to greet children at eye level, i.e. to sit down or bend down;

to show with a look or words that the staff is aware of the guest's presence if the staff cannot pay attention to the guest immediately, then apologize for making the guest wait;

to greet the guest by name, if possible;

to help the guest with outerwear/heavy or bulky items;

to offer a newspaper (for luxury hotels it is the norm to propose at least one local and two international newspapers).

3) When placing a guest at the table it is necessary:

to ask the guest if he/she has any preferences for the location of the table, to wait for confirmation of the proposed table, otherwise to offer another one, if there are any, or ask to wait, always specifying the approximate waiting time;

to offer the guest free coffee or juice in the lounge area or in the hotel lobby if the waiting time exceeds 5 minutes;

to pay special attention to the visitor who came alone: offer him/her reading materials, it is better not to place such guest near doors or toilets or in the middle of a restaurant;

to provide the guests with special needs with everything they need (to help a person in a wheelchair, to offer a child seat, children's menu, if it is available, as well as toys, pencils and coloring books for a child of the appropriate age);

to lead the guest to the table at a pleasant pace for him/her, try to communicate with the guest, do not turn the back on the guest;

to tell the guest the waiter's name and wish him/her a pleasant time and stay.

4) When accepting an order, the waiter has to:

approach the table 1 minute after the guests sat down at the table;

introduce oneself;

unroll the napkins and put them on the knees of the guests;

submit the unfolded menu first to women and the oldest, offer a bar menu to the oldest man, or put it unfolded on the edge of the table; during the period of restrictions due to the spread of coronavirus infection, invite guests to use the QR-code to download the electronic menu;

offer guests sparkling water or still water;

offer guests coffee, tea, freshly squeezed orange juice, other drinks in a minute after guests settled down at the table;

if the guest is having breakfast at the hotel for the first time, explain to him/her in detail how the buffet and the "a la carte" breakfast menu work (if necessary, inform about seasonal and daily offers);

recommend special dishes, such as a dish of the day or special dish from the chef, inform the guest about any menu items that are currently unavailable;

explain the wine concept of the restaurant, offer special drinks, invite a sommelier, if such a position exists in the restaurant; show the guest a label on a bottle of wine, offer the head of the table to try the wine, wait for approval; during the tasting to explain from which region the wine was delivered, year, origin, special notes of taste; serve wine and fill the first glasses immediately after ordering; serve wine slowly, with obligatory explanations of consistency, colour, aroma, tartness, taste, etc.;

accept the order within 3 minutes after the guests have received the menu (starting with children, women, the oldest), indicate the approximate time of service, repeat the guests' order; if guests are not ready to make an order, offer help in choosing, be ready to comment on ingredients of any dish, wait at some distance from the table while guests decide on the choice;

make sure that the kitchen has received orders and special wishes from guests;

offer additional alcoholic beverages, desserts, ice cream, coffee.

5) During the service the waiter has to:

make sure that all the appropriate cutlery and crockery is in place before serving the dishes;

serve women first (if there are children, to serve them first);

serve continental breakfast within five minutes, and hot dishes from the kitchen within 8 – 10 minutes after ordering;

for complex dishes the cooking time is 20 – 30 minutes, but the first dishes should be served within 10 – 15 minutes after ordering;

remove used utensils, napkins, any other items that are no longer used from the table within two minutes;

ask if the guests liked the dishes after each serving and during the first two minutes;

offer another dish if there are certain problems or solve the problem in any other way.

6) Presenting a check and saying farewell:

the bill must be brought within 3 minutes after the guest's request, before that it is specified how the guest wants to pay – by card or cash;

the check is submitted in a special branded folder or box of the restaurant together with a pen with a branded inscription if the guest is asked to fill out a form of evaluation and satisfaction with the services provided;

if necessary, offer guests help with outerwear and things;

lead the guest out of the restaurant, politely thank the guest and wish him/her a good day.

All team members should maintain eye contact with guests, smile, and offer help to the guest but not be intrusive.

The hotel management pays great attention to the appearance of employees because the general appearance of the staff represents the appearance of the hotel. Each employee makes a clear impression on each of the guests and can either improve or worsen the overall concept and guests' perceiving of the hotel and restaurant (Fig. 6.5).



Fig. 6.5. A leaflet for the staff on standards of appearance in the hotel and restaurant
(© Hilton, © Ahmedova Olena, 2019)

All employees must wear uniforms in accordance with their position, always be clean, tidy, with a good haircut, low-key make-up and manicure, and so on.

2. Organization of room service.

Room service is provided by a separate service which has its own premises equipped with the necessary appliances, utensils, napkins, spice sets, table decorations, champagne coolers, etc.; specially trained staff; special equipment; carefully developed technological sequence of services. Most four- and five-star hotels provide 24-hour room service, and some offer this service from 07:00 until 23:00. Due to the growing competition, room service is becoming a common service even in lower category hotels.

Guests can order food and drinks from a special menu in the hotel room. This is usually a separate a la carte menu, decorated in the style of the hotel called "in-room dining", which is printed in two or more languages depending on the nationality of the better part of guests. The general structure of the room service is as follows: breakfast, day menu, night menu, local cuisine, children's menu, alcoholic and soft drinks. The time when the service is provided, phone of the dispatcher or the button for the order is indicated under the name of each section. The time of the order preparation and delivery should not exceed 20 – 30 minutes, the customer should be informed about the additional time of preparation of complex dishes [106].

It should be noted that hotels pay great attention to breakfast as one of the main meals, and develop several options for different tastes. Along with the "in-room dining" menu, the breakfast menu is printed on cardboard for pre-order and single use, with a special hole that allows the guest to hang it on the door handle outside the room. The resident notes the dishes with the desired ingredients to his liking, drinks and serving time, as well as the name, room number, number of breakfasts, date and additional wishes, if there are any. Orders should usually be made and placed on the door handle before 2 – 3 a.m.

Orders, even complex, consisting of several dishes, are delivered in full at once, so as not to cause discomfort to the guest. An exception is made when a guest asks to serve food in a certain sequence.

Delivery is made by one or two waiters depending on the volume of the order, the category of the hotel, the status of the guest [24]. Room service

staff must have special knowledge and skills, namely: features of receiving and transmitting orders for production, serving a trolley or table, receiving and transporting orders to the room, rules of conduct in front of the room and in the room, rules of communication, peculiarities of service, features of tableware cleaning.

Special equipment and tableware are used to deliver orders to the room. The order can be delivered on a tray, on a table, or on a special serving cart. The upper part of this trolley has additional elements that can be raised in the room and thus turn the trolley into a comfortable table for serving. Besides, the carts with bottle holders, thermal containers, food warmers, equipped with heated surfaces or special serving tools with cooling elements are also used for room service. In order to comply with the hygiene and sanitation rules, all containers with drinks and food are covered with special lids during the delivery. In addition, the prepared order should be delivered to the room as soon as possible to preserve the taste, temperature and presentability of dishes. At the guest's request, the waiter can serve dishes on a room coffee table or desk, or leave a trolley in the room. The serving rules remain the same as in the restaurant. Used utensils and tableware are removed from the room in agreement with the client's wishes or during the planned cleaning of the room.

Room service can be ordered as part of the breakfast included into the room price or is an additional service usually paid for separately. Delivery of orders is often free of charge, and prices for dishes correspond to those in the restaurant or differ only slightly. The guest signs the bill brought by the waiter and pays it at the reception when leaving the hotel.

In addition to delivering drinks and meals to the room, the functions of room-service often include preparing rooms for the arrival of VIP guests, as well as checking the minibars in the rooms and replenishing their stocks as needed. The variety of contents of the mini-bar depends on the category of the hotel, the main items are: sparkling and still mineral water (0.33 l); juices (0.2 l); popular soft drinks (Coca-Cola, Pepsi); alcohol (beer, and in premium hotels whiskey, rum, tequila); chocolate, chips, nuts [38]. There is always a card with a list of goods and prices next to the mini-bar or in the folder with information about the conditions of stay in the hotel.

Prior to the arrival of the VIP guest, the room-service staff deliver a tray with flowers, a greeting card, three types of fruit, additional bottles of

sparkling and still water, etc. If such a guest travels with a child, he/she can also expect minor pleasantries in the form of a toy or children's set (pencils, coloring book, baby shampoo and soap).

To maintain the guest's loyalty to the hotel, employees try to get the most comprehensive information about him/her. Thus, in high-class hotels the staff will not miss the opportunity to congratulate the guest on a professional or public holiday. If the guest's birthday falls on the period of stay in the hotel, they try to pay maximum attention to him/her. Depending on the hotel's policy, the guest room is provided with a greeting card, flowers, fruits, a cooler with a bottle of champagne, a piece of cake or other dessert, a small branded souvenir (Fig. 6.6).



Fig. 6.6. Greeting a VIP guest on his birthday
(© Hilton, © Ahmedova Olena, 2019)

3. The features of hotel bar operation.

Bar service is to provide customers with alcohol and soft drinks. The bars can also prepare drinks for the restaurant. Such bars are called service

(service bars). The main purpose of the bar is entertainment and leisure, so musical accompaniment is mandatory (Fig. 6.7). The menu at the bar is based on snacks. Waiter service is partial. There are no additional services. Prices are usually quite high.



Fig. 6.7. Lounge area in the bar
(© Hilton, © Ahmedova Olena, 2019)

Bar service places high demands on the work of bartenders, who must know and recommend branded spirits, specialties, liqueurs, wines, champagne, cocktails, all menu items and their ingredients, be aware of the special diets.

The success of the bartender, by and large, depends on the level of his openness, sociability and contact. The service begins with building a rapport, striking up a conversation with the guest, so a smile, sincere interest make the guest feel more relaxed and comfortable, which usually increases the average check, but at the same time the bartender should respect the guest's need for privacy and avoid being annoying or intruding.

The drink order should be performed within 3 minutes from the moment the guest sits down at the table or bar counter, the drink is served together with a branded cocktail napkin or glass mats. The bar always serves extra snacks to the drinks ordered. Snack plates should be full; snacks are always fresh. If nuts or olives are served, a special plate for shells and stones is provided.

All glassware, cups, crockery and utensils must be clean and disinfected, free of stains, streaks, lipstick residues, without cracks and scratches.

The bartender or waiter must follow the following rules when serving guests:

1) when serving cold drinks:

place a branded cocktail napkin or glass mat in front of the guest so that the restaurant logo is directed to the guest;

if the drink is not pre-poured, it is poured at the table, the glasses are filled by 2/3, the bottle is left on the table and the bottle label is directed to the guest;

2) when serving hot drinks:

the tea cup and saucer are placed so that the cup handle and the teaspoon are placed on the right side;

the tea from a teapot is poured only after the guest's permission, the cup is filled only by 2/3;

a teapot, milk/cream container are arranged so that the handles are directed to the guest;

the coffee cup and saucer are placed so that the cup handle is on the right side and the spoon is parallel to the handle;

white and brown sugar, artificial sweetener should be available; small utensils (not a saucer) for a used tea bag should also be provided.

If the guest's glass is empty by 1/3, it is necessary to add a drink or offer a new one. Light snacks should be ready within 10 – 15 minutes after ordering, for hot dishes the appropriate time is 25 – 30 minutes.

Currently, the concept of bar has been significantly transformed. There are many types of bars: they vary from formal bars to club bars, pubs, wine bars, beach bars, phyto-bars, cocktail bars, sushi bars, milk-bars etc. The only thing that allows these restaurants to be called a bar is the availability of the main attribute of bars – a bar counter (Fig. 6.8). Bars have become an informal meeting place, a popular venue for various

events, fashion shows, celebrity gatherings, pre- and post-parties of major city/resort events. In hotels, bars can be located everywhere: in the lobby – lobby bars, lounge bars at restaurants, bars in swimming pools, conference halls, banquet halls, fitness centres, etc. [51]. The bars located in the territory of the hotel complex offer soft and alcoholic drinks, light snacks. Outdoor bars are open in warm weather and on weekends, they can also operate during various presentations, concerts and parties. Due to the large number of visitors during such events, the safety of guests always plays an important role.

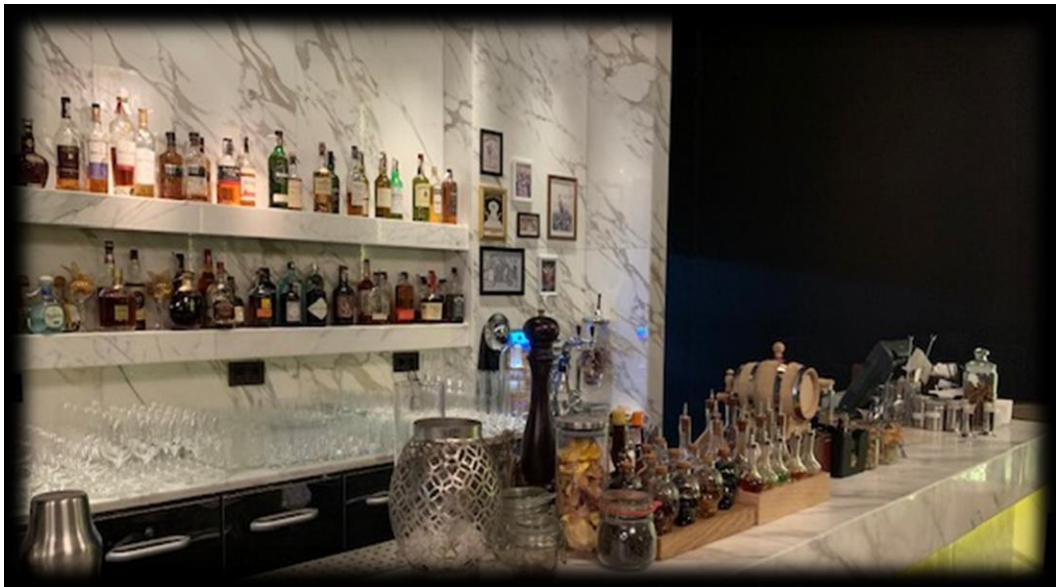


Fig. 6.8. Bar counter design
(© Hilton, © Ahmedova Olena, 2019)

Hotels with two or more bars usually have a separate bar and beverage service, which reports to the food and beverage department. This service coordinates all issues related to alcoholic beverages, beer and wine. The head of the department is responsible for the acquisition, receipt, storage and issuance of alcohol stocks, as well as for the management of these stocks. The duties of the head of the bar and beverage service also include hiring and training subordinate staff, scheduling and supervising the overall operation of the bars. His/her functions also include: promotion of various bar and beverage services; coordination of requests of other hotel/restaurant subdivisions that need drinks, such as banquets or room service; compliance with the state and local laws and regulations [38].

4. Organising event services.

Business hotels are most often located in places of business activity – large economic centres. Guests of business hotels are usually visitors and participants of conferences, seminars, and other business events. Accordingly, additional functions of the restaurant at such hotels include business lunches, coffee breaks, buffets, banquets and presentations, regular or gala dinners.

The food and beverage department works closely with the event department which prepares conference rooms and other facilities for various events and the kitchen where meals are prepared. The coordinated work of all departments and services is an integral part of the success of any event.

The food and beverage department is informed in advance about the dates and schedule of the event, the number of participants. If meals are planned in the hotel restaurant, the time of visiting the restaurant, the cost of the daily menu and the order of calculation are determined. The menu for participants of such events is made in advance and coordinated with the customer – the representative of the corresponding organization. As a rule, various options of complex breakfasts, lunches, dinners are offered. The administration of the restaurant, given the need to simultaneously serve a large number of people with limited time, should ensure waiters' fast and well coordinated teamwork. For this purpose the specific schedule of the service personnel work is specified. The number of waiters is determined at the rate that one waiter can serve no more than 8 people at a time. It is recommended that a few extra workers for collecting tableware and glasses be available, so that the waiters could be engaged only in serving the dishes and calculations with visitors.

To speed up the service, the tables are served in advance. Breakfast includes pastries, cups for tea or coffee, rosettes with jam, sugar, dairy products. During the service tea can be served in teapots, coffee in coffee pots so that guests could help themselves to the drinks without assistance. The bread is cut and placed on plates or in the breadbasket, covered with linen napkins and placed on the table.

Bottles (chilled and wiped) with soft drinks, fruit, bread, snacks on plates or in salad bowls, as well as sweet dishes (compote, jelly, mousse, cream, jelly) are placed on the tables before lunch.

In between meetings, there may be a bar-buffet organized at the venue. When organizing meals during events, it is necessary to distinguish between the concepts of buffets and stand-up receptions. Both formats assume that

guests will spend most of their time talking to each other or having fun, so a separate table is not planned for each guest. However, the buffet service includes tables and chairs for seating guests, during the stand-up receptions guests are treated while standing at high tables. Besides, during this service there are mainly products that are easy to take by hand without the use of cutlery, such as canapes, sandwiches, salads in tartlets, cupcakes, cookies, etc. All dishes at the buffet and stand-up receptions must be marked in English and local languages.

Two or more tables of 2 – 6 m long are usually used for the buffet or stand-up reception depending on the number of participants, the area and shape of the room. The tables are covered with tablecloths. Cold snacks in small portions (in salad bowls), bread, portioned gastronomic goods on big dishes, sandwiches, pies covered with a polyethylene film, and fruit, cakes in vases are put on tables (Fig. 6.9). thermoses with coffee, broth, cups for broth and coffee, jugs of juice are put at the table ends.



Fig. 6.9. Organising a conference buffet
(© Hilton, © Ahmedova Olena, 2019)

Near the buffet tables there are usually smaller tables where piles of snack and pie plates are arranged, snack forks, spoons and knives are

placed in groups, glasses for alcoholic and non-alcoholic drinks are ranked in rows. Paper napkins are placed in small stacks. Bottles with sparkling and still water, beer, wine, champagne, canned beverages (Sprite, Coca-Cola, etc.) are placed on additional tables. Each table is served by two or three waiters: they take care of product replenishment, clean the used ware and devices and replenish their stocks.

If a large number of guests is supposed to attend the event, the event service manager asks the food and beverage department manager to hire additional staff from outsourcing companies in advance because the selection of staff takes up to one or two days. Employees' experience is conditioned by scale and importance of the event or a client's special requirements. Outsourcing in the restaurant business allows saving on salaries for permanent employees without compromising the quality of the services provided. It is also an opportunity to add staff during the "wedding season", for the period of New Year's Eve corporate parties, to serve events with a large number of guests. The cost of professional chefs and waiters hired under such agreements is significantly lower than the cost of permanent staff because it is calculated in hours. The team will work only at certain times, thus, the owner of the restaurant will not have to pay for forced downtime when there are no large orders and events. As a rule, the restaurant signs a short or a long term contract with the outsourcing company where all details of cooperation, terms and conditions are agreed in advance and specified in the contract. For the event service manager, it is really important to instruct and assign all employees with definite responsibilities before the event in order to achieve maximum efficiency and full satisfaction of guests.

A coffee break is an essential part of even a short meeting. Coffee is an iconic drink for the business world. Over a cup of coffee, important contracts are signed, business connections are made and pressing issues are discussed. Sometimes a coffee break can do more for business than a busy meeting or conference. Perhaps this is why coffee breaks have become a tradition in business circles. A coffee break is a short break during a formal event. The purpose of the break is to recuperate, have a snack and socialise with colleagues and partners in an informal atmosphere. It is recommended that coffee-breaks be organised every 2.5 – 3 hours during the event, it usually lasts 20 – 40 minutes, the selection of drinks and snacks is offered in

a self-service format. The coffee break is not intended to be entertaining, therefore, TV sets and music are not welcome. Although the waiter service is not obligatory, there are usually a few waiters who help event participants with hot drinks, coffee machines, boiling water appliances or thermoses with properly brewed tea and natural coffee (the choice of devices depends on the level and category of the event).

The basic menu of the coffee break includes coffee, green, black and flower tea, packaged juice. Cupcakes or muffins, as well as chocolate or shortbread cookies, are proposed as snacks. When organizing a premium coffee break, a wide selection of drinks is offered, including natural fruit juices and sometimes alcoholic spirits. As snacks a wide variety of canapes, traditional and vegetarian sandwiches, bruschettas, whole fruits or sliced in pieces on skewers, cakes, pies, chocolates, cookies, etc. are served to the tables (Fig. 6.10).



Fig. 6.10. A fragment of the coffee break organization
(© Hilton, © Ahmedova Olena, 2019)

It is important to take the guests' nationality, their identity and stereotypes into account. While working with Europeans, it is essential to remember about increased hygiene and sanitation rules, especially in the

period of the COVID-19 restrictions. All drinks with accompanying foodstuffs and utensils should be individually packaged and be disposable.

The representatives of some other nationalities may perceive the use of disposable tableware as an attempt at cheap economy. The coffee breaks for respectable people are served with glass, porcelain and crystal. This is a clear indication of the high level of organisation that is really significant in some cases.

Thus, along with direct accommodation services, hotels can provide other types of services, the main of which is restaurant service.

In the structure of hotel complexes there may be one or more restaurants that can be independent enterprises or function as hotel subdivisions.

The restaurant must correspond to the hotel class in terms of number of seats, level and quality of service, variety of menus. In addition to breakfast, in order to increase the economic efficiency of its own activities, the restaurant should also focus on banquets, buffets and other events such as seminars, conferences, corporate celebrations and other entertainments. In addition, it is much more advantageous for the hotel restaurants to serve both the guests and the general public who may come in directly from the street. The food and beverage department is the second most profitable element of the hotel service.

Restaurants must comply with state standards, sanitary norms and fire regulations; observe all mandatory requirements for service quality, safety of life, human health, environment, which are regulated by technological documents and other regulations.

Section 7. Internet marketing in the activities of small and medium-sized tourism businesses

The tourism industry has changed significantly in recent years under the influence of the development of the Internet and computer technology. Nowadays, promotion on the Internet has become an integral part of the marketing activities of any business. Online promotion is the promotion of your services through online communications. It should be noted that the Internet promotion is based on the principles, tools, tasks of classical marketing. However, digital technologies of Internet marketing provide a significant increase in the effectiveness of traditional marketing tools through their adaptation to digital format. The use of Internet marketing technologies along with traditional marketing approaches, and in some cases the complete transfer of marketing activities to the Internet space is a necessary condition for the development, successful positioning and competitiveness of tourism businesses.

Internet marketing (web marketing) is a marketing and commercial activity on the Internet, which includes all elements of the marketing complex.

Marketing is a multifunctional activity that aims to meet the needs of consumers (target customers), in the right place, the right time, at the right prices, through marketing communications. Marketing services define three types of interaction: the company's management, contact staff and consumers (Fig. 7.1).

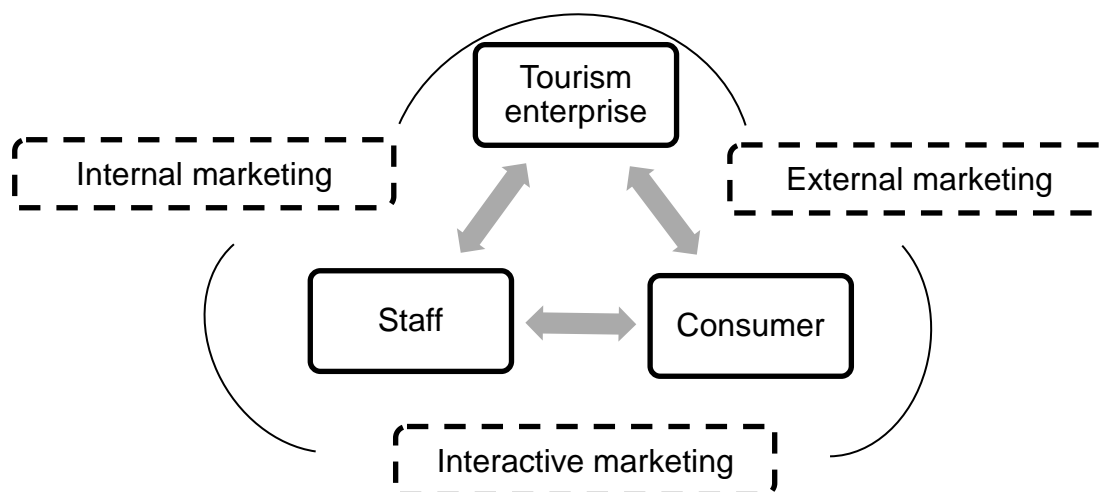


Fig. 7.1. Types of interaction in marketing

To effectively manage the organization of the service sector, you need to focus your activities on three areas. External (traditional) marketing

concentrates efforts in the direction of "organization – consumer". The strategy of external marketing is related to the main elements of the marketing complex: pricing, range of services, advertising and distribution channels.

Internal marketing covers the "organization – staff" and aims to develop effective tools to motivate staff in contact with service consumers. This is the development of corporate culture, which forms employees' sense of belonging and pride, the uniqueness of the working conditions offered to them. The loyalty of staff to their own company and its services is directly reflected in the effectiveness of external branding.

K. Gronroos identified two terms: "domestic product" (work) and "domestic consumer" (staff). He argues that before selling a service to an external consumer, it must first be sold to an internal consumer [9]. This principle can also be applied to the domestic tourism product, which should initially gain popularity among local tourists.

Interactive marketing involves building a strategy of relations "staff – consumer". The main thesis of interactive marketing is that the perception of service quality largely depends on the quality of interaction between buyer and supplier. In the process of consuming material products, the consumer buys a set of benefits concentrated in the product, which he immediately takes with him for consumption. In the process of buying a service, the consumer buys a set of benefits, concentrated in the process of interaction with those who provide the service, and which can not be taken away. This strategy is directly related to the model of an expanded marketing complex of services "7P", which was proposed in 1981 by the authors B. Booms and M. Bitner [41]. Within this model, the authors identified additional elements of the marketing complex for the service sector, such as: process, people and physical evidence.

Thus, there is a new marketing task – to study, create, evaluate and market the process of interaction between those who produce the service and those who consume it.

As mentioned, offline elements of the marketing complex are more consistent online, so it is worth considering the basic elements of the marketing communications complex.

In a broad sense, the concept of promotion is interpreted synonymously with the term "communication". The main purpose of the product promotion process is to stimulate demand. We can say that promotion is a kind of communication between buyer and seller.

The product promotion complex is a specific combination of advertising, personal sales, sales promotion and public relations measures used by the manufacturer to achieve advertising and marketing goals. The process of implementing the promotion strategy is carried out in the following sequence:

- definition of the target audience;
- characteristics of its corresponding reaction;
- choice of content and form of appeal;
- definition of types and structure of communication channels;
- implementation of the appeal;
- feedback from the target audience [5].

Promotion should be considered not only as an integral part of the marketing complex, but also as an integral element of this complex, which is used to implement marketing strategy.

If we consider the types of marketing communications, taking into account the audience coverage and cost, we can propose such a structure (Fig. 7.2).

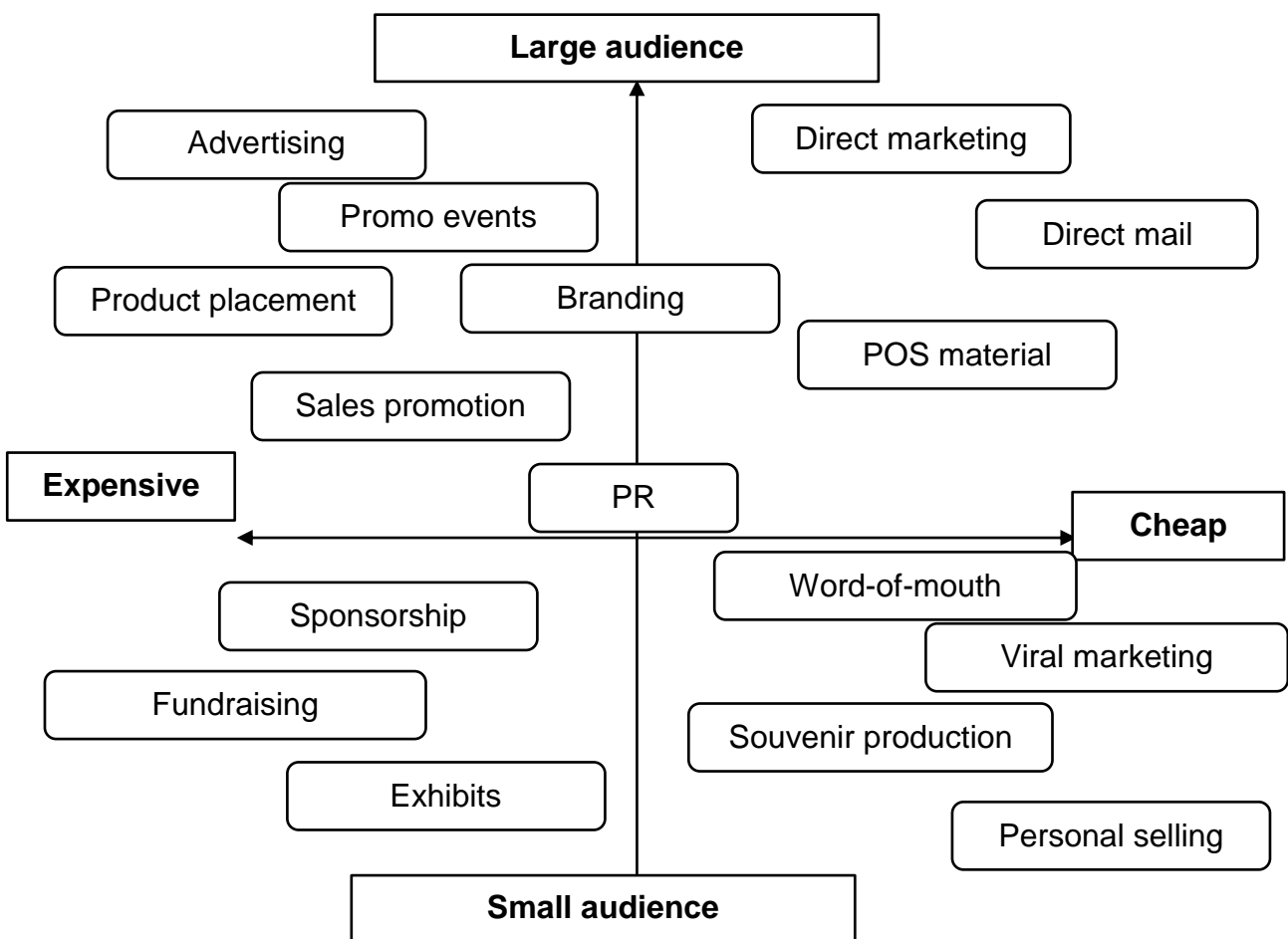


Fig. 7.2. Types of marketing communications within the frame of audience coverage and cost

From the whole list of marketing communications, for tourism enterprises and organizations, the following most effective tools can be identified: branding, advertising, promo events, exhibits and word of mouth.

Internet promotion is a set of actions on the Internet, aiming to achieve the goals of increasing sales of goods/services and maintaining the image, brand of a particular company or site.

The advantage of online promotion is low cost and long marketing strategy. The Internet has become an "information highway" for buyers. The Internet offers to small and medium-sized tourism businesses cost-effective solutions for the development of their products and sales networks.

Compared to other forms of marketing, online promotion is a fast and cost-effective solution for entering the market, and the advertiser has the advantage of reducing budget and storage costs compared to print or TV and radio advertising. Millions of people use the Internet to find a product or service, so small businesses can enter other markets for a fraction of the cost of traditional methods.

Websites are the company's second showcase, available 24 hours a day. The Internet creates an image of greater transparency of the company, thus through loyalty provides opportunities to increase the number of customers at a relatively low cost.

It has never been so easy for a new business to be able to reach millions of potential customers and position itself in the market without expensive infrastructure or huge marketing costs. Thanks to the Internet, new business can become popular almost instantly.

Fast connection with your customers. Email makes communication instant, whether the customer or branch is across the street or on the other side of the world. This makes it easier for customers to stay in touch, as well as simplifies repeat purchases. In this way, online strategy can really save you money, provide significant competitive advantages in any market and expand your small business.

Another important advantage of online promotion is time savings. There is a "Frequently Asked Questions" (FAQ) function, which provides a selection of frequently asked questions and answers to them. This saves time and money while strengthening your relationships with your customers by reducing communication time.

Table 7.1 shows examples of the main tools of marketing communications popular on the Internet [97].

Application of marketing communication tools on the Internet

Tools	Example
Advertising	GoogleAds, FacebookAds. Social Media Advertising. Email Marketing. Mobile Advertising. SEM (PPC) – Search Engine Advertising. Display Advertising – including banner advertising & retargeting
Sales promotion	Contests, games, raffles, lotteries. Prizes, prizes and gifts. Trial samples. Coupons. Discounts
Public relations	Publication of materials on the company's website. Publication of materials and news in the Internet media, on thematic sites. Conducting marketing activities with their active presence on the Internet. Participation in conferences
Sponsorship	Sponsorship of sections of relevant sites. Sponsorship of online forums. Blog sponsorship. Project sponsorship
Direct marketing	Sending promotional materials, samples, letters, etc. by mail to the main audience. Video presentation of the service. Telemarketing
Corporate identity	Website concept design. Trademark. Logo, slogan. Color, font and typography

Features of Internet marketing can be formulated as follows:

1) actualization of the key role of consumers in the markets, taking into account supply and demand: a single company has the opportunity to attract users in the short term, but the same opportunity has a competing

company, so businesses are forced to compete for consumer attention in the Internet environment, establishing and improving the quality of interaction with them;

2) the obvious lack of mandatory spatial localization, i.e. geographical remoteness in some areas is no longer a significant factor. At the moment, it is possible to operate without reference to a specific area or local market. The distance from the supplier to the consumer is important only when it is necessary to deliver goods or provide services that require the personal participation of a specialist or expert. Thus, the system of offline sales and distribution is set up separately;

3) the growth of globalization, which determines the specifics of companies. Thanks to the Internet, the spatial and temporal scale of doing business is changing. Users and companies are provided with opportunities for global communications that are not limited to territory. The cost of accessing information available online does not depend on how geographically distant those who provide it are;

4) increasing the speed of key decisions. Reduction of the time interval between the stages of communication of stakeholders, i.e. reduction of the total time of communications and agreements;

5) increasing the role of partnerships and the number of partners. Most companies are represented as websites, which gives a general (or, conversely, detailed – depending on the company's communication strategy) picture of their activities. In the vast information space, business structures unite in strategic alliances, attracting the attention of the target audience of the partner. This is achieved with low communication costs and a high level of their functionality and scalability. In addition, transaction costs related to the main aspects of establishing, maintaining and developing interactions between the company and its market partners are minimized; at the same time overhead costs are reduced (for business trips to employees, losses from broken, illegal or dishonest agreements);

6) personalization of interaction, which provides the company with detailed information about customers and their requests, as well as a wide range of opportunities for interaction. All this helps to segment customers through automated operations, as well as offer them products and services that meet their individual needs.

The main types of Internet marketing are presented in Fig. 7.3.

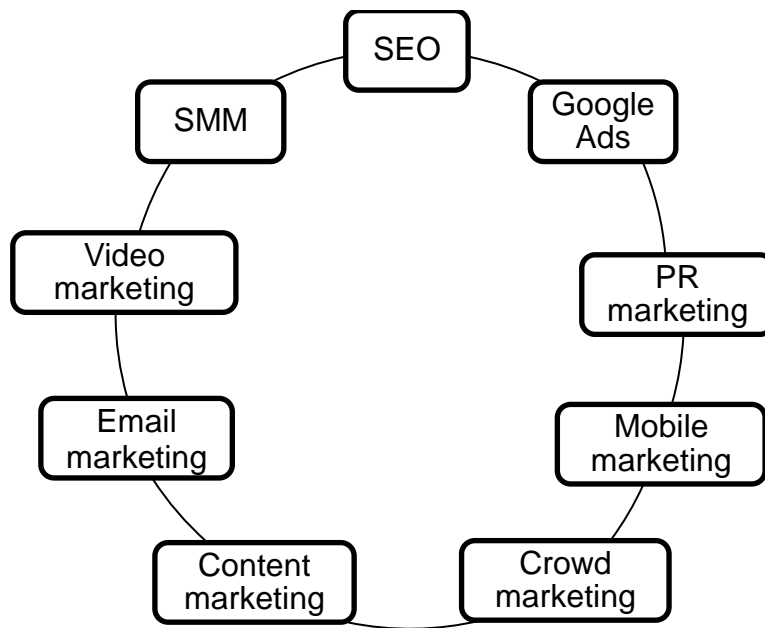


Fig. 7.3. **Main types of Internet marketing**

SEO (Search Engine Optimization) – a set of activities aiming to improve the position of the site in the results of search engines to increase site traffic. The higher the position in the search results, the more users go to the site. Therefore, it is important to improve the results of promotion through:

- increase of the relevance of pages to search queries (relevance);
- optimization of the structure and content;
- improvement of commercial factors;
- page code optimization;
- increasing external factors of resource significance.

Search engine optimization rules are set by search engines. Each of them uses and regularly updates its own ranking algorithms, which consist of many factors.

Google Ads is Google's advertising network. We use Google advertising when we want to show results for a given query or target semantic set. This visibility comes at a price, provided that the Internet user who sees you clicks on your link. This cost is called the cost-per-click or CPC.

Google Advertising is also a platform through which you want to place banner ads on your large network of sites and mobile applications, called the Google Display Network or GDN.

AdWords Advantages and Strengths are as follows:

- the ability to create and distribute a campaign according to your budget.

AdWords is available to everyone;

CPC (cost-per-click) or CPM (cost-per-impression) billing, depending on your goals;

the ability to quickly measure the performance of your campaign and optimize CTR (clickthrough rate), accurate analysis of the behavior of Internet users through the connection with Google Analytics.

One of the great benefits of Google Advertising is its ability to target. Indeed, unlike SEO, you have "complete control" over your geographic, demographic, behavioral, and temporal distribution.

Google offers the ability to set special bids for a specific area, age group, gender, or time interval. Data analysis allows you to optimally set up an advertising campaign and make informed decisions about its further adjustment [98].

Crowd marketing is a technology of marketing on the Internet, posting reviews about a product/service on various sites, such as: review sites, forums, blogs, question-and-answer sites, social networks. The purpose of this tool is to increase sales growth and loyalty of current customers through positive feedback.

Among the advantages of crowd marketing are the following: commenting looks as natural as possible; links in posts give real transitions; the more often the brand name is mentioned, the more trust it evokes; increase in the conversions of the target audience; traffic diversity – search by name, which is specified in the comment; reputation support.

The disadvantages of this tool are: the long process of obtaining the effect, the minimum waiting time is 3 months; high cost of crowd-marketing due to the complexity of the process, which is performed by a specialist manually.

Content marketing is an approach to the promotion of goods or services that differs from direct advertising in that the product is not imposed on the consumer, does not encourage him to buy, order or subscribe. Based on the information provided, the client can make his own conscious choice. This approach helps to form a relationship of trust with users, create an image of a leader in the niche, as well as not only offer goods, but also solve complex problems of choice for the consumer [113].

Content marketing includes:

blogs;

infographics;

video reviews;

master classes (seminars, trainings).

Content can be divided into entertaining, educational, news and informative.

The purpose of this tool is to create the desire of potential customers to make a profitable action (buy a product, order a service, leave a request for consultation). But this strategy is long-term and not suitable for all tasks and areas of activity.

Video marketing is a set of actions aiming to promote a company's products, services or brand through video.

The purpose of the tool is to convey information to the user as clearly as possible, through the visualization of the characteristics of the product or service.

This tool is suitable for all areas of activity and is actively used by travel companies to show attractive destinations and tourist attractions.

Social Media Marketing is the use of social platforms as channels to promote the brand, increase the target audience, attract traffic to the site and increase sales. According to statistics, 95 % of people aged 18 to 34 are most comfortable following the brand and interacting with it through social networks [152].

The purpose of the tool is to increase brand awareness, increase interest in the product, maintain constant communication with potential and existing customers.

The benefits of SMM marketing are:

users do not treat social media promotion as advertising, they trust this information more than advertising;

wide coverage of the target audience, possible attraction of visitors regardless of their regional affiliation;

the presence of feedback from the target audience allows you to quickly respond to the wishes/comments of potential customers.

But this tool also has drawbacks. This method does not give instant results: ensuring long-term effect requires constant systematic work: development of a variety of content plan, updating information, publishing news, author's articles, stories, posts, etc. It is impossible to accurately calculate the budget of the advertising campaign. There is also a high probability of damaging the reputation due to the comments of haters and controversial topics of the posts.

PR-marketing is the creation of the company's image in the network. PR-marketing involves constant work with the site, analysis of visitors,

improving the site from a visual point of view, optimization for better indexing in search engines, posting information about the site and the organization in the media and sites on similar topics, support and advertising on forums, regular site update. Thanks to this tool, work is being done on the image.

E-mail marketing is an appeal to a potential customer directly, via e-mail or sms-mailing. Visitors to the site receive information about any event related to the product or service. Distribution is carried out on the basis which was obtained through CRM or formed from subscribers to the distribution.

With this tool, the company can send newsletters about new products, encourage customers to resell and remind them of their existence.

The advantages of this tool are the ability to control the result and focus on the target audience of potential customers.

The disadvantage is that such emails usually get spammed; irritate internet users and look too intrusive.

There is also media advertising and mobile advertising. Media advertising is also called banner advertising. The ads are focused on increasing the brand's popularity. When you click the mouse, the user goes to the seller's website. The link directs to the section of the site where the potential customer can immediately make a purchase. Media advertising usually targets a particular type of product that is in demand.

Mobile advertising is a type of advertising in which contact with the user occurs through mobile gadgets in the form of various advertising messages. Every year, this advertising channel becomes more creative and interesting in terms of formats and ways to communicate with users.

As a result, the Internet is becoming an advertising medium through which companies market their products. Currently, almost every activity, at least somehow, is reflected in the network; a large number of advertising platforms, thematic portals and other resources are created through which the user finds the information he needs. Thus, the Internet has become a fully functional advertising tool, with its own specific features, able to compete with offline types of advertising, but does not require large financial costs. The constant growth of the Internet audience and the emergence of new, increasingly effective advertising media, respectively, leads to the growth of the Internet advertising market. These findings are confirmed by the following statistics: in 2020 the number of Internet users in the world increased to 4.54 billion, which is 7 % more than last year and it is 298 million more new users compared to January 2019. Information on the number of internet users worldwide and across countries in 2021 is given in Fig. 7.4 and 7.5.

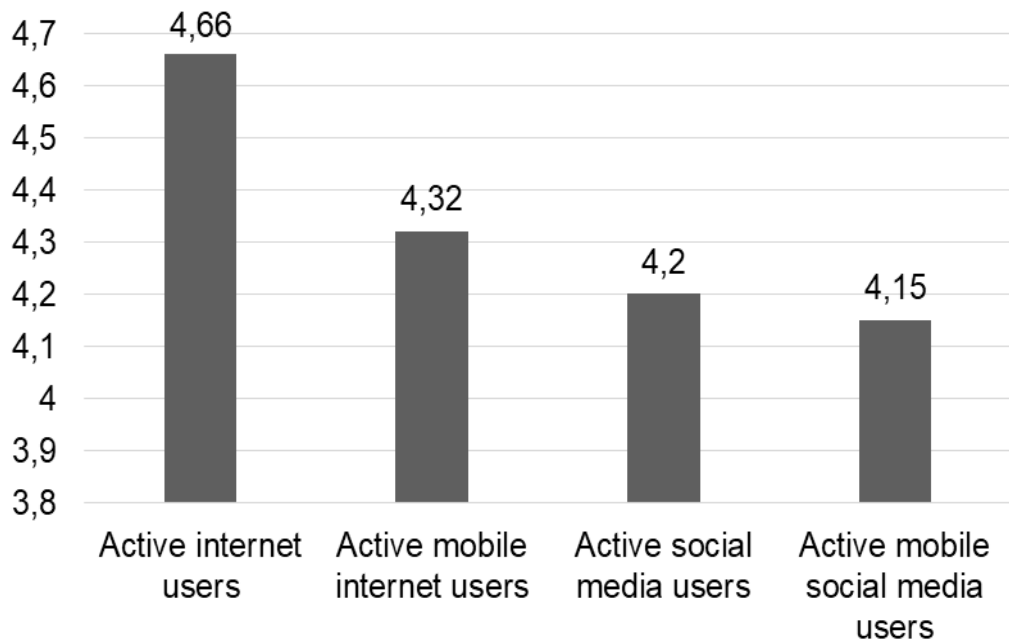


Fig. 7.4. **Internet users worldwide, billion, 2021**

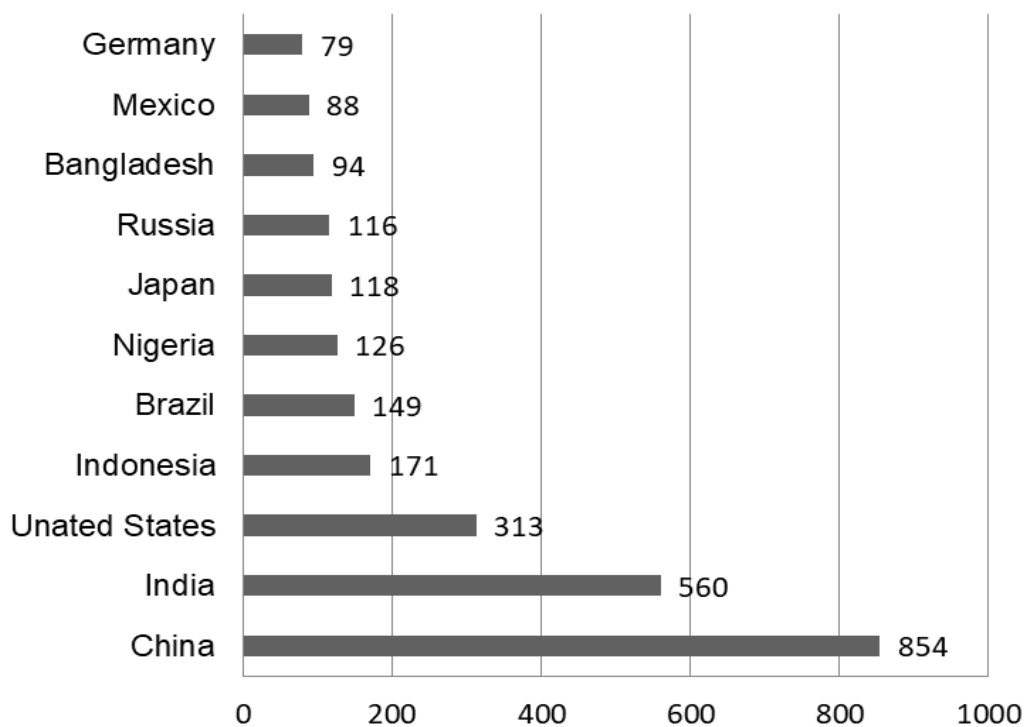


Fig. 7.5. **Internet users across countries, million, 2021 [118]**

For the past fifteen years, social media has been at the forefront of young people's lives. There are a huge number of different social networks, each of which has its advantages and disadvantages for promotion. Fig. 7.6 presents the most popular social networks around the world ranked by the number of active users [136].

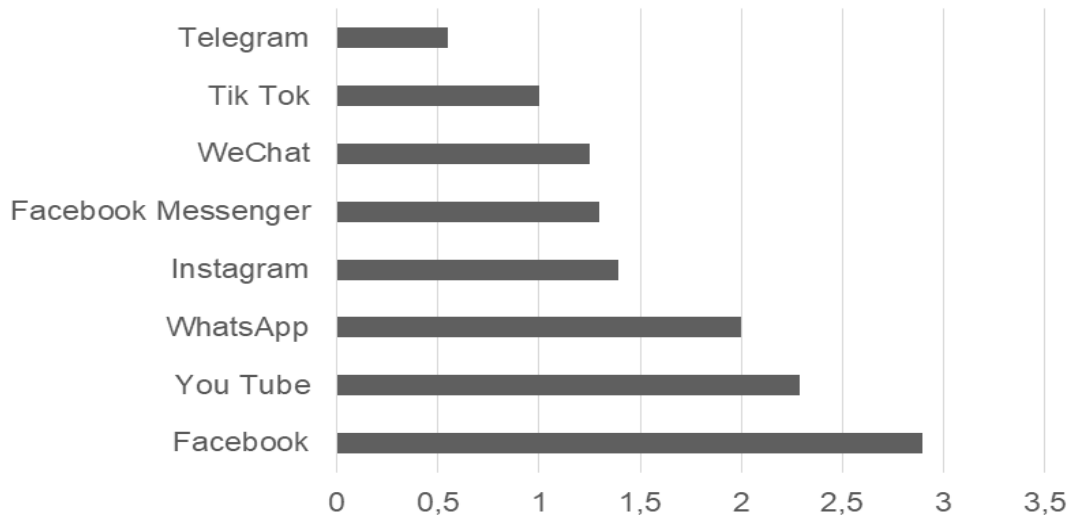


Fig. 7.6. Most popular social networks worldwide, million users, 2021

Facebook continues to hold the title of the most popular social networking platform.

Facebook has reached such a huge audience that marketers can no longer ignore it. And because most Facebook users visit the site every day, this makes them a great potential audience for internet marketing efforts. Facebook has 2.89 billion active users per month, and 1.93 billion users visit Facebook every day. Overall, daily active users accounted for 66 percent of monthly active users.

The country-based distribution of Facebook users is presented in Fig. 7.7.

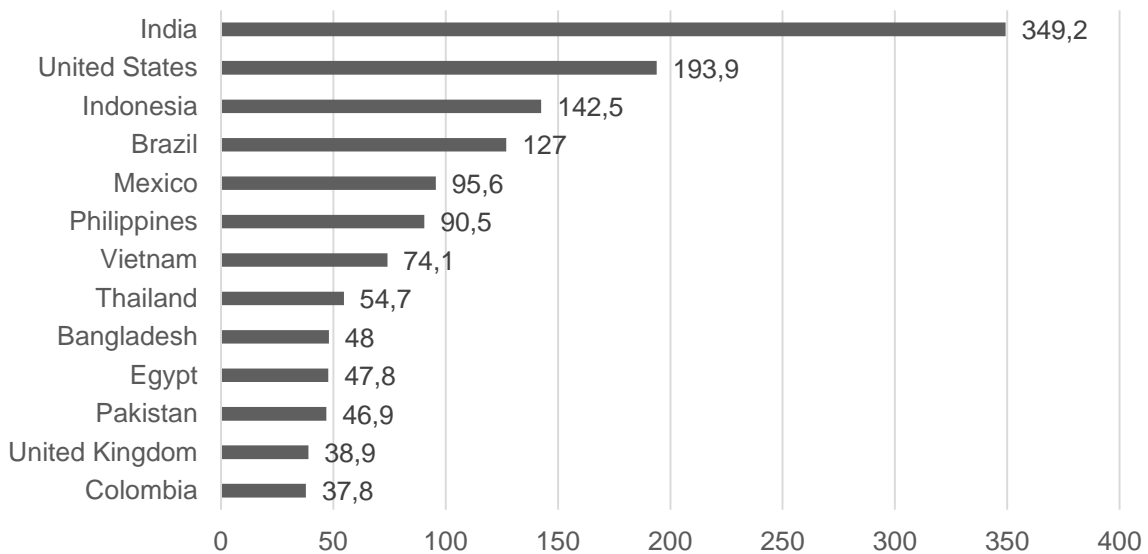


Fig. 7.7. Leading countries based on Facebook audience size, million users, 2021

Facebook has more than 80 million small businesses worldwide that use Facebook pages. A Facebook page is a place where you can post information about your company, a description of products or services, current news. This gives you the opportunity to increase your online business presence [94].

Contrary to popular belief, Facebook remains the dominant social networking platform for young people. 65 percent of Facebook users are under the age of 35, which means that they belong to the age group of millennials and generation Z (Fig. 7.8). These Facebook statistics also show us that for the most part, young people prefer to use similar social networking platforms to interact with people their age.

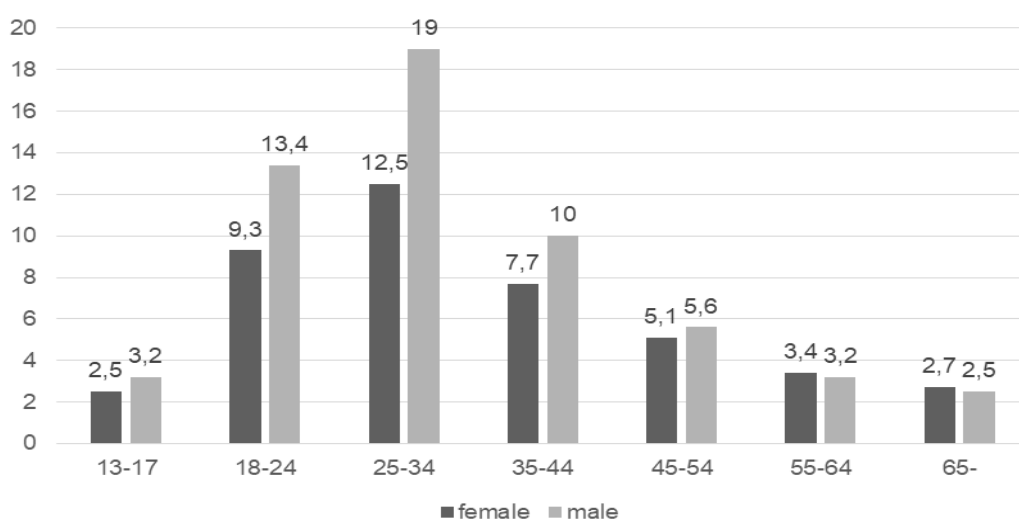


Fig. 7.8. Distribution of Facebook users worldwide according to age and gender, percent, 2021

Despite the fact that other social networking platforms, such as Instagram, Snapchat, are gaining popularity among young people, Facebook still attracts the attention of millennials and Generation Z [125].

Ukrainian Facebook audience is 0.7 % of the world. In terms of the number of users, our country is ranked 33rd in the world and 8th in Europe.

In the first quarter of 2020, the company generated \$17.44 billion in advertising revenue. Thus, the average revenue per user is \$6.95.

As a result of COVID-19 on Facebook in 2019, there was a significant drop in demand for advertising worldwide. This is evidenced by a stronger seasonal decline in advertising revenue from the last quarter of last year to the first quarter of next year.

However, Ukrainian Facebook users continue to actively respond to advertising: in January 2020, the average user clicked on it 21 times. Also, compared to the beginning of last year, Ukrainian Facebook users actively like and join the discussion of publications [99].

Revenue from advertising on Facebook increased significantly in 2020, overcoming the crisis of 2019 (Fig. 7.9) [132].

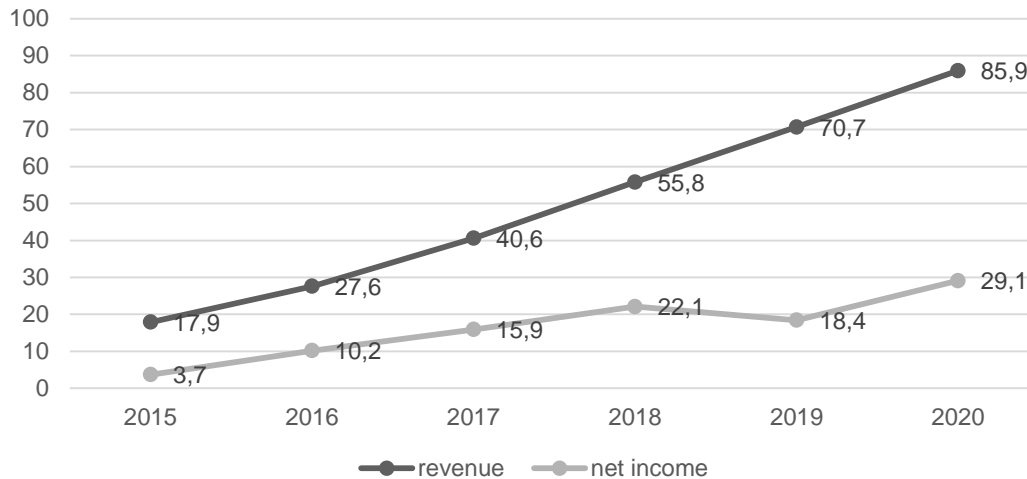


Fig. 7.9. Facebook's revenue and net income from 2007 to 2020, million dollars

Instagram also continues to grow as one of the most popular social networks. It has a large user base and boasts a higher level of user engagement than any other social platform. This social network is very famous all over the world. Fig. 7.10 shows the countries in which Instagram is the most popular [149].

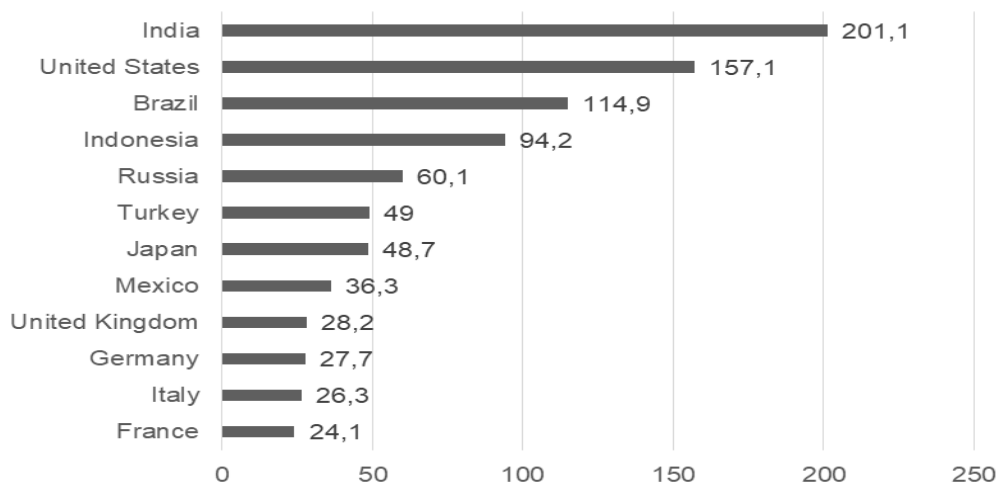


Fig. 7.10. Leading countries based on Instagram audience size, million users, 2021

As of October 2021, India was the leading Instagram audience with over 201 million users accessing photo and video sharing and editing software. Next is the United States with more than 157 million users. Third place went to Brazil with almost 115 million Instagram users, ahead of Indonesia with an audience of 94 million users.

In 2020, almost 855 million users received monthly access to the Instagram platform for sharing photos (Fig. 7.11). It is projected that in 2023 this figure will exceed 988 million people [149].

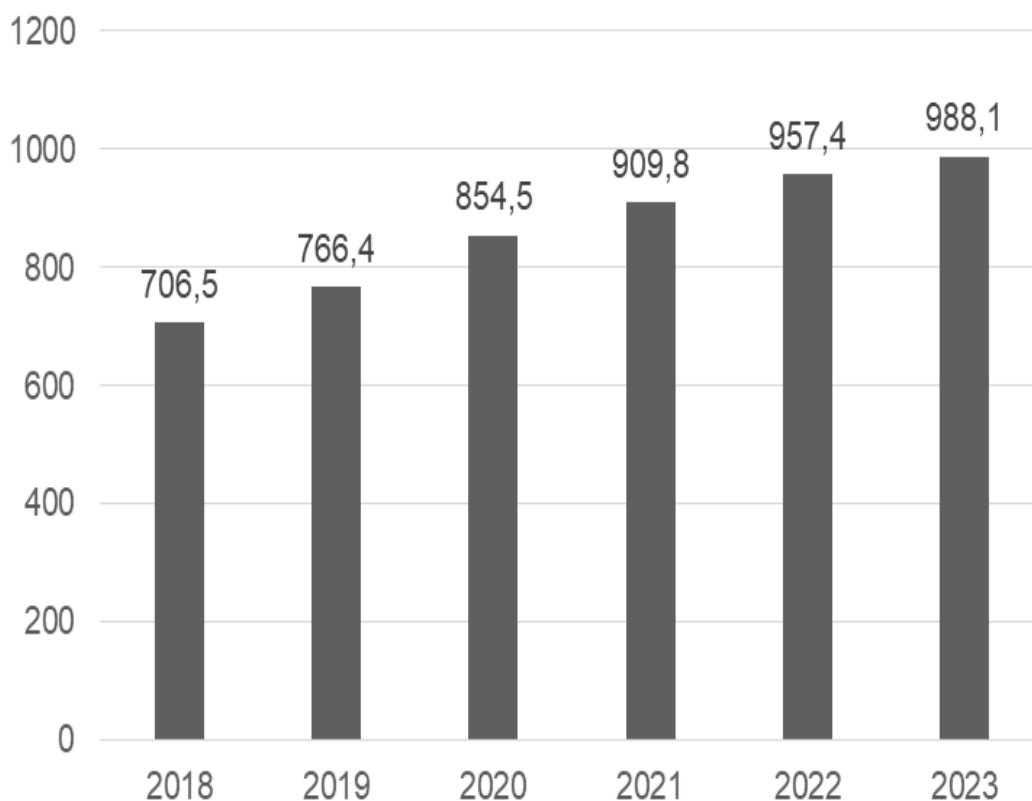


Fig. 7.11. The number of Instagram users worldwide from 2018 to 2023, million people

In Ukraine, Instagram is used from the age of 13, as prescribed in the rules of the service. 58.27 % of Ukrainian Instagram users are women, in contrast to Facebook, where according to statistics, the male audience predominates. The distribution of Instagram users worldwide according to age and gender is presented in Fig. 7.12 [126].

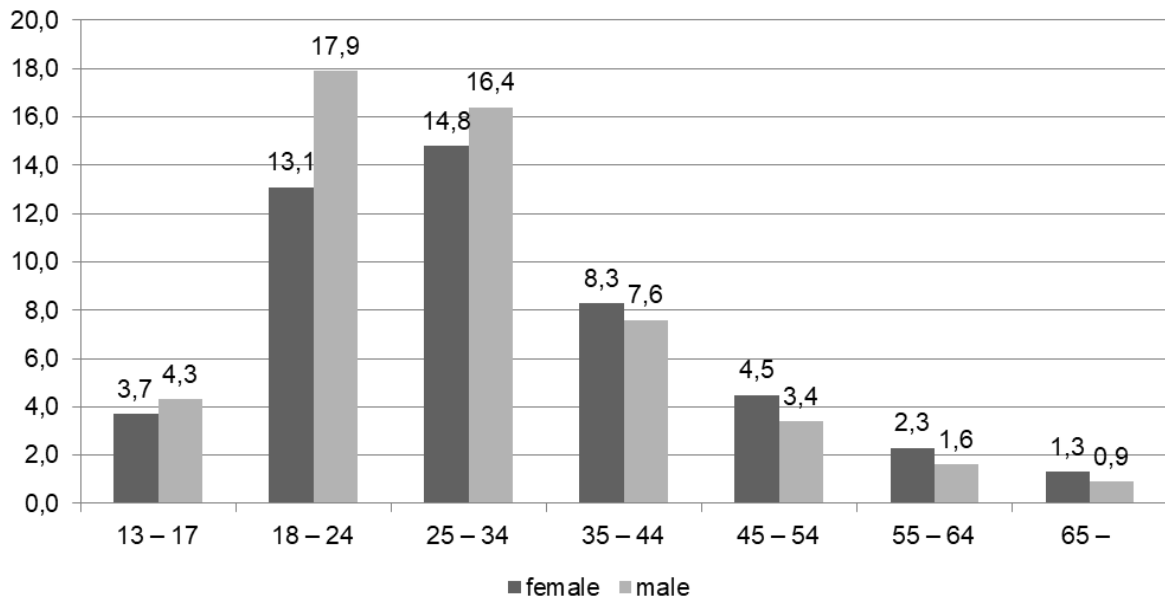


Fig. 7.12. Distribution of Instagram users worldwide according to age and gender, percent, 2021

It is obvious, that the audience of Instagram is younger than that of Facebook and includes a larger number of users aged 18 to 24.

The Instagram advertising revenue is steadily growing (Fig. 7.13). Income from advertising in the social media Instagram brought the Facebook company close to 14 billion dollars in 2020. In 2020, Instagram generated \$17.4 billion in advertising revenue only in the US [111]. Based on forecasts, in 2021, the growth rate of advertising sales on the social media platform that Facebook will be based on will reach 26.46 billion dollars.

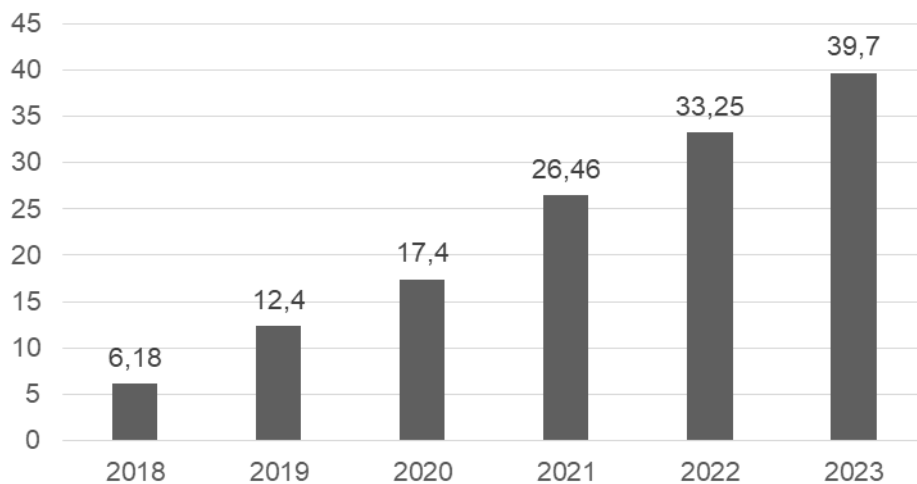


Fig. 7.13. Annual Instagram advertising revenues in the United States 2018 – 2023, billion dollars

The brand value of Instagram increased 47 percent in 2020, when compared to the previous year.

Strong brands enhance business performance primarily through their influence on three key stakeholder groups: customers (current and prospective), investors and employees. They influence customer choice and create loyalty; retain, attract and motivate talent; lower the cost of financing.

The influence of brands often through social media on current and prospective customers is a significant driver of economic value. By expressing their proposition consistently across all touchpoints, brands help shape perceptions and, therefore, purchasing behavior, making products and service less substitutable. Brands, therefore, create economic value by generating higher returns and growth, and by mitigating risk.

One can see that the annual income increases every year, which indicates the high marketing attractiveness of this network for business.

If the audience of social network users in Ukraine is considered, in all regions of Ukraine Facebook is more popular than Instagram. Only in the Kharkiv region Instagram has a penetration of 34 % against 30 % on Facebook. Instagram is significantly ahead of Facebook among young users aged 18 – 24. The source of growth of the Facebook audience is the population over the age of 35 (Fig. 7.14) [131].

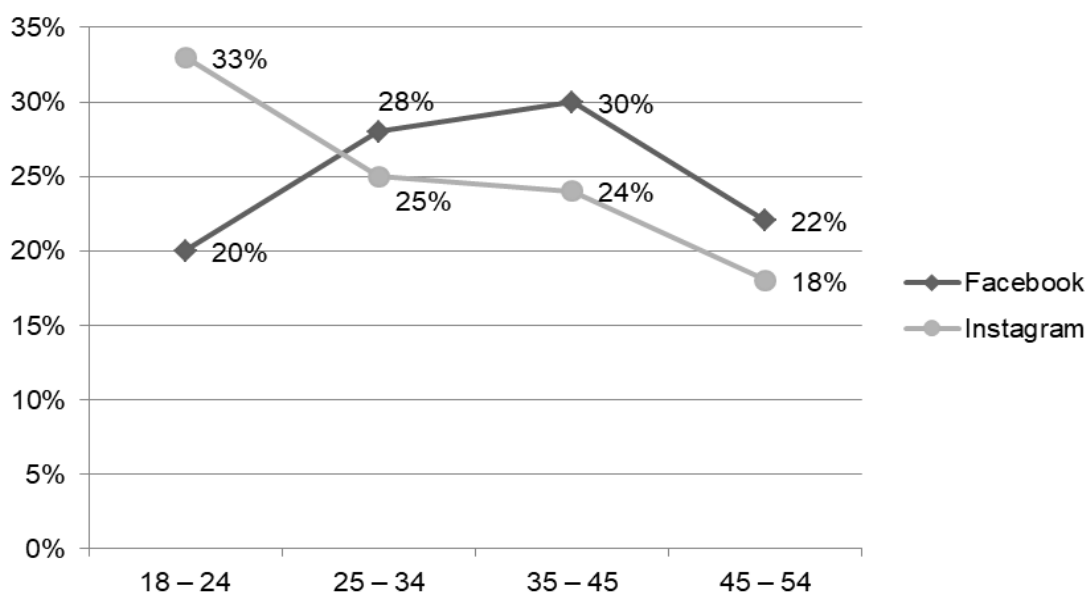


Fig. 7.14. Popularity of social networks among users of all ages in Ukraine

Recently, the Ukrainian audience of Facebook has grown by one million people and at the beginning of 2020 amounted to 14 million. The number of Instagram users increased by 0.5 million and reached 11.5 million people (Fig. 7.15).

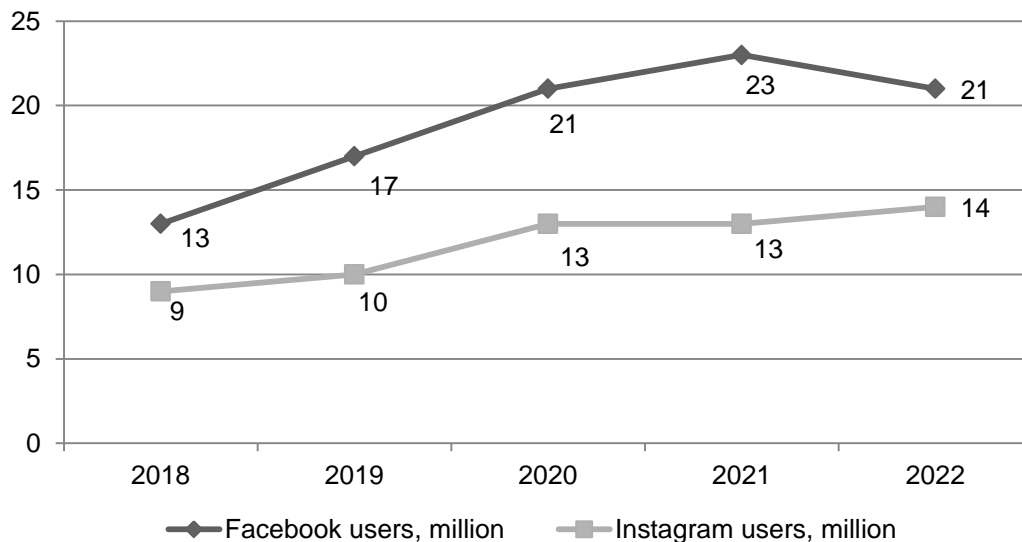


Fig. 7.15. The number of Facebook and Instagram users in Ukraine from 2018 to 2022, million people

The massive deactivation of fake accounts last year led to fluctuations in the number of Facebook and Instagram users and a sharp drop in May 2019. Already in September, the figures returned to previous values and continued to grow.

The impact of social networks on people's lives is huge, many do not even fully realize the scale of this phenomenon, but as it turned out, social networks is the most popular activity on the Internet.

At the moment, social networks are essentially a huge structured database with a wide variety of information about hundreds of millions of people around the world. Recently, networks are becoming more open to the outside world, and personal data of users are becoming available to the general public.

Most industries have become increasingly digitized over the last decade. The travel industry in particular has gone to great lengths to cultivate its online presence. The online travel industry is primarily made up of travel e-commerce sites and review sites. Travel e-commerce sites specialize in the selling of travel products such as flights, accommodation,

and rental cars. These can be either purchased directly through a travel company's website or through an online travel agency (OTA). Meanwhile, travel review websites, such as TripAdvisor, allow travelers to post their experience of hotels, restaurants, and other hospitality experiences online. These companies often generate revenue via advertisements on their sites.

It should be noted that Covid-19 has significantly accelerated the development of e-commerce in Ukraine. In 2020, Ukrainians bought goods and services worth 107 billion UAH via the Internet. The online tourism market is also developing very rapidly, tourists are becoming more independent and organize their vacation individually to their own needs and desires. The ability to book tickets, accommodation, tours, significantly reduces the cost of tourists. Already today in Europe the share of online and offline consumption is divided as follows: 43 % online and 53 % offline. It is important to note that the most popular acquisitions in the field of tourism are: air tickets (53 %), train tickets (17 %), hotels (14 %) and car rental (4.3 %). Tourist review websites, such as TripAdvisor, are also booming, allowing travelers to post information about their impressions of hotels, restaurants and other online shopping. These companies receive significant revenue from advertising on their sites (Fig. 7.16) [95].

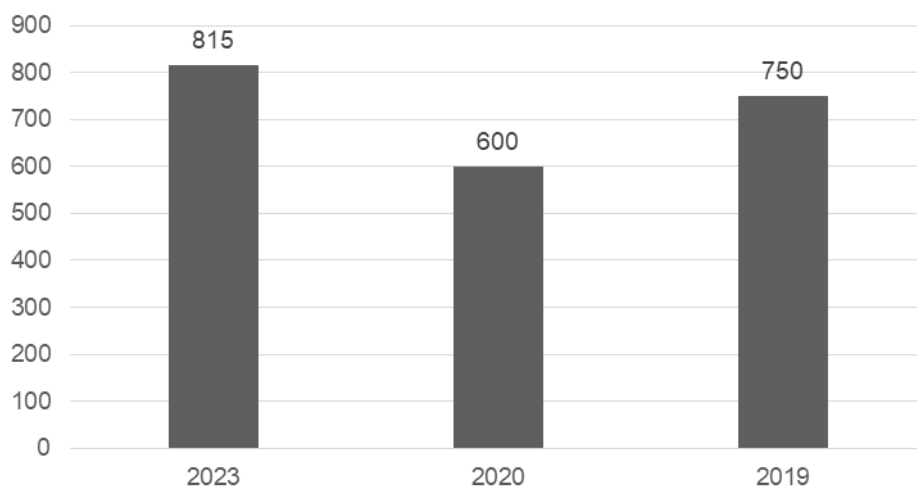


Fig. 7.16. The volume of online travel agent market in the world, 2019 – 2023, million dollars [159]

Strategic management of small and medium-sized tourism enterprises in modern conditions is not possible without the introduction of Internet and

SMM marketing. Based on the above trends, it is proposed to pay more attention to expanding the audience and attracting new customers among the age segment of the population who are active users of various Internet platforms.

When promoting on social media, a travel business may face certain challenges, such as:

the need to choose a particular SMM tool or a combination of them;

the complexity of assessing the effectiveness of these tools;

the problem with the content part, which content should be posted on the social platform.

To do this, one needs to develop a sequence of actions of the promotion strategy. Fig. 7.17 shows an example of the stages of developing a strategy for promotion on social networks for the tourism business.

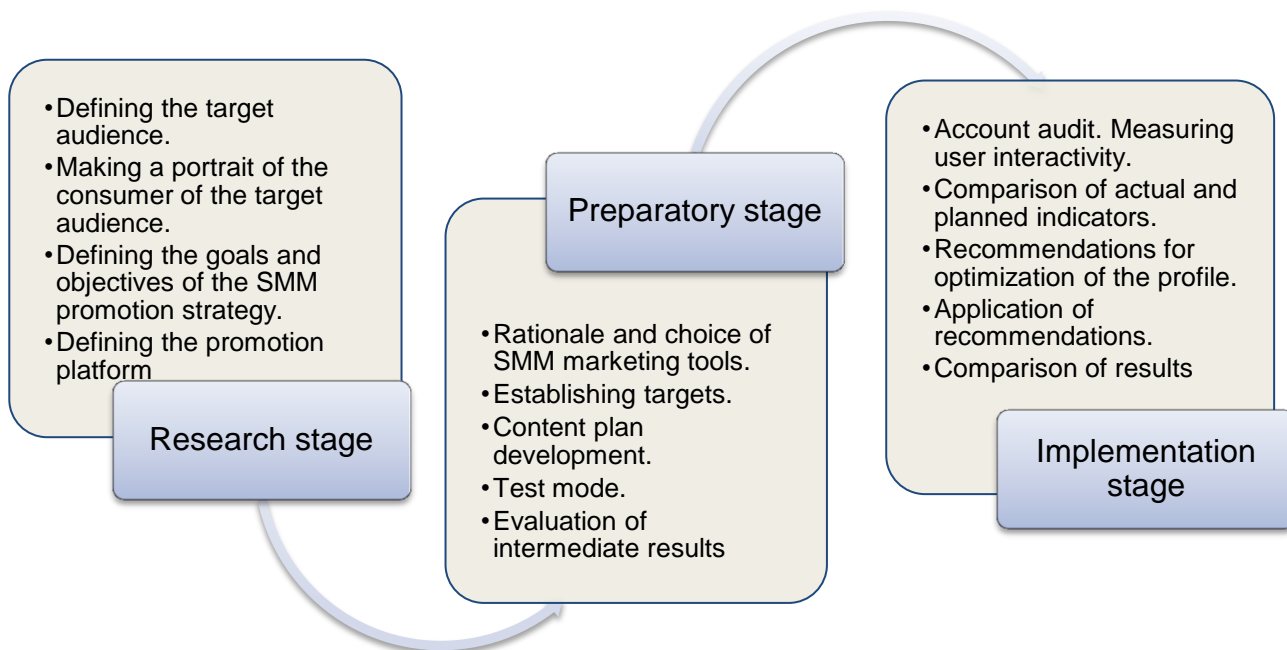


Fig. 7.17. SMM promotion strategy for tourism businesses

To determine the target audience, you need the characteristics of your activities and services. As a result, it is necessary to make a consumer portrait based on socio-demographic (age, place of residence, income level, etc.) and psychological characteristics (model of buying behavior, character traits, lifestyle, main values in life, etc.). Social media marketing can be applied to several segments of consumers.

At the next stage it is necessary to choose the purpose and tasks which the tourist enterprise solves by means of Internet marketing. The goals of Internet marketing should be determined by the overall marketing plan and be consistent with the main goals of the enterprise.

In the future, to build a successful promotion strategy, a social platform is chosen where the desired target audience prevails, which can be a popular service. It is not necessary to be limited only to a social network, it is necessary to choose some platforms for the publication of the corresponding content.

The next step is to select the SMM tools listed in Table 7.2.

Table 7.2

SMM marketing tools for a tourism enterprise

SMM tools	Characteristic
1	2
Content marketing	Content promotion. Content quality determines the performance and effectiveness of other SMM tools
SEO	Search engine optimization within social networks. There is an internal search in social media that needs to be optimized to attract more attention from potential consumers
Network management	This is primarily communication with customers, timely processing of questions, comments and objections from users
Targeted advertising	With targeted advertising, you can identify your target audience by a variety of characteristics (behavior, interests, geography, demographics) and show them a relevant advertising message, you can identify your target audience by a variety of characteristics (behavior, interests, geography, demographics) and show them a relevant advertising message
Social media influencer	Involve celebrities, such as bloggers, for live broadcasts or brand advertising
Integration of the site of companies with social networks	Social Media Optimization is a tool used to promote the content of social networks on the site. These are all kinds of widgets and buttons that are placed on the pages of the site and allow users to share information with their friends

Table 7.2 (the end)

1	2
Creating unique "hashtags"	The "hashtag" (#) shows all the content of the social network under this name
Conducting contests and raffles on social media	The use of social networks as a platform to stimulate sales allows you to attract new customers. Sweepstakes should be simple and not time consuming, such as reposts or friends
Analytics	A very important tool that helps to scan the social environment for the activity of promoting your brand and monitor the actions of competitors

The next step is to develop a content plan that will be based on the interests and preferences of the target audience. The main principles of creating a content plan are: uniqueness, brevity, interactivity, usefulness, following trends. Content should always be copyrighted, that's the only way it will work for you.

The key elements of the content plan of a tourist enterprise are given in Table 7.3.

Table 7.3

Content plan elements

Kind of elements	Characteristic
Content types	Sales, entertainment, informational, useful, combined
Topics of publication	You need to decide which topics you will consider for each type of content
Periodicity of publication	How often will you post content on social media? It is advisable to publish no more than two posts a day to spam users
Style of publication	It is necessary to clearly define the style and communication with the target audience, which is more characteristic of it
Time of publication	You need to set a time frame according to the activity of your target audience
Quality of publication	You need to decide what information potential customers need. Content must be unique and self-created and not borrowed

Next, it is necessary to conduct an interim analysis of the results of work on the implementation of the proposed solutions. For the analysis it is necessary to use metrics of social networks and check efficiency of the performed work.

The main indicator of measuring the effectiveness of activities on social platforms is interactivity – this is the level of user involvement in content. To assess the interactivity use the indicator ER (engagement rate) – the coefficient of involvement, which is measured for each post by the following formula:

$$ER = (\text{like} + \text{comment} + \text{direct} + \text{bookmark}) / (\text{coverage of the publication}) \times 100.$$

One must not forget that when forming a strategy for promotion on the Internet it is necessary to take into account the seasonality of fluctuations in the market. Provided that some services are in demand for some time, it is worth focusing on this period of time. It should also be borne in mind that many customers study the information of travel companies about their services in advance of the high season, so you should intensify marketing activities during the period of high research activity of users.

It is also advisable to highlight the main mistakes made by small and medium-sized tourism enterprises when promoting on social networks (Table 7.4) [152].

Table 7.4

Mistakes of promotion in social networks

Problem	Solution
1	2
Restriction to one platform	Successful comprehensive promotion of business on social networks includes multichannel. Almost all the main target audience of the travel company are active users of several social networks. Working through several channels will allow you to divide and expand your target audience and divide it into different segments
Ignoring the best time to publish on various social networks	For high conversion of posts on social networks, it is important not only to plan the frequency of publications, but to take into account the required time of publications for each site

Table 7.4 (the end)

1	2
Absence or excess of hashtags	Hashtags are a tool that allows you to find you throughout the social network. You also need to create branded hashtags for easy content navigation. Hashtags allow you to organize your information
Lack of a single corporate identity in different social networks	To form the image of a successful tourism business, you need to follow one style. Visual presentation in social networks should be unified
Ignoring subscribers' questions	When publishing posts, you should also take the time to work with comments from users. This is the only way to build the image of a reliable and customer-oriented company
Passive content	It is necessary to exhibit content in which the final phrase will be the invitation of the client to dialogue. This increases the loyalty and interactivity of the account. You can also research the needs and motives of your potential customers
Use of social networks exclusively for sale	Social networking is not a platform exclusively for sale. Users do not like sales content, they expect information that benefits them

In the context of a temporary crisis in the tourism sector due to the pandemic, new trends in doing business on the Internet have formed. Budget cuts do not allow small and medium-sized tourism businesses to use the costs of marketing communications in their promotion strategies. People are spending more and more time on the Internet looking for up-to-date information on tourist travel.

The Internet in today's market world is the main information and advertising platform. Unfortunately, the marketing activities of tourism enterprises on the Internet are not always structured, systematic and consistent with the principles of strategic planning. Businesses that are already actively using Internet marketing are clearly more competitive than others. Business profiles on social networks have become an alternative to offline advertising for small and medium-sized tourism businesses, demonstrating high efficiency in attracting loyal customers. The biggest advantage is that the SMM promotion strategy is available to any company at minimal cost.

Section 8. Implementation of Internet advertising tools in the tourism enterprise activity

Today, tourism is a global computerized business. It is a trade in services. And, first, it is a complex and diverse service, from the point of view of both the producer and the consumer. Secondly, it is an invisible, changeable, integrated service. And, thirdly, it is an information-rich service. Modern travel service is becoming more flexible and individual, more attractive and accessible to consumers. It is these characteristics of tourism that represent it as an industry ideal for the application of information technology.

It is impossible to imagine the life of society today without advertising. Advertising is an extremely multifaceted phenomenon that is an element of various spheres of life – economy, culture, communication, entertainment. In today's world, travel agencies are commercial enterprises, so their profits directly depend on the results of advertising.

In current conditions, one of the most effective means of communication and advertising is the Internet. For companies engaged in the tourism business, the Internet is an ideal means of advertising. The network provides an opportunity to inform the multimillion-dollar target audience about the company's services at minimal cost. In addition, the advantages of online advertising are that it allows you to transmit textual, graphic, audio and video information, as well as evaluate the effectiveness of activities through feedback from the target audience. The Internet can become a "breakthrough" of Ukraine in the advertising space of the world, acquainting foreign potential customers with the opportunities of the Ukrainian tourism business.

The implementation of modern information technology in various spheres of human activity today is becoming one of the most important factors in improving the efficiency of processes, the importance of which is not yet fully understood by many companies in the field of tourism. Businesses that realized the potential of information resources and computer technology, and later implemented them in their activities, were able not only to optimize production, but also to gain competitive advantage that allowed them to survive the crisis.

In the conditions of total informatization of society, growth of the number of Internet users, emergence of new types of advertising, thematic portals, search engines, sites, advertising platforms, a sufficient base for the development of the Internet advertising market is being formed.

Advertising is a tool of the market. In essence, it provides an opportunity to convey to a potential consumer a message about the product, the service and so that the potential consumer prefers this product, this service. Advertising is based on information and beliefs. Advertising can have a quick effect in terms of brand or company perception, but it takes a long time for the effect to be reflected in sales. Advertising is a dialogue between the seller and the consumer, where the seller expresses his intentions through advertising, and the consumer shows interest in the product. If the interest of the buyer was not found, the dialogue did not take place, and the goal of the advertiser is not achieved. Advertising is a purely social form of communication. Its social nature implies that the product (service) is legal and generally accepted. Advertising is a learning tool that allows the seller to repeat his appeal many times. At the same time, it allows the buyer to receive and compare the appeals of different competitors. Large-scale advertising is a kind of positive evidence of the popularity and success of the seller. Today, advertising is the most effective, and therefore the most applicable means of influencing buyers and consumers [46].

The institute of advertising is an integral part of a market economy and is the most important tool for market development, because without advertising mass production, able to ensure job growth and lower commodity prices, is impossible.

Advertising is a prerequisite for the development of competition, as it contains certain information and serves as a guide for consumers. It informs the consumer about the diversity of the market for goods and services offered by manufacturers. Advertising, in addition to being informative, carries an appeal to the feelings of the consumer and acts as a kind of "call". That is, it does not in itself form a need for potential consumers, but informs about items that are able to meet certain needs, thereby stimulating it.

Advertising challenges competitors, forces the company to improve its product, increase its competitiveness. Analysis of the concept of advertising is presented in Table 8.1. The purpose of advertising is to attract attention, arouse interest, convey information to the consumer and make him act in a

certain way. It is not enough to make a product, it is important that it finds its consumer.

Table 8.1

Analysis of the concept of advertising

Author	The essence of the concept
F. Kotler	Advertising is any form of impersonal presentation and promotion of ideas, goods and services paid for by a specific sponsor [46]
W. Arens	Advertising is not a personalized transmission of information, usually paid for and usually in the nature of beliefs about products, services or ideas known to advertisers through various media [39]
O. Feofanov	Advertising can be defined as a set of psychological measures to influence the minds of potential consumers in order to actively promote advertising, whether goods, services or political activities, as well as to create a positive image of the company, organization or individual institutions [34]
Starostina A. O.	Paid, non-private form of presentation of goods and services, which is carried out through the means of advertising on behalf of a particular advertiser [122]
Dichtl E., Hershgen X.	A special form of communication aimed at encouraging people to certain behaviors that serve the purpose of sales [50]
Law of Ukraine "On Advertising"	Special information about persons or products that are distributed in any form and in any way for the purpose of direct or indirect profit [79]

Therefore, the advertising appeal should inform something important and interesting for the consumer, about something exceptional, special, which is not in other products. The appeal in the advertisement must be true, probative and stated in an accessible, timely manner so that the buyer pays attention to the advertised product or service and purchases it.

When choosing advertising media, it is also necessary to take into account some conclusions made on the basis of previous advertising campaigns on the suitability of specific advertising media to promote specific products.

In addition, an important determining factor is the compliance of the nature of the media themselves with the nature of the advertised product and the type of advertising message. For example, some tools are more

organically suited to certain types of advertising messages. Most often, a combination of the means of disseminating the information used can serve as a guarantee of high efficiency of the advertising message.

An advertising campaign is a set of advertising activities, united by a goal (objectives), to implement the marketing strategy of the advertiser by encouraging a given group of consumers to act through advertising appeals [128].

We can say that all advertising activities of the company are a set of advertising campaigns. The process of preparing, planning and conducting an advertising campaign includes four stages: defining the goals and objectives of the advertising campaign; strategic planning; tactical decisions; operational work. Strategic planning is the main stage, because it depends on the last two stages, as well as the success of the advertising campaign as a whole.

Accordingly, it should be noted that strategic planning involves a number of successive stages: product research; definition of the target audience of advertising; choice of means of advertising; preparation of an advertising appeal; development of advertising release schedules; drawing up a budget for the promotion of goods; preliminary evaluation of the effectiveness of advertising [32].

Internet advertising, that is placing ads on the Internet, is a presentation of goods, services or businesses on the Internet, addressed to the mass consumer and having the character of persuasion. The global digital advertising market in 2022 is valued at \$602.25 billion that is 66.4 percent of the overall expenditure on media ads. This refers to advertising on internet-connected devices such as computers, mobile devices, and smart devices. Media ads include everything from email marketing and video content to search engine results and more.

In 2022 digital advertising showed a 15.6 percent rise from the \$521.02 billion spent in 2021. It may only be a fraction of an increase, but digital advertising growth is expected to continue in 2023. The largest annual growth between 2021 and 2023 came in 2021 when digital ad spend increased 29.9 percent year over year. Digital advertising growth is showing no signs of stopping. Experts' projections indicate that the digital advertising market will continue to grow over the next few years, albeit with a slight slowdown in its pace (Fig. 8.1) [122].

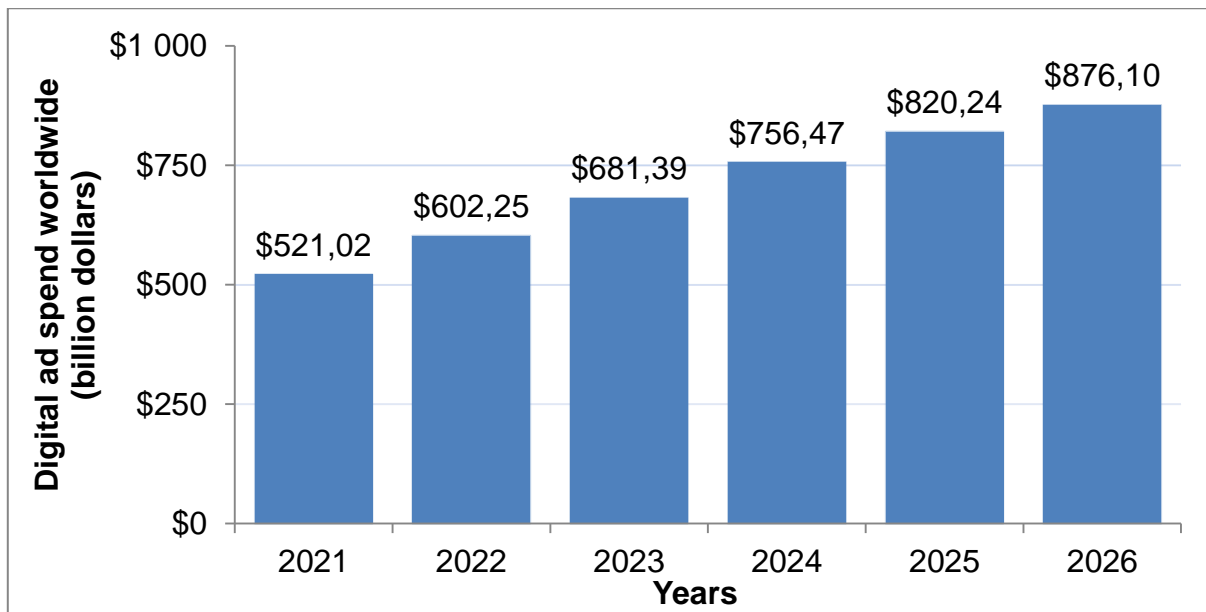


Fig. 8.1. Digital ad spend (2021 – 2026) [122]

Internet advertising becomes effective due to such indicators as the cost of content and the ability to quickly intervene in the course of the advertising campaign, in contrast to television and radio. This makes it popular among businesses. It is worth describing the benefits of Internet advertising for businesses that use it online.

This includes: the opportunity for businesses and organizations to direct the advertising campaign directly to a clearly defined target market segment; the ability to monitor and evaluate the effectiveness of Internet advertising due to the immediate reaction of consumers/users of the Internet resource; expanding the market share of the company in existing markets and entering new ones; reduction of costs (5 – 10 times lower than traditional) for the implementation of an advertising campaign on the Internet; quick update of information provided in Internet advertising; the possibility of conducting an advertising campaign simultaneously with the sale of enterprise products.

Internet advertising also has significant benefits for Internet users, which are manifested in the following: the ability of consumers/users to access Internet advertising at any time, regardless of time and day; the speed of obtaining the necessary information and the ability to obtain a large and diverse amount of information about the product or service that is advertised

online; interactivity, i.e. the ability of the Internet user to instantly receive additional information on request. Enterprises in the context of informatization of society use different types of Internet advertising, which differ from each other in methods, parameters and tools.

Let's analyze the main types of Internet advertising, which are widely used by enterprises, namely: contextual advertising; media advertising; banner advertising; search engine optimization (SEO); promotion on social networks; viral advertising [28].

Contextual advertising is placed in search of a search engine that matches the subject of the search query, as well as on the pages of the website on the subject of the advertisement. It is demonstrated to those Internet users who make a request and it is quite effective. Accordingly, contextual advertising is divided into search (SERP search engine pages) and thematic (websites of all participants in the Internet).

Contextual advertising provides an opportunity too set up targeting, i.e. show ads to the target market segment; to evaluate its effectiveness in a timely manner to achieve appropriate results, to form and launch information (announcements). At the same time, it has a high cost of attracting visitors.

Contextual advertising is evaluated by i-media specialists with publicly available metrics using impressions, clicks, and conversions. With the help of media advertising, which acts as an advertising platform, test information material is provided on the sites. Search engine sites use search engines, thematic websites, news and information resources, i.e. where you can find the target market segment of the company.

The market segment, its profile and geography, time spent on the website, traffic sources are analyzed in detail. Media advertising affects the strengthening of the company's image, product brand. It takes the form of banner advertising, so payment is made for 1,000 banner impressions. The impact of media advertising on consumers/users is due to the presence of the banner hyperlinks, the ability to call from the banner to a mobile phone and animations.

Generalization of the advantages and disadvantages of online advertising depending on its perception by advertisers is shown in Table 8.2.

**Advantages and disadvantages of online advertising depending
on its perception by advertisers**

Advantages of online advertising	Disadvantages of online advertising
<ol style="list-style-type: none"> 1. The possibility of maximum targeting (focusing) of the advertising appeal. 2. High efficiency of information transfer and management of the advertising campaign. 3. Low cost of advertising compared to other types of advertising (1000 contacts ≈ \$5 – 10). 4. The ability to visualize contact with the consumer. 5. Interactivity and multimedia of Internet advertising. 6. Opportunity for the advertiser to work with any consumer. 7. Constantly growing customer base. 8. Unlimited market geography. 9. Saving time through automation. 10. The presence of a large amount of advertising and general information about the product (service). 11. High level of citation of information in the offline environment. 12. The ability to conduct operational, clear and in-depth analysis of promotional activities. 13. Long-term advertising campaign. 14. High brand awareness by consumers. 15. Consumer confidence. 16. Simplified process of e-advertising management. 17. The ability to choose the type of advertising on the Internet. 18. The ability to conduct marketing research in accordance with the goal. 19. Improving the image of the product (enterprise) through the placement of advertising on a quality site 	<ol style="list-style-type: none"> 1. A small audience, although there are prospects for growth. 2. Weak development of Internet resources of some highly specialized industries. 3. Lack of sufficient professional staff in the online advertising market. 4. Imperfect literacy when creating an advertising message. 5. The possibility of low quality of the site where the information is posted. 6. Great competition. 7. Poor network connection

Generalization of the advantages and disadvantages of Internet advertising depending on its perception by users of the Network is given in Table 8.3.

Table 8.3

Advantages and disadvantages of online advertising depending on its perception by consumers

(generalized by the author based on sources [7; 48; 69])

Advantages of online advertising	Disadvantages of online advertising
1. Unlimited market geography	1. Lack of network Internet connection
2. The ability to visualize contact with the advertiser	2. Poor communication and low speed transmission of information on the Internet
3. Multimedia and interactivity of advertising	3. Lack of older age people desire to use the Web
4. The ability to receive information from any computer	4. Considering advertisements as spam
5. High efficiency of information transfer	5. Artificial statistical increase of the number of visits to Internet resources
6. Unlimited amount of advertising and general information about the product (service)	6. The possibility of committing fraud in Networks
	7. Low level of obsession advertising

Based on a study of the advantages and disadvantages of Internet advertising and the undeniable importance of the Internet in the modern economy, it was found that there is a great potential for increasing the impact of this latest type of advertising on users.

Tourism and information are inseparable. After all, the decision to travel is made on the basis of truthful, timely and clear information. Tourism is an information-rich service. Therefore, this area can be considered a growing application of information technology.

Information technology is a systematically organized set of methods and tools designed to solve management problems. It is used for collecting, registering, transmitting, accumulating, searching, processing and protecting information based on the use of advanced software, use of computer technology and communications, and as well as the ways in which information is provided to those who need it.

Signs of any information technology are:

computer processing of information according to selected algorithms;

storage of large amounts of information on various media;

transmission and exchange of information at any distance in limited time while maintaining all its properties.

The tourism industry is ideally suited for the introduction of modern information technology, so in recent decades it has been significantly influenced by scientific and technological progress [32].

Computerization is one of the most important achievements of tourism. The personal computer and the Internet have made it possible to create a public, extremely information-intensive bridge and, compared to other information technology systems, cheaper and faster information infrastructure, their accessibility and reliability have facilitated the entry of new information technologies into all spheres of society, productivity growth in services [1].

The information technology system used in tourism consists of a computer reservation system, teleconferencing system, video systems, computers, management information systems, electronic airline information systems, electronic money transfer, telephone networks, mobile communications, etc. It should be noted that this system of technology is not deployed by travel agents, hotels or airlines individually, but by all of them. Moreover, the use of information technology by each segment of tourism is important for all other parts.

The use of modern information technologies increases the security and quality of tourist services. Today, tourism uses the Global Distribution System, which provides fast and convenient booking of transport tickets, hotel reservations, car rental, currency exchange, booking tickets for sporting and cultural events and more. The largest global distribution systems in the international market of tourist services are AMADEUS, Worldspan, Galileo, Saber. Together, these systems number about 500,000 terminals installed in hotels around the world, which occupies more than 90 % of the market, 10 % are regional reservation systems and systems that are in the process of merging with one of the above. Each GDS, although global, has its own arsenal of distribution. For Amadeus and Galileo it is primarily Europe, for Saber and Worldspan it is America.

Information technology in tourism is a system of methods and ways of transmitting and processing information based on the use of technical

means that can be used in the management of tourism enterprises, namely: customer service, cooperation with suppliers, intermediaries, government agencies, partnerships with them, etc. The impact of information technology on tourism is carried out at different stages of creation and promotion of tourism products (Fig. 8.2).

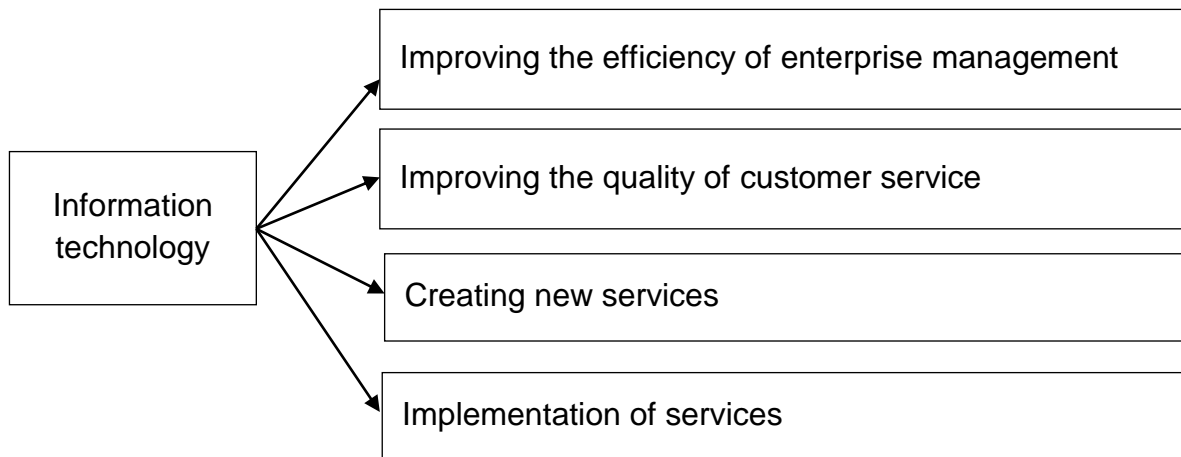


Fig. 8.2. The main areas of application of information technology in tourism [1]

The positive impact of information technology on the tourist flow is due to the transformation of the tourism sector from one that focuses on serving organized tourists – a multidisciplinary field of activity aimed at meeting the diverse needs of individual tourists. Despite the widespread use of information technology, the level of application of IT by domestic enterprises is quite low, due to:

- a low level of information and communication infrastructure development;

- lack of tourist databases in some regions of the country; limited information and advertising of tourist products in the markets;

- a low level of development of virtual tourism enterprises;

- absence of a state electronic system providing the subjects of tourist activity with operative information on demand, supply, prices, tariffs.

In modern conditions, the following forms of Internet use are of special interest to enterprises:

- communications;

- advertising and product promotion;

- marketing research;

electronic presentation of the enterprise and its product;
use of opportunities of electronic international exhibitions and fairs;
use of reservation systems;
independent product formation;
use of electronic product catalogs;
obtaining the necessary information about the product and services;
obtaining up-to-date information on tariffs and prices;
use of the Internet for calculations.

In general, companies can use the Internet in these ways:

- 1) create a web page to place information about the company and its services;
- 2) advertise on the Internet;
- 3) participate in news exchange groups;
- 4) communicate by e-mail (including e-mail advertising);
- 5) conduct online meetings, conferences, provide information about the company's services;
- 6) sell their goods and services, i.e. carry out on-line trade;
- 7) promote the company among consumers to carry out online marketing;
- 8) make on-line booking of services and products.

For businesses, the Internet is first and foremost an ideal means of advertising. At present, it is difficult to imagine a company that does not have access to the network, an e-mail box or a page on the social network. The Internet makes it possible to inform a multimillion-dollar target audience about the company's services at minimal cost. In addition, the advantages of online advertising are that it allows you to transmit textual, graphic, audio and video information, as well as evaluate the effectiveness of activities through feedback from the target audience. Advertising on the Internet has become possible due to the creation and use of Internet resources: Web-sites, Web-portals, which make it possible not only to get acquainted with the company's services, but also to book them through the Web.

The greatest influence of modern Internet technologies is observed in the distribution and sale of the product. First of all, this applies to the possibility of forming new marketing channels to promote and market the product. Thus, in the field of advertising, direct distribution of information by e-mail (direct-mail) has become widespread.

In recent years, most companies have been creating their own websites on the Internet, as well as using banner advertising. A banner is an image or a text block on the website, which is a hyperlink to the site of the advertiser, which contains a detailed description of the product or service.

The peculiarity of advertising on the Internet is that its central element is the company's website. The whole complex of advertising events is built on its basis. The purpose of the site is to place information about the company on the Internet. The website is not only the face of the company, but also a marketing tool that explores the interests of the target audience, strengthens the company's image, promotes the brand, attracts potential customers and partners. The company's website can be used for advertising, to get an overview of the company, brand recognition, public relations, official press releases, customer support and technical assistance.

The possibilities of advertising on the Internet are not limited to sites. Another very useful means for the company's advertising campaign is the use of the capabilities of search engines. Of course, the maximum task is to keep the company's website in the top positions for all interesting requests, and for free. But this task is quite difficult. Depending on the specifics of the search both foreign and Ukrainian systems can be used. Such search engines contain indexes of a large number of Internet web servers. This is, on the one hand, an advantage and, on the other hand, a disadvantage, because for any query, search engines usually provide a very large amount of information, of which only a small part is useful, and it takes a long time to filter it.

Since we live in a period of rapid development of information technology, it is impossible not to notice the changes that have already taken place. Global computerization has affected not only our lives in general, but also our business, including tourism. The ability to work with information, collect and process, as well as make decisions based on it is the basis for successful tourism business.

The impact of information technology on tourism development is quite large, as it is related to the efficiency of each tour operator individually and the tourism business as a whole. This affects the competitiveness of the enterprise in the market. Therefore, today it is simply impossible to present the activities of a tourist enterprise without the use of the Internet. This network is used in almost all business processes within the tourism enterprise, from finding and attracting customers to the formation of a tourism product. It also provides a huge amount of information that a tourism

enterprise needs: accommodation addresses, flight schedules, visa formalities. The use of the Internet in the field of tourism includes such areas:

- open access to the use of modern communication systems, such as e-mail, messengers which significantly to reduces the costs of an enterprise;

- opportunity to create and promote intra-corporate booking systems for tours on the Internet;

- an opportunity for travel companies to receive background information on prices, tariffs, countries, weather forecasts, etc, to form a quality tourism product;

- implementation of online multimedia technologies in the form of catalogs;

- the possibility of forming new marketing channels to promote travel services, in particular, the creation of web-sites of a company or communities in various social networks.

The use of information technology by tourism enterprises, allows entrepreneurs and marketers to explore new opportunities in the tourism market, to study different market segments (geographical, demographic).

Given the growing role of modern information technology in the tourism business, the Association for the Promotion of Tourism Technology (APTT) was established. It is resigned for:

- introduction of automation tools, which significantly reduces less productive time, which is the source of the greatest dissatisfaction of intellectual workers;

- involvement of future users in the selection and creation of new automated places, taking into account their proposals;

- refusal to seek immediate general approval of new facilities and appropriate relocations of staff, which may lead to a reduction in the level of support services;

- introduction of first of all easily applied tasks with obligatory carrying out of an intensive course of training of future users.

The result of the computer information technology implementation is saving the time of specialists. The only way to get a tangible effect of saving time is the transformation of this time to achieve specific goals of this unit, determined by the overall strategy of the enterprise.

Internet communication tools have also led to major changes in the functioning of various economic sectors, such as marketing. As the name implies, Internet marketing is the act of promoting goods and services over

the Internet. This is the type of marketing and advertising that the Internet uses to convey advertising marketing messages to customers. This is a subset of digital marketing. Internet marketing involves a greater variety of marketing components than regular marketing.

Like any other means of promotion or advertising, online advertising also includes both the advertiser or promoter and the publisher. The publisher includes advertising in its online content, and the advertiser provides advertisements that must be published or displayed on the publisher's content. Other individuals involved may be advertising agencies, advertising servers and affiliates. Advertising agencies mainly help in creating and placing an advertising copy. The ad server provides advertising and tracks statistics. Advertising affiliates are those partners who carry out independent advertising work for the advertiser.

Some of the main benefits of the Internet are its impact on empowerment, overcoming geographical constraints or difficulties, effective targeting, getting fast results, cost-effectiveness, reaching more people, measurable results, customization, relationship building, 24/7 availability. But the use of the Internet in marketing has its drawbacks. For example, duplication, excessive advertising clutter, frivolous recognition, product mismatch, excessive competition, pity for pessimistic feedback, too much dependence on technology, not all people understand, and lack of trust. Internet marketing includes search engine marketing, e-mail marketing, social media marketing, and many types of media advertising (including web banner advertising).

Internet marketing activities are one of the areas of marketing activities in the company's activities, providing a link between these activities and Internet technologies. The basis of marketing activities with the use of information technology advances is always the use of technology in the information sphere as a necessary component. Marketing technologies of companies in the modern scientific and technical environment exist with the decline of traditional advertising methods and the constant growth of digital. The long period of development of marketing activities and the peculiarities of the use of them in different countries, industries, organizations and firms, led to the emergence of different types of marketing. They are characterized by:

- the individual nature of communication between producer and consumer;

- convenience of processes of selection and purchase of goods or services;

wide opportunities to provide the consumer with the necessary information;

purposefulness of information influence;

the possibility of establishing permanent business relationships with consumers, measuring their response to relevant appeals;

high efficiency of creating information messages and the ability to adjust them depending on the reaction of consumers.

Internet marketing activities are significantly different from conventional marketing activities and communications through the use of virtual information space. The Internet and other digital media (smart TV, smartphones and tablets) are opening up new forms of interaction and new models of information exchange, respectively, have a different economic effect from the introduction in companies. The main tool here is the website where the information is posted. It may have means of communication that are integrated with the site.

The use of the network brings new features and advantages against the adoption of traditional marketing methodology, such as:

the transition of a key role from producers to consumers. This is one of the most fundamental qualities brought by the Internet to the world of modern commerce. The Internet has made it a reality for companies to attract the attention of a new customer for tens of seconds spent in front of a computer screen. At the same time, it allowed the same user to switch to any competitor in a few seconds. In this situation, the attention of customers becomes the greatest value, and established relationships with customers is the main capital of firms;

globalization of activities and reduction of transaction costs. The Internet is significantly changing the spatial and temporal scale of commerce. It is a global means of communication that does not have any territorial restrictions, and the cost of access to information does not depend on the distance from it, in contrast to traditional means, where this dependence is directly proportional. Internet marketing activities are characterized by the fact that the distance between seller and buyer plays a role only in terms of transport costs at the stage of delivery of goods;

the time scale among the network is also significantly different from the usual one. High efficiency of communicative properties of the network provides the opportunity to reduce the time to find partners, make decisions, implement agreements, develop new products, etc.

These effects also lead to a significant reduction in transaction costs, i.e. the costs associated with establishing and maintaining interaction between the firm, its customers and suppliers. At the same time, the cost of communications, compared to traditional means, becomes minimal, and their functionality and scalability increase significantly.

Currently, the domestic market is rapidly introducing Internet marketing in the company's activities, as well as realizing the potential of social networks in marketing communication activities on the Internet, which confirms the fact that Internet marketing is an important phenomenon in modern management. Improved and updated internet marketing technologies will help maintain and develop the company's relationships with customers. This will contribute to the high communication status of the marketing system, increase the efficiency of marketing activities and expand marketing relations.

According to research conducted in Ukraine, the source of information for choosing a travel agency is primarily the impressions and opinions of friends and acquaintances, as well as their own experience (57.5 and 47.6 % of respondents indicate the priority of these sources of information). Next in terms of the effectiveness of the impact on consumers are the Internet (43.2 %), television (36.6 %), print advertising (33.6 %), print media and specialized publications (21.9 %) [17].

Contextual and banner advertising are the main means of using the Internet by tourist enterprises. About half of all Odesa enterprises in this industry use this type of promotion of their services. More often the advertising banner of the tourist enterprise represents the graphic representation of the information on the enterprise and is placed on the general information or specialized tourist resources. The main purpose of creating and placing banners is to attract the maximum number of potential customers. In setting such goals, many travel companies abuse the bright elements, turning their own banners into objects that irritate and do not interest, but rather cause a negative reaction.

Contextual advertising of tourist enterprises is a concise text message in the journalistic style. Contextual messages are often placed on large portals with a significant audience [8]. The program, integrated into the portal, checks the texts entered by the user and displays only such advertising messages that have the same keywords as the inspected texts. In this case, if any user used the keywords "vacation", "resort" and the like, he would see

in the upper corner of the page those advertising messages of travel companies, which were marked with such keywords. This allows you to follow the targeting of advertising messages. Creating their own sites is also quite actively used by tourism enterprises in the Odesa region. About 70 % of tour operators and 40 % of travel agents have their own websites [8].

Thus, the main methods of advertising on the Internet is the placement of information about the travel company, its travel products on advertising sites, in banner systems, networks for the exchange of text blocks [69].

For corporate clients in the field of business tourism, advertising with the use of e-mail (mailing lists, discussion letters, individual letters) is of particular importance; affiliate programs, forums and chats for advertising purposes; registration in search engines and directories, etc. The Internet as a means of marketing communications has the positive properties of such means of communication as telephone, fax, press, television, radio, mail, but also has a number of its own advantages, which do not have other means of communication. These advantages include information capacity, interactivity, hypertext nature, territorial infinity of market coverage, target nature of the impact, targeting, the ability to collect information about each visitor to the travel agency website and high efficiency of analysis of the results of promotions [6].

Unlike other means of marketing communications, there are no restrictions on the amount of advertising space or airtime on the Internet, which allows you to post detailed information about various travel routes on the travel agency's website. This means of communication is especially suitable for clients who want to avoid the influence of persuasive or emotional factors, which necessarily exists in personal communication with the company's staff. A significant advantage of the Internet is the ability to significantly reduce the cost of advertising by shifting the focus from traditional means of dissemination of information (for example, from printed materials) to the information form of presentation on the network. By maintaining connections with potential customers via the Internet, the travel agency can obtain additional information from them, which helps constantly improve the quality of travel services and better meet the needs of service consumers.

The use of Internet for advertising does not only attract new customers, but also retains the existing ones. In conditions of fierce

competition in the tourism market, the task of retaining customers becomes a higher priority. Along with the advantages, this means of advertising has its drawbacks, which include the chaos and information overload of most sites of tour operators, which makes it difficult to attract and retain potential customers. There is a shortage of specialists in Internet marketing, which in turn leads to low quality Internet advertising in the domestic market of travel services [69].

The most promising approach to solving the problem of marketing communications system management is the application of the concept of integrated marketing communications (IMC), on the basis of which the marketing communications management system of modern enterprises should be built. Integrated marketing communications is a planning concept that involves assessing the strategic role of individual areas (advertising, sales promotion, personal selling, etc.) and finding the optimal combination to ensure clarity, consistency and maximize the impact of individual communication campaigns.

When developing a communication strategy, it is also necessary to take into account many additional factors that influence the organization's choice of communication tools and their relationship in the communication set. The set of such factors may include target market, market conditions, product life cycle, level of competition, financial constraints of the organization, industry specifics and more.

Particularly important and insufficiently studied are industry factors, specific features of the tourist service, which determine the features of marketing communications of enterprises. Characteristic features of tourist services can be divided into general and specific. It is proposed to include such features of the tourist service as seasonality, complexity and great subjectivity in assessing the quality of the tourist product. So, the basic principles on which the management system of marketing communications of tourist enterprises should be based, are as follows:

- significant individualization and targeting of communication to potential consumers compared to other areas of business;

- the exclusive role of creating a positive image in increasing the demand and competitiveness of the tourist enterprise in the market;

- the need for integrated use of communication tools and technologies that increase the materiality of services and consumer confidence (visibility of

advertising, advertising of tourist facilities and manufacturers of tourist services, active exhibition activities, corporate identity, etc.);

complexity of structure and multilevel participants of communication interaction in tourism (target audiences of marketing communications are not only consumers of tourist services, but also other domestic and foreign tourist enterprises, various organizations of the tourist industry, public and state institutions).

Specific means of marketing communications in tourism include an advertising tour – a special advertising product that is developed by a tour operator in order to inform employees of travel agencies about the emergence of a new route and direct acquaintance of the latter with tourist facilities on this route.

The environment in which the tourist enterprise operates is permeated by a complex system of communications. The company is in contact with its customers, banks, insurance companies, manufacturers of travel services, various contact audiences. Moreover, these connections are multidirectional and intersecting. The task of the tourist enterprise is to form and maintain the image of the proposed products and the company as a whole and in the eyes of the public and its existing and potential customers.

In the current socio-economic conditions in the field of tourism, marketing communications should not be considered an aid to the implementation of the tourist product, but its important component.

IMC is especially relevant in times of crisis, when the main tasks facing companies are: maintaining customer base, retaining solvent customers, working time management, increasing productivity through automated business processes, accelerating information flows within the company, optimization of the company's product portfolio, management of relations with suppliers, optimization of marketing costs, management of receivables, reduction of temporary costs of the head to control the current activities of the company, automation of routine operations. In such conditions, IMC helps to increase employee efficiency, optimize staff (redistribution by department), quickly hire new employees, overcome the sales crisis, identify promising customers, abandon insolvent customers, combine sales of different divisions of the company (cross-selling), work effectively with partners and find new directions for development.

Technological innovations of Web 2.0 have been widely used in the practice of reputation management of commercial organizations and, of

course, can be an effective tool for positioning the company. For travel agency ORM (on-line reputation management, not to be confused with Object Relational Mapping, a term related to databases) – a new concept, which is proposed to be understood as a system of activities that involves the use of various techniques and services to create and maintain a lasting positive impression on the target audience of the institution and its activities via the Internet and as a result, increasing the loyalty of contact groups to the travel agency. The Classic ORM structure is shown in Fig. 8.3 [197].



Fig. 8.3. **Classic ORM structure** [197]

ORM is one of the newest areas of reputation management, which is most actively developing, and this process is quite natural [197].

ORM is a system process which has certain structural elements:

SMM (social media marketing) ORM – building a reputation in social media;

SERM (search engine reputation management) ORM – the right work with reviews and comments in blogs, forums, thematic sites and creation of a reputation with it;

SEO (search engine optimization) ORM – promotion on the Internet, or rather in search engines (e.g. Google, Meta) needed to build the right reputation of documents that should get on the first page of search results;

Crisis ORM – work on "saving" reputation during crises, attacks of competitors, information warfare, etc.;

Public ORM – work with the media: publishing articles, participating in thematic programs and interviews that will help shape the image of the travel agency and strengthen its reputation.

As for internal optimization, it is, no doubt, the optimization of the company's CRM system.

Internal optimization of the site consists in modernizing its content, adapting it to the needs of the target audience. Therefore, filling the site with indigestible text designed for search engine robots is irrational. Most users of the network, encountering text saturated with keywords, refuse to continue to cooperate with the resource, because they consider this approach to site promotion unprofessional. And the mechanism of indexing the site by robots is constantly improving, as a result of which the page, oversaturated with keywords, can cause a sharp drop in rankings, and even a lifelong "ban".

Therefore, when filling the site with information, it is more important to take into account the need of users for the right and quality material. An uninteresting site that even offers the most essential products may be unattractive to the user. On the other hand, it is the "power of the word" that can motivate you to buy even the most ordinary product. This is directly related to some feature of the psyche, concerning to the emotional perception of information. The brighter the first impression of the content of the site, the more positive characteristics will be subconsciously attributed to your products, the more buyers will move from potential to actual.

Equally important for effective promotion is the visual content of the site. This applies not only to the layout of pages, harmonious combination of colors, fonts, but also the number and variety of photos, video and audio materials and more. Without these features, the text will be a boring set of letters and even the smartest thoughts will not be read by visitors to the resource. And taking into account the fact that the time of the visitor's stay is also taken into account when calculating the rating, it is necessary to create the most interesting and attractive content of the site not forgetting the ease of use, page load speed and other aspects of usability [197].

Therefore, you need to do optimization in the following areas:

content modernization;

improving the visual appearance of the site;

adding articles to the site;

SEO optimization for a company that should interest the consumer through its site cannot be impractical in any case. The effect of such a simple thing as finding a site at least in the top 5 search engines for relevant queries can be impressive;

promotion in social networks (SMM).

SMM is, in fact, a very complex topic. SMM betting companies are often on the list of brands most hated by consumers. Only 2 – 3 % of potential consumers remain involved (watching updates, swearing and harassing posts) with the possibility of attracting virtually all 100 % [65]. That is, SMM has been a waste of time for most companies.

The first problem is the low level of performance. More precisely, more specifically, the content inspires users with sadness and indifference. It doesn't matter what social network it is on, but the desire to create an "information flow" overshadows the desire to be useful to its subscribers. As a result, the potential customer does not receive the necessary information and disappears. Groups and corporate pages are not likely to attract participants, but become an annoying element of their own news feeds. It seems like the information is boring, but I'm too lazy to unsubscribe. So, such content is a consequence of another, more serious problem: the lack of a strategy of customer interest.

Too often, what is called an SMM strategy, or any other marketing strategy, is not even close to what the strategy is all about. And this is the second problem related to SMM.

Therefore, to improve the promotion of a tourism company through SMM it is necessary to remember about:

having a clear promotion strategy;

quality of promotion.

Is it easy? No. Is it appropriate? Yes, by following these two rules, a company can increase sales. But if it is not possible to do SMM-promotion qualitatively, it is probably better not to do it at all.

Contextual advertising is one of the most effective and fastest ways to promote a product or service. The most well-known contextual advertising operator is Google. This is a kind of principle of advertising, when it is focused on the content of the website on which it is placed; it can be in the form of a banner or a text ad.

The essence of such advertising is that site owners indicate the place where the ad should be placed, and the ads themselves displayed in this place are different, they are automatically selected from the ad database and they all correspond to the theme of the site.

Another feature of such advertising is that the ads are shown many times for free, and you only have to pay if the user is interested in the ad and clicks on the ad in order to read more on the site [5].

The pros of the method are as follows.

This channel is extremely selective, which is clear even from the name. It is based on the interests of users, which are calculated based on queries, history of visits, page content, which means that the message will be potentially attractive to visitors. Such high targeting makes PPC more effective than other promotion channels.

The context block is relatively easy to create – just formulate the title and text, specify keywords, choose the audience and theme of the sites, set the display mode, and other work will be done automatically by platform technology.

Advertising can be selected not only by subject, but also by the style of the site, so that it fits as organically as possible into the design of the site and does not irritate users, distracting them from the main content. This point is very important for site owners who want to join an affiliate network.

PPC is a great opportunity to get in the top search without worrying about SEO-optimization, which is especially true for new resources with a small audience and/or significant competition in the industry. The payback from the campaign is usually observed in the first week after the placement of contextual ads.

Only resources that meet certain criteria are accepted to participate in the partner network. Yes, the partner's site must be registered on a paid hosting, have quality content and a minimum number of unique visitors. In addition, dishonest partners who accrue clicks and conversions may be blocked.

This advertising provides numerous tools for evaluating the effectiveness, the ability to analyze the behavior of visitors, set goals and parameters to achieve those, track problem areas, etc.

The cons are the following.

The main goal here is not the number of clicks measured as the click through rate (CTR) or pageviews, but the maximum conversion. This means

that poorly targeted messages can "blow" the entire budget without any return on investment (ROI). The problem is especially relevant for advertisers, as they pay for each link.

Poor conversion is often caused by incorrect or inaccurate keyword choices that prevent the offer from reaching its target audience, inconsistency between the ad and the content offered, poor design, difficult navigation, long download times, questionable content, unclear resource message, and other factors.

Modest appearance and unobtrusiveness can be both a disadvantage. Of course, unlike animated banners and other display advertising, contextual advertising does not distract users from the main content of the page, but often leaves them completely indifferent.

Since the price per click is formed on the basis of bidding, and in the first place there is an option for the transition to which the company is willing to pay the maximum bid, in some areas there may be a lot of competition. As a rule, the most expensive key ones are related to financial, educational, medical services, as well as construction.

In addition to the price, the display in the selected position is affected by the level of clickability, or the frequency of visitors to the link. This further increases the requirements for design, the right choice of keywords and the relevance of the site and the target audience [5].

The introduction of contextual advertising can have a huge impact on the tourism company's activity, so its use can be considered absolutely appropriate.

E-mail marketing. E-mail can be completed in the shortest possible time and allows you to reach a large target audience.

There are many mailing lists on the Internet for a variety of topics. They are usually conducted by people who are well versed in this issue, regularly sending by e-mail regular issues of mailings. Recipients of such letters subscribe to the list themselves, and at any time they have the right and opportunity to cancel their subscription. There are open mailings (for everyone), closed (for people of a certain circle), free (existing due to the enthusiasm of the creators, sponsorship, paid advertisers), paid.

A mailing list is usually a broadcast tool for a specific target group and often has thousands of subscribers, so it is considered an effective marketing tool [5].

The pros of e-mail mailings:

one of the positive aspects of e-mail is the ability to track the effectiveness of your correspondence;

email is considered to be the most popular means of communication on the Internet;

the advertiser receives a guarantee that the letter will be delivered to the recipient;

the number of subscribers can always be influenced (there are proven ways to do this);

this form of letter delivery is convenient and cheap.

The cons are:

mail filters sometimes send such mailings in spam, and the letter is deleted from the server;

some subscribers do not look in the mail;

newsletters are subject to the law and are obliged to comply with it;

if your letters are no longer of interest to customers, they can always refuse them.

We can say that the pros outweigh the cons. Thus, the use of this type of communication, for example, for mailings with shares, is quite appropriate.

One of the widespread problems of CRM systems used by tourism companies is the following elements missing:

receiving analytical reports;

planning and analysis of the effectiveness of marketing activities;

customer satisfaction control, registration and complaint handling.

These shortcomings, respectively, can lead to the following consequences:

there is no possibility to analyze the customer base, build comprehensive reports on sales, procurement and history of communication with customers;

the company does not have a tool for centralized marketing planning for operational business process management;

customer complaints are lost, are not considered in time, it is not possible to receive reports on the types of complaints for the period by company managers.

Thus, the company needs to upgrade the CRM system to better manage the company's internal processes.

To evaluate the effectiveness of SEO optimization, the following indicators should be monitored:

- the number of visitors who came to the site from search engines;
- the number of visitors who came to the site from each search engine;
- the number of visitors who came to the site on specific requests;
- the query conversion rate;
- the number of pages visited by at least one visitor.

By knowing these metrics, you can track your current performance with such tools as Google Analytics, HubSpot, Mixpanel, Woopra, FoxMetrics, Piwik PRO Analytics Suite, Gauges, W3counter, Clicky, and others.

Many quantitative and qualitative performance indicators (KPIs) need to be monitored on social media. To measure some KPIs will be enough internal statistics of the service, for others you will need special tools: web analytics systems (Google Analytics – yes, the same is used for SMM) and social media monitoring services. In Fig. 8.4 the best traffic channels according to Google Analytics are shown.

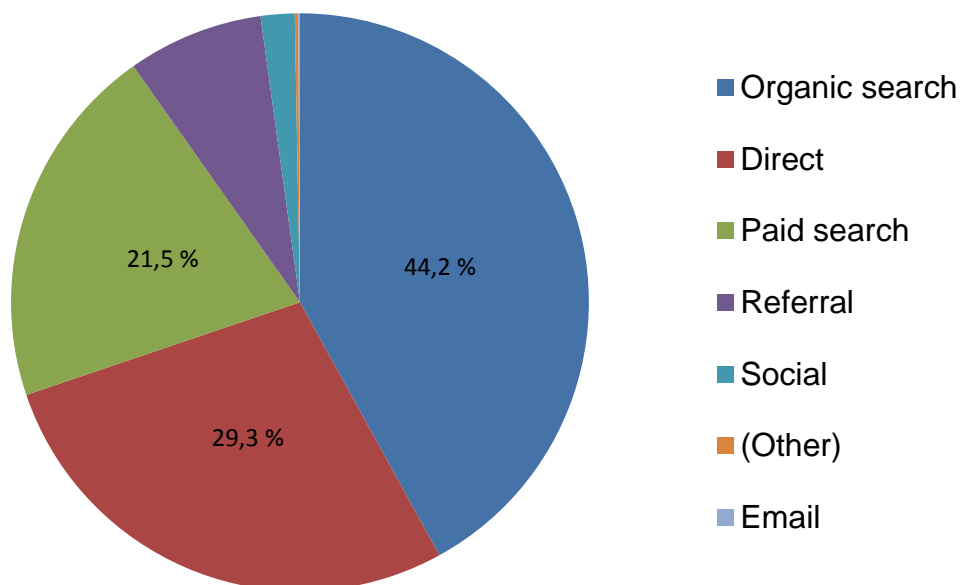


Fig. 8.4. Top traffic channels according to Google Analytics

When working in social networks, the most important is: working with content and feedback that is the number and frequency of publishing posts

and responses to users over a period of time. The quality of the published material is very important here. With feedback from community members, you can assess whether expectations are true [142].

Coverage is the number of page fans or people in the group, the number of users who saw the news. This is an important indicator, but not the most important one. Thousands of users can see the viral picture with a kitten, but what will be the effect for business? You should not chase a huge number of people. It is better to work well with a small but targeted audience.

Involvement. It can be assessed in "reactions" – user actions: it's clicks on links, answers to questions. In the author's opinion, this is the main indicator of involvement, interest in the content. Even if a person does not become a fan of the page or does not register on the site, he expresses his attitude to the brand in the form of like, share, retweets, posts, comments to posts. This helps to assess whether the right direction has been chosen to work with this audience.

Conversion is the most important and very ambiguous indicator of the effectiveness of work in social networks. For each project you need to individually determine the indicators by which you will need to measure conversion. For some projects, this is the number of questions asked by narrow specialists of the company. For other projects, such indicators as the number of orders made from social networks, recognition or traffic on the site may be used. But in any case, conversion is the most important indicator of work on social networks.

As for contextual advertising, its effectiveness is determined by the click-through rate and measured as percentage. This is an important parameter in the formation of the cost of a click [121].

It is advantageous for the contextual advertising system to show ads with the highest CTR. The higher the CTR, the more people click on the ads and the more money contextual advertising service earns. If multiple ads have the same cost-per-click, the system will show the ad with the highest CTR above.

The calculation formula is:

$$\text{CTR} = (\text{number of clicks} / \text{number of impressions}) \times 100 \%. \quad (8.1)$$

Evaluation of the effectiveness of CRM system upgrades.

The most common criteria for the effectiveness of the CRM system are customer loyalty and the effectiveness of relationships with them. Indicators of customer loyalty for a certain period of time are revenue and customer loyalty index.

The first indicator is financial, expressed in monetary terms, the second one is a relative financial indicator calculated in percent. The loyalty index is the share of purchases of the company's products (services) in the total purchases by the customer of similar products for a certain period, for example, for a year. Absolute customer loyalty means that all products from the company's range, which the customer requested the previous year, were purchased from only one organization.

The effectiveness of the relationship with customers is presented through many indicators, such as the time from the first contact to the transaction, the number of transactions for the period, receivables, the number of withdrawals, the share of sales to new customers and profitability.

It is extremely difficult to assess the economic effect of implementing a CRM system in monetary terms. As a rule, in each company there are areas in which the effect of CRM-system can be measured, these are:

- reduction of labor costs and increase in working capacity of employees;
- increased percentage of customer retention;
- reduction of operating costs associated with marketing campaigns and sales.

There are the following methods for determining the economic effect of the use (in this case – modernization) of CRM-system [184].

ROI calculation. This method can be used to estimate the payback period of the project. ROI is the ratio of the average increase in profit to investment, and the increase in profit obtained through the introduction of CRM-technologies. The ROI calculation formula is as follows:

$$\text{ROI} = (\text{P}_{\text{crm}} - \text{P}) / \text{Z} \times 100 \%, \quad (8.2)$$

where P_{crm} is the profit received by the enterprise during the implementation of CRM;

P is the profit received without the introduction of CRM;

Z is the project implementation costs.

The methodology according to which the expenditure part is estimated in money and the criterion of adequacy of expenses is the framework of the project budget. The revenue part is estimated by the following algorithm [119].

Prior to implementation, the project objectives are formed. Each goal is assigned a weighting factor depending on its importance to the management of the enterprise.

Upon completion of implementation, the result for each goal is evaluated in terms of "yes/no" (achieved / not achieved).

The success of the implementation is determined by the number of achieved goals and the degree of achievement.

Complex methods for calculating the effectiveness of implementation. Most of them use the ratio of the amount of improvement of the company's performance in monetary terms to the cost of implementation to calculate efficiency.

In this approach, the most difficult thing is to find a way to express the effectiveness in monetary terms such as increasing the percentage of customer retention, increasing the percentage of conversion of potential customers into real ones, etc.

Also the modern CRM systems help obtain some advantages:

report Editor is an analytical tool that allows you to interact with performance data in multidimensional tables and graphs. Using this tool allows the company's management to better understand the way forward, understand where to go to occupy a larger market share, etc.;

using the module, which allows you to centrally plan marketing campaigns, to do it more effectively, analyze the results, determine the profit from them;

constant contact with customers, improves the quality of services to strengthen competitive positions in the market.

When developing a communication strategy, it is necessary to take into account many additional factors that influence the organization's choice of communication tools and their relationship in the communication set, in particular, target market, market conditions, product life cycle, level of competition, financial constraints of the organization, industry specifics and more.

Using the proposed systematization of Internet marketing tools makes it possible to do business more efficiently on the Internet, i.e. reduce costs, conduct effective marketing research, automate sales and customer information processes, market analysis, increase the effectiveness of buyer-seller interaction.

The tourism sector is information-rich, so to ensure the quality of its management it is necessary to use modern information technology. The information technology system used in tourism consists of a computer reservation system, teleconferencing system, video systems, computers, management information systems, electronic airline information systems, electronic money transfer, telephone networks, mobile communications, etc. The use of modern information technologies increases the security and quality of tourist services.

The impact of information technology on tourism development is quite large, as it is related to the efficiency of each tour operator individually and the tourism business as a whole. This affects the competitiveness of the enterprise in the market. Therefore, today it is simply impossible to present the activities of a tourist enterprise without the use of the Internet. This network is used in almost all business processes within the tourism enterprise.

Thus, the promotion of their services via the Internet provides travel companies with a number of advantages over competitors. The main ones include improving the image of the company; raising the effectiveness of advertising activities; obtaining an additional channel for dissemination of information and selling a tourism product; increasing the awareness of potential customers about the company and its services; possibility of direct and feedback with clients in real time; simplification and reduction of time for such standard operations as booking, consulting, payment for services; obtaining technical capacity for more complete demonstration of services, saving employees' working time spent on providing standard information that can be obtained via the Internet, the ability to remotely serve potential customers from other cities or countries.

Conclusions

The digitalisation of economic relations has a significant impact on the tourism, hospitality and leisure sectors. However, this impact is ambiguous. On the one hand, the possibilities of differentiating the tourism product are greatly increased by involving the consumer in the process of the product creation through interactive means, expanding the list of tourism services, raising the level of quality, widening marketing channels. On the other hand, the conditions of the digital economy put forward new requirements for enterprises of the tourism, hospitality and leisure sector. They must adapt to rapid technological changes, integrate into the digital economy, offer a unique, inimitable, customer-oriented product in the face of increasing competition, integrating markets and expanding the ability of tourists to design tours on their own.

Thus, although the hospitality, tourism and leisure sector has significant potential as a factor of economic quick development, it is not a tool for solving all economic problems. In addition, it should be emphasized that the possibility of significant losses from tourism in countries in crises is much higher than in developed countries. However, developed countries have a diversified economy, and government investment programs are not fully focused on the development of tourism, as it could be in a case of developing countries.

One of the features of the development of modern tourism is the uneven distribution of international tourist flows in different regions and countries. At the same time, 20 – 30 % of the total number of people traveling abroad are mass or group tourists, and the other 70 – 80 % are individual tourists who mainly travel to neighboring countries.

In recent years, the development of mass tourism has been observed, which is the result of the influence of the following factors:

- price (decrease in air transport prices, increase in the number of charter flights, increase in the number of tourists who choose the bus as a mode of transport due to the low price);

- economic (opening of new economically profitable tourist destinations, increased competition between tour operators in the field of mass tourism);

ecological (overpopulation and overloading of the tourist infrastructure, caused by the concentration of tourists, leads to excessive use of natural resources, significant pollution of the environment, a violation of the ecological balance);

personal (more free time, higher social motivation for involvement).

However, for the successful development of the tourism industry, the state of the natural environment is decisive. Among the measures stimulating the rational use of natural resources and protection of the natural environment is the provision of tax incentives for tourist enterprises when switching to resource-saving technologies and the introduction of cleaning equipment. Also an effective way to solve the problem is the development of ecological tourism.

Summarizing the above mentioned, it should be stressed that business processes in the tourism and hospitality are the universal management and enterprise technology for business development and control. In general, all business processes of tourism organizations aim to achieve a dual objective: the production of value for consumers of tourism products and the maintenance of their own business activities, including optimization and development.

Under such circumstances, the use of evidence-based tools in tourism activities, taking into account the latest trends in the digitalisation of the tourism industry, is relevant. Tourism actors will be able to implement a balanced development strategy by applying the proposed approach to identify opportunities and threats, strengths and weaknesses in the development of the domestic tourism sector in the digital economy.

With the application of modern digital technologies, the tourism industry is gaining new opportunities for sustainable development. But at the same time, the requirements for tourism stakeholders to implement ICT are increasing. This reinforces the need to build certain skills of the staff and to create a modern infrastructure.

Based on the application of the cluster analysis procedure using the Statistica software product, the study found that there is relationship between tourism development and Industry 4.0 indicators. This relationship is similar for some countries, allowing them to be clustered within a panel sample. At the same time, there are differences between the groups identified during the

analysis. This leads to the conclusion that the relationship among the analyzed indicators is variable in each cluster. Further analysis using the Granger causality test can determine the direction of the relationship between the indicators and can be used to the tourism industry development in the context of Industry 4.0.

Every year the number of information systems and technologies in tourism and hospitality industry grows, which is explained by the significant demand. World-famous software programmes that were previously more often used in the entrepreneurial activities of service enterprises in the domestic market of information products are gradually losing popularity and are being replaced by domestic systems and technologies that can fully satisfy the demanding entrepreneur. The move to an online format has also had an impact on this business, thereby accelerating the emergence or development of new types of services.

The use of cloud technologies continues to be promising (almost 60 % of CRM already have cloud versions) with certain improvements in data storage security and the availability of appropriate mobile applications to facilitate the work of both enterprise employees and customers directly (as it is becoming customary to use mobile phones as a workplace). The availability of company's own channels (especially for travel businesses), blogs (whose popularity is growing rapidly) and social media pages (whose use makes it possible to reach different target audiences of consumers) should not be forgotten as well. Deep personalisation will play a considerable role while developing or improving information systems and technologies, which will be aimed at creation of individual tours, will be shaped for each client and will not be offered to other customers, will provide additional services and will take into account the guest's desire. That is, in order to be competitive in the market of tourism and hospitality services, companies should provide not only high-quality services, but also those that will stand out with their range of services, speed, uniqueness and innovation.

Thus, the main task of tourism development and, as a result, the use of CRM in Ukraine is the formation of a modern strategy for the promotion of a tourist product on the domestic and international markets.

The tourism sector is information-rich, so to ensure the quality of its management it is necessary to use modern information technology. The

information technology system used in tourism consists of a computer reservation system, teleconferencing system, video systems, computers, management information systems, electronic airline information systems, electronic money transfer, telephone networks, mobile communications, etc. The use of modern information technologies increases the security and quality of tourist services.

In the structure of tourism complexes f.i. there in a hotel may be one or more restaurants that can be independent enterprises or function as hotel subdivisions. In addition, it is much more advantageous for the hotel restaurants serve both the guests and the general public who may come in directly from the street.

In the context of a temporary crisis in the tourism sector due to the pandemic, new trends in doing business on the Internet have formed. Unfortunately, the marketing activities of tourism enterprises on the Internet are not always structured, systematic and consistent with the principles of strategic planning. Budget cuts do not allow small and medium-sized tourism businesses to use the costs of marketing communications in their promotion strategies.

Thus, the promotion of their services via the Internet provides travel companies with a number of advantages over competitors. The main ones include improving the image of the company. Using the proposed systematization of Internet marketing tools makes it possible to do business more efficiently on the Internet, i.e. reduce costs, conduct effective marketing research, automate sales and customer information processes, market analysis, increase the effectiveness of buyer-seller interaction.

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**ТУРИЗМ ТА ГОТЕЛЬНО-РЕСТОРАННИЙ БІЗНЕС
В УМОВАХ ЦИФРОВОЇ ЕКОНОМІКИ:
ПРОБЛЕМИ ТА ПЕРСПЕКТИВИ**

(англ. мовою)

Монографія

*За загальною редакцією
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Розглянуто питання перспектив розвитку індустрії туризму та гостинності в цифровій економіці, особливості та специфіку цифровізації бізнес-процесів, взаємозв'язок індексу конкурентоспроможності подорожей і туризму зі світовим рейтингом цифрової конкурентоспроможності, використання сучасних інформаційних систем і технологій, а також управління якістю, інтернет-маркетингу та реклами в туристичному та готельному бізнесі.

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