

Ministry of Education and Science of Ukraine
Black Sea Universities Network

ODESA NATIONAL UNIVERSITY OF TECHNOLOGY

International Competition of
Student Scientific Works

BLACK SEA SCIENCE 2022 PROCEEDINGS



ODESA, ONUT 2022

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BLACK SEA SCIENCE 2022

Proceedings

Odesa, ONUT 2022

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INTRODUCTION

International Competition of Student Scientific Works “Black Sea Science” has been held annually since 2018 at the initiative of Odesa National University of Technology (formerly Odesa National Academy of Food Technologies) with the support of the Ministry of Education and Science of Ukraine. It has been supported by Black Sea Universities Network (the Association of 110 higher education institutions from 12 countries of the Black Sea Region) since 2019, and by Iseki-FOOD Association (European Integrating Food Science and Engineering Knowledge into the Food Chain Association) since 2020.

The goal of the competition is to expand international relations and attract students to research activities. It is held in the following fields:

- Food science and technologies
- Economics and administration
- Information technologies, automation and robotics
- Power engineering and energy efficiency
- Ecology and environmental protection

The jury includes both Ukrainian and foreign scientists. In the 4 years that the competition has been held, the jury included scientists from universities of 24 countries: Angola, Azerbaijan, Benin, Bulgaria, China, Czech Republic, France, Georgia, Germany, Greece, Israel, Italy, Kazakhstan, Latvia, Lithuania, Moldova, Pakistan, Poland, Romania, Serbia, Slovakia, Switzerland, Turkey, USA.

At the same time, every year the geography has expanded and the number of foreign jury members has increased: from 46 jury members representing 25 universities from 12 countries in 2018, to 73 jury members of the 46 universities from 19 countries in 2022.

More than a thousand student research papers have been submitted to the competition from both Ukrainian and foreign institutions from 25 countries: China, Poland, Mexico, USA, France, Greece, Germany, Canada, Costa Rica, Brazil, India, Pakistan, Israel, Macedonia, Lithuania, Latvia, Slovakia, Romania, Kyrgyzstan, Kazakhstan, Bulgaria, Moldova, Georgia, Turkey, Serbia.

The interest of foreign students in the competition grew every year. In 2018, the students representing 15 institutions from 7 countries have submitted 33 works. In 2021 the number of submitted works increased to 73, authored by the students of 40 institutions from 18 countries.

The competition is held in two stages. In the first stage, student research papers are reviewed by members of the jury who are experts in the relevant fields. In the second stage of the competition, the winners of the first stage have the opportunity to present their work to a wide audience in person or online.

All participants of the competition and their scientific supervisors are awarded appropriate certificates, and the scientific works of the winners are included in the electronic proceedings of the competition. Every year the competition receives a large number of positive responses from Ukrainian and foreign colleagues with the desire to participate in the coming years.

2. ECONOMICS AND **ADMINISTRATION**

MARKETING COMPLEX DEVELOPMENT FOR THE PROJECT “WINE ROUTES OF UKRAINIAN BLACK SEA REGION” ON THE BASIS OF MARKETING RESEARCH

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Abstract. *The scientific paper reviews theoretical approaches to wine tourism marketing, identifies management and marketing problems of wine tourism development in Ukraine. The results of processing interviews with stakeholders are presented, macro- and microenvironment factors are analyzed, consumers of wine tours are segmented, and the motivation of visiting wineries is studied. Basic, competitive and functional (commodity, price, distribution, communication) strategies of the project of wine routes of the Black Sea region of Ukraine are proposed.*

Keywords: *wine tourism, wine routes, marketing complex, marketing research, stakeholders, structured interviews, hypotheses, target segment, consumer portrait, communication channels.*

I. INTRODUCTION

The relevance of the topic is due to the fact that today the wine tourism market in Ukraine is characterized by stable development and positive forecasts. Recently, local wines and wineries that produce them have become increasingly popular. People demand something special, limited, unusual and, necessarily, natural. Today, both the leaders of the wine industry and little-known wineries have begun to organize excursions to their own vineyards or production facilities. The first Routes of Wine and Taste have already been created in Bessarabia and Transcarpathia, and Kherson and Mykolaiv regions intend to create similar roads.

In 2020, the international project Sea of Wine was launched. This project involves the development and launch of a wine route that will pass through four countries: Ukraine, Georgia, Armenia and Greece. From the Ukrainian side, winemakers of the Black Sea region, namely Odessa, Mykolaiv, and Kherson regions, can take part in the project.

The purpose of the research is to substantiate management decisions on the formation of a marketing complex for the development of wine tourism in the Black Sea region based on marketing research.

II. LITERATURE ANALYSIS

One of the promising areas of development of the tourist services market is wine tourism – a thematic type of tourism associated with getting acquainted with the history, production technology and culture of consumption of wines in a particular region and tasting them directly from the manufacturer. [1; 4; 5]

Wine tourism is an important element of two branches of wine-making and tourism, a tool for reviving economic activity due to the influx of domestic and foreign tourists to wine-producing regions. For the tourism industry, wine and related attractions are an essential factor in the competitiveness of a tourist product, a motive

for special travel, an element of food, treatment and entertainment services. For wineries, wine tourism is one of the ways to promote a brand to ensure long-term consumer commitment. [1; 4]

Some aspects of the development of wine tourism in Ukraine are covered in the works of D. Basyuk [1], K. Badeshchenkova [2], T. Bozhuk [3], S. Ivanov [4], L. Gorshkova [5], O. Lyubitseva [6], V. Matveeva [7], S. Nezdoininova [8], A. Pergat [9]. Among foreign authors, the peculiarities of marketing in wine tourism are studied in the works of M. Hall, G. Johnson, James E. Wilson, K. Storchmann, [10-12] et al.

However, a systematic scientific study of the peculiarities of the influence of environmental factors on the development of wine tourism, as well as the behaviour of consumers of wine tours, has not been conducted in Ukraine today.

III. OBJECT, SUBJECT, AND METHODS OF RESEARCH

The object of research is the processes of forming a marketing complex for the project of wine roads of the Black Sea region and its justification by the results of Marketing Research.

The subject of the research is a set of theoretical, methodological and applied aspects of conducting marketing research in order to form functional strategies (commodity, price, distribution, communication) of the Wine Road project.

Research methods: PEST analysis, analysis of microenvironment factors, methods of qualitative and quantitative Marketing Research (survey, structured interview, text content analysis), 4P marketing package (Product, Price, Place, Promotion).

IV. RESULTS

The driver of the development of European wine tourism is the creation of regional wine roads. Almost all wine countries have such "wine roads" leading from Castle to Castle, from winery to winery. In Italy, there are special routes with the names "Strada del Chianti", "Strada del Vino", pleasant for wine lovers. [13] a total of 173 "wine routes" and 3,900 wineries are located in Italy. [14] Georgia's most famous wine route starts from Tbilisi and passes through Msheta in Borjomi. In Tbilisi, tourists visit the sparkling wine factory "Bagrationi 1882", where they get acquainted with the history of the factory, a tasting room that serves 12 types of sparkling wine, enjoy pita bread, fruit and cheese. The German wine route is one of the most popular tourist routes in the Palatinate region. It consists of several long rural roads with a total length of 85 kilometres, winding along forests and grape Hills, ruins of castles and cozy German villages. [15] Alsace wine Road is the most famous Wine Road in France, founded in 1953. When traveling along it, it is worth visiting the towns of Colmar, Riqueur, Riboville and Eguisheim – they are considered the most authentic and beautiful, and Riqueur and Eguisheim are generally included in the lists of the most beautiful villages in France (Les Plus Beaux Villages de France).

Compared to Europe, wine tourism in Ukraine has appeared relatively recently. The conditions and results of its development are the creation in 2019 of the project and public organization "Road of wine and taste of Ukrainian Bessarabia" and in 2020-2021 of the "Road of wine and taste" of Transcarpathia, Kherson region, Mykolaiv region, Carpathian region and Kryvyi Rih region. The main goal of these organizations is to ensure the preservation of the historical, cultural, ethnographic and

enogastronomic environment of certain regions of Ukraine, their popularization, support for local producers, introduction of European quality standards for craft products, as well as increase the tourist and investment attractiveness of the region.

The management problem of wine tourism in Ukraine is insufficiently high rates of development in comparison with European countries.

Based on the management problem marketing problems were identified:

- insufficient certainty of macro-environmental factors affecting the development of wine tourism in Ukraine, including in the Black Sea region;
- insufficient certainty of the behaviour of consumers of wine tours;
- insufficient certainty of motivation of Ukrainian wineries to become participants in wine roads.

4.1 Marketing research

Marketing research is the systematic collection, recording and analysis of data on problems related to the marketing of goods and services.

Table 1. Types of development research of wine tourism

Types of research	Secondary research	Primary research
Macro- and micro-environment factors	Reviews of the wine tourism market in Ukraine	Interviews with stakeholders at Odessa Wine Week
Wineries	Monitoring of wineries websites	Survey of TOP managers of wineries on Odessa Wine Week
Consumers	Monitoring of research on segmentation and motivation of wine tourists in Europe	Online survey (Google form of the questionnaire) of tourists of the Black Sea region on Facebook

Qualitative and quantitative marketing research was conducted to solve the identified problems (Table 1):

1) qualitative research - interviewing industry stakeholders (stakeholders are those who are actively involved in a project or business, those whose interests may be affected by the success or failure of the project, as well as those who, by virtue of their position or authority, can influence the project themselves);

2) quantitative research:

- based on the processing of the answers to the first question of the interview, environmental factors and opportunities for market participants were identified; factors were grouped into groups: political, legal, economic, socio-cultural and technological; an expert assessment of the influence of factors on the development of wine tourism was carried out (PEST analysis);

- based on the processing of the answers to the following three interview questions, hypotheses of segmentation of wine tour consumers were formed in accordance with the characteristics of behavior; an online questionnaire was conducted to confirm the hypotheses for the first two segments

- a survey (questionnaire) of TOP-managers of wineries who took part in the round-robin tasting at ODESSA WINE WEEK was conducted (19.05.2021).

The list of stakeholders of Ukrainian wine tourism, interviews with whom were conducted during Odessa Wine Week, namely on May 21, 2021, during the conference "Enogastronomical tourism - a driver for the development of tourist destinations":

1. Kirill Dombrovsky, First Deputy Chairman of the government agency for tourism development of Ukraine
2. Irina Dyachenkova, director of the publishing house «Drinks+»
3. Alexander Grabovsky, president of the Odessa Association of tour operators and agencies
4. Maria Yukhnovets, president of the Association of entry tour operators of Ukraine, and Marina Antonyuk, member of the board of the Association of entry tour operators of Ukraine
5. Yevgenia Nikolaichuk, co-founder of «Like a Local's Wine Bar», teacher of the Sommelier School, WSET4
6. Sergey Morenets, founder of the club of wine connoisseurs «Vintage» (Odessa)
7. Albina Manzul, technologist at the family winery Manzul Winehouse
8. Kristina Beshleul, communications specialist of The Sea Of Wine Project, PR Manager of the wine company «Tairovo» LLC (ТМ «Виноробна Станція» («Wine Station»))
9. Tatiana Dymnich, travel agency «Я вам розкажу за всю Одесу» («I will tell you for the whole of Odessa»)
10. Roman Kozlovsky, travel agency «Давай поїдемо» («Let's go») [16]

The experts were asked to answer a number of questions:

- 1) From your point of view, in the next few years, which 3-5 factors will most strongly influence the development of wine tourism in Ukraine?
- 2) How can you describe the portrait of a Ukrainian wine tourist: who is he, what does he do, what interests him?
- 3) Where can I find him to communicate with him?
- 4) How can he be lured to the Black Sea region?

The results of grouping macro factors based on processing stakeholders' responses to the first question are presented in Appendix A. The results of processing the portrait response and communication with wine tourists are presented in Appendix B.

4.2 PEST analysis of wine tourism development in Ukraine.

Environmental factors and opportunities for wine tourism market participants were grouped according to the classification of PEST analysis factors (Table.2).

The analysis showed that political, legal and economic factors will have the strongest impact on the development of wine tourism in the coming years.

Among the political factors, most experts highlighted the need for state support for the development of wineries and wine roads, and also emphasized the risks associated with quarantine restrictions at the legislative level of social contacts, which affects the decline in demand for tourist services in general, including a decrease in income from wine tours, tastings, etc.

Table 2. Macro-environment factors determined on the basis of the conducted interviewing of experts in the field of wine tourism and wine.

Factor	Opportunities
Political and legal factors	
Government support for the development of wineries and wine routes	Lobbying for bills to reduce tax pressure on participants in wine routes
	Positioning of Ukraine at the government level as a tourist and wine country, promoting its regions as attractive tourist destinations
Legal restriction of social contacts, movement of tourists due to COVID-19	Domestic tourism development due to lockdown
Economic factors	
Stagnation of the country's economy as a result of the pandemic effect	WT as an important source of sales of its products for small wineries
	Development of thematic ("niche") tourism, including business, medical, and wine tourism
Growing popularity of various types of local gastro and enotourism	Cooperation (collaboration) with craft producers of various products
	Maintaining interest in everything local, including local wines that can only be tasted at this winery
Development of regional infrastructure, comfort of movement, and service	Creating a set of additional services at wineries for the relevant consumer segments (hotel, restaurant, etc)
Development of craft winemaking	The emergence of new craft wineries with an good attractive location, reasonable price of tasting and wines
Attracting international investment in the development of wine tourism	Participation in international wine tourism development projects
	Promoting the development of new forms of community in enogastronomy tourism (International Wine travel awards)
Sociocultural factors	
Popularization of Ukrainian wine	Changing preferences of Ukrainian consumers in the direction of domestic honest, high-quality wine
Development of wine consumption culture	Attitude to wine as a food product (recognition at the legislative level)
	Informing about the usefulness of dry wines
Development and support of Ukrainian cuisine and its combination with local wines	When developing wine tastings, take into account the combination with local gastronomy, specialties
Technological factors	
Introduction of technological innovations in craft winemaking	Growth of the quality level and expansion of the range of wine from craft producers
Introduction of online methods in training, communication, tourism, etc.	Growing popularity of online wine tastings accompanied by professional sommeliers

The results of the assessment of political, legal, economic, socio-cultural, technological factors are summarized in Table 3.

Table 3. Assessment of the impact of macro-environment factors on the development of wine tourism.

Factors	Weighted Average
1. Political and legal factors	1,215
Government support for the development of wineries and wine routes	0,675
Legal restriction of social contacts, movement of tourists due to COVID-19	0,360
Unstable political situation in the country	0,180
2. Economic factors	1,180
Stagnation of the country's economy as a result of the pandemic effect	0,400
Growing popularity of various types of local gastro and enotourism	0,210
Development of regional infrastructure, comfort of movement, and service	0,240
Development of craft winemaking	0,270
Attracting international investment in the development of wine tourism	0,060
3. Sociocultural factors	0,860
Popularization of Ukrainian wine	0,315
Development of wine consumption culture	0,320
Development and support of Ukrainian cuisine and its combination with local wines	0,225
4. Technological factors	0,760
Introduction of technological innovations in craft winemaking	0,320
Introduction of online methods in training, communication, tourism, etc.	0,320
Development of online communications	0,120
Total	4,015

Almost all experts paid attention to economic factors, but at the same time everyone spoke about the sore point. Therefore, this group of factors turned out to be the most numerous. Thus, Kirill Dombrovsky, First Deputy Chairman of the State Agency for Tourism Development of Ukraine, highlighted the impact of the stagnation of the country's economy due to the pandemic effect, and representatives of tour operators paid more attention to the development of infrastructure, service, comfort of movement.

Among the socio-cultural factors, the development of a culture of wine consumption and the popularization of Ukrainian wine were singled out. In addition, many talked about the importance of combining wine and local specialties, and at the enogastronomical conference one of the panels was devoted to Odessa cuisine as a tourist magnet of the region.

Among the technological factors, the introduction of technological innovations in viticulture and winemaking to improve the quality of wine and the development of IT technologies (web applications, websites) are highlighted.

Hence, the total weighted estimate showing the degree of readiness to respond to environmental factors was 4,015. In this case, the assessment indicates that the response to macro-environment factors is at an average level.

4.3 Analysis of wineries

In total, a survey was conducted with representatives of 16 wineries, including by geographical location by region:

Bessarabia (4): LLC «PTC Shabo», NSC «Institute of Viticulture and Winemaking named after V.E. Tairov», Frumushika-Nova, «V. Petrov» winery

Black Sea (8): LLC "Tairovo" (TM « Vinorobna Stanzia»), JSC Koblevo», The winery of Prince P. N. Trubetskoy, TM « Shustov», «Beykush winery», 46 Parallele Wine Group, FALCON CRAFT WINE, «WINECRAFT» winery

Transcarpathia (2): «Chateau Chizay» wine company, «STAKHOVSKY WINES» craft winery

Podolia (1): PE "GIGINEISHVILI WINE HOUSE"

Center Of Ukraine (1): Biologist craft winery

The response received was displayed as diagrams in Fig. 1-4.

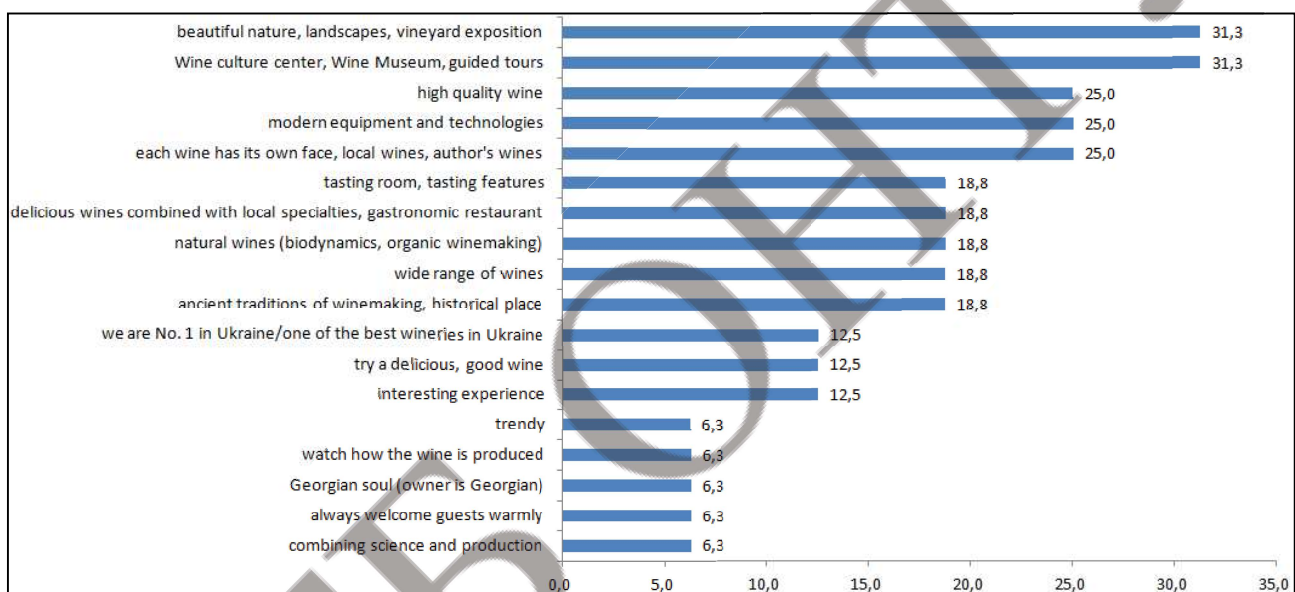


Fig. 1. Reasons to visit a winery.

From the point of view of wineries, the main two reasons for wine tourists to visit them are specially created museums, cultural centers with excursions and magnificent landscapes and picturesque vineyards around (31% of respondents chose both answers). Also, in the top 5 reasons to visit the winery were: the opportunity to taste unique local or author's wines; high quality wine and the use of modern equipment (each of the answers was chosen by 25% of wineries).

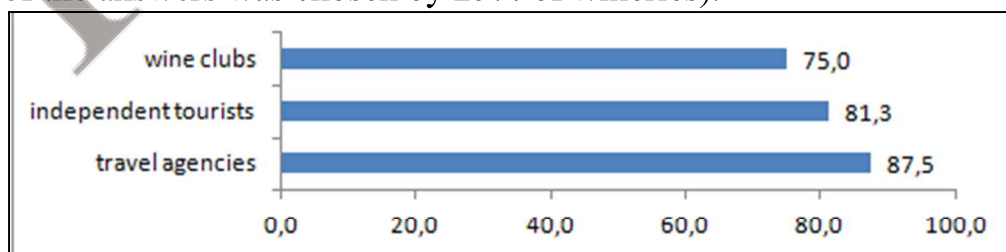


Fig. 2. Who organizes a trip to the winery? (% of respondents)

Most often, trips to wineries are organized by travel agencies.



Fig. 3. Information Resources of existing wineries.

Facebook- Instagram (100%), and almost all of them have their own website and page (86%). Ordering via the Internet is a promising area for selling wine products, which is why 81.3% of wineries sell wine on their own website; 62.5% of wineries offer their products on the Rozetka.

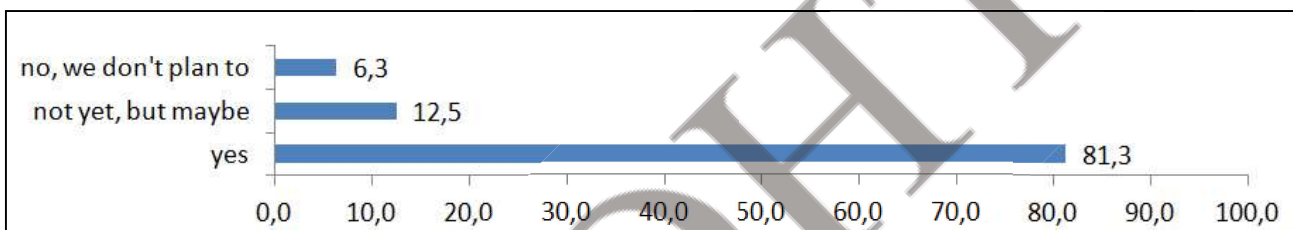


Fig. 4. Does the winery plan to become part of the wine roads of Ukraine?

Most wineries see prospects for development in the field of enogastronomical tourism, that is why 81.3% of the respondents plan to join the wine roads.

To the question "how can the income for the participants of the wine routes grow?" most of the surveyed wineries believe that the profit can increase in the range of 25-30% for the participants of the wine roads.

4.4 Analysis of consumers of wine tourism services in the Black Sea region

Analysis of the stakeholders' answers (second-fourth questions) allowed us to identify the following four groups of wine tourists:

1) Advanced wine connoisseurs, who are mostly united in wine clubs. They have experience in tasting both domestic and foreign wine. They have experience in tasting at wineries.

2) Ukrainian tourists who are interested in everything new. They have travel experience, primarily domestic tourism.

3) People whose professional activities and the purpose of their trip to wineries are directly related to wine and tourism.

4) Foreign tourists

Hypotheses about the segment №1:

- Mainly women aged 40-60 years, employees engaged mainly in intellectual work
- A consumer with an income level of "average" and "above average", has free time to travel.

- Have an interest in wine consumption, are interested in new knowledge about wine, in new impressions.
- Traveling with friends, close acquaintances or with family.
- They attend wine festivals. Most often, they are members of wine clubs.

Hypotheses about the segment №2:

- A consumer with an above-average income, aged 25-45 years.
- A person who learns about the world and himself through travel has quite a lot of experience in traveling.
- A working person who is interested in new experiences, emotions and knowledge.
- Young audience, leads a healthy lifestyle; prefers wine rather than stronger alcohol.
- They can travel with a loved one, family, friends, employees.
- Their interests are complex: new places, beautiful landscapes, historical sights, local cuisine combined with wine.
- They can attend national and local festivals on any topic of interest: music, hand-made, enogastronomy, etc.

To clarify the motivation of tourists traveling in our region, an online survey was conducted among representatives of the segments №№1 и 2.

Overall, out of 58 respondents, 72.4% are women and 27.6% are men, mostly between the ages of 36 and 45 (41%).

The results of the responses are presented below.

Travel organizer:

- independent - 75.9%
- travel agency - 24.1%
- wine club - 10.3%
- travel club - 6.9%

How often do people come to the Black Sea region of Ukraine:

- 1-2 times a year - 58.6%
- 3-4 trips per year - 27.6%

Sources of information about tourist destinations of the Black Sea region of Ukraine:

- friend's offers - 41.4%
- advertising in FB, Instagram - 31.0%
- sites about trips and tourism - 20.7%
- announcements on the pages of the tourist/wine club - 20.7%

Motivation for a weekend trip to the Black Sea region (maximum 5 points)

- Avoid everyday life, new experiences - 4.41
- Discover a new city and culture - 4.17
- Relax by the sea - 3.66

Reasons for choosing a destination (maximum 5 points)

- Beautiful nature, landscapes - 4.59
- Tour price (travel expenses) - 3.90
- Local food and wine - 3.86

Wine: habits (maximum 5 points)

- I am interested in wine and related activities - 3.28
- Wine-related activities are reason enough to travel - 2.97
- I often attend wine tastings - 2.93

Results of answers to the question "Acceptable expenses for 1 day of travel that are interesting to you in this program": the majority of potential tourists (27.6%) are guided by average expenses from 700-1400 UAH, another 24% consider pleasant expenses for a day up to 700 UAH. 10.3% are ready to spend more, namely 1401-2000. Also, 6.9% of consumers expect an elite level of services, more than 3000 UAH.

4.5 Analysis of microenvironment factors is given in Table 4.

Among the factors of the microenvironment, the most influential are contact audiences and consumers.

Table 4. Risk assessment of the microenvironment of the Black Sea Wine Roads Project of Ukraine

Factors	Weighted Average
1. Intermediaries	0,88
• Development of rural tourism	0,52
• Pricing of tourist services	0,36
2. Contact audiences	1,17
• Informing about local wines of a certain area	0,48
• Development of wine clusters	0,30
• Attitude of local authorities and the population to the project	0,39
3. Substitute goods	0,36
• Increasing domestic imports of European wine products in supermarkets and wine boutiques	0,36
4. Competitors	0,44
• The popularity of wine roads in Transcarpathia and European countries	0,44
5. Consumers	0,91
• Growing demand for domestic tourism	0,55
• Consumer interest in products with a geographical indication	0,36
In general	3,76

4.6 SWOT analysis

The main strengths of the project are the presence of well-known wineries with quality products and the success of the pilot project "Roads of wine and Taste of Bessarabia".

Among the weaknesses are the low level of awareness of some project participants and the limited financial resources of project participants.

The main opportunity is the growing interest in the national local flavor on the part of Ukrainians and foreigners, the support of the project participants from the state.

The main threats of the project are the introduction of quarantine and the prohibition of tourist activities, as well as low consumer awareness.

Table 5. SWOT analysis of the wine roads project

Internal factors (strengths and weaknesses) External factors (opportunities and threats)	Strengths (S) 1. The presence of well-known wineries with quality products and interesting storytelling 2. Success of the pilot project "Wine and Taste Roads of Bessarabia" 3. Complexity of acquaintance with local sights 4. The beauty of the area, the photogenic nature of the objects visited	Weaknesses (W) 1. Inaccessibility of the region for foreign tourists. 2. Seasonality of the attractiveness of visiting wineries 3. Low level of service quality of certain objects of the tourist sphere 4. Heterogeneity in the level of development of wineries 5. Low level of awareness about some project participants 6. Limited financial resources of project participants
Opportunities (O) 1. The growing popularity of rural (green) tourism 2. Growing interest in the national local color of Ukrainians and foreigners 3. The trend of awareness of wine products in the media 4. Awareness of the importance of partnership activities within the wine cluster as a condition for accelerating development. 5. Increasing the role of local self-government in attracting investment in the development of small settlements 6. Support from the EU in Ukraine, attracting the attention of foreign tourists.	SxO 1. Formation of tours to wine and other trendy agricultural locations 2. Development of PR-programs to acquaint the target audience with the project 3. Complexity of media support 4. Organization of open-air tasting meetings in the traditional style for the South of Ukraine.	WxO 1. Participation in EU grants 2. Development of an event program for project participants during the year 3. Organization of seminars and conferences 4. Improving cooperation between individual producers with government officials.
Threats (T) 1. Introduction of quarantine restrictions, as well as a ban on tourism 2. Decrease in demand due to rising prices 3. Negative feedback from social and media people 4. The growing popularity of relatively cheap European wines. 5. Low consumer awareness of wineries.	SxT 1. Development of advertising campaigns on social networks 2. Development of a program for working with bloggers 3. Involvement of photographers to demonstrate the beauty of the area 4. Formation of value proposals for certain segments of tourists	WxT 1. Development of marketing legends for little-known project participants 2. Development of online tours, teasers for the formation of interest among consumers (tourists) 3. Conducting marketing research to identify promising target segments

4.7 Complex marketing of the wine roads project

General strategy

The project development strategy was chosen as the general strategy for this project.

Development strategy is a long-term qualitatively defined direction of development of the company concerning the sphere of activity of firm, means and forms of its activity, system of relations within the organization, and also its position in environment leading the organization to the purposes.

Competitive strategy

The strategy of differentiation was chosen as a competitive strategy. The essence of the differentiation strategy is to improve and personalize the product, which aims to improve its attractiveness to the consumer. The main task of the chosen competitive strategy is to provide each segment of consumers with personalized services.

Table 6. Strategy 4P of the wine roads project

4P	Type of strategy	A set of measures
1. Product	Differentiation strategy The strategy of "market novelty"	It is necessary to develop quality wine tourism products for each consumer segment; Develop a Development Program / Wine Tourism Development Roadmap; Develop a list of wine tourism entities; Develop marketing of wine tourism products. In perspective: Create a wine tourism infrastructure (construction along the routes of a network of guest houses at wineries, restaurants, cafes) Create a museum of Ukrainian wine with a wine shop.
2. Price	Flexible pricing strategy	Wine tourism is an additional promotion for winemaking. According to experts, sales with the active development of wine tourism will increase the turnover of winemakers by 30%.
3. Place	Intensive distribution strategy	Establishing links and partnerships with various tour agencies and operators. Interaction with contact audiences. Website development.
4. Promotion	Pull Strategy	Develop your own website in several languages. Development and publication of printed products (booklets, guides, tourist maps, catalogs, etc .; Active participation in international tourism exhibitions and fairs; Advertising in the media of Ukraine and CIS and foreign countries; Organization and holding of info-tours for representatives of mass media and tourist organizations; Contextual advertising; Targeted advertising on Instagram, Facebook.

V. CONCLUSIONS

Wine tourism is a specialized type of tourism that aims to taste, consume, and buy wine directly from the producer. The study showed that among modern tourists, the share of those who are looking for an opportunity to add more celebration and pleasure to their holiday in terms of culture and discover new gastronomic sensations combined with Fine Wines is growing.

The management problem of wine tourism in Ukraine is the insufficiently high rate of its development. The driver of the development of wine tourism in the region can be the creation of a map of tourist routes between wineries, historical monuments, interesting places, hotels and restaurants - the so-called "Wine routes" or "Wine and taste routes".

To solve certain management and marketing problems, primary and secondary research of the market, wineries, and wine tourists was conducted.

PEST analysis has shown that political and economic factors have the greatest impact on the development of wine tourism. State support for the development of wineries and wine roads should help reduce tax pressure on participants of wine roads, and most importantly, promote the positioning of Ukraine at the state level as a tourist and wine-producing country, promote its regions (including the Black Sea region) as attractive tourist destinations. It is also more important to overcome the stagnation of the country's economy due to the impact of the pandemic.

The success of spreading wine roads depends on the activity of their participants, especially wineries. Most wineries see prospects for development in the field of enogastronomy tourism, which is why 81.3% of respondents plan to become part of wine roads. The projected percentage of revenue growth from participating in the Wine Road project is approximately 25-30%. Their representatives named specially created museums, cultural centers with excursions, as well as beautiful landscapes and picturesque vineyards around them as the main motives for wine tourists to visit wineries. Among consumers of wine tours, you should pay attention to communication with such promising segments:

1) advanced "wine connoisseurs", which are mostly united in wine clubs. They have experience in tasting both domestic and foreign wines. They have experience in tasting at wineries. Active users of social networks. They can become a source of "word of mouth", positive reviews and recommendations. Communication channels: offline and online route presentations in wine clubs, local wine tastings accompanied by sommeliers in City wine boutiques, regional wine and gastronomy festivals.

2) "travellers" – Ukrainian tourists who are interested in everything new. They have travel experience primarily in domestic tourism. Communication channels: recommendations of friends, reviews in social networks, offers of travel agencies, information about wine routes on specialized sites of wine roads; presentations of wine routes at city festivals.

Based on the conducted research and SWOT analysis, *the 4P marketing mix complex* was developed, and a different strategy was chosen for each of the elements.

Product - a strategy of market novelty. For this strategy, you must:

- develop high-quality wine travel products for each consumer segment;
- develop a development program/roadmap for wine routes;

- develop a list of wine tourism entities;
- develop value propositions of wine products based on the needs of certain segments of consumers.

Pricing strategy – a flexible pricing strategy. The site with a map of wine roads should have a calculator for calculating the total cost of a wine tour, depending on the chosen route and the complex of basic and additional services.

An intensive **distribution strategy** has been selected for distribution channels. It is necessary to establish contacts and partnerships with various travel agencies and operators. Creating a wine roads website that can be not only informative, but also a means of online tour sales in the future.

The **promotion strategy** in this project is a Pull Strategy. The strategy assumes that the manufacturer uses communication tools to directly influence the consumer through mass distribution channels.

The website may contain information not only from winemakers and restaurants, but also from liquor stores, other tourist activities in the region related or unrelated to wine, such as local cheese factories; nature reserves or historical sites. In general, all tourist information about the region should be provided, including local hotels or rural lodges for the night (proven, with good service).

You need to create a section of the website: activities (experiences), where you can collect all travel offers. For example, red wine tasting in an old mansion; picnic in the vineyards; blind wine tasting; wine and local gastronomy. In general, everything that you can experience, live and get impressions there! And remember that wine roads aren't just about wine!

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Table A. 1 - Macroevironment factors determined on the basis of an interview conducted by experts in the field of wine tourism and wine.

Political and legal factors			
Factor		Opportunities	
State support for the development of wineries and wine roads	Kirill Dombrovsky Irina Dyachenkova Sergey Morinets Tatiana Dymnich	Lobbying for draft laws to reduce preferential pressure on participants of guilty roads	
		Positioning Ukraine at the state level as a tourist and wine-growing country, promoting its regions as attractive tourist destinations	Kirill Dombrovsky Irina Dyachenkova Maria Yukhnovets and Marina Antonyuk
Legal restriction of social contacts, movement of tourists due to COVID-19 (closed borders, vaccination additional documents for entry to another country)	Kirill Dombrovsky Sergey Morinets Tatiana Dymnich	Domestic tourism development due to lockdown	Yevgenia Nikolaichuk
Economic factors			
Factor		Opportunities	
Stagnation of the country's economy as a result of the pandemic effect	Kirill Dombrovsky	Wine tourism as an important source of sales of its products for small wineries	Albina Manzul
		Development of thematic ("niche") tourism, including business, medical, and wine tourism	Yevgenia Nikolaichuk
Growing popularity of various types of local gastro and enotourism	Odessa Wine Week	Cooperation (collaboration) with craft producers of various products	Albina Manzul
		Maintaining interest in everything local, including local wines that can only be tasted at this winery	Albina Manzul
Development of regional infrastructure, comfort of movement, and service	Alexander Grabovsky Maria Yukhnovets and Marina Antonyuk Sergey Morinets Kristina Beshleul	Creating a set of additional services at wineries for the relevant consumer segments (hotel, restaurant, etc.)	

Continuation of the table. A. 1

Development of craft winemaking	Alexander Grabovsky	The emergence of new craft wineries with an attractive location, good location, reasonable price of tasting and wines	Roman Kozlovsky
Attracting international investment in the development of wine tourism	Kristina Beshleul	Participation in international wine tourism development projects, such as "Sea of Wine"	Kristina Beshleul
		Promotion of new forms of community in gastronomic tourism (International Wine travel awards)	Irina Dianchenkova
Sociocultural factors			
Factors		Opportunities	
Popularization of Ukrainian wine	Maria Yukhnovets and Marina Antonyuk	Changing preferences of Ukrainian consumers in the direction of domestic honest, high-quality wine	Alexander Grabovsky
Development of wine consumption culture	Yevgenia Nikolaichuk Tatiana Dymnich	Attitude to wine as a food product (recognition at the legislative level)	Odessa Wine Week
		Informing about the usefulness of dry wines	Yevgenia Nikolaichuk
Development and support of Ukrainian cuisine and its combination with local wines	Odessa Wine Week	When developing wine tastings, take into account the combination with local gastronomy, specialties	Tatiana Dymnich
Technological factors			
Factors		Opportunities	
Introduction of technological innovations in craft winemaking	Sergey Morinets	Growth of the quality level and expansion of the range of wine from craft producers	Sergey Morinets Kristina Beshleul
Introduction of online methods in training, communication, tourism, etc.	Odessa Wine Week	Growing popularity of online wine tastings accompanied by professional sommeliers	Odessa Wine Week

Table B.1 – Results of a survey of experts on the portrait of a wine tourist

1	Characteristics of a wine tourist	Full name of the expert
1.1	This is any person who gets to know this world and gets to know himself in this world, reveals new facets, learns something new, travels, acquires experience, impressions	Kirill Dombrovsky
1.2	These are people who at least has a job. And people who are basically interested in life, new directions, maybe new attractions, new knowledge, strive to get them directly from the sources of this knowledge and like to form their own opinion about a particular subject.	Irina Dianchenkova
1.3	Oddly enough, women respond to such trips with great enthusiasm. Men prefer to drink in men's companies and without formalizing the situation. And as a woman, she would always like to receive, in addition to the product itself, also information. To get in the mood for new knowledge and pleasure, it is more pronounced in the female audience. Although it can not be said that men are somehow indifferent, but women are more emotionally perceived and naturally in the group they prevail today.	Alexander Grabovsky
1.4	Age from 35 years, on average. They are a kind of hedonists who appreciate the pleasure of wine and food. By middle age, such a certain selectivity is already being formed. These are people with an above-average budget. These are definitely not budget tourists. Because it doesn't make much sense to go on a food tour and save on everything and not try anything. You can then go to Silpo, buy a bottle there and finish your gastronomic tours. Interests can be diverse in terms of professions. These are mostly people of creative professions, rather than people of some engineering professions. Plus, these are people who need to popularize Ukrainian.	Marina Antonyuk
1.5	If we talk in general about the portrait of such a wine tourist, you can call it foody. I would not separate those who love wine tours from gastronomic ones, because wine is a whole culture and is also closely related to food. These are definitely aesthetes who enjoy absolutely every component. Wine tour, gastronomic tour in general it is always very beautiful, it is always very aesthetically pleasing it is always very full. Second, yes, absolutely, these are people with a fairly high income, because they basically belong to the category of significantly average +. These people are not banal. That is, if a person wants to see Chile or Ukraine... or any other country where there is winemaking, that is, he consciously wants to fly there only because there is winemaking, that is, this indicates a non-banal view of travel and his high interest in wine topics. And these are definitely people who you know such people in life as, do you speak English? "No rush" is people who live by the principle of "no rush" to enjoy absolutely every moment during their lifetime	Maria Yukhnovets
1.6	I would distinguish two categories. The first category is professionals or people related to this topic in one way or another. They go to wineries purposeful the second category of people is looking for something interesting, but they are not quite in the wine topic. They go because one of their friends organized it, or it's some kind of big corporate trip. Now it is also popular among corporate trips.	Yevgenia Nikolaichuk

	Therefore, the average age is in any case 25-40. Maybe 45. This is definitely the average plus segment in terms of money. This person is so quite open. And in the past, most often, he already has a good experience of traveling as such. Well, he is also interested in gastronomy, of course.	
1.7	These are mostly women aged 40-50 years. Because if men go, it's only for the company. Basically interested in tourism, not only wine, has time to travel. In other words, these are most likely people who are freer in time. Some may be freelancers who are not burdened with worries. They are also interested in wines. This is how the connection is: interest - wine, interest - tourism, interest in gastronomy	Sergey Morenets
1.8	Even 5-7 years ago, probably there were people starting from the age of 30+, but now it is still changing, because I see from my personal experience that of course the majority, probably 70% of people are 30+, but still there is already a younger generation, which ... what attracts, first of all, it is basically an interest in life, that's all interesting to learn. It's not interesting, it's boring to live here, as if it's just monotonous to do your work there, and so on. This is the first point. The second is that wine is still inextricably linked with a healthy lifestyle and basically this whole story, if, for example, earlier they really consumed more strong alcohol, now everything is getting closer to drinking more wine and therefore the younger generation, it also strives to drink this particular drink. Well, in general, let's say I can say that about myself, I have mostly families who lead, try to lead a healthy lifestyle, who like to travel, who basically likes to live interestingly, as a rule, these are people with well, what with higher education is self-evident, but basically, they are quite educated and have seen a lot in life, here.	Albina Manzul
1.9	Women 40-60 years old, employees, with higher education, intellectual work (teachers, doctors...)	Roman Kozlovsky
2	Where to find a wine tourist	Full name of the expert
2.1	Through mass media, digital, and communication. It is necessary to form a Ukrainian culture of traveling in their own country, this stitches Ukraine together. Because when a person from one region goes to another region, learns traditions, through cuisine, through wine, through communication, through culture, through conversation, through literature, whatever, then returns to the place of his permanent residence and extrapolates this experience to his friends, acquaintances, relatives – this unites us, it stitches the country together, and this is the main thing.	Kirill Dombrovsky
2.2	International expohabs are enogastronomical, primarily wine. These are global exhibitions about wine, such as in Germany Prowine, in London LondonVineFest, in France VineParis or VineexpoParis, in Spain Alimentaria and in Moldova and Georgia these are Wine Days and in Ukraine these are WineISpirits Ukraine - exhibitions that take place in Kiev. The audience of visitors and exhibitors is 100% the same as the audience of wine tourists. Because people who are very active, they are interested in wine, they already understand something about wine and they like to travel.	Irina Dianchenkova

2.3	You need people to know what you do, to trust you, but these are not simple things at all. This is a matter of time, a matter of constant work, a matter of correctly set information flows. The organization of wine festivals, such as in Bolgrad, Tarutino, will inform tourists	Alexander Grabovsky
2.4	We need to hold as many local festivals as possible. This has always been a very good mechanism to attract attention, basically, some seasonal wine-making moments: grape harvesting and so on.	Maria Yukhnovets
2.5	People who go to restaurants, people who go to tastings. Or today, corporate tourism is also looking for interesting locations.	Yevgenia Nikolaichuk
2.6	Promotion through travel agencies, through international travel agencies	Sergey Morenets
2.7	Themed wine communities (clubs). Tasting sites (festivals...)	Roman Kozlovsky
3	What is interesting about the Black Sea region for a wine tourist	Full name of the expert
3.1	Sea, air, sun, cuisine, wine – that's why it's interesting. Culture, good people...	Kirill Dombrovsky
3.2	For international wine tourists, Ukrainian local wine is exotic.	Irina Dianchenkova
3.3	The quality of the product and harmoniously selected tasting pairs - with aged cheeses with high-quality brynza, with meat specialties. If I were still interested, I would think that Odessa is always distinguished by high-quality fish. It is not yet so densely present in wine tastings.	Alexander Grabovsky
3.4	In order for a person to come to a tourist site, they were offered not only a set of wines of some interesting nature, but also a gastronomic combination. Yes, some kind of lunch can be local cuisine Offer a 3-4-day tour, which would be more profitable to go to than to Turkey	Sergey Morenets
3.5	The theme of a healthy lifestyle combined with gastronomic tourism. Just wine is quite difficult to lure a person, that is, you need to create a complex for him: there is food, and wine, and some beautiful locations When a family arrives who also needs to lure a child, many wineries produce grape juice, that is, to make it interesting and good not only for adults	Albina Manzul

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