



Information and communication technologies in the promotion of Russian wines

Las tecnologías de la información y la comunicación en la promoción de los vinos rusos

Vladimir Kiselev^{1,*}, Tatyana Kiseleva², Alla Petropavlovskaya¹, Anna Fedorova¹, Larisa Plyushcheva¹, Anna Gorokhova³

¹ Plekhanov Russian University of Economics. Moscow, Russian Federation.

² Kemerovo State University. Kemerovo, Russian Federation.

³ Moscow Polytechnic University. Moscow, Russian Federation.

*Corresponding author E-mail: gorokhovaa.e@mail.ru

(recibido/received: 12-diciembre-2021; aceptado/accepted: 22-febrero-2022)

ABSTRACT

Wine and tourism are considered interrelated factors of regional winemaking and viticulture. Currently, due to the large supply of imported wines in the Russian retail trade, traditional Crimean wines have lost mass demand for the national consumer. The *study object* of the present article is the process of uncovering unique cultural and historical context through a game format using modern information technologies, namely, virtual reality and augmented reality. The *study subject* of the study is a set of participants in the Crimean viticulture and winemaking, namely, winegrowers, winemakers, tourism and logistics companies, hospitality enterprises, tourists, and vacationers at Russian resorts that are part of wine-growing regions or are located in reasonable proximity from a logistical viewpoint. The *research subject* is the relationship of these participants with the research object. The problem of low demand for traditional Russian wines in the national consumer market is solved through the employment of information and communication technologies, which are a kind of information technology.

Keywords: Regional wines; Promotion; Information and communication technologies; Historical and cultural heritage of wine-producing regions.

RESUMEN

El vino y el turismo se consideran factores interrelacionados de la viticultura regional. Actualmente, debido a la gran oferta de vinos importados en el comercio minorista ruso, los vinos tradicionales de Crimea han perdido la demanda masiva del consumidor nacional. El objeto de estudio del presente artículo es el proceso de descubrimiento de un contexto cultural e histórico único a través de un formato de juego que utiliza las modernas tecnologías de la información, a saber, la realidad virtual y la realidad aumentada. El objeto de estudio es un conjunto de participantes en la viticultura y la vinicultura de Crimea, a saber, los viticultores, los bodegueros, las empresas de turismo y logística, las empresas de hostelería, los turistas y los veraneantes de los centros turísticos rusos que forman parte de las regiones vitivinícolas o están situados en una proximidad razonable desde el punto de vista logístico. El objeto de

la investigación es la relación de estos participantes con el objeto de la investigación. El problema de la escasa demanda de vinos tradicionales rusos en el mercado nacional de consumo se resuelve mediante el empleo de las tecnologías de la información y la comunicación, que son un tipo de tecnología de la información.

Palabras claves: Vinos regionales; Promoción; Tecnologías de la información y la comunicación; Patrimonio histórico y cultural de las regiones vitivinícolas.

1. INTRODUCTION

Support of the regional and export sales progression, especially from the perspective of a long-term image creation mechanism and the consumption of regional wines globally depend on tourists (Bowe *et al.*, 2015).

The growing interest of both applied and academic science in wine tourism as a kind of economy indicates that the region, as a wine terroir attracts tourists from other regions, including foreign. This is an important factor in the continued success of wine producers (Bowe *et al.*, 2015). However, only a relatively small proportion of the total number of tourists visits regional wineries during their holidays (Bowe *et al.*, 2015). What is the reason? Why is the most important factor of the regional economy not involved? Our research is devoted to the answers to these questions.

The elements of the scientific significance of the present study are the uniqueness of setting the research goal, namely, forming unique competitive advantages through the involvement of consumers in the game format of obtaining information about the cultural and historical heritage of the place of the selling proposition of wines on the example of Russian wines. Another element of scientific significance is the digitalization of wine promotion technology, the implementation of information and communication technologies (ICT) into the sphere of Crimean winemaking. The third element of scientific significance is the generation of digital content of the historical and cultural heritage of Russian wine regions. Finally, the fourth element reflecting the relevance of the study is the innovative development of the economy of Russian wine regions by involving the tourism sector, hospitality, and other related economic sectors in the processes of integration with winemaking (Adamenko *et al.*, 2021; Kiselev *et al.*, 2020; Kiseleva *et al.*, 2021).

2. METHODS

The methodology of the conducted research is based on a systematic approach. The following methods were used to solve individual problems:

- Statistical desk research was used to conduct marketing analysis of the supply and demand situation of Crimean wines on the national consumer market of the Russian Federation;
- Statistical analysis was employed to validate and verify obtained data;
- Econometric data analysis was applied to identify certain patterns;
- Behavioral research (eye-tracking, in-depth interviews, etc.) was carried out to study customer response;
- Combinatorial modeling and social survey in target consumer audiences was used when designing bottle labels and text content;

Calculation of the socio-economic efficiency of design developments was based on a structural approach.

3. RESULTS

The main problem that the study is aimed at solving is the loss of competitiveness of Russian wines, including those produced by Crimean regional wine producers. This problem is multifaceted. On the one hand, the unlimited import of wines from abroad, which surpasses Russian wines in taste and price, has led to such a situation in the Russian consumer market. Crimean winemakers are focused on natural wine-making materials growing in their region, unlike exporters in the same price category.

On the other hand, the traditions of the world wine market, which is dominated by the category of wines produced in the traditional wine regions of the Old Wine World (vineyards of four European countries: France, Italy, Spain, and Portugal), contribute to the decline in the competitiveness of Russian wines, including Crimean. These regions have a well-deserved reputation among their consumers. The high demand for wines from these traditional wine regions is influenced by the popularity of the places of origin, affordable price, familiar taste for traveling consumers, as well as stability of taste in time and place of consumption.

At the same time, in the modern context of climate change, the category of the New World wines produced in Latin America (Chile and Argentina), the USA (California), Australia, South Africa, and New Zealand is gaining market power in the stead of the winemaking of the countries of the Old Wine World. Russia is also counted among the mentioned countries of the New World wines in the current period, remembering its undeservedly forgotten wine regions, such as Crimea, Kuban, Taman, etc. However, Russian wines are deprived of these advantages in terms of market power.

Based on the results of social surveys of wine consumers, researchers of consumer preferences of Australian wines (Nallaperuma *et al.*, 2017) identified the most significant factors (Table 1).

Table 1. Profile of consumer preferences of regional wines (2017 data).

Indicators	Value on a 10-point scale
1 The buyer knows good examples of wines from this region	9.1
2 The buyer knows the good reputation of wines from this region	8.6
3 The buyer knows the clear sensory profile of wines from this region	8.5
4 The buyer considers the style of wines from this region to be original	8.3
5 The buyer is aware of the specialization of this region in wines of a certain style	7.9
6 The buyer believes the high potential of wines from this region for after-sale storage in bottles	7.7
7 The buyer considers this region to be highly productive in the production of wines	7.3
8 The buyer is aware of the specialization of this region on wines of only one/two types	7.0

The data are compiled based on information from (Nallaperuma *et al.*, 2017).

The influence of visits to the wine region is demonstrated by the level of recollection of specific wines of the visited region a few months later. According to O'Mahony (2008), only 20% of participants in wine tours to the regions increased their consumption of wines from the region's wineries during the next

quarter after visiting it. This is also confirmed by the survey of regional wineries: only a fifth increased sales of their wines after visiting tourists (O'Mahony *et al.*, 2008). Thus, expensive wine tours to a small extent confirm their importance for economic growth in the wine region. The causes of this phenomenon need to be comprehensively studied to eliminate them in the future.

As follows from the above data, consumers of regional wines rely mainly on their knowledge and beliefs when buying them, which do not need to be verified through a special trip to the places of production of regional wines. Therefore, wine tourism as a special sub-branch of the tourism industry is currently slowing down in its progression.

Based on this information, at present, innovative technologies are needed to deliver information about the competitive advantages of the place of origin of Russian wines to consumers in such a way as to form their desire to buy these wines and enjoy their flavor characteristics, peculiar to the cultural and historical advantages of the territory of their origin. To the full extent, these advantages should become the competitive advantages of the wines of the Russian wine regions.

The problem of low demand for Crimean wines on the national consumer market can be successfully solved by their promotion through ICT. Through ICT, it is possible not only to convey information about the parameters of the selling proposition to target customer audiences but also immerse buyers in the digital world and spark their interest in entertaining information about the place of origin of wines and cultural and historical values of Russian wine regions, thereby introducing game situations that would contribute to the involvement of buyers in the purchase of this group of wines.

In the conducted research, an information and communication environment in the field of innovation is being formed, i.e. a portal, containing information about wine-growing regions as unique original regions of the Russian Federation in the Azov-Black Sea region, which have passed a unique historical path of development, inhabited by a multinational and multi-confessional population with cultural diversity.

These parameters of the new Russian wine world have determined their special place in the cultural space of Russia. At the same time, these regions are the largest tourist and resort centers in Russia. For this reason, acquaintance with Russian wines has begun in the resorts of the Crimea, Krasnodar Territory, Kuban, and Taman and continued for many following years.

It is recommended to increase the popularity of traditional trademarks of Soviet origin and new wines of the contemporary period through modern drivers of consumer demand, such as omnichannel personalized communication, information technology, entertaining historical content, submitted in a game format, as well as virtual and augmented realities.

4. DISCUSSION

Conducted research resulted in the development of the concept of using ICT to promote Russian wines. This concept includes digital content, generated by us, aimed at promoting this category of wines through the ICT. An important part of this concept was the developed system of relationships between participants in the field of viticulture and winemaking of Russian wine-making regions in the application and updating of this content when designing labels of produced wines.

Earlier, we received methodological and practical experimental experience in related fields, such as visual merchandising (Kiselev *et al.*, 2020), multisensory communication management (Kiselev and Kiseleva, 2019; Kiselev *et al.*, 2019), emotional infogramming (Kiselev *et al.*, 2020), and others. This increases the credibility of the results obtained, which are currently being filed as a patent protection object.

Research provides an understanding of the situation with the amount of demand for Russian wines in the consumer market of the Russian Federation. On this basis, a consumer behavior model for the wine selling proposition has been developed. These results are consistent with the standpoint of authors of other studies on the analyzed problem (Lai, 2019).

As a result of the conducted research, a toolkit of ICT has been developed to bring game content with a historical context presented in the format of interaction with artificial intelligence to consumers of Russian wines on the national consumer market of the Russian Federation. Federal Law No. 468-FZ "On Viticulture and Winemaking in the Russian Federation" (State Duma of the Federal Assembly of the Russian Federation, 2019) asserts the high importance of this industry sector for the country. Accordingly, the relevance of improving the efficiency of the competitiveness of products in this industry increases.

Present-day publications on this topic generally reflect the traditional ineffective channels of promoting Russian wines. To create an image and promote Russian, and especially Crimean wines, there is a federal program aimed at increasing the recognition of Russian-made wines produced from domestic grapes.

Based on this document, "Days of Russian Wines" are organized in chain stores. Russian wines, selected for promotion are guaranteed to be made from grapes grown in the terroir of Russian wine regions. As follows from the few publications on this topic, another way to improve the sales of wines of the Crimean region is personal presentations by winemakers of their wines (personal fame among market specialists and advanced consumers) (Gnilomedova, 2020). A team of authors from the Sevastopol State University points to the development of the wine label design containing the word "Crimea" as their geographical status. The authors note the color of the label as one of the most powerful tools to attract buyers' attention to wine. However, the authors do not provide arguments to their conclusions. The authors assert the expediency of wine tourism through the creation of the "Wine Road of the Crimea" as one of the main parameters of ecotourism on the Crimean Peninsula (Gnilomedova, 2020). However, the authors do not provide factual information to confirm the validity of their development, since these studies are preliminary (Gnilomedova, 2020).

Numerous publications on the analyzed problem of increasing the economic efficiency of wine regions were published by Professor L. Lockshin, Head of the School of Wine Marketing at the Australian University, together with his colleagues (Mueller *et al.*, 2009). After an in-depth study of the consumer purchasing habits of regional-origin wines (Australia), the author concluded that the choice of wine is mainly based on the label. In 80% of cases, the buyer chooses a certain wine in the store because they have already bought it before, although they may not even remember it. Only in 50% of cases, the buyer dwells on a particular bottle because they are familiar with the grape variety from which the wine is made, or the region of origin, brand, or vintage. Even fewer consumers (30-40%) of the total number of buyers focus their attention on the features of labels when choosing wine (Mueller *et al.*, 2009).

Many authors cite the research results on the purchasing preferences of wines of the Old Wine World. Thus, R. Capitello and L. Sirieix (2019) studied consumers of French and Italian wines. The authors note that the importance of the ethnic-ethical standards in the selection of wines is quite low, which slows down the consumption of ecological wines (Capitello and Sirieix, 2019).

Based on information about the study results of consumers from the countries of the New Wine World (Brazil), it follows that participants in the Brazilian consumer market use wines mainly to meet the needs for socialization through communication with friends, family, etc. (Toigo and de Toni, 2018). In this case, preference is given to local regional wines. Consumers note that the wines are important also as a wonderful gift (mainly imported wines).

These expert conclusions make the results obtained relevant and realistic. To prove the realism of the proposed idea, we had to generate data for the argumentation of such a statement.

5. CONCLUSION

Not only information about the parameters of the trade offer is conveyed through the ICT to the target customer audiences, but also it allows immersing buyers in the digital world, drawing their attention to interesting information about the place of origin of wines, as well as cultural and historical values of the Crimean Peninsula. Thus, it allows introducing game situations that contribute to the involvement of buyers in the purchase of this group of wines.

Thus, an information and communication environment in the field of innovation has been created, including a system for monitoring and promoting advanced achievements in the Republic's specialization sectors, involving winemaking. An innovation portal of the Republic of Crimea and Sevastopol has been created, containing information about the Republic of Crimea and Sevastopol as a unique and strategically important region of the Russian Federation in the Black Sea region, which has passed a unique historical path of development, as a territory inhabited by a multinational and multi-confessional population with cultural diversity. These characteristics of the Crimean Peninsula determine a special place in the cultural space of Russia. At the same time, the Republic of Crimea and Sevastopol is one of the largest tourist and sanatorium-resort centers in Russia. The increase in the popularity of traditional wine trademarks of Soviet origin was carried out through modern drivers of consumer demand, namely, personalized communication, information technology, entertaining historical content presented in a game format, as well as virtual and augmented reality.

REFERENCES

- Adamenko, A. P., Ananyeva, A. A., Zarapina, L. V., Tselovalnikova, I. Yu. and Semenova, J. A. (2021). Economic and legal aspects of consumer right protection in tourism. *Journal of Environmental Management and Tourism*, 11 (8(48)), 1967-1972.
- Bowe, J., Lockshin, L., Rungie, C. and Lee, R. (2015). Wine and tourism: A good blend goes a long way. In: K. Kubacki (Ed.), *Ideas in marketing: Finding the new and polishing the old. Developments in marketing science: Proceedings of the Academy of marketing science* (pp. 309-312). Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-319-10951-0_116
- Capitello, R. and Sirieix, L. (2019). Consumers' perceptions of sustainable wine: An exploratory study in France and Italy. *Economies*, 7 (2), 33. <https://doi.org/10.3390/economies7020033>
- Gnilomedova, N. V. (Ed.). (2020). *Management in viticulture and winemaking*. Sevastopol, Russia: Federal State Autonomous Educational Institution of Higher Education "Sevastopol State University", 48 p.
- Kiselev, V. M. and Kiseleva, T. F. (2019). *Multisensory characteristics of goods as a basis for their identification and positioning. Interdisciplinary research: Monograph* (2nd ed., revised and expanded). Moscow, Russia: Rusains, 258 p.
- Kiselev, V. M., Meshalkin, V. P., Danko, T. P., Rakauskienė, O. G., Savinkov, S. V. and Meshkov, V. R. (2020). Communicative codes of visual nature for business communications. In: *Advances in Economics, Business and Management Research. Proceedings of the Russian Conference on Digital Economy and Knowledge Management (RuDEcK 2020)* (Vol. 148, pp. 296-299). Atlantis Press.

Kiselev, V. M., Savinkov, S. V., Terentyev, V. A. and Meshalkin, V. P. (2019). Cognitive communications: Information support of management decisions. In: *Advances in Economics, Business and Management Research. Proceedings of the International Science and Technology Conference "FarEastCon" (ISCFEC 2019)* (Vol. 79, pp. 281-284). Atlantis Press.

Kiseleva, I. A., Kuznetsov, V. I., Sadovnikova, N. A. and Androshina, I. S. (2021). Modeling consumer behavior in a market economy. *Revista Geintec-Gestao Inovacao e Tecnologias*, 11 (4), 402-413. <https://doi.org/10.47059/revistageintec.v11i4.2116>

Lai, M. B. (2019). Consumer behavior toward wine products. In: C. Santini and A. Cavicchi (Eds.), *Woodhead Publishing Series in Food Science, Technology and Nutrition. Case studies in the wine industry* (pp. 33-46). Woodhead Publishing. <https://doi.org/10.1016/B978-0-08-100944-4.00003-3>

Mueller, S., Lockshin, L., Louviere, J., Francis, L. and Osidacz, P. (2009). How does shelf information influence consumers' wine choice? *Australian and New Zealand Wine Industry Journal*, 24, 1-12. Retrieved from <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.580.1752&rep=rep1&type=pdf>

Nallaperuma, K., Bandyopadhyay, A. and Lockshin, L. (2017). A comparative analysis of experts' and consumers' perceptions of regionality in Australian wine purchase decisions. *Journal of Wine Research*, 28 (3), 194-215. <https://doi.org/10.1080/09571264.2017.1360261>

O'Mahony, B., Hall, J., Lockshin, L., Jago, L. and Brown, G. (2008). *Wine tourism and subsequent wine purchase behavior*. Adelaide, SA, Australia: Cooperative Research Centre (CRC) for Sustainable Tourism Pty Ltd, p. 57.

State Duma of the Federal Assembly of the Russian Federation. (2019). Federal law of December 27, 2019 No. 468-FZ "On Viticulture and Winemaking in the Russian Federation" *Sobranie Zakonodatel'stva Rossiiskoi Federatsii [SZ RF] [Collection of Legislation of the RF]* 30.12.2019, No. 52 (Part I), Item 7786.

Toigo, T. and de Toni, D. (2018). Product image: The configuration of fine wine's image. *Revista GESTO*, 6 (2), 49-62. <http://dx.doi.org/10.31512/gesto.v6i2.2773>