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WINERY WEBSITE ANALYSIS FRAMEWORK: THE CASE STUDY OF SREM WINERIES

OKVIR ZA ANALIZU INTERNET PREZENTACIJA VINARIJA: STUDIJA SLUČAJA VINARIJA SREMA

Abstract: *The purpose of this paper is to develop a framework that would enable analysis of wineries' websites from several aspects: Website Functionality, Interactivity, Visual Appearance, Contact Information, Winery Specific Information, Wine Tourism Related Services, and Online Shopping. The framework is then applied to analyse the Srem wineries' websites. The author has specifically chosen the Srem region because Srem's viticulture has a long tradition, and the wines produced there are of high quality. To be recognized as such in the world and to make Srem region interesting to wine consumers and wine tourists from various countries, the Srem wineries need to have a strong online presence, particularly in the form of websites. Unfortunately, the research presented in this paper reveals that a large number of Srem wineries do not have a website. The existing websites were studied in detail in accordance with the proposed framework. The project has its practical implications, since the framework presented can be of great help to wine business practitioners in understanding which features characterize a high-quality winery website.*

Key Words: *Winery websites, websites analysis, wineries, wine tourism, Srem.*

Apstrakt: *Svrha ovog rada je razvoj okvira koji će omogućiti analizu internet prezentacija vinarija sa nekoliko aspekata: funkcionalnosti internet prezentacije, interaktivnosti, vizuelnog izgleda, raspoloživosti kontakt informacija, informacija o samoj vinariji, usluga vezanih za vinski turizam, kao i mogućnosti onlajn kupovine. Taj okvir je zatim primenjen na analizu vinarija Srema. Autor je odabrao baš Sremski rejon zato što vinogradarstvo u Sremu ima dugu tradiciju, a proizvedena vina su visokog kvaliteta. Da bi kao takve bile prepoznate u svetu, i da bi Sremski rejon mogao zainteresovati ljubitelje vina i vinske turiste iz najrazličitijih zemalja, vinarije Srema moraju imati snažnu prisutnost na internetu, posebno u vidu internet prezentacija. Istraživanje prezentovano u ovom radu je, nažalost, pokazalo da veliki broj njih i nema internet prezentaciju, a postojeće prezentacije su detaljno analizirane u skladu sa predloženim okvirom. Projekat poseduje i praktične implikacije, jer predstavljeni okvir može biti od velike pomoći svima koji se bave vinskim biznisom da razumeju koje su to karakteristike koje visokokvalitetna internet prezentacija vinarije mora posedovati.*

Ključne reči: *Internet prezentacije vinarija, analiza internet prezentacija, vinarije, vinski turizam, Srbija.*

Introduction

Serbia's geographical location and climate are favourable to grapes and wine production, and its viticulture has a long tradition (Petrović et al., 2015). Serbia has three winegrowing regions: Vojvodina, Central Serbia, and Kosovo and Metohija, with 22 wine sub-regions withn them (Simonovic et al., 2019; Ivanišević et al., 2015).

One of the wine regions within Vojvodina is Srem. It is located on the slopes of Fruška Gora mountain facing the rivers Danube and Sava (to the north and south, respectively), excluding the area of "Fruška Gora" national park (Ivanišević et al., 2015). Viticulture in Srem is one of the oldest ones in Europe (op. cit.) and there are numerous wineries in this area. Many of them are small to medium sized, so they cannot afford to spend too much on marketing. In order to be recognized by wine consumers and potential wine tourists, they need to have good websites and preferably well-managed social networks profiles. The aim of this paper is to develop a winery website analysis framework that would be applied on the selected Srem wineries' websites. Before explaining the framework and commenting on the research results, we will first briefly review the existing literature in the field of wineries' websites analysis and evaluation.

Literature review

A number of authors have investigated wineries' websites by applying different criteria and emphasizing different website features (i.e., attributes). Reviewing their work was valuable in defining the framework for website analysis used in this paper.

Begalli et al. (2009) investigated a sample of 272 Italian speciality wineries in order to examine the adoption of the Internet as a wine marketing tool. A two-stage analysis had been conducted. The existing websites were analysed in the first stage, and an adapted 7Cs model was used for this purpose. In the second stage, in order to analyse entrepreneurs' perception of the Internet marketing, the authors conducted a direct survey of both the wineries with and without websites. The adapted 7Cs model included 26 parameters grouped into 7 categories: Content – 3 parameters (website update, graphic quality, counter presence); Choice – 4 parameters (product presentation, range of products, presence of accessory products, presence of agrotourism activities); Context – 2 parameters (website typology, transaction typology); Comfort – 5 parameters (ranking, number of languages, navigability, site map presence, presence of an internal search engine); Convenience – 3 parameters (direct sale availability, delivery time, delivery costs); Customer Service – 5 parameters (delivery traceability, payment procedures, delivery procedures, security of transactions, FAQ); and Community – 4 parameters (forum presence, visit book presence, link availability, toll-free telephone number availability).

Zhu et al. (2009) extended a four-stage model (which included the following stages: presence, portals, transactions integrations, and enterprises integration) that characterized the level of the Internet usage by the enterprises, and introduced market integration into it. The authors defined several functional features for their revised website stage model. They also specified 19 distinct features that characterized web content and grouped them into 4 categories: Marketing Function – 9 features (newsletters, press releases, awards won by the wines, toll-free contact capability, business hours, customized wine labels, tasting notes & recipes, map & location, and events held by winery); Technological Functions – 5 features (photo album & gallery, virtual tour, background music, online visitor counter, and dynamic pictures & flash effects & moving pictures

or words); Legal and Social Awareness – 3 features (website copyright statement, legal notice, and privacy statement); and Winery Characteristics – 2 features (family-owned business or not, languages which have been used on the website).

Velikova et al. (2011) evaluated 56 wineries' websites based on 95 attributes grouped into 14 categories: Ease of Navigation, Ease of Contact, About Us, Operational Information, Facilities, Product Information, E-commerce, Strategic Marketing, Branding/Positioning/Image, Public Relations, Partnership, Interactive Functions, Marketing Research, and Educational Opportunities. The study involved 21 evaluators.

Kolb and Thach (2016) analysed the adoption of Web 2.0 and social media use by the German wineries on a sample of 208 wineries from 13 different winegrowing regions. They performed a content analysis in order to determine the websites' existence, e-commerce engine presence on the websites, as well as the presence of Web 2.0 components. The authors also investigated the relationship between the size of the winery and the features studied (op. cit.).

Grahovac et al. (2017) chose five wineries from Serbian region of Banat and four from Romanian region of Banat, and they analysed their websites for certain Internet offers: Contact and Location Information, Photo Gallery, Wine Tasting, Online Shopping, Additional Tourist Offers, as well as Websites' Multilingualism.

Ćamilović (2020) compared the websites of five Serbian local tourist organizations based on 29 features grouped into 7 main categories: Search Engine Optimization (SEO) – 1 feature (SEO overall score); Website Functionality – 4 features (main navigation menu availability, mobile friendly website, search box/button, multiple language versions); Interactivity – 4 features (contact information, contact

us form, FAQ, newsletter sign-up); Visual Appearance – 5 features (readability, tourist organization logo, photographs, videos, virtual tour); Tourist Organizations' Website Specifics – 7 features (accommodation; attractions, historical & cultural sites; sightseeing tours & excursions; restaurants, cafés & bars; shopping; sport; major events); Visitor Information – 4 features (how to get to the destination, tourist info centres, local weather, time zone & currency); and Social Media Links – 4 features (Facebook, Twitter, YouTube, Instagram). Although the paper did not deploy the website analysis in the wine sector, it was useful in defining the wineries' websites analysis framework.

Materials and methods

The research presented in this paper was conducted in September of 2021. The first step was to identify the wineries of the Srem wine region that would be further analysed. The list of wineries was taken from the website vino.rs. Subsequently, Google search engine was used in order to obtain further information about each winery: its municipality, its website address (if there was one), and some additional contact information. If no information was found on Google, the winery was excluded from the study. The narrowed list included 74 Srem wineries. Not all of them had a website. Some website addresses provided (in some documents, or on their Facebook pages) did not work because the domain was not even registered (Who.is online tool was used in domain information search). Several websites were under construction or not accessible, and those were also eliminated from the study. This means that 41 of 74 wineries (55.41%) had a functional website. Three websites were not typical winery websites, so they were also excluded from the research. The Serbian versions of the websites were analysed in detail, and their list is presented in Table 1.

Table 1: *The analysed sample of the Srem wineries and their websites*

Winery	Website address
Acumincum	https://www.vinarija-acumincum.com/
Ačanski	https://podrum-acanski.com/
Aven	https://www.vinarijaaven.rs/
Bajilo	https://vinarijabajilo.rs/
Belo Brdo	https://www.belobrdo.com/
Benišek-Veselinović	http://www.podrumbenisek.com/
Bikicki	https://www.bikicki.rs/
Bjelica	http://www.vinarijabjelica.rs/
Brestovački	https://vinarija-brestovacki.business.site/
Danguba	https://vinarijapodrumdanguba.rs/
Deurić	https://vinarijadeuric.com/
Dulka	http://vinarijadulka.rs/
Đurđić	http://www.djurdjic.rs/
Erdevik	http://www.erdevikwinery.com/
Fruškogorski vinogradi / Quet	http://fruvin.com/sr/
Hopovo	https://vinogradhopovo.com/
Imperator	https://www.imperator.rs/
IN Ilič-Nijemčević	http://vinarija-in.rs/
Kiš	http://vinarijakis.com/
Komuna	http://www.vinarijakomuna.com/
Kovačević	https://vinarijakovacevic.com/
Mačkov podrum	http://www.mackovpodrum.co.rs/sr/
Manufaktura Spasić	https://manufakturaspasic.com/
McC	https://www.mccorganskovino.com/
Miljević	http://www.podrum-miljevic.co.rs/
MK Kosović	http://www.vinarijakosovic.com/
Mrđanin	http://www.vinarija-mrdjanin.rs/
Patkov vinograd	https://patkovvinograd.business.site/
Sokolov zamak	https://sokolovzamak.rs/
Stojković	https://dvasunca.com/
Šapat	http://www.sapat.rs/sapat/
Šukac	https://podrumsukac.rs/
Tri međe i oblak	http://trimedjeioblak.com/
Trivanović	https://vinarijatrivanovic.rs/
Urošević	http://www.vinogradiurosevic.rs/
Vinat	https://vinovinat.webs.com/
Vinum	https://www.vinum.rs/
Živanović	https://www.museumzivanovic.com/

Source: Author

The framework of this study is mostly based on the website features adapted from the existing studies (Begalli et al., 2009; Zhu et al., 2009; Velikova et al., 2011; Kolb and Thach, 2016; Grahovac et al., 2017; Ćamilović, 2020). The author suggested a

list of 26 different website attributes that needed to be analysed, and grouped them into 7 main categories: Website Functionality, Interactivity, Visual Appearance, Contact Information, Winery Specific Information, Wine Tourism Related Services, and Online Shopping. This is illustrated in Table 2.

Table 2: Wineries' websites analysis framework

Category	Website attribute
1. Website functionality	a) Main navigation menu availability from all pages b) Mobile friendly website c) Functional search box/button d) Multiple language versions
2. Interactivity	a) Contact us form b) Functional newsletter sign-up c) Online sign-up for wine club d) Social media links on a homepage
3. Visual appearance	a) Logo on every page b) Images of the winery or its facilities c) Vineyard images d) Images of individual products
4. Contact information	a) Address b) Telephone c) Email d) Functional Google Map
5. Winery specific information	a) Winery information b) Working hours c) Wine descriptions d) Wine prices
6. Wine tourism related services	a) Wine tasting b) Offering food with wines c) Guided tour of the winery and/or vineyard d) Onsite accommodation
7. Online shopping	a) Online shopping availability b) iOS and Android shopping application download options

Source: Author

Both the content analysis of the wineries' websites, and the automated online tool were used for the purpose of the analysis. In order to test if the websites were mobile-friendly, the author used Mobile-Friendly Test Tool. Analysing other features usually required the content analysis of the selected websites. However, some features needed to be tested by the author, because only the functional ones were considered. For example, if there was a search box/button or a newsletter sign-up box, but it didn't work properly, it was not taken into consideration. The same applies for Google Maps that could not load correctly. Only the search box/buttons that allowed users to find particular topics or pages on a website were examined (this feature is quite different from the product search function in a web shop, which was not an attribute covered by this study). Some websites had several social media buttons, but not all of them were linked to their existing social media profiles. For example, some were linked to the website's homepage, the Google website, or Google+ social network that was shut down for business and personal use in April 2019. Those were not considered valid. Only the

social media links that actually worked on the homepage were taken into account. In cases when the English version button did not work (i.e., did not redirect to the English version of the website), the website was not considered to be bilingual. Online shopping of any kind was taken into account (both web shop, and making an online order).

Results and discussion

Good website functionality is important for achieving a positive user experience, and thus the success of a website. The author investigated several important functionality features. The results are presented in Table 3.

Table 3: The Srem wineries' websites' functionality analysis

Website functionality			
Website attribute		No. of web-sites	%
Main navigation menu availability from all pages	Present	33	86.84
	Not present	5	13.16
Mobile friendly website	Yes	29	76.32
	No	9	23.68
Functional search box/button	Present	4	10.53
	Not present	34	89.47
Multiple language versions	Serbian language only	20	52.63
	1 or 2 foreign languages	16	42.11
	3 or more foreign languages	2	5.26

Source: Author

Most websites (86.84%) have main navigation menu available on all the pages, which is good. However, almost one quarter of the websites (23.68%) are not mobile friendly, and this is not good enough. Many people use their mobile devices when they search the information on the Internet and visit websites. Search box/button enables the users to easily find exactly what they are looking for on a website, and thus it is an important element of the website functionality. The study shows that only 10.53% of the analysed websites have a functional search box/button. To make the website useful for foreign visitors, it should be multilingual. Unfortunately, 52.63% of the analysed wineries have only a Serbian version of the website, which is of no use to foreign visitors. Furthermore, 42.11% of them are available in one or two foreign languages, while only 5.26% are available in three or more foreign languages.

Interactivity determines how a visitor can engage with the winery, and this analysis is presented in Table 4.

Table 4: *The Srem wineries' websites' interactivity analysis*

Interactivity		No. of web-sites	%
Website Attribute		**No. of web-sites**	**%**
Contact us form	Present	21	55.26
	Not present	17	44.74
Functional newsletter sign-up	Present	3	7.89
	Not present	35	92.11
Online sign-up for wine club	Present	1	2.63
	Not present	37	97.37
Social media links on a homepage	None	13	34.21
	1 or 2	18	47.37
	3 or more	7	18.42

Source: Author

Sometimes, providing contact information is not enough, and 55.26% of the analysed wineries offer a contact us form on their websites as well. According to Kotler et al. (2014), newsletters can support building a company's image and bringing important news to target markets. Nevertheless, only 7.89% of the Srem wineries' websites have a functional newsletter sign-up. Wine clubs help wineries develop long-term relationships with their customers (Velikova et al., 2011). It is a powerful means to increase repeated purchases. A wine club membership should offer special benefits to its members, such as membership pricing, complementary tasting, or exclusive access to special events. Unfortunately, only one of the 38 analysed websites offers an online sign-up for a wine club. Social media links can be a good way of finding new customers and increasing awareness of the winery. Many people use social media to find additional details about wines and wineries. For this reason, the fact that 34.21% of the analysed websites do not have any social media links on their homepages is a high percentage. However, 47.37% of the websites have one or two social media links, while 18.42% have three or more.

A website should be aesthetically pleasing, and this is why the author investigated visual appearance: presence of logo on every page, images of winery or its facilities, vineyard images, and images of individual products. The results are illustrated in Table 5. Logo serves as an identifier for a winery. Its presence on the website ensures credibility and promotes brand loyalty. As many as 73.68% of the analysed wineries display their logos on every page of their websites. Also, 78.95% of them contain images of the winery or its facilities, 86.84% display vineyard images, and 86.84% of them display images of individual products. Those are important in order to create a good impression, and they can inspire people not only to desire to taste wine, but to visit the winery as well.

Table 5: The Srem wineries' websites' visual appearance analysis

Visual appearance			
Website Attribute		No. of web-sites	%
Logo on every page	Present	28	73.68
	Not present	10	26.32
Images of the winery or its facilities	Present	30	78.95
	Not present	8	21.05
Vineyard images	Present	33	86.84
	Not present	5	13.16
Images of individual products	Present	33	86.84
	Not present	5	13.16

Source: Author

There are several reasons why a website needs to contain contact information. One of them is to ensure that a website is legitimate, that is, to confirm that a particular winery is indeed the real owner of that specific website. Contact details are also necessary for making an inquiry about the products or paying a visit, or simply to seek some additional information. The websites' contact information analysis is presented in Table 6.

Table 6: The Srem wineries' websites' contact information analysis

Contact information			
Website Attribute		No. of web-sites	%
Address	Present	37	97.37
	Not present	1	2.63
Telephone	Present	38	100
	Not present	0	0
Email	Present	32	84.21
	Not present	6	15.79
Functional Google Map	Present	26	68.42
	Not present	12	31.58

Source: Author

The results show that 97.37% of the websites display an address, all the websites provide a telephone number, 84.21% provide an email address (or several ones), and 68.42% have added a functional Google Map. The last-mentioned option is important because one click to Google Map can route visitors to the winery, and many people use it for the purpose of navigation.

A very important analysis is the one concerning the websites' winery specific information presented in Table 7. The main reason why someone visits a winery's website in the first place is to

find some information about the winery and its products, and to check the working hours. As expected, most Srem wineries' websites offer winery information and wine descriptions. However, 52.63% of them do not display wine prices, and 71.05% do not include the information about the working hours. This is unfortunate, because a website visitor can be puzzled about the appropriate time to contact the winery or visit it.

Table 7: The Srem wineries' websites' winery specific information analysis

Winery specific information			
Website Attribute		**No. of web-sites**	**%**
Winery information	Present	36	94.74
	Not present	2	5.26
Working hours	Present	11	28.95
	Not present	27	71.05
Wine descriptions	Present	34	89.47
	Not present	4	10.53
Wine prices	Present	20	52.63
	Not present	18	47.37

Source: Author

Wine tourism can be described as "visitation to vineyards, wineries, wine festivals and wine shows for which grape wine tasting and/or experiencing the attributes of a grape wine region are the prime motivating factors for visitors" (Hall et al., 2000: 298). This very description tells us that wineries play important part in attracting wine tourists. Although winery specific information, analysed earlier in this paper, are interesting to wine tourists, they are also seeking some tourism related services. The analysis results are presented in Table 8.

Table 8: The Srem wineries' websites' wine tourism related services analysis

Wine tourism related services			
Website Attribute		**No. of web-sites**	**%**
Wine tasting	Present	25	65.79
	Not present	13	34.21
Offering food with wines	Present	19	50.00
	Not present	19	50.00
Guided tour of the winery and/or vine-yard	Present	8	21.05
	Not present	30	78.95
Onsite accommodation	Present	3	7.89
	Not present	35	92.11

Source: Author

Surprisingly, more than one third of Srem wineries' websites (34.21%) do not offer wine tasting. Half of them offer some food with wines. Only 21.05% of the analysed websites give visitors the option of a guided tour of the winery and/or vineyard, and only 3 of 38 the analysed websites provide onside accommodation. These results show that Srem wineries are not sufficiently aware of the importance of wine tourism and their role in it.

Consumer fondness of online shopping is driving wineries worldwide to embrace e-commerce (Parboteeah et al., 2016).

In 2020, the pandemic drove even more wine consumers online, and in 2021 wine retailers predicted that online wine sales would continue to grow (Melton, 2021). With pandemic restrictions for bars and restaurants, the e-commerce has grown fast for wineries that sell their products directly to consumers (op. cit.). The Srem wineries did not seize this opportunity to the right extent. Nearly half of the analysed websites (47.37%) do not offer online shopping options, and only one website has iOS and Android shopping applications download option.

Table 9: *The Srem wineries' websites' online shopping analysis*

Online shopping			
Website Attribute		**No. of web-sites**	**%**
Online shopping availability	Present	20	52.63
	Not present	18	47.37
iOS and Android shopping application download options	Present	1	2.63
	Not present	37	97.37

Source: Author

Conclusion

Viticulture and wine production in Serbia have a long tradition. Nevertheless, Serbian wines are not sufficiently promoted on the global market. The main prerequisite for a winery to be competitive on the market and to be recognized among wine lovers and wine tourist is to have a high-quality website. This paper provides a framework for winery websites analysis that can be put in good use by wine business practitioners, because it also gives guidelines about the features that a website should have. The framework has been used to analyse and evaluate 38 Srem wineries' websites, and the results presented are quite interesting.

However, there are some limitations to this study that should be mentioned. The first, and most obvious one, is that only Srem wineries' websites were analysed. Srem is just one of 22 wine sub-regions withing three winegrowing regions in Serbia. It would be useful to extend the research to all the other regions and sub-regions, and to compare the main differences between them.

Another limitation of this study is that it is mostly based on the content analysis of the wineries' websites, while no surveys were conducted. It would be interesting to perform a qualitative research study in the future.

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