

Web Site Utilization in SME Business Strategy: The Case of Greek Wine SMEs

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Taking into account the existing literature about developing business strategies utilizing web sites effectively, this study attempts to derive a website design framework especially for wineries that could help wine producers globally in support of their commercial activity in the pre and post selling phases as a channel of communication from and towards the markets as a means of promotion and marketing. Further this works aims to identify the online strategies and the web sites features used by the Greek wineries, in order to improve the efficiency of combined business techniques and to investigate the existence of homogeneous website groups, using cluster analysis. The analysis of derived Greek B2C website framework with the use of the principal component method explains the presence of four leading profiles: i) e-commerce experts; ii) social media users; iii) simple informative features iv) wine tourism oriented.

JEL Codes: M10, M21

1. Introduction

Business use of web sites as integral tools in business strategies has intensified during the last decades. From the very beginning, the adoption of distribution channels via the Internet was viewed as particularly advantageous for small and medium sized enterprises which had problems to reach and sell to markets denied to them through existing more traditional channels (Hoffman and Novak 2000; Madill and Neilson, 2010). E-commerce is an attempt to exploit the performance and cost advantages of the Internet, for buying and selling goods and services.

Recent research on the topic of the utilization of web sites as a business strategy focus on the contributions that web sites can make in three main areas: providing consumer information, providing an ecommerce capability, and encouraging the development of interactive relationships between companies and their customers. There is extensive research on small and medium enterprise (SME) adoption of electronic business (e-business). Many of these studies explore the factors (barriers and drivers) that influence SME owner-manager adoption decisions (e.g. Gibbs et al., 2007; Gilmore et al., 2007; Quaddus and Hofmeyer, 2007; Roberts and Toleman, 2007; Simmons et al., 2008; Tan and Macaulay, 2007; Xu et al., 2007). The most commonly-used theories are: The resource-based view of the firm; Porter's models (generic strategies, industry forces and/or value chain analysis); theory of planned behavior; technology acceptance model; and Rogers' diffusion of innovations theory (Parket and Gastleman, 2007).

Wine, in particular is an ideal product to exploit the opportunities of websites thanks to its intrinsic characteristics, namely it is a product of "experience" and is highly

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differentiated and marketed internationally while the competition is intense. (Stricker et al., 2003). Wine enterprises are internalizing the new market and new technologies by modifying their business models in function of the possible applications offered by the Internet. The purchase and consumption of wine is based on an intensive exchange of information, which is not only related with the tangible aspects of the product, but also with symbols, tradition, culture, tourism, gastronomy. From this perspective the use of the Internet can significantly enhance the perceived value of wines (Giraud-Héraud et al., 2001). Specifically, in the case of small-medium enterprises of the vine and wine sector, the Internet can be with different modalities, namely not only for e-commerce but also in support of the commercial activity in the pre- and post-selling phases and as a channel of communication from and towards the markets as a means of promotion and marketing (Canavari et al., 2002). Especially in the case of Greek wineries, which experience the current economic crisis, it is extremely important to improve their internationalization tools in order to establish a strong brand identity and an interactive communication relationship with potential consumers all over the world, through exploiting the opportunities of an effective website.

Accordingly, this work is designed to make a contribution to both academic literature and to SME winery owner/operators directly in providing a website design framework that will help wine producers globally to enhance the perceived value of wines, to support their commercial activity pre and after sales, and to create an interactive communication channel as a mean of promotion and marketing. Further, this study evaluates the online strategies and the web site features used by the Greek wineries, in order to improve the efficiency of combined business techniques and investigate the existence of homogeneous website groups using cluster analysis.

To accomplish these goals the paper is organized as follows: next section provides an overview of the literature on wine web strategies. The methodology employed in the research is described in third section in order to define a website design framework specific to wineries and to provide a critical evaluation of their quality in relation to the most relevant marketing objectives and approaches. Next, the paper presents the empirical results of the research and closes with a discussion of the findings, implications of the research and some avenues for future research.

2. Literature on Wine Web Strategies

The potential of Internet applications to enhance the effectiveness of wine marketing operations was identified and discussed by many authors (Bruwer and Wood, 2005; Giraud-Héraud et al., 2001; McNeill, 2007; Sellitto, 2002; Sellitto and Martin, 2003; Stening and Lockshin, 2001; Stricker et al., 2007; Duquesnois and Gurău, 2008), although the focus of their analysis varied.

Also the debate about the features that need to be included in the winery website has been discussed in the wine marketing literature (e.g., Ness, 2006; Winters, 1997; Yuan et al., 2004). Specifically, suggested essential website features include the winery (history, profiles of the winemakers, stories about the winery, etc.), the wine (awards, educational opportunities, etc.), wine tasting, sign up information and contact information (Taylor et al., 2010).

Some of the researchers emphasized on the tourism development approach (Simeon and Sayeed; 2011), and discussed how web design and product presentations had an

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impact on consumer perception. Many of these studies used interviews, online surveys and experiments to highlight the importance of perception management on winery web sites (Sellitto, Wenn, et al., 2003; Koch, 2006; Ellig & Wiseman, 2007; Flavián, Gurrea, et al., 2009).

However, the most recent focus on the extended use of social media tools arguing that managers will need to use several tools to gather and analyze information about brand performance in social media, and even more tools to help understand and present that information (Olsen & Hershmeier, 2008; Watts et al. ; 2008 and Pitt et al; 2011). Velikova et. al., (2011) attempt to develop an objective website evaluation framework that will assist the wine business practitioner with creating effective websites. According to their results online shopping availability, social media presence, and wine clubs were identified as major points of differentiation between the two clusters, which were labeled as “marketing-oriented” and “wine-oriented” websites, respectively.

In case of Greece, Vlachvei (2012) tried to investigate producers’ adoptions decisions about utilization of Web in case of Greek wine SMEs. The results indicate that the producer’s limited knowledge and the lack of web-business experience of developing beneficial relationships with existing or new customers through actively engaged websites and social media marketing are the critical variables causing SMEs to miss market opportunities. This work aims to contribute preliminary research to the gap in the literature concerning usage of websites as a marketing/business tool for Greek SME wineries.

3. Methodology

After peer review of existing website evaluation frameworks in the literature (Vlachvei, 2012; Begalli et all, 2008) and taking into account input from website designers/developers, web style guides, and personnel from the Greek wine industry, a website design framework specific to Greek wineries was derived. This framework has 42 attributes spread across 8 categories. This winery B2C framework forms the criteria for the data collection instrument in the winery website evaluation. The eight main categories are:

- a) Company information data which give the consumer the chance to be informed about the existence of the firm and to conduct with the producer either by mailing address or e-mail or telephone numbers
- b) Production and products information. The producer present the winery, the vineyards, the territories, the catalogue of wines with pictures, production processes, give his own history of involvement in love with wine, communicate firm’s mission and vision. These attributes help the winemaker to build his product image, his brand and to encourage consumers to get more information about the wine.
- c) E-commerce. It is actually the facility to order and pay the presented products online This transactional function implies however the existence of price list catalogue, implementation of online applications permitting a secure transfer of personal and financial information, as well as the presentation of clear and detailed information about the conditions of sales, and the procedure to be followed to return defective products and obtain a refund, the delivery costs and the delivery time.

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- d) Social media. Existence of Interactive communication tools, which permit to the interested customer to initiate a direct dialogue with the producer, and/or with other customers. The firm might decide to create site-based community by creating a blog or a discussion forum. The producer can invite regular customers to register, providing information about their personal demographic profile, their specific needs in terms of product type and quality, and their particular interests related to wine. This information can be used to develop a database, which allows then the producer to develop personalized relationship with every registered customer, by providing special offers, information, news, that can be sent directly to the email account of the clients.
- e) Wine tourism opportunities and local partnerships. Wine tourism can be defined as the visitation of vineyards, wineries, wine festivals and wine shows. According to the literature (O'Neil et al., 2002) for the wine producer, visits to the cellar door to offer three benefits: a) distribution at a low marginal cost; b) the development of brand equity and a chance to add value. c) If wine tourism is available in the region, the cellar door effectively gives the small winery the ideal avenue to create a niche brand (Browner, 2004; Jarvis and Goodman, 2005). As a consequence, the website should give all the information needed to schedule a visitation, like availability of wine tour, cellar door hours, the existence of a restaurant on the winery estate for wine tasting and other traditional food products, the existence of a museum or gift shop, or organized tour in the area and links to local attractions, lodging and restaurants.
- f) Navigation. Navigation through the website is usually helped by having easily identified navigation buttons on the home page. Web site updating, along with, site map, logo and winery name on every page and language selection are the main features that are selected as important for the Greek wine B2C framework.
- g) Value-added features. Press releases, along with wine making information, storage and aging information and wine awards should be included in the website in order to provide value added to consumers and establish awareness.
- h) Educational opportunities. As the marketing paradigm shifts from being sales-oriented to customer oriented, enhancing customer service is increasingly important. Winery website customer service components could include educational opportunities such as recipes on food pairing and tips info on wine tasting.

In order to achieve the research aims we focus on the analysis of the existing Greek winery websites to provide a critical evaluation of their quality in relation to the most relevant marketing objectives and approaches. We obtained our empirical data on e-marketing practices by wineries from a survey conducted in September 2012. Our sample has been drawn from the Greek wine guide "New Wines of Greece" which is National Inter-Professional Organization of Vine and Wine of Greece. The total size of our initial sample was 90 wine establishments, while the websites in 23 cases were either not accessible or under construction which makes the surveyed number of active websites 67 (74.5%).

According to the results of Graph 1, more than 90% of the firms' websites share some common attributes which are: information about mailing, e-mailing address and telephone numbers, description of wines and pictures of wines and logo and winery name on every page. Also, more than 50% of the firms present on their website their mission and vision, historical data for the firm, winemaking information and technical notes, media updates, press releases and share Facebook or Twitter while the visitor

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can choose among at least three languages. It is interesting however the low level of e-commerce adoption by Greek wine firms (around 10-12%), which is a barrier for exploitation of the performance and cost advantages of internet. However, more than one third of the websites is found to be wine tourism oriented, trying to attract visitors in wine estate aiming for a more complex and satisfying consumer experience through vineyard walking, winery organized tour, cellar door sales, wine tasting.

Firstly we have utilized a principal component factor analysis. Factor analysis is a statistical method used to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors. Factor analysis searches for such joint variations in response to unobserved latent variables. Principal component analysis seeks a linear combination of variables such that the maximum variance is extracted from the variables. It then removes this variance and seeks a second linear combination which explains the maximum proportion of the remaining variance, and so on (Child Dennis, 2006). The second stage of the analysis concerns cluster analysis.

4. Results

Through the analysis of the principal component method four factors have been identified. The correlation coefficients among each factor and the variables of our Web site framework utilized for the empirical analysis are reported in the following table (Table 1). The analysis of these coefficients explains the presence of four leading profiles in the sample survey. They are: i) e-commerce experts; ii) social media users; iii) simple informative features iv) wine tourism oriented.

The first factor (e-commerce) explains 29.9% of the explained variance and is characterized by significant correlation coefficients in online shopping cart availability, price list, identified method of payment, identified delivery time and delivery cost parameters. The second factor explains 15.7% of the explained variance and is characterized as social media oriented since there is significant correlation in parameters concerning the use of social media, facebook/twitter, online sign up, newsletter sign up, customer feedback, educational opportunities, media updates/latest news along with presentation of wine production facilities. The third factor explains 11.4% of the explained variance and is characterized by significant correlation coefficients only in mailing address, historical data for the firm and wine description parameters. They are the features that show an informative profile with no interactivity and no use of e-commerce. The fourth factor is characterized as wine tourism oriented since the parameters with significant correlation coefficients are winemaker profile, links to local lodging, local attractions and forum presence parameters. The fourth component explains 11% of the explained variance.

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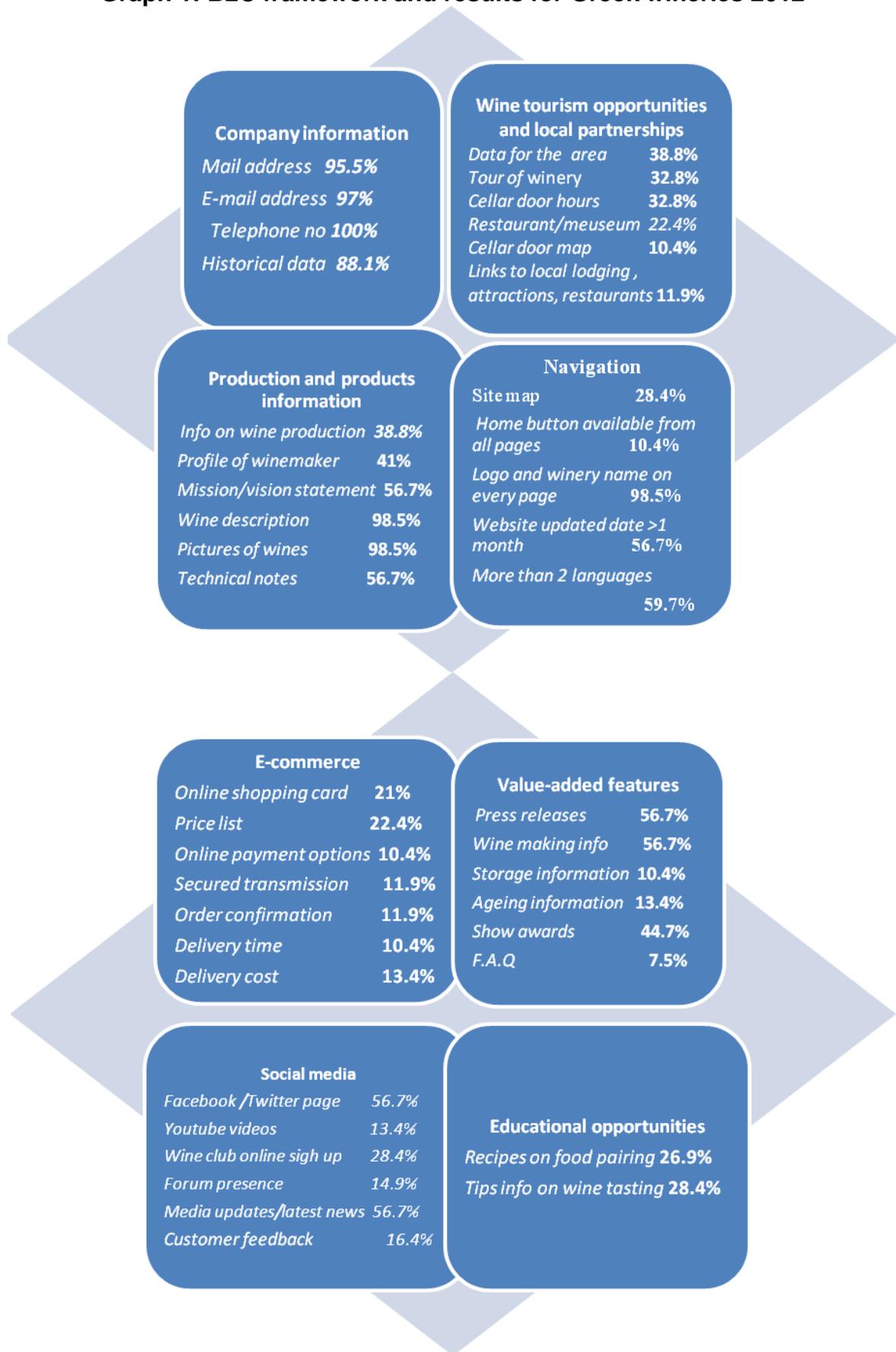
Table 1: Factor Matrix^a

	Factors			
	1	2	3	4
Mailing address available	0.068	0.165	0.809	-0.140
Historical data	0.072	0.050	0.650	0.339
Profile of winemaker	0.139	-0.036	0.202	0.776
Wine description	0.019	0.055	0.805	0.013
Wine making info	0.069	0.601	0.123	0.420
Price of wine	0.827	0.007	0.019	0.044
Online shopping cart	0.810	0.200	0.056	0.101
Online payment options	0.937	0.074	0.035	0.084
Delivery time	0.918	0.057	0.027	0.020
Delivery cost	0.950	0.117	0.034	0.022
Mission statement / Vision	-0.012	0.541	0.205	0.121
Media updates / Latest news	0.226	0.496	-0.300	0.259
Forum presence	0.135	0.452	-0.020	0.559
Links to local lodging, attractions, restaurants	-0.070	0.245	-0.116	0.725
Wine club online sign up	0.412	0.631	0.063	-0.103
Customer Feedback	0.355	0.676	0.020	0.020
Educational Opportunities	-0.159	0.724	0.079	0.108

^aExtraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

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Graph 1: B2C framework and results for Greek wineries 2012



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Based on the four factor scores associated to each web-site a k-means cluster analysis has been conducted. A four group solution has been chosen after the comparison of Euclidean distances among different groups of alternatives. The scores of the centroids of the four factors drawn out (Table 2) permit the characterization of homogeneous web-site groups as described below.

In Cluster 1 we meet nine firms which combine all parameters of our website framework. However they are mainly e-commerce oriented, with good social media marketing strategies, informative website and positive relationship with wine tourism marketing orientation. Cluster 2: the 19 firms that form this cluster are characterized by weakness to provide a channel for consumers to purchase online wine and to use social media tools in order to establish strong relationships with virtual visitors to the winery and foster a sense of community among these virtual visitors. However they are information oriented and they try to provide a more complex and satisfying consumer experience through attracting them as a tourist destination with good quality wine tasting and local attractions. The largest cluster is Cluster 3 with 39 firms, which means that the majority of the sample firms use a combination of information about the winery, historical data, description of wines and use of IT technologies, online sign up, newsletter sign up, customer feedback, media updates and news as major points of differentiation. Cluster 4 (7% of the sample) includes small firms with weakness to provide proper information, interactive communication or on-line sales.

Table 2: Factors centres scores

Cluster	Factor 1	Factor 2	Factor 3	Factor 4
Cluster 1	2.206	0.360	0.070	0.452
Cluster 2	-0.336	-0.535	0.094	0.199
Cluster 3	-0.366	1.003	0.122	-0.652
Cluster 4	-0.155	-0.440	-6.494	-0.106

5. Conclusions

This work proves that although most Greek wine firms are aware of the relevance of the Internet as an instrument capable of offering visibility on the global market, have not reached yet an adequate level of appreciation of its potentiality to develop and implement their competitive activities worldwide. Most of them use at least their websites mainly as a communication mean, which is an addition to the traditional marketing devices, with limited variety of web marketing strategies.

Our main results concern: i) the low web-site adoption rate for Greek wine firms in the survey (74.5%); ii) websites are mainly informative about the general characteristics of the firm such as location, contact, wine description, winery and wine pictures iii) informational and low interactivity in web-site typology; iv) the low rate of e-commerce technologies adoption v) the linkages between Greek wine firms and wine tourism.

The analysis of derived Greek B2C website framework with the use of the principal components method explains the presence of four leading profiles in the sample survey. They are: i) e-commerce experts; ii) social media users; iii) simple informative features iv) wine tourism oriented.

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Based on the four factor scores associated to each website a cluster analysis has been conducted and four homogeneous website groups are identified. The largest group with more than half websites is not involved in e-commerce activities, but they are mainly informative and good enough with interactive tools, offering online sign up, customer feedback and media updates as major points of differentiation. The second cluster in terms of size includes websites which are also informative and trying to provide a more complex and satisfying consumer experience through attracting them as a tourist destination with good quality wine tasting and local attractions.

This study provides valuable insights for wineries concerning how their web sites might be assessed and improved. However, the results must be assessed in light of the study weaknesses. The weaknesses of the study refer mainly to the small number of sample firms. Future research is required to expand this research into other key wine regions of the world. Comparisons of Greek strategies with those of wineries in other countries would provide valuable insights on the use of web strategies in one industry internationally.

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