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INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE CAMPANIA REGION WINE BUSINESS¹

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Abstract. The spread of modern information and communication technologies (ICTs) in the present economic context has led to new ways of carrying out commercial activities. A large body of research has shown the high potential of ICT applications for agrifood products, in particular for highly differentiated products. Wine, in particular, is an ideal product to exploit these opportunities thanks to its intrinsic characteristics, namely it is a product of “experience” and is highly differentiated and marketed internationally. This paper, starting from an analysis of the important role that modern information and communication technologies have in the agrifood sector, and more specifically in the grape growing sector, aims at examining the role that Internet and web marketing could play in promotional and communication strategies of wine companies in the Campania Region, by examining these tools as the combination of strategic factors essential to acquire a competitive position in the virtual market.

Key words: Wine, ICT, webmarketing, Campania Region

1 Introduction

In recent years, enterprises working in the wine business have begun to search for innovative tools and to develop managerial abilities to face new challenges coming from different markets and different contexts.

Nowadays, countries such as Australia, New Zealand, Chile, Argentina and South Africa market good quality wines at reasonable prices and actively manage

¹ The current paper is the result of the researches followed by Rosa Misso within the project “Information and Communication Technologies in the Campania Region wine business” of the UniCeSV (Centro universitario di ricerca e formazione per lo sviluppo competitivo delle imprese del Settore Vitivinicolo italiano). Sections 1 and 2 are written by Rosa Misso, 3 by Riccardo Vecchio, 4 by Azzurra Annunziata, sections 5 and 6 are common work of the authors.

marketing strategies. Such countries may even overtake the countries that traditionally are the major wine producers thanks to the ability to understand market dynamics and to identify appropriate strategic responses (Cesaretti, G.P., Green, R., Mariani, A., Pomarici E., 2006).

At the same time, according to the European Union, “modernisation of all levels of the wine industry” is one of the main ways to greater competitiveness². Thus, the European Union launched a process of revitalizing companies from bottling to marketing, including the adaptation of cellars, organisation of producers and promotion. Therefore, it is important to continuously and promptly adjust to the dynamics of a highly competitive market in which companies, in order to gain advantages on the market, must adapt the tools and strategies of companies operating in highly competitive markets. Undoubtedly, the success of countries that threaten European products indicates that their strategies should be taken into consideration in order to be competitive, although these strategies should not be uncritically duplicated. Of course, such reflection should also, and above all, stimulate the search for even more innovative solutions adapting them to stimuli coming from the actual economic social and cultural context in which the new information and communication technologies are a tool for innovation and competitiveness. Among elementary strategic tools for the development of a competitive advantage is the capacity to create a close relationship with clients, to differentiate ones own product using appropriate promotional strategies and, overall, to synergize efforts and investments exploiting the advantages of innovation at all levels of the productive process. Moreover, beside considering the new markets opened by e-commerce, one must also consider constraints and tools that it involves in parallel to traditional market.

Based on the above considerations, this work, starting from an analysis of the important role that modern information and communication technologies have in the agrifood sector, and more specifically in the grape growing sector, aims at examining the role the Internet and of web marketing could play in promotional and communication strategies of wine companies in one of the Italian historical production areas such as Campania Region, by examining these tools as the combination of strategic factors essential to acquire a competitive position in the virtual market (Anderson K., 2000).

2 Information and Communication Technologies and Agrifood

The spread of modern information and communication technologies (ICTs) in the present economic context has led to new ways of carrying out commercial activities. Alongside the traditional market there is a virtual market the rules of which are often unknown to the traditional market but whose growth prospectives are greater and easy to reach. In this context, one refers to “digitalized” activities, when referring to e-business in general in all his applications, and to e-commerce in particular, to

² European Commission, Directorate-General for Agriculture and Rural Development (2006), Working paper: *WINE Common Market Organisation*.

research, to information, to communication, to finance, to work, to training, to entertainment, to connection intra and inter companies.

Given their characteristics ICTs have become essential tools for the development in widely diverse fields that need them in order not to succumb to competitors. ICTs, in particular, are characterized by a high level of integration with other technologies and are useful for all companies with a high potential of growth in productivity, thereby increasing the possibilities open to the users. For example, ICTs increase the capacity for data elaboration and transfer, archiving capacity and applicative collaboration. At the same time, however, they require to reorganise an increasing number of activities within companies, through the automation and integration of different functions and lead to new configuration of the value chains of enterprises, determining substantial changes in different sectors.

In other words, ICTs have represented the true stimulus for various innovations, as regards both procedures and products, and organization, and vice versa, through innovation ICTs have become an endogenous factor of growth.

In agrifood the use of ICTs, in general, can be justified by two fundamental reasons. First, clients and consumers require a complete “tracing”. To this regards, this technology facilitate the management of the flow of information. Second, ICTs provide competitive tools for the management of the flow of goods able to provide an advantage to the company which, in turn, contribute to the general efficiency of the supply chain. Anyhow, agrifood companies have invested in ICT less than other sectors. This may be due to the presence in agrifood of many small and medium enterprises. Among the applications frequently used by both small and medium enterprises operating in agrifood, are e-mails, websites and online banking. In addition to these basic tools, in decreasing order of use are Electronic Data Interchange and Enterprise Resource Planning (ERP) systems. The focalising on future challenges in terms of food safety (for example, tracing systems) and digital integration of the value of the offer chain prompted the enterprises to increasingly invest more in Radio Frequency Identification (RFID) technology.

However, information technology plays an important role also in the strategic management of the large amount of data and information that include a geographic component and that can support strategic and operative decisions of agricultural entrepreneurs. Therefore, “intelligent” systems can contribute to the definition of a technologically advanced agriculture, which corresponds to the American “precision farming”.

In conclusion, ICTs have progressively become an “innovative paradigm” that profoundly affects not only the development of both intra- and inter-relationships of agrifood enterprises, thereby facilitating monitoring and coordination. In addition, ICTs can modify the organization of relationships among the stakeholders of the field, and thus have a huge potential to change competitive dynamics.

3 ICT applications in vineyard and cellar

In the last years wine is the final result of various factors, all equally important, starting from the necessary contribution of nature up to the decisive intervention of man. Long gone is the time when agronomical and enological procedures were left to chance. Although it is true that wine is an important link to traditions to the places where it is produced, it is also true that the most of this cultural heritage has been transformed thanks to technology, development of enology and wine culture and, last but not least, to chemistry. Although technology helps to improve the quality of wine, it is important to note that quality is a concept that in which the producer believes and aims at. This means that, without quality raw material, technology certainly cannot make miracles, eventually it can help to obtain the best quality from less than excellent raw material. In the last ten years, the wine sector has undergone a profound renewal involving the whole supply chain, from the planting of vines to product packaging. Undoubtedly, this renewal resulted from the expectations of an increasingly well informed and demanding customers. Apart from improving the quality of wine, technological innovations have been applied to automatize several phases of the productive process. At the same time, operators in this sector have become more aware and careful. The evaluation of the quality of grapes, the choice of parameters with which to describe quality and its identification are fundamental when the agriculture phase (involving the vine grower and the agronomist) and the transformation phase (involving the cellar master and the wine maker) enter into communication. The principle is always to identify parameters or measurable indices (in the composition of the grapes or in estimating the yield of vineyards) that are directly related with the qualitative characteristics looked for in wine. In the vine and enological sector, besides equipments, phyto-pharmaceuticals and biotechnologies, there are advanced information and technological tools for the collection, exchange and elaboration of information. Moreover, technological innovation has produced very important softwares and technologies that, appropriately included in management and productive processes, result in rationalisation of the collection and administration of the company's data and lead to notable benefits in terms of efficiency and efficacy³.

Relative to ICT applications in vineyard in recent years, many new technologies, adapted or developed precisely for vine culture, have been introduced on the market. However, although until a short time ago most of the new technologies were aimed mainly at the collection and classification of the greatest number of data possible related to the productive process, the most recent innovations are aimed at directly transforming the data collected into specific agronomic practices, with the objective of improving the quality of grapes, reducing costs and standardization of productive processes. Therefore, today in this field "planning" means not only taking into account technological tools for the various single but also organizing a system of collection and classification of data and information that can be accessed in real time for the management and improvement of the entire productive process. In this paper we present a brief, not exhaustive, panorama of the most advanced technologies today available for the monitoring, the management and the running of a vineyard.

³ It is also thanks to ICTs that countries such as Australia, United States and New Zealand have in a short time produced relevant qualities of wine (Anderson, 2001, Aylward, 2003).

One of the most important of these advantages is undoubtedly precision or site-specific vine culture, or rather based on the differential management of vine culture in relation to the environmental characteristics. In this optics, growing practices are modulated in relation to the spatial variability of the territory and therefore linked to the true needs of the plant.

The prime aim of precision vine culture is to know the state, the condition, the vigour and the physiological needs of each single vine and to adapt culture techniques to these needs in a timely fashion, so that information tools support the automation of the management of an enormous number of plants.

Another macro family of technologies undergoing intense development in recent years is that of ground sensing, that is, a system consisting of a series of intercommunicating micro sensors and nodes, and a central elaboration unit that, in turn, continuously transmits data to the agronomist, thereby providing a complete information about the vineyard in real time. The sensors can record physiological parameters related to the plants or to environmental parameters such as diametral growth, leaf temperature, the water content and temperature of the soil at different depths and the water content and temperature of the air etc.

Relatively to ICT applications in cellars modern wine making, thanks to equipment, biotechnologies and vinification protocols resulting from research and experimentation, produces a large number of data that must be stored with care and that become part of a company's heritage. The collection and management of information flows during the process of producing wine are, moreover, determinant for qualitative improvement.

In fact, appropriately organized and memorized production data allow one to:

- Plan and monitor the productive process,
- Obtain the tracing of the supply chain,
- Identify responsibilities,
- Check suppliers (grapes, wines, enological workers, etc..),
- Efficiently organize personnel.

Moreover, if information travels quickly throughout the supply chain and in the cellar, it is possible to limit problems, isolating the causes, preventing them from continuing to cause damage and to communicate with the other workers to monitor the various steps of production. Wine companies increasingly use information tools for day-to-day running. For example, with management software packages it is possible to: balance reclassification, storeroom retrieval and commercial statistics, classification of the clients/suppliers records, of the documents accompanying goods, of wine production registers, of the loading/unloading registers, of the bottling registers, of the geographical indications labels, management of excise duties, stock declaration, vineyard land registry, management of deposits and link with the cash registers at the point of sale. Among the most widely used technologies for the collection and re-elaboration is the integrating system of sensors that allows one to monitor and record in real time several parameters of the alcoholic and malolactic fermentation, immediately elaborating the sensorial and technological evaluation of the enologists and indicating the appearance of eventual anomalies indicating what should be done to counteract these. Other recent interesting technologies for cellar management are:

- artificial olfactive systems known as electronic noses, which are able to provide a details and exhaustive profile of the sensorial characteristic of the product⁴;
- computerized systems for the “at-a-distance” monitoring and management of the temperature and levels in the refining container (barrels, tanks);
- advanced equipment for mass spectrometry chemical analysis to obtain a quick quantitative profile for the various components known for their different sensorial effect on wine;
- systems to control steps of labelling and bottling.

In addition, there are now information technologies that allow the perfect transfer of information. A case in point is represented by technologies that report “digital DNA” – a numeric code generated by a mathematic algorithm that has a high inviolability barrier – of the product on each single bottle of wine thereby guaranteeing its authenticity.

Moreover, the coding system allows one to verify the conformity of the product, its origin and its traceability, the correct distribution on the market and other information that the producer may decide to make available to the distribution network and/or consumers. This digital identity card reported on the label or on the cork makes possible to associate its single bottle of wine to its digital identity. This system can be integrated with other technologies as for examples, bar codes, RFID⁵ and holograms.

4 Internet and webmarketing to support promotional and communication strategies of wine companies

Increasing international competition within the wine market has led to structural changes in this sector, which have transformed it from *an agricultural-based business governed by the supply to a food industry characterized by intense international exchanges and high levels of competitiveness and professionalism* (Rabobank, 2003).

A substantial contribution to this change is linked to the advent of new information technologies that have become an important production and organizational factor in the search for new business opportunities. Consequently, company marketing policies have evolved focusing on “information” and on company-client relations in an integrated vision that may produce value. The use of web marketing has increased with the evolution of relational marketing applied to the ICTs that allow one to use and integrate personal one-to-one communication and mass one-to-many communication with reduced costs and targeted to all the stakeholders involved in a company.

⁴The electronic “nose”, which is already widely used in the field of coffee, beer and fishing, is based on a matrix of gas sensors and on a complex system of elaboration of the signals measured.

⁵Radio Frequency Identification is a technique for the automatic identification of objects or persons. It is based on the “at-a-distance” reading RFID tag using specific “readers”.

A large body of research has shown the high potential of web marketing for agrifood products, in particular for highly differentiated products. Indeed, web marketing gives enterprises located far from the main commercial areas access to direct and short commercial channels by giving them visibility with the ever-growing public of web surfers.

Wine, in particular is an ideal product to exploit these opportunities thanks to its intrinsic characteristics, namely it is a product of “experience” and is highly differentiated and marketed internationally (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.

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 and Spadoni, 2000).

In analyzing the diverse possibilities to implement Internet marketing in the wine sector, Goodman (2000) stressed the many advantages that companies can gain from such applications and classifies them in different macro-categories of possible competitive advantages that may derive from the reduction in the time required to search, acquire and circulate information, the improvement of internal and external relationships with the actors at the start and end of the supply chain. The continuous improvement of services and products offered to clients, because the web reduces the time and costs of market research; it can also be used to launch new products and to do customer satisfaction analysis. Nevertheless, these benefits have not been exploited homogeneously by all the actors operating in the global market. In fact, various studies show wide differences in the approach to web marketing of wine companies in different countries, and stress that the “newcomers”, in particular Australia, Chile, United States and South Africa, are emerging in the market also thanks to the extraordinary ability to apply innovative and effective marketing strategies that are able to exploit the opportunities offered by new technologies.

For example, Stricker et al. (2003) analyzed the use of the Internet by the wine companies in Australia, California (USA) and Germany and showed that websites are more widely used in California than in Australia or in Germany. Moreover, wine company websites in Australia and California focus on selling products, whereas Germany sites focus on the informational aspect.

Empirical studies in various Italian regions (Canavari M. et al., 2005; Parisi P., Lo Giudice P., 2006) show that, although companies recognize that Internet increases their visibility in the world markets, they have yet to exploit I as a relational tool to increase competitiveness. In fact, in most cases, the Internet continues to be considered like any other media and few webmarketing strategies have been adopted. An analysis of the business models online (Sebastiani, 2001) showed that Italian wine companies are still tied to a *firm-based* models characterized by a central structure and strong integration between online and offline activities, in which approaches go from the company window (the most used) to transactions that

culminate in the e-based model⁶. This is confirmed by results of studies conducted throughout Italy by Winenews.it⁷, an online communication agency that monitors and evaluates each year 2000 companies and their websites. Their results show that only a small number of Italian wine companies view their website as a crucial part of their marketing strategy, whereas most producers see a website as merely a “duty”, a sort of online catalogue, which is not always kept updated. In addition, a considerable number of producers still do not have a website.

The monitoring also identified a prevalence of level 1 websites, namely window websites or presence websites that simply introduce the company, provide information about it and its products and gain visibility online, thereby not exploiting the strategic potential of this information channel that is able to activate interactive marketing to meet the needs of the “web consumer” thereby creating value in a one-to-one relation.

The issue is even more controversial when considering the online commerce of wine. The revenues of online sale of spirits (wine, beer and liquors) in Europe is about 240 million euros. Compared to the entire sales of spirits in Europe (75 billion euros), online sales account for only 0.32% of the total (source: Forrester Research).

In a survey of more than 8000 wine aficionados in Italy with a medium-high education and high income levels, who use the Internet daily for professional or leisure purposes, 72% had never bought wine online (24% sometimes purchased wine online). Only 4% bought wine online regularly. The majority (64%) of those buying wine online spent an average of between 100 and 200 euros per year, 27% spent between 200 and 500 euros/year; 6% between 500 and 1000 euros/year; and 3% less than 100 euros/year.

It is therefore obvious that Italian wine companies must invest more in websites that are more coherent with a more general communication and promotional strategy in particular a strategy that is able to exploit the various online tools from e-mailing, marketing and newsletters to more “evolved” strategies that attract visitors and makes them return to the website and strongly connect them to the product.

Among the latter strategies, *advergaming* are particularly interesting and are considered one of the best means with which to make a brand known without invasive advertising, and that also prompt word-of-mouth. In Italy, a very interesting example in the wine sector is the “*Santa Margherita*” company whose website contains several free games all of which aim at informing the player about wine and above all about the brand. This had a positive effect in terms of accesses to the website, with more than 215.000 visitors/year and an average of 17.000 visits/month.

Other innovative web marketing tools are linked to the new opportunities of exploiting the knowledge and information offered by the Web 2.0. A 2.0 marketing perspective means generating experiences using different channels and improving the

⁶ See Sebastiani, 2001, for details. Briefly the different business models available online are: advertising based; community based; brokerage-based; infomediary; subscription-based; firm-based.

⁷ *WineNews - The pocket wine web site in Italy* is a daily online communication agency about the world of wine, currently has 18.570 registered users, more than 125.000 unique visits each month. The ranking of the 12 best websites on wine in Italy is made after monitoring 2000 sites from all Italian Regions.

client/company relation that, by taking part in the development of a product/service makes them feel actors and will develop a positive feeling towards the brand.

These tools allow companies to get to know consumers and to adapt their strategies to the consumers' needs. By analyzing blogs and forums, companies can understand what people think about their products so they can identify targeted commercial strategies.

According to the Silicon Valley Bank in the "*State of the wine industry: forecast and strategic recommendations, 2007 – 2008*" report, the Web/Wine 2.0 concept is spreading: blogs, podcasts and the growing use of social networks focused on wine are the ideal forum for viral marketing strategies⁸. The potential of these tools in terms of support to marketing policies is considerable also because the users of Web 2.0 represent 56% of Internet users⁹.

Particularly interesting is the case of blogs, which have become an increasingly interesting instrument for companies. Roughly, we can classify wine-related blogs in: blogs as a tool for aficionados, namely it is an opportunity for storytelling, giving opinions, sharing information, etc.; company blogs where the producer and the community of users communicate and in which besides information strictly related to wine, there are personal experiences ideas, opinions and much more. Successful company blogs show that the more the users perceive the information posted as personal, sincere and true, the keener they are to place confidence in the company's products¹⁰.

Another Web 2.0 tool that is enjoying particular success in the wine sector is online videos. These represent the expression of forms of self-publishing, which is favoured by the low costs of the technologies used and the complete absence of editorial authority. In fact, many Italian and foreign wine companies use this instrument to tell their story, to give information about their territory by filming the wine-picking. Lastly, there are instances of using the wine/web 2.0 combination for virtual reality. In 2006, the "*Capozzi Winery*" in California opened "Second Life" which is the virtual equivalent of its company, including cartoons, in which the user can take part in the main steps that leading to wine production.

⁸ Viral marketing describes strategies that encourage individuals to spread to others a commercial message creating the potential for the exponential growth of the message itself.

⁹ Nielsen//NetRatings Custom Analytics, "Web 2.0: lo scenario italiano ed internazionale", January 2007.

¹⁰ Particularly interesting is the experience of the South African company "*Stormhoek*", whose brand is now famous in Europe, particularly in the United Kingdom, thanks to a strategy of viral marketing, launched in 2005, using cartoons sent out on the blogosphere, through bottles sent to bloggers free of charge, through word-of-mouth. Today, this company sells over 350,000 cases of wine, only 10,000 of which on the internal market, spending just of 50,000 euro/year in advertising.

5 Web marketing applications in the wine business of Campania Region: some empirical evidence

5.1 Brief presentation of Campania wine business

The evolution which has involved the international wine market in the last decade brought to recognize a specific value to Mediterranean wines, awarding the producers of southern regions capable to offer products suitable to evolved consumers expectations.

In Campania Region, as in other southern regions of Italy, the number of firms that have introduced quality improvement strategies and have entered the high scale wine market reaching growing revenues, has become relevant (Pomarici, 2004).

Campania thanks to its peculiar climatic conditions, even if extremely variable, that has helped the growth of grapes and the production of good quality wines, and due to its ultra millenarian wine making tradition, is historically considered one of the most appreciated Italian quality wine producing region.

For the local economy viticulture is an agriculture activity of undoubted importance in terms of territorial diffusion and in terms of impact on total agriculture gross sale production.

The added value of wine regional sector is approximately 160,5 million € and counts on the national added value for about 3%. Wine sector expresses, moreover, remarkable potentialities considering its capacity to promote economic activities linked to production, tourism and services, which have a considerable impact on territory.

Table 1. Campania Region wine production: main data

	Period	Campania	Italy	Campania /Italy
Total surface (hectars)	2005	27.112	718.869	3.8%
Utilized surface (hectars)	2005	26.750	683.507	3.9%
Surface variation	2000-05	-0.8%	-0.3%	
Wine production (hectoliters)	2006	2.020	49.631	4.1%
Per hectar production (kg)	2006	110	105	

Taking into account production levels, Campania Region expresses only a small amount of the national wine production, near to 5%, and even a smaller amount on the supply of wines with geographical denomination (1,4%) and of ones with geographical indication (1,5%).

At the moment, thanks also to the requalification occurred in the last years, the regional wine production counts on 29 recognized origin denominations between which 3 Controlled and guaranteed denomination of origin (DOCG), 17 controlled denomination of origin (DOC), with over seventy typologies, and 9 geographical indications (IGT), that is essentially a “niche” production with peculiar

characteristics. Along with high quality wine productions there are some firms with nationally and internationally recognized trademarks.

The placement of the wine offer is predominantly on the local and national market, therefore the regional contribution to Italian wine export is rather low even though it is concentrated on high level wines.

In view of the wine firms system it is possible to state that the limited market orientation, the poor unity inside the supply chain and the reduced experience on international and national markets, have contributed to prevent the birth of a real true cluster of regional wine firms.

In the end, the Campania wine division turns out to be a polarized structure which opposes few large firms or associated producers and transformers that reach national and international markets using private trademarks, have a good relationship with the organized distribution and have the management capability to handle market challenges, to a multitude of small agricultural firms, which are structurally weak, and with low entrepreneurial background barely oriented to the market and to co-operation. These lacks stop an incisive valorization and promotion of the product and a more competitive positioning.

5.2 Methods, targets and main results

Starting from the previous considerations the study meant to outline a first scenario of the attention of Campania Region wine enterprises towards the use of web-based technology for commercialization and valorization of their products.

The research wants to give some indications about the tendency of Campania Region wine firms to employ the web as a supplementary instrument for marketing policies, trying to understand the consistency of planned offline marketing strategies with web marketing tools.

Specifically the empiric analysis proposal was to achieve the following goals:

- Verify the presence of Campania Region wine firms on the world wide web;
- Characterize the role of Internet in the wine firms marketing strategies;
- Analyze the mission assigned to their web sites;
- Study the web marketing strategies and the business models;
- Verify the consistency between marketing strategies and web marketing policies.

To reach these goals, the analysis has been designed in two phases. The first one has identified, surfed, directly observed and evaluated the web sites of Campania Region wine firms, with the intention to give a first picture of the utilization of the internet. The second phase has realized a discussion focus group with some leader firms of the region, selected provincially.

The results of the first phase have outlined that around 63% (153) of the 244 wine firms operating in Campania Region have a web site, of these 66 have an average production of over 100.000 bottles per year. Starting from this data a casual sample composed of 20 regional wine firms, reflecting the provincial distribution, has been extracted representing about 30% of the total number of regional wine firms with a website and an average annual production above 100.000 bottles.

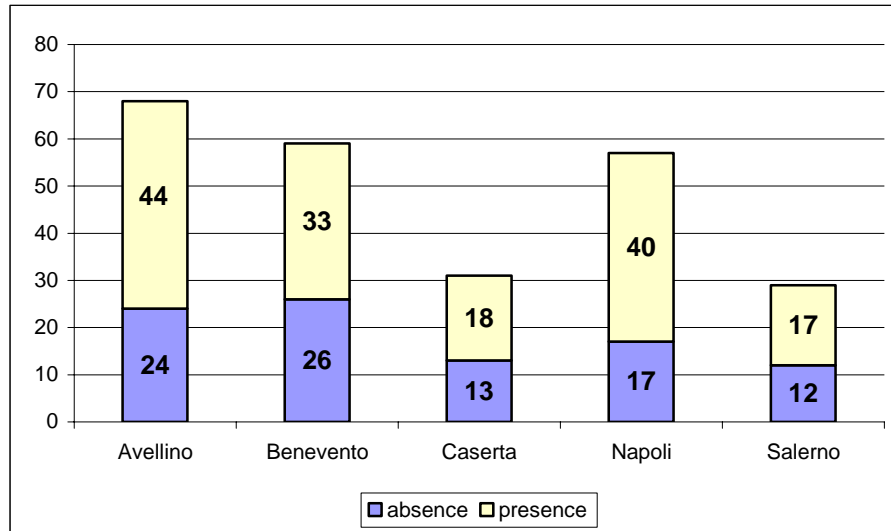


Fig. 1. Provincial distribution of wine firms with web site

The observation and surf of the websites has been realized by the user point of view whom are directed the devices of the, so called, virtual retailing mix, and has allowed to analyze the elements used in the web marketing strategies.

The analysis has substantiate that the main part of the regional wine firms websites have an informative and promotional character with a total absence of e-commerce websites.

The common information in all 20 analyzed websites are relative to the description of the firm and the wine catalogue, yet only in 9 cases the explanation of the wines goes along with other information such as cooking recipes or pairing advices and just in two cases there is an online sommelier guidance. A frequent information in most of the websites is, also, the description of the territory in which the firms works, nevertheless, also in this case in hardly any website the connection firm-territory is strengthened offering to the visitor links to accommodation facilities or restaurants (different from the ones directly managed by the firm).

Besides, in most of the websites visited there are informations on national and international events, sponsored or participated by the firm, while less emphasis is given to events promoted by the territory. 75% of the websites visited offer the surfer the possibility to view an online photo gallery, that generally holds not only vineyards, cellars and the firm but also the territory. Barely used are videos and virtual visits, currently available in just 3 websites.

Among the visited websites the more equipped, roughly 5, offer the guest a section dedicated to news or media reviews, or the possibility to subscribe to receive periodic newsletter, and are supplied with an information form.

It is important to highlight that complete online shopping is impossible in any website and only in 3 cases firms allow the visitor to make online, national, orders using standard forms.

Finally, significant is to underline that about two thirds of the websites visited have an English version and only in 3 cases the website is available in an other language, mostly German.

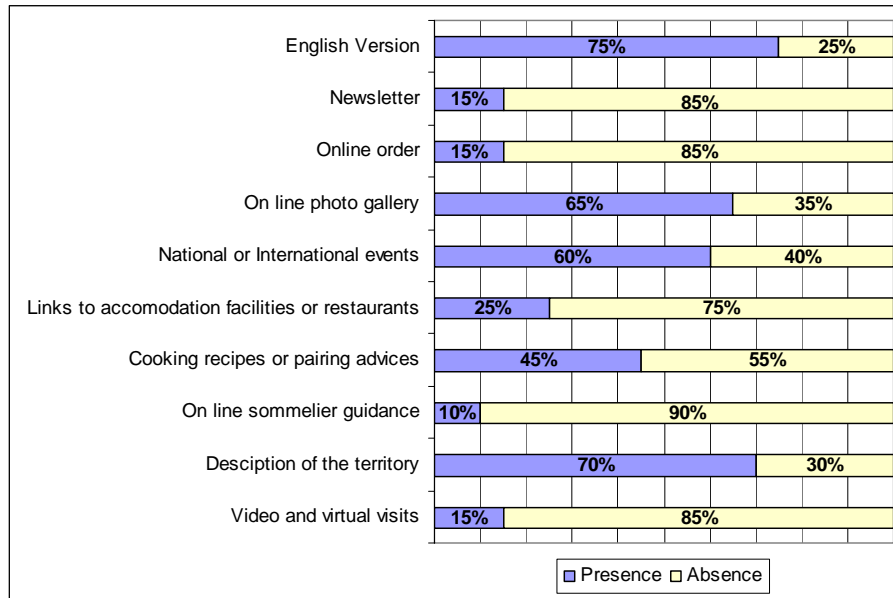


Fig. 2. Some characteristics of the wine firms websites visited

To analyse thoroughly the results of the online survey and to comprehend the consistency between marketing strategies and the employment of the web it has been organized a focus group with the managers of wine firms coming from the five provinces of Campania Region. The focus has represented a very important moment to reveal, first of all, the sensibility of regional wine entrepreneurs for modern information and communication technologies.

In particular, from the focus came into sight the firms limited predisposition to use and exploit completely the potentials of such technologies in their marketing strategies. Proving what emerged in the previous phase, all the managers have stated that, also being aware of the important role that Internet can play to develop international market opportunities and expand the amount of information given to the customer, at the moment they have adopted an online business model limited to the promotional and informational functions.

The managers have also outlined insufficient results in terms of customer relationship improvements. Furthermore, at the focus has came out that the website has not been useful to develop the communication or collaboration with other wine firms, or local organizations, associations or promotion agencies.

Probably these results depend on the fact, already revealed in the first phase, that the websites don't offer advanced and interactive services to the guests, like discussion forums, blogs, virtual visits, and so on, but in the best case newsletter and downloadable materials.

Concerning online sales, the focus has pointed out a real aversion from the managers towards these sale modality, considered poorly attractive for the consumer and not in line with the firms philosophy. This feature, combined with the other results exposed previously, proves that the wine managers assign a marginal role to web marketing and don't rely in the potential benefits this can give to the firm.

6 Final remarks

Among the various informatics and telecommunications technologies available today Internet is certainly the most useful in terms of potentialities: as far as marketing and business is concerned it is the most innovative instrument which has appeared in recent years. This instrument requires the necessity for the various enterprises (especially the wine ones) to develop specific devices and to research for new solutions in order not to be excluded from the advantages offered by the virtual market. In the present paper some conclusions have been reached by searching a strict relationship between promotional and communication strategies adopted by wine business firms and the corresponding marketing strategies offered by the web. From the present paper it results that the wine business compartment represents a potential user of the advantages deriving from the applications of Internet, since the use of this means is globally rather spread. However, as underlined in the previous sections, the benefits offered by this strong instrument have not been properly exploited by all "actors" operating in the global market. This conclusion appears to be particularly apt to Italy, where most wine business firms, even though aware of the relevance of the Internet as an instrument capable of offering visibility on the global market, have not reached yet a adequate level of appreciation of its potentiality to develop and implement their competitive action worldwide. In this work we have underlined the fact that the web is still considered, by the wine firms of Campania Region, mainly as a communication mean, which is an addition to the traditional marketing devices, and therefore a limited variety of webmarketing strategies has emerged from the compartment. This empirical type of analysis has allowed to directly verify how in the Campania provinces wine firms, even though employing reasonable efforts to planning and implementing promotion and communication strategies, do not attribute the due importance to web marketing strategies and still give the latter a marginal role, showing a limited trust toward potential benefits of these applications. In this respect, the potentialities of the small wine firms existing in the Campania Region are not developing in new opportunities. Instead, they show a structural weakness and a prevalence of a business culture poorly market oriented. These small wine enterprises of Campania should instead concentrate their efforts and investments by exploiting the advantages of innovative technologies at all levels of the production process, in order to build up a strong relationship with the consumers and with the markets, and should try to differentiate their own product through the application of adequate promotional strategies.

References

1. Anderson K. (2000) Lessons from Australia's Wine Industry, Export-Led Growth, Rural Industries Research and Development Corporation, Global Competitiveness Research and Development, N. 00/52.
2. Aylward D.K. (2003) A Documentary of Innovation Support among New World Wine Industries. *Journal of Wine Research*, 2003, Vol. 14, Num. 1.
3. Canavari M., Regazzi D., Spadoni R. (2002) Origin Labels on the World Wide Web, Università di Bologna, Dipartimento di Economia e Ingegneria Agrarie, Italy.
4. Cesaretti, G.P., Green, R., Mariani, A., Pomarici E. (2006) Il mercato del vino - Tendenze strutturali e strategie dei concorrenti: Franco Angeli.
5. European Commission, Directorate-General for Agriculture and Rural Development (2006) Working paper: WINE Common Market Organisation.
6. Food and Agriculture Organization of the United Nations (1997) Agricultural and Food Marketing Management. Marketing and Agribusiness texts n.2.
7. Goodman S. (2001) The Internet: Increasing Efficiency and Effectiveness. *The Australian Grapegrower and Winemaker*, May 2001.
8. Hall, A., Lamb, D.W., Holzapfel B. and Louis, J. (2002) Optical remote sensing applications in viticulture - a review. *Australian Journal of Grape and Wine Research*, 8, 2002.
9. Rabobank (2003) Wine is business, shifting demand and distribution: major drivers reshaping the wine industry, Rabobank International. Food & Agribusiness Research Utrecht.
10. Stricker, S., Sumner, D., Mueller, R. (2003) Wine on the web in a global market: A comparison of E-commerce readiness and use in Australia, California and Germany, IV EFITA (European Federation for Information Technology in Agriculture) Conference. July, Hungary.
11. Taylor J. ,Tisseyre B. and Praat J.P. (2005) Bottling Good Information: Mixing Tradition and Technology in vineyards. Information and Technology for Sustainable Fruit and Vegetable Production FRUTIC 05, 12-16 September 2005, Montpellier, France.

12. Wood E. and Kaplan D. (2005) Innovation and performance improvement in the South African wine industry. *International Journal of Technology & Globalization*, 2005, Vol. 1.