Wine and web marketing strategies

The case study of Italian speciality wineries

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Abstract

Purpose – This paper aims to investigate the level of internet marketing in use and the web marketing strategies models implemented by the Italian Speciality Wineries (ISWs).

Design/methodology/approach – The paper surveyed a sample of 272 high quality wineries. The analysis of the existing web sites has been conducted through an adapted 7Cs model. The 7Cs model data analysis has been developed both at a univariate and a multivariate level. The entrepreneur's perception of internet marketing has been analysed through a market research questionnaire.

Findings – The use of internet marketing by the ISWs is at an initial stage. "Show-case" is the main purpose while functionality is the most important web site characteristic. Five groups of wineries have been identified through cluster analysis. The web marketing approaches implemented revolve around the choice to effect online sales. The web marketing strategies map highlights that the future development of the ISWs web marketing models goes in two different directions. The entrepreneur's perception of quality of the web site is identified in navigability parameters.

Originality/value – The paper contributes to a greater knowledge of the strategic web marketing models utilized by Italian speciality wineries. It also discusses the entrepreneur's perception of internet marketing.

Keywords Electronic commerce, Internet marketing, Marketing strategy, Wines, Italy

Paper type Case study

Introduction

The recent and sudden growth of e-business is having a strong impact on entrepreneurs especially in small and medium enterprises (SMEs) (Wilkinson, 2002). As underlined by Brooksbank *et al.* (2003) e-commerce also represents an important option for the survival and the growth of Small Farming Enterprises (SFEs). The speed of growth and the use of e-business vary in accordance to the country, the sector and the size of the company (Baourakis and Kourgiantakis, 2002; Beynon-Davies *et al.*, 2003).

A growing number of studies have recently emphasised the potential of internet to help SMEs to be more competitive; the main opportunities are described in detail by Hsieh and Lin (1998) while Kleindl (2000) has underlined the new risk factors.

Internet is also an important option for agro-food SMEs that want to market "typical" local food products more effectively in a global context. There is increased interest by consumers and retail distribution chains for these goods (Sparkes and

Thomas, 2001). Furthermore the world market is not homogeneous, it is composed of many sub-markets, each of them having particular requirements.

This situation is similar in the international wine market, especially in the ultra-premium ($25-50 a bottle) and icon segments (above $50 a bottle) (Mueller *et al.*, 2003; Bernet and Stricker, 2003). The consumers' perception concerning these wines is highly complex and during the decision-making process they take into account many differentiation factors. Consequently, consumers demand lots of information concerning the characteristics of the products for which internet is the best communication channel (Hsieh and Lin, 1998; Baourakis and Kourgiantakis, 2002).

The wine sector can also be considered as a globalisation indicator, because some of the developments in the wine industry are representative of what is happening in other food industries that have still not fully adopted e-commerce (Mueller *et al.*, 2003; Bernet and Stricker, 2003).

On this basis, the aims of the paper are to verify for the Italian speciality wineries (ISWs):

- the level of internet marketing adopted;
- the web marketing approaches implemented and the expected future developments for these wineries; and
- the strength and weakness factors of the strategic web marketing models in use.

Literature review

The definition of e-business and e-commerce found in literature is widespread and often contradictory. A rational classification of the different definitions is reported by Beynon-Davies *et al.* (2003), whom on the basis of previous studies conducted by Turban *et al.* (2000) and Beynon-Davies *et al.* (2002) regard e-business "as a superset of e-commerce and in turn e-commerce as a superset of internet commerce or i-commerce". On this basis and according to Chaffey *et al.* (2000), internet marketing is larger than e-commerce, but it can also be considered a sub-set of e-business. Internet marketing shares some of the characteristics of both direct and indirect marketing (Baourakis and Kourgiantakis, 2002).

Sparkes and Thomas (2001) referred to the interactivity and the development of customer relationships as one of the most critical factors of internet marketing to gain competitive advantage for SMEs. Kleindl (2000) identifies as further sources of competitive advantage:

- access to the international market;
- the entrance into new markets, especially niche markets, at no additional costs;
- business efficiency; and
- lower costs in the exchange of information.

Quick market access without the use of middlemen is reported as an important strength factor by Benjamin and Wigand (1995) even though they underlined the danger of channel conflicts. Businesses can, however, limit these conflicts by offering different products to online customers or by using internet just for contacts and promotional information (Kleindl, 2000). These problems are obviously still relevant for agro-food products, which usually use long distribution channels that cannot be supplied by internet (Baourakis and Kourgiantakis, 2002).

As described by Berthon *et al.* (1996) the new marketing possibilities of the web regard:

- product information;
- corporate image growth; and
- interactivity with consumers.

Furthermore, new opportunities of adopting the internet by small businesses look for, not only more efficient product sales transactions, but also a cost-effective communication method, through which they can conduct research activities concerning products, consumers and markets (Pallab, 1996; Quelch and Klein, 1996). The cost of e-market research is much lower than conventional methods and its use has become more intensive due to the increasing growth of the internet market (Baourakis and Kourgiantakis, 2002). In this way SMEs can adopt flexible product strategies to meet the needs of their customers.

The access to a wide range of products, services, information and easier communication methods are other favourable factors for SMEs to compete in the global marketplace (Quelch and Klein, 1996). On this basis the global adoption of internet facilitates the opening of new markets and the development of new products with favourable impact on:

- local production and customer relationships; and
- the development of a consistent level of supply and the entrance on the global market of specialized niche products.

The use of internet by individuals and or regional sites, to promote rural tourism and local products, gives relevant potentiality for less favoured areas. Here, in the past, the development and the sales of speciality products has been greatly limited because of the location and the costs of advertising (Blandford and Fulponi, 1997). In this context, web portals can also be seen as a further method to increase SMEs participation in e-commerce and to enter global markets (Sparkes *et al.*, 2001; Christie *et al.*, 2003). In this way the internet has become a "marketing interface" through which information sharing among SMEs and other groups is becoming the key factor for focusing strategies on the consumer needs. It allows them to get a new competitive edge linked to:

- the creation of a speciality food network between producers and consumers; and
- consumer loyalty based on the origin of one collective brand (Sparkes *et al.*, 2001).

Integrating e-commerce services and e-commerce support services through web sites and providers focused on agriculture, agro-food and/or wine, can be considered as another reason for creating collective marketing interfaces between producers and consumers (Mueller, 2000). Some SMEs have the ability to create virtual assets such as "information skills, digital resources and the competency for managing inter-company relations and collaborative events with other companies". This is considered as a critical asset by Tetteh and Burn (2001) for achieving global competitiveness. SMEs benefit from:

- competing with other companies on non-price variables;
- new markets;

- lower marketing costs; and
- increased consumer satisfaction.

On the other side relevant deterrents seem to be:

- web site construction costs; and
- the difficulties linked to the test performance of marketing.

The lack of information and communication technology (ICT) and the skills to use ICT are pointed out by Feher and Towell (1997) as further difficulties in adopting ICT. These are barriers for SMEs who wish to take full advantage of the new technology. Web site quality and the lack of web-business experience are often other additional critical variables causing SMEs to miss market opportunities (Thelwall, 2000; Wilkinson, 2002).

Ainscough and Luckett (1996) have defined four broad categories of relevant ways (interactive brochures, virtual storefronts, information clearinghouses, customer service tools) in which the internet, but especially the Worldwide Web, can be used as a marketing tool. They pointed out how, in the rapidly changing environment, organisations may yield the most significant competitive advantages going beyond the informational level. This source of competitive advantage has also been stressed by Ditto and Pille (1998) who divided into three different levels the degree of consumer impact provided by a web site:

(1) Informational.
(2) Transactional.
(3) Relational.

Following this approach the internet is therefore more than an efficient communication medium. It is also a powerful tool in interactive marketing where an equal input from technology, content and marketing experts represents the necessary capacity for creating meaningful and efficient customer relationships.
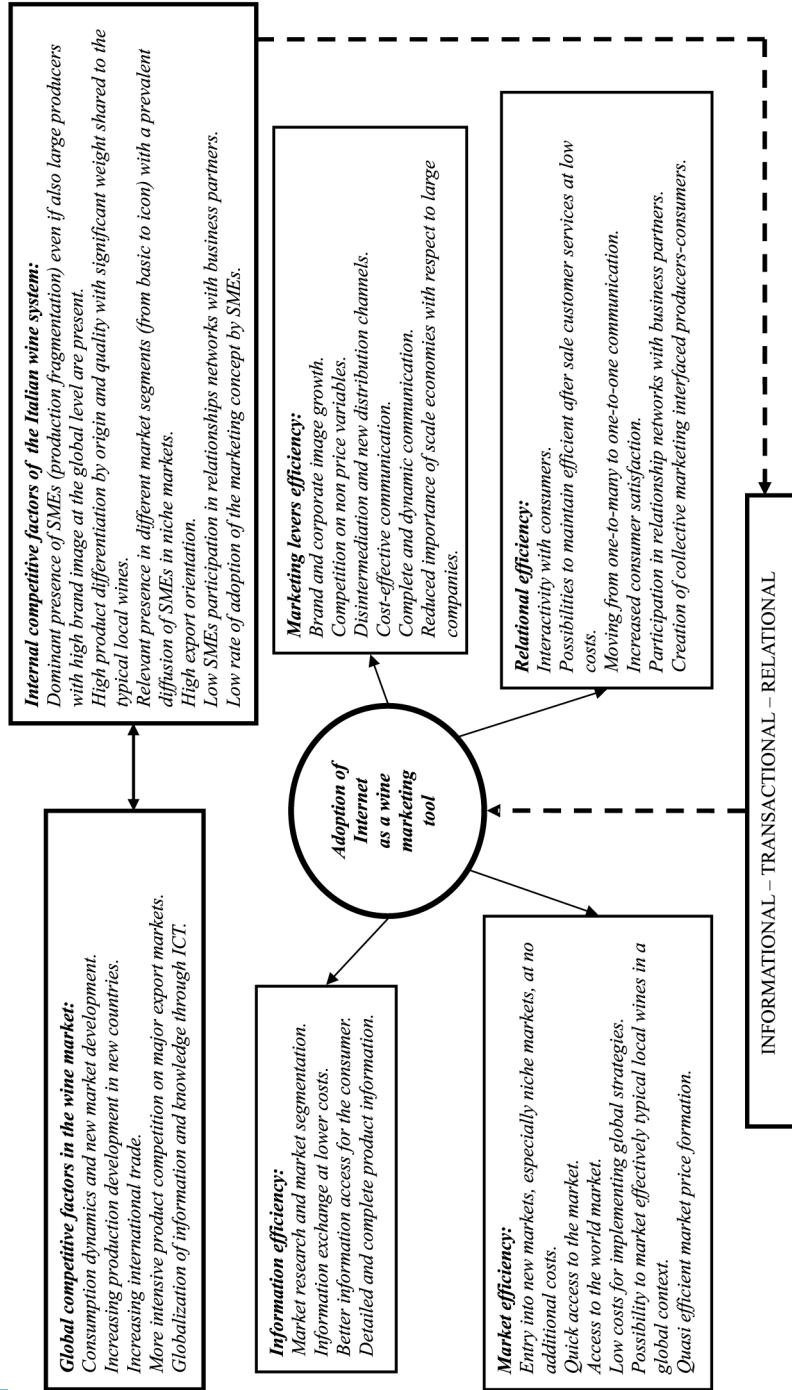
The case of the Italian speciality wineries
Theoretical framework and objectives of the research
Taking into account the risk and opportunity factors emerging from the previous literature review the present paper develops a theoretical framework pointing out the interaction of relationships in the system of internet wine marketing (see Figure 1). It assumes that the adoption of the internet, as a wine marketing tool, has been determined by:

- the interaction of the internal and external competitive factors of the Italian wine system; and
- the level at which, according to Ditto and Pille (1998), internet marketing is implemented.

The nature and the intensity of the relationships between the three groups of factors mentioned previously (internal and external competitive factors, levels of adoption) determines a variable mix of the four sources of efficiency identified as:

(1) information;
(2) market;

Internal competitive factors of the Italian wine system:
Dominant presence of SMEs (production fragmentation) even if also large producers with high brand image at the global level are present.
High product differentiation by origin and quality with significant weight shared to the typical local wines.
Relevant presence in different market segments (from basic to icon) with a prevalent diffusion of SMEs in niche markets.
High export orientation.
Low SMEs participation in relationships networks with business partners.
Low rate of adoption of the marketing concept by SMEs.

Global competitive factors in the wine market:
Consumption dynamics and new market development.
Increasing production development in new countries.
Increasing international trade.
More intensive product competition on major export markets.
Globalization of information and knowledge through ICT.

Marketing levers efficiency:
Brand and corporate image growth.
Competition on non price variables.
Disintermediation and new distribution channels.
Cost-effective communication.
Complete and dynamic communication.
Reduced importance of scale economies with respect to large companies.

Relational efficiency:
Interactivity with consumers.
Possibilities to maintain efficient after sale customer services at low costs.
Moving from one-to-many to one-to-one communication.
Increased consumer satisfaction.
Participation in relationship networks with business partners.
Creation of collective marketing interfaced producers-consumers.

Adoption of Internet as a wine marketing tool

Information efficiency:
Market research and market segmentation.
Information exchange at lower costs.
Better information access for the consumer.
Detailed and complete product information.

Market efficiency:
Entry into new markets, especially niche markets, at no additional costs.
Quick access to the market.
Access to the world market.
Low costs for implementing global strategies.
Possibility to market effectively typical local wines in a global context.
Quasi efficient market price formation.

INFORMATIONAL – TRANSACTIONAL – RELATIONAL

Figure 1.
The internet wine marketing system

(3) marketing lever; and

(4) relational.

On this basis and taking into account the general aims stated in paragraph 1, the specific objectives of the research were to analyse:

(1) The degree of internet marketing in adoption and its variability in relation to the companies' characteristics.

(2) The perception of the internet as a relevant marketing means.

(3) The web sites quality and the expected future developments.

(4) The relevant variables that discourage entrepreneurs from using web sites and their future strategic options.

(5) The strength and weakness factors of the actual web marketing strategic models.

The main reason that drives the previously mentioned specific objectives is the fact that the wine industry is still a non-core IT industry and the benefits deriving from a higher use of the internet are likely to be emerging (Goodman, 2003). It is particularly true for the Italian wine industry for which the adoption rate of the internet is significantly lower than the average for EU countries (Camussone and Ciucciarelli, 2000).

Furthermore the wine industry represents a strategic business for the Italian agro-food system, accounting for 7.1 per cent of its added value and 14 per cent of its export value (INEA, 2006). It is also largely dominated by SMEs, which, as underlined for the Australian wine industry by Goodman (2000), have adopted the marketing concept less than larger companies.

Italian small wineries are characterised by a strong orientation towards traditional regional wines often positioned in the premium segments. The valorisation of these wines constitutes one of the most relevant options for improving the international image of Italian wines. Their strong-presence in the domestic niche markets represents an important barrier for the full development of the competitive potential. The adoption of intense web marketing strategies could help Italian speciality wineries to move more quickly from a product to a marketing orientation base becoming more competitive and efficient.

Methodology

In order to achieve the previous research aims a two-stage analysis has been conducted. The first stage has been focused on the analysis of the existing web sites with the purposes:

(1) To quantify the degree of internet marketing in adoption and its variability inside the sample.

(2) To provide a critical evaluation of the quality in relation to the most relevant web marketing objectives and approaches.

In the second stage, a direct survey, using specific questionnaires, has been carried out on wineries with and without web sites to evaluate:

(1) The perception of internet as a relevant marketing tool.

(2) The expected future development in relation to the web marketing strategic models and options.

For the analysis of the existing web sites (first stage) an adapted 7Cs model has been used. The overlapping and the connection between the 7Cs model adopted and the theoretical framework depicted in Figure 1 present clear evidence in the inter-connection space between the level of adoption of the internet as a wine marketing tool and four sources identified in the same figure. In fact, the evaluation through the 7Cs model of the web sites quality and the consequent level of internet adoption influence the information, the market, the marketing levers and the relational efficiencies.

In relation to the 7Cs Framework recommended by Rayport and Jaworski (2001) and by Lee and Benbasat (2004), as a reference model for the interface design elements of a Web-based system, the model adopted in this paper presents some adaptations to provide a better focus on the aims and the context of the research. Comparing the 7Cs framework suggested originally by Rayport and Jaworski (2001) with the adapted model here proposed, the following relevant differences can be pointed out:

(1) A more simple organization of themes concerning community, communication and connection inside community.

(2) A more articulated analysis of the elements concerning the original 2Cs context and content in the 4Cs are represented by content, context, choice, comfort.

(3) A desegregation of the e-commerce aspects in the 2Cs – convenience and customer services – where the latter includes other elements that do not concern e-commerce.

(4) The C customization was not included in the initial context of Web 1.0 like the one of the Italian wine sector analysed in this paper.

The large dominance of the context Web 1.0 for the ISWs also suggested adopting a 7Cs framework instead of the 8Cs framework recently proposed by Yang *et al.* (2008) as a reference model used for the context of Web 2.0.

The comparison between the two 7Cs models discussed previously, as well as the parameters of evaluation used for each C, is reported in Table I, while Table II reports the specific criteria used to evaluate each parameter.

The direct survey (second stage analysis) conducted on the wineries with their own web sites has been carried out using a specially designed questionnaire that permitted us to collect information concerning:

(1) the gross output both on the domestic and foreign markets;

(2) the relative importance assigned by the entrepreneurs to the different communication methods;

(3) the presence of web site systems for direct sales;

(4) the reasons for which the entrepreneurs did not create such procedures;

(5) the entrepreneurs' opinions about the most relevant characteristics a web site should have for being efficient;

(6) the utilization of systematic cost analysis for the web site management; and

(7) the future options for implementing e-commerce strategies.

Information concerning the previous points (1) and (2) have also been collected for wineries without web sites.

Rayport and Jaworski 7Cs model	Adapted 7Cs model	Parameters
Context: how the site is organized and how the content is presented to the users	Content	Web site update Graphic quality Counter presence
Content: what are offered by the web site	Choice	Products presentation Range of products Presence of accessory products Presence of agro-tourism activities
Community: degree of interactivity communication	Context	Web site typology Transaction typology
Customization: refers to the site's design or personalization	Comfort	Ranking Number of languages Navigability Site map presence Presence of an internal search engine
Communication: refers to the site-to-user communications	Convenience	Direct sale availability Delivery time Delivery costs
Connection: refers to the extent of formal linkage from one site to others	Customer services	Delivery traceability Payment procedures Delivery procedures Security of transactions Frequently asked questions (FAQ)
Commerce: refers to the interface that supports the various aspects of e-commerce	Community	Forum presence Visit book presence Link availability Free call telephone number availability

Table I.
7Cs models and
parameters

Parameters	Evaluation criteria
Web site update (1-3)	Not determined, more than monthly, from weekly to monthly
Graphic quality (1-3)	Only graphics, with animation, with sound or with animation and sound
Products presentation (1-4)	Absent, only product list, also product characteristics, products with a price list
Range of products (1-3)	Not shown, few, large
Web site typology (1-3)	Informational, low interactivity, high interactivity
Transactions typology (1-4)	No transactions, B2C, B2B, B2C and B2B
Ranking (1-4)	After 13th site, 21st-30th site, 11th-12th site, first ten sites
Number of languages (1-3)	Only Italian, two languages, more than two languages
Navigability (1-3)	Bad (more than five clicks), quite good (four to five clicks), very good (less than four clicks)
Direct sale availability (1-3)	No direct sales, off-line, others
Delivery time (1-2)	Not specified, three to seven days
Delivery costs (1-2)	Not specified, specified
Payment procedures (1-2)	One choice, two choices
All other parameters (1-2)	No presence, presence

Table II.
Parameters evaluation
criteria

www.man

Further specific questions, analysed in depth for these wineries regard: the entrepreneur's intention of creating web sites in the short-term; the presence of the company on collective web sites; and the relative importance of the different web marketing objectives for the entrepreneurs.

One relevant aim of the research was to analyse the web marketing strategies implemented by speciality wineries, so the sample has been drawn from the Italian wine guide "Duemila Vini", edited by the Italian Association of Sommeliers, that represents one of the best known and complete guide on Italian wines. To select the Italian speciality wineries with market standing into the highest segments, companies who have obtained, in the year 2005, the award of a "five bunches"[1] of grapes for at least one wine have been chosen. On this basis a sample of 272 wineries were selected.

The 7Cs model data analysis has been conducted both at a univariate and a multivariate level. The need to conduct a multivariate analysis is linked to the aim to characterize web marketing strategy models adopted by ISWs and to highlight their strengths and weaknesses. In this case we have selected the 7Cs model variables with significant variability inside the sample. The annual production has also been included as a proxy to the business volume dimension. Therefore a two stage multivariate analysis has been developed using the software SPSS.

First, we have utilized a non-linear principal factor analysis (De Leeuw and Van Rijckevorsel, 1980; Gifi, 1985). It represents an optimal scaling procedure when the variables are expressed, as in this sample, in different scales (nominal, ordinal, proportional). As it has been mentioned, it represents an extension to the traditional linear procedure (Fabbris, 1991) using the minimum alternates square algorithm for the evaluation parameters. In this way, this non-linear principal factor analysis can create descriptive economies and identify and measure non-linear patterns through the assignation of scores with metrical properties to each variable feature. The descriptive economy is realized through the reduction in size of the original data matrix and it explains, at the same time, the maximum amount of variance.

The second stage of the multivariate analysis concerns cluster analysis. The input for the cluster analysis is the dimension factorial scores assigned to each ISWs web site. To reach the previous objective we have used the non-hierarchical classification "K-means cluster analysis". The algorithm utilized to identify web sites which belong to each group is based on the "nearest centroid sorting" method. Through this method the centroids of the groups are interactively evaluated and each web site is assigned to the group that minimizes the distance between the web site and the centroid group. The number of groups selected has been through both a row of alternative classification processes and the comparison of the Euclidean distance matrixes between the centroids.

Results
Sample characteristics and 7Cs model evaluation
The survey sample distribution by production volume confirms the structural dichotomy of the Italian wine industry characterized by the presence of a large number of SMEs and a few large companies. Almost 70 per cent of the ISWs produce fewer than 300,000 bottles a year, while only 8 per cent bottle over 1.5 million bottles a year. About 20 per cent of the companies can be classified as medium sized wineries and are included in the 0.3-1.5 million bottles a year class (see Table III).

Production (bottles a year)	n	Wineries (%)	Per cent cum.
Fewer than 25,000	18	6.6	6.6
25,000-60,000	49	18.0	24.6
60,001-120,000	55	20.2	44.8
120,001-300,000	66	24.3	69.1
300,001-1.5 million	54	19.9	89.0
More than 1.5 million	22	8.1	97.0
Not available	8	2.9	100.0
Total	272	100.0	

Table III.
Wineries distribution by
production volume

The geographical location is quite different in relation to the production volume. The largest number of Italian speciality wineries (ISWs) – in particular the highest quality wines – come from two regions (Toscana and Piemonte), which account for almost 45 per cent of the Italian wineries selected. Table IV shows how the ISWs present a high territorial concentration since the first six regions account for three quarters of the total.

The use of internet marketing by the ISWs is still at an initial stage. In fact 77 companies (28.3 per cent of the total) do not have a web site, while the web site was not accessible in eight cases (2.9 per cent) and 22 are under construction for another 8.1 per cent. Only 165 companies (60.7 per cent) represented in the survey have an active web site.

A larger presence of non-web wineries has been observed in the most important enological regions of North Italy, while the South reveals a more intensive presence on the web. In the North the traditional large diffusion of SMEs with stable direct marketing channels is the most important factor responsible for a slower adoption of internet as a marketing tool.

The analysis conducted to evaluate the existing web sites quality, using the 7Cs model, is reported in Table V. The main results are summarised as follows.

Content
These characteristics are related to the design and layout of the web site (graphics and updating). The graphics is generally good but the updating is disappointing. Web site updating is not considered essential by ISWs. Few of them attach importance to the strong relationship existing between the frequency of updating and business image.

Regions	n	Wineries (%)	Per cent cum.
Toscana	63	23.2	23.2
Piemonte	52	19.1	42.3
Friuli Venezia Giulia	29	10.7	53.0
Trentino Alto Adige	20	7.4	60.3
Veneto	20	7.4	67.7
Sicilia	15	5.5	73.2
Others north	14	5.1	78.3
Others centre	33	12.1	90.5
Others south and islands	26	9.6	100.0
Total	272	100.0	

Table IV.
Wineries distribution
by region

7Cs	Parameters	Evaluation criteria	%	Percent total
Content	Web site update	Not determined	87.9	
		More than monthly	3.0	
		From weekly to monthly	9.1	100.0
	Graphic quality	Only graphics	75.2	
		With animation	12.7	
		With sound or with animation and sound	12.1	100.0
	Counter presence	No presence	95.2	
		Presence	4.8	100.0
Choice	Products presentation	Absent	5.5	
		Only product list	4.2	
		Also product characteristics	87.9	
		Products with a price list	2.4	100.0
	Range of products	Not shown	6.1	
		Few	19.4	
		Large	74.5	100.0
	Presence of accessory products	No presence	70.9	
		Presence	29.1	100.0
	Presence of agro-tourism activities	No presence	86.1	
		Presence	13.9	100.0
Context	Web site typology	Informational	47.9	
		Low interactivity	48.5	
		High interactivity	3.6	100.0
	Transaction typology	No transactions	61.2	
		B2C	27.9	
		B2B	1.2	
		B2C and B2B	9.7	100.0
Comfort	Ranking	After 30th site	5.5	
		21st-30th site	1.2	
		11th-20th site	3.6	
		First ten sites	89.7	100.0
	Number of languages	Only Italian	21.2	
		Two languages	46.1	
		More than two languages	32.7	100.0
	Navigability	Bad (more than five clicks)	10.9	
		Quite good (four to five clicks)	60.0	
		Good (less than four clicks)	29.1	100.0
	Site map presence	No presence	95.2	
		Presence	4.8	100.0
	Presence of an internal search engine	No presence	96.4	
		Presence	3.6	100.0
Convenience	Direct sale availability	No direct sales	64.2	
		Off-line	28.5	
		Others	7.3	100.0
	Delivery time (*)	Not specified	73.9	
		Three to seven days	26.1	100.0
	Delivery costs (*)	Not specified	68.8	
		Specified	31.2	100.0

Table V.
7Cs parameter evaluation

7Cs	Parameters	Evaluation criteria	%	Percent total
Customer services	Delivery traceability	No presence	99.4	
		Presence	0.6	100.0
	Payment procedures (**)	One choice	70.0	
		Two choices	30.0	100.0
	Delivery procedures (**)	No presence	60.0	
		Presence	40.0	100.0
	Security of transactions (**)	No presence	70.0	
		Presence	30.0	100.0
	Frequently asked questions (FAQ) (**)	No presence	100.0	
		Presence	0.0	100.0
Community	Forum presence	No presence	93.3	
		Presence	6.7	100.0
	Visit book presence	No presence	73.3	
		Presence	26.7	100.0
	Link availability	No presence	78.8	
		Presence	21.2	100.0
	Free call telephone number availability	No presence	99.4	
		Presence	0.6	100.0

Note: *per cent valuated on a sample of 19 companies; **per cent valuated on a sample of ten companies

Table V.

Non-updated web sites have a poor appearance. Web site visitor counters are few and far between.

Choice
Product presentation is good and it is consistent with web site typology. The catalogue is on average well represented with careful information about production processes, both agronomic and enological. The link with the region is a common prominent element. It is interesting to underline that the statistical range of products is a result of the presence of many different types of wine rather than other accessory products.

Context
This characteristic is linked to the interactivity of the web sites and shows considerable deficiency. It is strongly connected to the content parameter results. Only a few web sites allow a one to one link, but often this is not clear. Solely informational web sites lose the possibility to interact immediately with potential clients. High interactive web sites would help ISWs to greatly understand consumer preferences. Furthermore, the use of a computerized channel in B2C and B2B activities is very limited.

Comfort
The simplicity and the enjoyment in surfing the web sites provide contrasting results. On one side, the ranking and navigability offer satisfactory responses; on the other hand, the use of two languages or more is not widespread. The presence of both site maps and an internal search engine is unusual.

Convenience
It is impossible to evaluate in an absolute way because the selling activities are greatly limited.

Customer service
As in the convenience parameters, also the flow of supporting information concerning the phases of before and after sales is difficult to evaluate. Moreover, we can underline the presence of unclear conditions (the lack of product prices, uncertain payment procedures and delivery methods) that turn away potential buyers.

Community
This group of parameters shows web sites lacking the ability to network with the consumer. The data confirm that the ISWs tend to utilize web sites as a show-case to improve their business image.

Typology analysis of the web marketing strategies
Through the analysis of the principal non-linear components five factors have been identified. A five factors solution has been chosen using three choice criteria:

(1) Eigenvalues more than one.
(2) Explained variance.
(3) Eigenvalues graphic representation.

Based on the graphic method the choice of the number of factors to take out was four. In fact, after the fourth factor the graphic tends to hide itself on the x-axis. Moreover explained variance by the four factors results was 54.8 per cent. This percentage is not completely satisfactory for the research aims. Considering also the fifth factor such variance is 63.5 per cent and verifies also at the same time the eigenvalue more than one criterion. On this basis we adopted the five factors choice because it represents the best efficient mediation among the three standard criteria.

The eigenvalues and the explained variance, as well as the correlation matrix among the factors and the original variables of the 7Cs model are reported in Table VI.

The analysis of the correlation matrix permits to characterize the five factors as follows:

(1) E-business orientation.
(2) Product presentation.
(3) Contact management.
(4) Updating.
(5) Business dimension.

The first factor (e-business orientation) explains 15.3 per cent of the explained variance and is characterized by significant correlation coefficients in online sales, B2B and B2C parameters. The high-value of this factor identify a clear behaviour to use the web site for sales. A positive correlation between the web site typology shows the tendency to make good use of interactivity as the main feature of internet where online sales orientation is present.

	E-business orientation	Product presentation	Factors Contact management	Updating	Business dimension
Annual production	0.186	0.094	−0.059	−0.230	0.817
Updating web site	0.101	−0.131	−0.007	0.638	−0.160
Presence of counter	−0.379	−0.142	0.107	0.338	0.545
Graphic quality	−0.008	0.494	−0.049	−0.008	0.074
Range of products	0.146	0.847	−0.024	0.038	−0.095
Web site typology	0.562	0.258	0.431	0.344	0.131
Online sales	0.812	0.016	0.206	0.035	−0.038
B2C and B2B	0.783	0.125	−0.155	0.202	0.062
Product catalogue	0.116	0.839	0.175	0.034	0.001
Presence of forum	−0.015	0.026	0.843	−0.162	−0.071
Presence of links	0.096	−0.009	0.666	0.228	0.051
Presence of guest book	0.149	0.134	0.082	0.769	0.072
Eigenvalues	1.843	1.812	1.462	1.453	1.041
Variance per cent	15.3	15.1	12.3	12.1	8.7

Table VI.
Factors matrix

The second component (15.1 per cent of the explained variance) has been defined "Product presentation" because it is strictly correlated to the range and product catalogue. This highlights, as appeared in the non-variable analysis, the web sites show-case characteristic.

Contact management is the third factor and defines 12.3 per cent of the variance. The variables with the highest correlation coefficient are, in this case, the presence of forum and links. They are the variables that measure web site information efficiency.

Updating (12.1 per cent of the explained variance) is correlated using the presence of web site updating and a guest book. High scores in this factor have been reached where there is continuous web site updating by a web master, as a guest book presence shows.

The fifth factor (8.7 per cent of the explained variance) is business dimension. The growth trend reflects on the presence of the visitor counter.

Based on the five factor scores associated to each web site a k-means cluster analysis has been conducted. A five-group solution has been chosen after the comparison of Euclidean distances among different groups of alternatives. Mutual distances among cluster centroids are reported in Table VII.

Such distances highlight a clear differentiation between groups 1, 3, 4 and the last two groups. Group 2 and group 5 show partial overlapping. However, they are the two biggest groups as they contain more than three quarters of the sample web sites.

Clusters	1	2	3	4	5
1	–	3.170	4.973	3.968	3.246
2	3.170	–	5.874	2.685	1.908
3	4.973	5.874	–	6.327	5.963
4	3.968	2.685	6.327	–	3.040
5	3.246	1.908	5.963	3.040	–

Table VII.
Distance between final
cluster centres

The scores of the centroids of the five factors drawn out (see Table VIII) permit the characterization of homogeneous web site groups as described in the following.

Group 1 (7 per cent of the sample). Big companies with moderate web site updating but without revealing online sales. These companies present positive interactive efficiency while they are lacking in product presentation.

Group 2 (52 per cent of the sample). This is the largest group. It underlines, critically, the limited prominence given to web marketing activities in despite of the financial resources that companies invested in them. These companies are distinguished by the limited volume of sales and the worst interactive efficiency inside the sample. Also the other factors present negative values, even though the frequency of updating is relevant if compared to the other groups.

Group 3 (1 per cent of the sample). The two companies that form this group are clearly differentiated from the others. Big production volumes, marked e-commerce orientation and frequent web site updating are the company's main characteristics. Product presentation is good while little attention is paid to interactive efficiency.

Group 4 (10 per cent of the sample). This is the typical group of companies that use web sites as a show-case and offer simple and enjoyable surfing services. A widespread presence of forum and many links to other web sites go together with the best product presentation and the second updating frequency scored inside the sample. Reduced business dimension and poor e-commerce orientation also surface.

Group 5 (26 per cent of the sample). Prominent interest in online sales, insignificant updating frequency, low interactive efficiency, product presentation well kept and small production volumes are the results that appear in the fifth group. In this case the lacking attention to web site updating seems to be clearly connected with the steadiness of the product portfolio and customer relationships. These companies give priority importance to brand presentation and to physical product characteristics.

Internet marketing perspectives for the ISWs: an analysis of the entrepreneur's perception

The web sites analysis conducted through the 7Cs model has been integrated, as described previously, with a specific questionnaire. In this case, the 272 business sample has been divided into two groups:

(1) Businesses with web sites (195 wineries).

(2) No web site wineries (77 businesses).

The aim of this survey was both to look into the businesses' behavior towards web marketing and communication policies and to underline the main characteristics and

	E-business orientation	Product presentation	Factors Contact management	Updating	Business dimension
Group 1	−1.199	−0.419	0.211	−0.733	2.386
Group 2	−0.231	−0.130	−0.365	0.517	−0.286
Group 3	2.274	0.298	−0.177	1.672	4.880
Group 4	0.029	0.381	2.255	0.564	−0.396
Group 5	0.665	0.212	−0.178	−1.115	−0.139

Table VIII.
Factors centres scores

functions of future web sites. The questionnaire reply rate was 21.2 per cent in businesses with web sites and 35.1 per cent in wineries without it. The reply percentages agree with literature into questionnaire responses.

The first aspect that emerges from the sample survey is a different level of importance related to the internet as a communication tool. The winery entrepreneurs with web sites perceive the internet as an important tool in 61 per cent of the cases (see Table IX). It was a lower score than fairs and food and wine events.

Inside the group of wineries without web sites the preferred communication channels are, in order of preference, fairs, newspapers and food and wine events. Internet is considered important by 44.4 per cent of the entrepreneurs. Despite this, more than 80 per cent of wineries that have not got a web site intend to build one, while another 13.5 per cent are already building or restyling. The results confirm that the adoption of the internet diminishes the use of traditional communication channels.

The second aspect is that the web sites represent, for the wineries that are working to build it, a show-case (see Table X).

| | | Importance | | |
	Channel	Not/less important (%)	Important (%)	Very important (%)
Wineries with web sites	Newspapers	36.6	29.3	34.1
	National TV	75.6	9.8	14.6
	Local TV	87.8	9.8	2.4
	Radio	95.1	4.9	–
	Internet	39.0	43.9	17.1
	Fairs	14.7	26.8	58.5
	Food and wine events	24.4	39.0	36.6
	Billboards	97.6	2.4	–
No-web wineries	Newspapers	26.0	40.7	33.3
	National TV	66.7	22.2	11.1
	Local TV	88.9	11.1	-
	Radio	85.2	11.1	3.7
	Internet	55.6	40.7	3.7
	Fairs	11.1	37.0	51.9
	Food and wine events	26.0	44.4	29.6
	Billboards	100	–	–

Table IX.
The entrepreneur's perception for the ISWs communication channels

| | Importance | | |
Characteristics	Not/less important (%)	Important (%)	Very important (%)
Online sales	81.8	18.2	–
Customer retention	40.9	45.5	13.6
Marketing tool	18.2	59.1	22.7
Show-case	–	36.4	63.6
Channel to the supplier	68.2	31.8	–
Channel to the collaborators	40.9	40.9	18.2
Channel to the institutions	95.5	4.5	–

Table X.
The entrepreneur's perception for the characteristics of web sites under construction

The data analysis of the characteristics of the web sites under construction show it is a marketing tool that functions for customer retention. The internet is utilized as a communication channel more for collaborators than suppliers. Less relevant aspects are internet adoption to link wineries and institutions and online sale activities.

Finally, ISWs with a web site consider functionality as the most important web site characteristic and the community aspect the least important (see Table XI).

Only half the businesses in the sample take into account web site costs closely. Comparing these results with the web site analysis conducted previously, it also emerges that there is consistency in functional parameters between expected characteristic and the reality of the situation. This consistency is not revealed in updating and link parameters.

The web marketing strategies map: some hypotheses for future trends
The strategic web marketing models adopted by ISWs are highlighted in Figure 2. The diagram has been developed giving a score to the five groups of wineries for each

Characteristics	Not/less important (%)	Importance Important (%)	Very important (%)
Updating	8.3	33.3	58.4
Languages	4.2	37.4	58.4
Appearance	12.5	41.7	45.8
Functionality	–	29.2	70.8
Links	12.5	50.0	37.5
Customer retention	29.2	37.5	33.3
Interactivity	25.0	41.7	33.3
Security	20.8	29.2	50.0

Table XI.
The importance rate of the ISWs web site characteristics
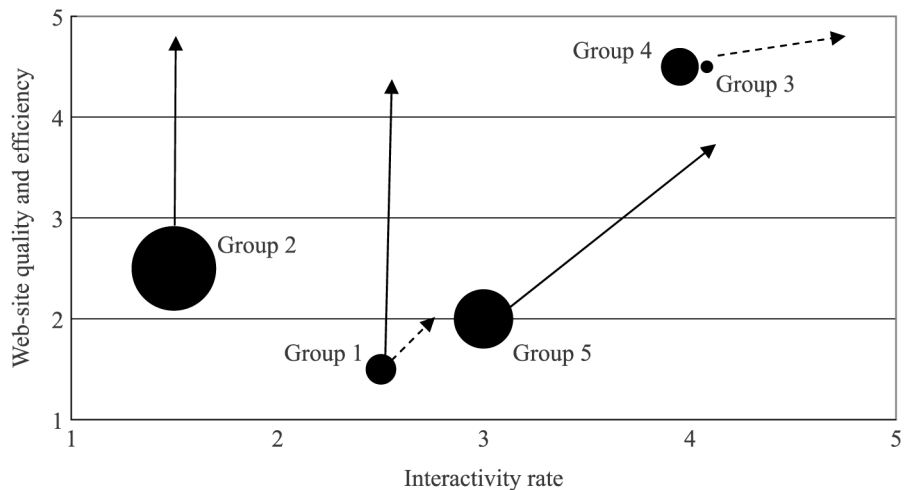
Figure 2.
The web marketing strategies map

leading profile identified. The x-axis represents the interactivity rate of the web site while the y-axis considers its quality and efficiency.

The interactivity rate variable is built on e-business orientation and contact management profiles. Web site quality and efficiency is the simple average of product presentation and updating variables. The size of the spheres is proportional to the group dimension.

The figure highlights that there are three different areas of strategic positioning. The first area includes group 2. The strategic web-marketing model of these businesses is based on the quality and efficiency variables. Web site updating is the only strength factor. Improved product presentation could help these wineries to get higher scores in the y-axis. Web site quality and efficiency is the development target for these ISWs that consider the web site as a show-case. This is consistent with the limited volume of sales of these wineries and with the informational typology of their web site. These ISWs reveal the choice to use internet as a tool to improve their business image. Such strategic behaviour is adopted by many ISWs, as the large dimension of the sphere indicates. This group clearly identifies a large section of the Italian wineries that are not interested in starting new distribution channels. In fact they distribute their wine into HoReCa market both in Italy and abroad.

The second area regards group 1 and group 5. These groups have strategic positioning based mainly on the interactivity rate variable. Contact management is the strength factor of group 1, while e-business orientation reduces the x-score of the group. High scores in the interactive rate are reached when the companies decide to adopt the strategic choice of starting online sales. The high score in the y-axis could easily be reached through the improvement of updating and product presentation parameters. This is to be expected considering both the worst scores in the y-axis and the big volume of sales of these ISWs. Therefore, the logical future of web marketing models for these wineries is represented by the growth in web sites quality and efficiency. Group 5 is characterized by significant interest in online sales. In this case high scores in the x-axis could also easily be reached. In fact, the improvement of the contact management variable does not necessitate a strategic business choice as could be required by the starting of online sales. Furthermore, improved contact management is a natural evolution of e-commerce implementation. At the same time, we can hypothesis for these ISWs, according to their business volume dimension, that more financial resources will be invested in web site updating to support their e-business orientation. Therefore, the future positioning of the strategic web marketing models for these wineries is to be expected in the top-right of the figure.

The third area involves group 3 and group 4. The two groups of wineries get the same scores in the diagram but they reach them in opposite ways. The business volume dimension is another factor of differentiation. In fact while group 3 looks at the largest wineries in the sample survey, group 4 concerns the smallest. Moreover the same results give different meanings. The strength factor of the web-marketing model of group 3 is e-business orientation. The presence of high scores in the updating variable indicates that the best score in the parameters is easily achievable through improved e-commerce implementation. The strength factors of group 4 are product presentation and contact management. In this case reaching higher scores in the interactivity rate variable requires, as already seen for group 4, a background strategic choice. However, the behaviour of these small wineries depends on the fact that they

are affected by increased competition in the international wine market. This strategic positioning is consistent with customer retention expectations of these ISWs.

Conclusions

Internet allows SMEs to be more competitive and it is an important option for Italian speciality wineries (ISWs). The internet permits wineries to implement globalization strategies and the opportunity to maintain efficient after-sale customer services. However the low-rate of e-business implementation is not encouraging ISWs to move from product to market orientation. Large companies have adopted e-business quicker than smaller ones. Also e-commerce is adopted by few ISWs.

The results of the research verify the low level of internet marketing adoption by ISWs. The paper has particularly pointed out:

- the low web site adoption rate;
- that show-case is the main function of the web site;
- the preference for informational and low interactivity in web site typology;
- the high expectations of entrepreneurs about functional web site characteristics;
- the identification of the navigability characteristics as quality evaluation parameters of the web site; and
- the low importance given to internet as a marketing tool.

The level of internet marketing used did not reveal significant variability in relation to the companies' characteristics. However, it goes together with companies e-business orientation. So the relevant question is: why do not ISWs start e-business? The results emerging from the research allow the following explanations to this question. There is a gap in the Italian wine industry adoption of new technology and it is inversely correlated with the easy access to the HoReCa market channels by the small wineries. Also the international image of Italian wines contributes to the continuation of this situation. Furthermore the lack of attention to consumer preferences, financial costs of the web site and the entrepreneur delegation of responsibilities are other aspects, which show that internet is not rooted in ISWs business functions.

The web marketing approaches implemented by ISWs revolve around the strategic choice to effect online sales. Improved web site quality and efficiency is the top priority for wineries that do not choose to start online sales. The comparison of the interactivity parameters and the web site quality and efficiency has to be carried out in wineries that adopt e-commerce. The web marketing strategies map highlights that the future development of the ISWs web marketing models go in two different directions. The first polarity, high scores in web site quality and efficiency, attract small wineries that do not affect online sales. The second polarity attracts large companies together with small wineries that sustain competition.

The key factors of the web marketing models based on quality and efficiency parameters are updating and product presentation. The current positioning of these web-marketing models depends on the contrasting scores reached by lots of ISWs in the y-axis parameters of the strategic map depicted in Figure 2. Therefore there are not actual strength factors while reduced business dimension volumes can be considered a weakness factor. In the same way the business volume dimension is the critical factor in web marketing models built both on web site quality and efficiency and interactivity

parameters. Even so the strong presence of the ISWs in the domestic niche markets together with the small and medium size represent relevant barriers for its future adoption of intense web marketing strategies.

In terms of managerial implications for the ISWs a short-medium term development of internet adoption to support a higher intensity of the web marketing can be seen to improve information, market and marketing levers efficiency (see for details Figure 1). It involves new investments in the web sites quality and efficiency especially on the content, choice, comfort and community Cs impacting informational and relational aspects. The evolution also towards a transactional model with impact on the relational efficiency seems still to represent a long-term dynamics. It involves the wineries with less structural constraints that already adopt e-commerce or one-to-one communication approaches. The relevance in terms of transferability of these results can be seen for the wine industries of other national contexts, especially in the "old world", dominated by the presence of SMEs marketing quality wines with specific territorial characterization (France, Spain and Germany).

The results emerging from the present paper also suggest other research paths to explore the contexts analysis in which the adoption of new web marketing strategies will find further development for the ISWs. Specific issues can be identified in the analysis of the relationships between companies' sites and collective territorial portals as well as with B2B e-commerce marketplaces and platforms. In fact the study of the linkages between territorial and companies' brands and communication strategies represent at the web marketing level a relevant field of research to analyse the determinant factors and the strategic models that can permit SMEs to perform more efficiently on the global market.

Note

1. "Duemila Vini" provides, for each wine a quotation ranging from 1 to 5 bunches, where the 5 represents the best evaluation in relation to the wine sensory qualities. Taking into account both the lack of specific databases and the close correlation existing between wine guide quotations and market prices, this selection can be considered as one of the most efficient methods to single out speciality wineries with market standing in the highest segments (icon but, more frequently, ultra-premium and super-premium segments).

References

Ainscough, T.L. and Luckett, M.G. (1996), "The internet for the rest of us: marketing on the worldwide web", *Journal of Consumer Marketing*, Vol. 13 No. 2, pp. 36-47.

Baourakis, G. and Kourgiantakis, M. (2002), "The impact of e-commerce on agro-food marketing: the case of agricultural cooperatives, firms and consumers in Crete", *British Food Journal*, Vol. 104 Nos 8/9, pp. 580-90.

Benjamin, R. and Wigand, R. (1995), "Electronic markets and virtual value chains on the information superhighway", *Sloan Management Review*, Vol. 36 No. 2, pp. 62-72.

Bernet, A. and Stricker, S. (2003), "German wineries on the web: a survey of web sites of Mosel-Saar-Ruwer and Pfalz wineries", paper presented at Wine Marketing Colloquium, Adelaide, 26-27 July.

Berthon, P., Leyland, P. and Watson, R.T. (1996), "Marketing communication and the worldwide web", *Business Horizons*, September/October, pp. 24-32.

Beynon-Davies, P., Jones, P. and Williams, M. (2002), "Evaluating the experience of e-business among SMEs", *Proceedings of the 9th European Conference on Information Technology Evaluation, Université Dauphine, Paris, 15-16 July*, pp. 63-70.

Beynon-Davies, P., Muir, E. and Jones, P. (2003), "An identification and classification of ebusiness barriers to growth within the SME Sector", paper No. 31, WEI working paper series, Welsh Enterprise Institute (WEI), University of Glamorgan, Pontypridd, February.

Blandford, D. and Fulponi, L. (1997), "Electronic markets in the agro-food sector", *The OECD Observer*, No. 208, pp. 20-3.

Brooksbank, D., Sparkes, A. and Thomas, B. (2003), "The adoption of the internet by farmers' markets in South East Wales", paper No. 29, WEI working papers, January.

Camussone, P.F. and Ciucciarelli, F. (2000), "Internet and small and medium enterprises: a matter of joint design of technology, organization and development of people", in Rete, E. (Ed.), *Organizational Studies*, Edipi, Milano.

Chaffey, D., Mayer, R., Johnston, K. and Chadwick, F. (2000), "Internet marketing", *Financial Times*, Prentice-Hall, London.

Christie, M.J., Pickernell, D.G., Putterill, L.G., Rowe, P.A. and Thomas, B.C. (2003), "Farming the worldwide web: cultivating online networks in Wales", paper No. 34, WEI working paper series, August.

De Leeuw, J. and Van Rijckevorsel, J. (1980), "Homals e princals: some generalizations of components analysis", in Diday, E. (Ed.), *Data Analysis and Informatics*, North-Holland, Amsterdam, pp. 231-41.

Ditto, S. and Pille, B. (1998), "Marketing on the internet", *Healthcare Executive*, Vol. 13 No. 5, pp. 54-5.

Fabbris, L. (1991), *Analisi esplorativa dei dati multidimensionali*, CLEUP, Padova.

Feher, A. and Towell, E. (1997), "Business use of the internet", *Internet Research: Electronic Networking Applications and Policy*, Vol. 7 No. 3, pp. 195-200.

Gifi, A. (1985), *Princals*, Research Report UG-85-03, Department of Data Theory, Leiden.

Goodman, S. (2000), "Wine marketing: what's involved?", *The Australian Grapegrower & Winemaker*, April, pp. 67-70.

Goodman, S. (2003), "A framework for the implementation of (internet) marketing by the wine business", paper presented at Wine Marketing Colloquium, Adelaide, July 26-27.

Hsieh, C. and Lin, B. (1998), "Internet commerce for small businesses", *Industrial Management & Data Systems*, Vol. 98 No. 3, pp. 113-19.

INEA (2006), *Annuario dell'Agricoltura Italiana*, Il Mulino, Bologna.

Kleindl, B. (2000), "Competitive dynamics and new business models for SMEs in the virtual marketplace", *Journal of Development Entrepreneurship*, Vol. 5 No. 1, pp. 73-85.

Lee, Y.E. and Benbasat, I. (2004), "A framework for the study of customer interface design for mobile commerce", *International Journal of Electronic Commerce*, Vol. 8, pp. 79-102.

Mueller, R.A.E. (2000), *Emergent E-Commerce in Agriculture*, AIC Issues Brief, No. 14, University of California, Berkeley, CA, December.

Mueller, R.A.E., Stricker, S. and Sumner, D.A. (2003), "Wine on the web – rapid appraisal of web sites by wineries and wine merchants from Australia, California and Germany", paper presented at Wine Marketing Colloquium, Adelaide, 26-27 July.

Pallab, P. (1996), "Marketing on the internet", *Journal of Consumer Marketing*, Vol. 13 No. 4, pp. 27-39.

Quelch, J.A. and Klein, L.R. (1996), "The internet and international marketing", *Sloan Management Review*, Vol. 37 No. 3, pp. 60-5.

Rayport, J. and Jaworski, B. (2001), *Introduction to E-Commerce*, McGraw-Hill, New York, NY.

Sparkes, A. and Thomas, B. (2001), "The use of the internet as a critical success factor for the marketing of Welsh agro-food SMEs in the twenty-first century", *British Food Journal*, Vol. 103 No. 5, pp. 331-47.

Sparkes, A., Thomas, B., Clifton, N. and Rosales, M. (2001), "The internet as a marketing interface for small and medium-sized agro-food enterprises", paper presented at Academy of Marketing/AMA 6th Annual Research Symposium, 10-12 January.

Tetteh, E. and Burn, J. (2001), "Global strategies for SME-business: applying the small framework", *Logistics Information Management*, Vol. 14 Nos 1/2, pp. 171-80.

Thelwall, M. (2000), "Effective web sites for small and medium-sized enterprises", *Journal of Small Business and Enterprise Development*, Vol. 7 No. 2, pp. 149-59.

Turban, E., Lee, J., King, D. and Chung, H. (2000), *Electronic Commerce: A Managerial Perspective*, Prentice-Hall, Upper Saddle River, NJ.

Wilkinson, S. (2002), "Exploring the virtual business: a case study from Wales, UK", paper No. 23, WEI working paper series, June, Welsh Enterprise Institute (WEI), University of Glamorgan, Pontypridd.

Yang, A.T., Kim, D.J., Dhalwani, V. and Vu, T.K. (2008), "The 8C framework as a reference model for collaborative value webs in the context of Web 2.0", *Proceedings of the 41st Hawaii International Conference on System Science, Hawaii, January 7-10*.

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