

E-marketing and Internet Functions of Agricultural Products in SME in Greece

Georgios Tsekouropoulos¹, Zacharoula Andreopoulou², Christiana Koliouka³,
Stavroula Iefa⁴, Theodoros Koutroumanidis⁵, Christos Batzios⁶

¹ Technological Educational Institution of Thessaloniki, E-mail: geotsek@mycosmos.gr

² Laboratory of Forest Informatics, School of Forestry and Natural Environment, Aristotle University of Thessaloniki, Box 247, 54124, tel. 2310. 992714, fax. 2310. 992717, Greece, E-mail: randreop@for.auth.gr

³ Laboratory of Forest Informatics, School of Forestry and Natural Environment, Aristotle University of Thessaloniki, Box 247, 54124, tel. 2310. 992714, fax. 2310. 992717, Greece, E-mail: Christiana.Koliouka@gmail.com

⁴ Technological Educational Institution of Thessaloniki, E-mail: stavlefa@hotmail.com

⁵ Department of Rural Development, Democritus University of Thrace, Pantazidou 193, Orestiada, 68200, Greece, E-mail: tkoutrou@agro.duth.gr

⁶ Lab. of Animal Production Economics, Faculty of Veterinary Science, Aristotle University of Thessaloniki, tel. 2310.999957, E-mail batzios@vet.auth.gr

Abstract. The permeation of new technologies combined with the high cost for running a shop force enterprises to search for new sales methods. Network applications and ICT (Information and Communication Technology) can help achieve e-commerce goals. In Greece, many enterprises in the agro-food and drink sector already have an internet presence. This paper studies the adoption of e-commerce in websites that support e-commerce activities within the agro-food and drink sector. Therefore, the paper aims to identify and evaluate their qualitative and quantitative content characteristics, rank them according to 6 content characteristics/criteria using the multicriteria method of PROMETHEE II and classify them in groups of similar adoption. The findings of this study reveal the rate of adoption of e-commerce in the sector and can be a valuable model for the designers of the websites that promote e-commerce activities within the wider area of food.

Keywords: e-marketing, internet, network, database, e-commerce, agro-food and drink sector

1. Introduction

Nowadays, the Internet, apart from a channel to collect information of all kind, it has also become a means of promotion and consequently, an effective business tool (Tsekouropoulos et al., 2011). Enterprises use the internet not only for retrieving information and marketing but also for the enhancement of their communication with business-partners and customers (Tsekouropoulos et al., 2005). The enterprises aim at their participation in the internet society since the benefits are high and electronic systems are ready to serve customers all over the world 24 hours per day 7 days a week (Andreopoulou, 2008), when the cost keeps decreasing.

Copyright ©by the paper's authors. Copying permitted only for private and academic purposes.

In: M. Salampanis, A. Matopoulos (eds.): Proceedings of the International Conference on Information and Communication Technologies for Sustainable Agri-production and Environment (HAICTA 2011), Skiathos, 8-11 September, 2011.

E-marketing can be defined as the use of Internet and related digital technologies to achieve marketing objectives and support the modern marketing concept (Eszes, 2010). It includes both direct response marketing and indirect marketing elements, and uses a range of technologies to help connect businesses to their customers. By such a definition, e-marketing encompasses all the activities a business conducts via the worldwide web with the aim of attracting new business, retaining current business and developing its brand identity (Quirk eMarketing, 2006). E-marketing is a subset of e-Business that utilizes electronic medium to perform marketing activities and achieve desired marketing objectives for an organization (Petrovic, 2010). E-commerce is also a part of e-business. It is the purchasing, selling, and exchanging of goods and services over computer networks, such as the Internet, through which transactions or terms of sale are performed electronically (DigitSmith, 2006).

E-marketing gives business of any size access to the mass market at an affordable price and allows truly personalized marketing. Specific benefits of e-marketing include (Department of Trade and Industry of United Kingdom, 2004), (The National B2B Centre, 2011):

- *Global reach.* A website allows finding new markets and trading globally.
- *Lower cost.* A properly planned and effectively targeted e-marketing campaign can reach the right customers at a much lower cost than traditional marketing methods.
- *Trackable, measurable results.* Web-analytics and other online metric tools make it easier to establish how effective the campaign has been.
- *24-Hour marketing.* With a website the customers can find out about the products even if the office is closed.
- *Shorter lead times.* If there is a website or an e-mail template, the reaction to events will be more quickly, giving a much more contemporary feel.
- *A level playing field.* With a well-designed website, the enterprise could look like professional and credible as the larger competitors.
- *Personalization.* If the customer database is linked to the website, then whenever someone visits the site, can be greeted with targeted offers. DataBase Management System (DBMS) is a software package that allows data to be effectively stored, retrieved and manipulated (Andreopoulou et al., 2011).
- *Openness.* By having a social media presence and managing it carefully, the entrepreneur can built customer loyalty and create a reputation for being easy to engage with.
- *Social currency.* E-marketing lets the entrepreneur create engaging campaigns which can gain social currency-being passed from user to user and becoming viral.
- *Improved conversion rates.* If the enterprise has a website, then the customers are only ever a few clicks away from completing a purchase.

Together, all of these aspects of e-marketing have the potential to add up to more sales.

However, e-marketing does have few disadvantages such as (Eszes, 2010): lack of personal approach, dependability on technology, security-privacy issues, maintenance costs due to a constantly evolving environment, higher transparency of

pricing, increased price competition and worldwide competition through globalization.

E-marketing also includes management of digital customer data and Electronic Customer Relationship Management (ECRM) systems accomplished through the Internet, e-mail, and wireless media. Enterprises find in the internet a means to reduce customer-service costs, to further sustain customer relationships, to extend marketing messages personally and thus enable mass customization (Johnson, 2002). Mass customization was defined by Tseng & Jiao (2001) as "*producing goods and services to meet individual customer's needs with near mass production efficiency*". Marketing is considered as a core activity (Basahel & Irani, 2009).

1.1. The website role of an e-market place

Website design is a key issue and also its usability becomes a fundamental concern. It refers to the fluency or ease with which the client is able to interact with the system without 'thinking' about it. This is in line with the definition of usability offered by the International Organization for Standardization, which is: "the effectiveness, efficiency, and satisfaction with which specified users achieve specified goals in particular environments" (Hillier, 2003).

But it is not only usability that affects an e-market's appeal and visits, but also security, vividness, its correlate riskiness, approval by referent others, feature organization, quality of content, price, recognizability/desirability of brand, and time delay/download speed (Blake et al., 2005). Another important factor is the cultural context of the audience that needs to be taken into consideration.

Since the primary measures of portal success are high levels of user acquisition and retention, only those e-market places' websites that attract and maintain the desired target audience and build valuable customer relationships will have the potential for long-term success. Even private/informational portals, to become successful, must entice busy employees to alter well-established informational search habits (Clarke & Flaherty, 2003).

In Greece, specifically in the sector of food and drink several enterprises have already a presence in the internet. That facilitates the increase of their total sales as they attract costumers not only locally at shops but also on the e-shops in the internet. There are also enterprises without physical shop for holding transactions with the public thus they exist only in the internet (Seretakis et al., 2010). Nevertheless, it is evident that there is not yet a complete system in the internet which will fully secure the safety of e-transactions (Tsekouropoulos, 2009).

This paper provides the case study of SMEs in agro-food and drink sector in Greek internet. SMEs are ranked and classified in groups as to their e-marketing features and internet functions accomplished. Additionally, an integrated-dynamic framework is developed for ranking 66 SMEs in agro-food and drink sector based on PROMETHEE II and the results are discussed.

2. Methodology

The SME websites that were used for the research, were collected from the Greek Internet with the use of proper search engines and keywords concerning, e-commerce, agro-food and drink, website activities, on-line transactions, e-marketing e.t.c..

Initially, qualitative analysis was performed in order to examine the type of common e-marketing criteria found in these e-shop web pages; then a quantitative analysis was carried out, in order to examine the presence or absence of these criteria/characteristics.

Various e-marketing services were introduced in the retrieved websites and 6 different criteria were identified and introduced in each website. Each e-marketing service constitutes a criteria/characteristic and it is finally attributed in a variable x_i (Table 1). Additionally, a 2-dimensional table was developed and was used in order to examine the existence of criteria and evaluate the services of the websites.

Table 1. Variables attributed to e-marketing criteria to be achieved by the e-shop website

Variable	E-marketing services to become criteria achieved by the e-shop website
X_1	Autonomous presence within the internet
X_2	Reliability of recipes / Quality certificates
X_3	Product exposure / Information provision to consumers
X_4	Possibility of access in other websites
X_5	Form of communication / FAQ
X_6	E-shop / Shopping cart

For that purpose the values were attributed to variables x_1 to x_6 , respectively. Whenever a criterion was achieved for a website the value 1 was attributed to the respective variable aiming at justifying the relative service within the evaluation of the website.

The total amount of e-marketing criteria achieved in each website was also studied. For each food and drink enterprise website, the total number of achieved criteria is attributed to a new variable, named t. Variable t presents the sum of e-marketing services achieved, therefore takes a value between 1 and 6.

Then, the total ranking of the websites was studied. The method that was used for the total ranking was the multicriteria analysis named *PROMETHEE II*. That method applies a linear form of service in the particular case, using the e-marketing services of the websites identified as criteria. The PROMETHEE II method is part of outranking relations theory (Brans & Vique, 1985; Brans et al., 1986; Siskos & Zopounidis, 1987; Brans et al., 1987; Brans et al., 1998; Zopounidis, 2001). A similar multicriteria method was used for the total ranking of websites for agricultural products (Andreopoulou et al., 2008). The PROMETHEE II method for multi criteria analysis uses six types of general criteria with the corresponding criteria services, in order to determine the superiority (outranking) between two alternative solutions.

In this specific case, the aim was to determine the superiority of one website over another website. The general level test criterion was selected for this project, corresponding to a criterion service, which has an interval region for the determination of superiority (Brans & Vique, 1985; Roy, 1991). The websites that were retrieved in the Internet concerning enterprises in food and drinks sector were examined in pairs as alternative solutions (k_i, k_j) with $i= 1, 2, 66$ and $j=1, 2, \dots, 66$ as to their supremacy, i.e. which of the two websites excelled based on the criteria used.

The service $H(d)$, which was used to express superiority, was the following:

$$H(d) = \begin{cases} P(v_i, v_j), \text{ outranking of website } v_i, & \text{if } d \geq 0 \\ P(v_j, v_i), \text{ outranking of website } v_j, & \text{if } d < 0 \end{cases} \quad (1)$$

Where $P(v_i, v_j)$, $P(v_j, v_i)$ are the services of preference, and d is the difference between the values of each pair of websites (v_i, v_j), for the criterion under evaluation. When we examined which of the two websites (v_i, v_j) is superior, the superiority service $H(d)$ was applied according to the value d (positive or negative) for each criterion.

In this study, variables X_1, \dots, X_6 were used, which are the criteria described in Table 1. The variables are unambiguous and are marked with either 0 or 1. For this reason, the service used is of linear form $\rho=1$.

The multicriteria indicator of preference $\Pi(v_i, v_j)$ which is a weighted mean of the preference services $P(v_i, v_j)$ with weights w_i , express the superiority of website v_i against website v_j after all the criteria have been tested.

The values of $\Pi(v_i, v_j)$ are calculated using the following equation (Brans et al., 1986):

$$\Pi(v_i, v_j) = \frac{\sum_{t=1}^k W_t \cdot P_t(v_i, v_j)}{\sum_{t=1}^k W_t} \quad (2)$$

We receive 50 scenarios of weights (one scenario of weights w_i corresponds to all criteria) and for each scenario of weights we receive 10 scenarios on the standard deviation for every criterion. In total, we have 500 different net flow values for each website of food and drinks sector enterprise. We use the average of these 500 values as the final net flow value for each website of enterprise.

K is defined as the number of criteria and $P_t(v_i, v_j)$ the preference services for the k criteria. The multicriteria preference indicator $\Pi(v_i, v_j)$ takes values between 0 and 1. When two websites (v_i, v_j) are compared, one is assigned two flow values: outgoing flow and incoming flow. The outgoing flow is calculated by the following equation (Baourakis et al., 2001):

$$\Phi^+(v_i) = \sum_{v_j \in A} \Pi(v_i, v_j) \quad (3)$$

In both cases, A is defined as the number of alternative solutions for websites v_j . The outgoing flow expresses the total superiority of website v_i against all other

websites v_j for all criteria. The incoming flow is determined by the following equation (Baourakis et al., 2001):

$$\Phi^-(v_i) = \sum_{v_j \in A} \Pi(v_i, v_j) \quad (4)$$

The incoming flow expresses the total superiority of all other websites v_i against website v_j for all criteria. The net flow for each website v_i is estimated by the following formula:

$$\Phi(v_i) = \Phi^+(v_i) - \Phi^-(v_i) \quad (5)$$

The net flow is the final number that is used for the comparison between the websites in order to obtain the ranking. The ten values (scenarios) range between 0.25s and 2.5s with step 0.25s, where s is the standard deviation of all differences d for each criterion. In total, we take 500 net flow values for each website and find the website's average value. Each website with a higher net flow is considered superior in the final ranking. Finally, they were classified in groups according to their net flow.

3. Results

Research through search engines on the Internet resulted in the retrieve of 66 websites concerning enterprises in the Greek agro-food and drink sector that have an internet presence through an e-shop.

In Figure 1, the achievement of each one of the 6 e-marketing criteria/characteristics, expressed in variables x_1 to x_6 is displayed.

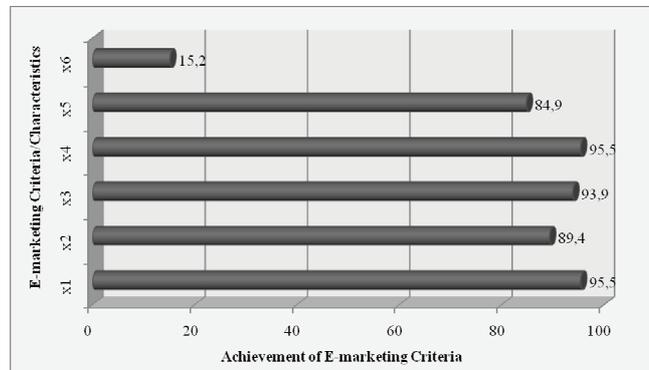


Figure 1. Achievement of e-marketing criteria about the SME websites

Regarding both physical and e-presence of an enterprise (x_1), 95.5% of them fulfill that feature.

Quality certificates for the products are promoted through the e-shop website in 89.4% of enterprises and so as the reliability of the recipes. These features often go hand in hand and are represented with variable x_2 .

In most of the enterprises (93.9%) are promoted the products, providing various information to the consumers. E-promotion of the products is shown through variable x_3 .

Concerning now the feature about the presence or the absence of other links inside the website of each enterprise, represented with variable x_4 , 95.5% of enterprises in the sample offer the possibility of access in other websites.

Moreover, almost 85% of the enterprises in the sample, within the framework of qualitative policy applied, support the communication with the customer through suitable forms of communication (x_5) aiming to provide additional information on the products, services and transactions, to receive complaints, to give advice and to also support after sales service. There is also the function of Frequently Asked Questions (FAQ) for provision of further information.

Finally, variable x_6 represents the presence of shopping cart. A shopping cart is a software application that typically runs on the computer where the website of the enterprise is located and allows the customers to do things such as searching for a product in the store catalog, adding selected product to a basket and placing an order for it.

Regarding variable t , that is the sum of e-marketing criteria accomplished by e-shop websites, they are shown in Figure 2. Only 7 enterprises of the sample accomplishes all six e-marketing criteria ($t=6$). 48 businesses accomplish five e-marketing criteria ($t=5$) and 7 businesses of the sample four ($t=4$). Moreover, 1 business accomplishes three e-marketing criteria ($t=3$) and none of them two ($t=2$) or one ($t=1$). Finally, 3 enterprises accomplish no one criterion ($t=0$).

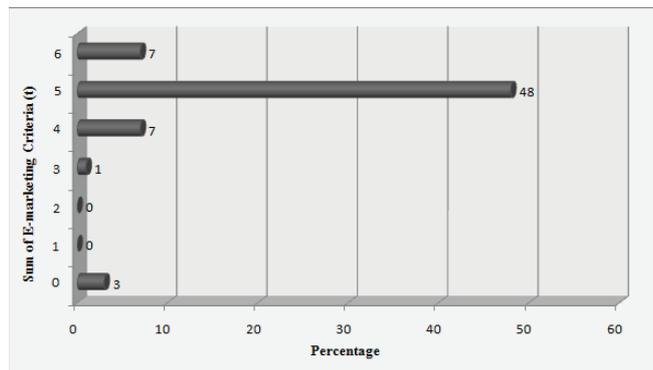


Figure 2. Sum of the e-marketing criteria accomplished by enterprises

4.1. Ranking and classifying e-shops websites using the multicriteria method PROMETHEE II

Based on the application of the multicriteria analysis method PROMETHEE II, the total ranking of the e-shop websites is presented in Table 2. In the same Table it is also presented the total net flow that is estimated for each website and it is used for the comparison between the websites in order to obtain the total ranking, as each website with a higher net flow is considered superior in ranking. Also, in the same table, the sum of the achieved criteria for each website and the classification in groups appear.

According to these findings, the values that were estimated for the total net flows Φ present a great spectrum of values between (+9.936) to (-47.846) and that indicates

a great difference concerning the ‘superiority’ between the first and last case in the ranking of the enterprises’ websites. Moreover, the total flows Φ of the enterprises’ websites, as derived from the application of the PROMETHEE II method, allow a further grouping of the cases and generate four groups:

- Group 1: classified in this group are 8 websites of the enterprises that achieve 5-6 criteria and very high total flows (+9.936) to (6.943) that present a ‘high superiority’ against the rest of the cases.
- Group 2: classified in this group are 47 websites of the enterprises that achieve 5 criteria and medium total flows (+3.218) to (0.466) that present a ‘low superiority’ against the rest of the cases.
- Group 3: classified in this group are 6 websites of the enterprises that achieve 4 criteria and average negative total flows (-0.426) to (-3.156) that present an ‘average lag’ against the rest of the cases.
- Group 4: classified in this group are 5 websites of the enterprises that achieve 0-4 criteria and average negative total flows (-8.478) to (-47.846) that present a ‘high lag’ against the rest of the cases.

Table 2. The total ranking of the websites, the total net flows of each website and the classification in groups.

Final Ranking	URL of SME	Net flow Φ	Groups
1	www.e-anemos.gr	9,936	group-1
2	www.foccacia.gr	7,91	group-1
3	www.aristeos.gr	7,91	group-1
4	www.agapitos.gr	7,91	group-1
5	www.absinthe.gr	7,037	group-1
6	www.agelidiscava.gr	7,037	group-1
7	www.cavaarion.gr	7,037	group-1
8	www.stivos.net	6,943	group-1
9	www.skouna.gr	3,218	group-2
10	www.tragakis.com	3,218	group-2
11	www.papmar.gr	3,077	group-2
12	www.helmos.com	3,003	group-2
13	www.golden-sandwich.gr	3,003	group-2
14	www.trofodosia.gr	3,003	group-2
15	www.mastfoods.com	3,003	group-2
16	www.provinco.gr	3,003	group-2
17	www.troficom.gr	3,003	group-2
18	www.pitenis.gr	3,003	group-2
19	www.aretousa.gr	3,003	group-2
20	www.AristonFoods.gr	3,003	group-2
21	www.thymiopoulos.gr	3,003	group-2
22	www.lena.com.gr	3,003	group-2
23	www.tropis.gr	3,003	group-2

24	www.biofresco.gr	3,003	group-2
25	www.bioshop.gr	3,003	group-2
26	www.arvanitis.gr	3,003	group-2
27	www.fikas.gr	3,003	group-2
28	www.metsovosa.gr	3,003	group-2
29	www.agrovim.gr	3,003	group-2
30	www.filippos-sa.gr	3,003	group-2
31	www.fresca.gr	3,003	group-2
32	www.chrisanidis.gr	3,003	group-2
33	www.elinos.gr	3,003	group-2
34	www.greek-ouzo.com	2,53	group-2
35	www.coffee-nettos.gr	2,53	group-2
36	www.ellvino.gr	2,101	group-2
37	www.pilavas.gr	2,101	group-2
38	www.karoniswineshop.gr	2,101	group-2
39	www.fileloinon.gr	2,101	group-2
40	www.kavapergola.gr	1,928	group-2
41	www.cava-semeli.gr	1,928	group-2
42	www.onassis-foods.gr	1,879	group-2
43	www.sisitis.gr	1,879	group-2
44	www.kordonismarket.gr	1,879	group-2
45	www.nektar.gr	1,879	group-2
46	www.amphion.gr	1,879	group-2
47	www.minosfoods.gr	1,173	group-2
48	www.melissa.gr	1,173	group-2
49	www.biotrofos.gr	1,173	group-2
50	www.elgeka.gr	1,173	group-2
51	www.sunspices.gr	1,173	group-2
52	www.ioniki.gr.com	1,173	group-2
53	www.konva.gr	1,173	group-2
54	www.trofotechniki.gr	1,173	group-2
55	www.mi-alpha.gr	0,466	group-2
56	www.pikounis.gr	-0,426	group-3
57	www.seafood.triton.gr	-0,426	group-3
58	www.antonio.gr	-2,512	group-3
59	www.aromathellas.gr	-2,512	group-3
60	www.cava-sfetsiou.gr	-3,156	group-3
61	www.boikos.gr	-3,156	group-3
62	www.cibshellas.com	-8,478	group-4
63	www.cookie-man.gr	-18,708	group-4
64	topalis@kar.forthnet.gr	-40,495	group-4
65	mamas@mamas.gr	-46,143	group-4

4. Conclusions

Internet has become a most effective means for promoting and enhancing purchasing via the promotion of products and the provision of any possible information existing, before selling. Also it contributes in facilitating the customers when buying and ordering, it helps financial transactions, secures delivering of products and preserves the prestige of the company while keeping clients satisfied after sales service (Andreopoulou et.al. 2009).

Internet research has retrieved 66 websites that represent SME Greek enterprises in agro-food and drink sector. With the aim of studying the adoption of e-marketing and internet functions, the websites were qualitative studied and 6 different criteria that promote e-commerce activities. The enterprises have adopted various internet tools and techniques to achieve e-marketing.

The findings show that the majority of the websites achieve 5 criteria while 83% of the websites achieve 5-6 e-marketing criteria and internet functions. Quality certificates for the products are promoted through the websites in 89.4% of enterprises. E-promotion of the products is found in 93% of the websites.

In the second Group, that presents low superiority, were classified 47 websites (71.21%). In Groups 3 and 4, 17% of the cases are classified, meaning that few websites present a lag, achieve few criteria and occupy negative total net flows. The enterprises, which belong to this group, should be optimized considering Group 1 a model. Although only 12% of the websites are classified in Group 1 and achieve 5-6 criteria, they consequently appear to have a high superiority against the rest of the cases, representing a high level of e-commerce adoption.

According to these findings, the values that were estimated for the total net flows Φ present a great spectrum of values and that points out a great difference that concerns the 'superiority' between the first and last case in the ranking of the enterprises' websites. Besides, the total net flows Φ of the enterprises' websites, as derived from the application of the PROMETHEE II method, allow a further grouping of the cases and the initial creation of four groups, plus a single case that would be considered as the fifth group.

The results of this study can be an effective tool while designing similar websites for an enterprise that aims to initially or further involve itself in the e-commerce activities in the agro-food and drink sector. Therefore, it is pointed out that these enterprises in Greece have to adjust to the new 'information era' and aim to become more effective and efficient while accomplishing e-commerce activities. As the majority of the enterprises in this sector are generally still in the initial adoption phase (usually a promotional level), they should further mature in the next phases of e-commerce adoption, as those stages of adoption characterized for their dynamic interaction with potential clients and finally, the total integration of e-commerce activities and the optimization of the supply chain.

The findings are useful in improving e-commerce adoption through the improved design and implementation of a website to fulfill certain features and characteristics.

References

1. Andreopoulou, Z.S. (2008) Computer Networks, Sustainability and Environment. University lectures. Aristotle University of Thessaloniki, p. 98.
2. Andreopoulou, Z., Koliouka, C., Tsekouropoulos, G. & Manos, B. (2011) Strategic Planning and Decision Support in Small-Medium Wood Enterprises. In the proceedings of the 7th National and International Conference on Professional Systemics in Action (in print).
3. Andreopoulou, Z.S., Koutroumanidis, Th. & Manos, B. (2009) The Adoption of E-commerce for Wood Enterprises. *International Journal of Business Information Systems*. Vol. 4, No. 4, p. 440-459.
4. Andreopoulou, Z., Tsekouropoulos, G., Koutroumanidis, T., Vlachopoulou, M. & Manos, B. (2008) Typology for E-business Activities in the Agricultural Sector. *International Journal of Business Information Systems*, Vol. 3, No. 3, p. 231-251.
5. Baourakis, G., Kalogeras, N., Doumpou, M., Stavropoulos, Ch., Bankova, M. & Zopounidis, C. (2001) Multicriteria Methodology of Evaluation of Financing Records of Enterprises of Rural Sector: The Case of the Co-operative and Juice Enterprises, in *Analysis of Financing Decisions with Multiple Criteria*. Zopounidis, C., ed. p.317-333. Thessaloniki: Anikoula Publications.
6. Basahel, A. & Irani, Z. (2009) Examining the Relationship between Information Systems and Marketing Functions: The Experience of a Middle East Airline. *International Journal of Business Information Systems*, Vol.4, No.4, p. 403-418.
7. Brans, J.P., Chevalier, A., Kunsch, P., Macharis, C. & Schwaninger, M. (1998) Combining Multicriteria Decision Aid and System Dynamics for the Control of Socio-economic Processes. *European Journal of Operational Research*, Vol. 109, p. 428-441.
8. Brans, J.P., Mareschal, B., Margeta, J. & Mladineo, N. (1987) Multicriteria Ranking of Alternative Locations for Small Scale Hydro Plants. *European Journal of Operational Research*, Vol. 31, p. 215-222.
9. Brans, J.P., Vincke, Ph. & Mareschal B. (1986) How to Select and How to Rank Projects: The PROMETHEE Method. *European Journal of Operational Research*, Vol. 24, p. 228-238.
10. Brans, J.P. & Vincke, Ph. (1985) A Preference Ranking Organization Method: The PROMETHEE Method for Multiple Criteria Decision Making. *Management Science*, Vol. 31(6), p. 647-656.
11. Burgess, S., Sellito, C. & Wenn, A. (2005) Maturity in the Websites of Australian Wineries: A Study of Varying Website Content. *International Journal of Electronic Business*, Vol. 3, No. 5, p. 473-490.
12. Clarke, I. & Flaherty, T.B. (2003) Web-based B2B Portals. *Industrial Marketing Management*, Vol. 32, p. 15-23.
13. Department of Trade and Industry of United Kingdom (2004) Achieving Best Practice in your Business. E-marketing.
14. DigitSmith (2006) Ecommerce Definition and Types of Ecommerce. Retrieved on <http://www.digitSmith.com/ecommerce-definition.html>.
15. Eszes, I. (2010) An Introduction to Internet Marketing.

16. Hillier, M. (2003) The Role of Cultural Context in Multilingual Website Usability. *Electronic Commerce Research and Applications*, Vol. 2, p. 2-14.
17. Johnson, L.K. (2002) New Views on Digital CRM. *Sloan Management Review* 3:10.
18. Petrovic, D. (2010) What is E-Marketing? Retrieved on <http://analogik.com/articles/231/e-marketing>.
19. Quirk eMarketing (2006) What is Emarketing and How is it Better than Traditional Marketing? Retrieved on <http://www.quirk.biz/resources/88/What-is-eMarketing-and-how-is-it-better-than-traditional-marketing>.
20. Roy, B. (1991) The Outranking Approach and the Foundations of ELECTRE Methods. *Theory and Decision*, Vol. 31, p. 49-73.
21. Seretakis, A., Tsekouropoulos, G. & Andreopoulou, Z. (2010) Study on the Rate of E-commerce Activities Presence of Greek Enterprises in Food and Drinks Sector. *Greek Company of Information and Communications in Agriculture (EPEGE)*, January 2010, 3rd Volume of Scientific Works: E-business applications on the agricultural sector, Vol. 1.
22. Siskos, J. & Zopounidis, C. (1987) The Evaluation Criteria of the Venture Capital Investment Activity. An Interactive Assessment. *European Journal of Operational Research*, Vol. 31, p. 304-313.
23. The National B2B Centre (2011) Develop an E-marketing Plan. Retrieved on <http://www.businesslink.gov.uk/bdotg/action/detail?itemId=1075384999&type=RESOURCES>.
24. Tsekouropoulos, G. (2009) Consumers' Behavior towards Food Promoting Methods. PhD thesis, Aristotle University of Thessaloniki, June 2009.
25. Tsekouropoulos, G., Andreopoulou, Z., Seretakis, A., Koutroumanidis, T. & Manos, B. (2011) Optimizing E-marketing Criteria for Customer Communication in Food and Drink Sector in Greece. *International Journal of Business Information Systems* (in print).
26. Tsekouropoulos, G., Tzimitra-Kalogianni, I. & Manos, B. (2005) Logistics in Greek Agricultural Enterprises – Problems – Prospects. In the Proceedings Vol. 1, ITAFE-05 International Conference on Information Technology in Agriculture, Food and Environment, 12-14 October 2005. Cukurova University, Adana, Turkey, Vol. 2, p. 606-613.
27. Tseng, M.M. & Jiao, J. (2001) Mass Customization in: *Handbook of Industrial Engineering, Technology and Operation Management* (3rd ed.). New York: Wiley. ISBN 0-471-33057-4.
28. Zopounidis, C. (2001) Analysis of Financing Decisions with Multiple Criteria. Thessaloniki: Anikoula Publications, p. 67-85.