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An Innovative Tool to Assess Marketing Capabilities of Traditional Producers within the European Food Industry

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Paper prepared for presentation at the 110th EAAE Seminar 'System Dynamics and Innovation in Food Networks' Innsbruck-Igls, Austria February 18-22, 2008

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Abstract.

The purpose of this paper is to assess the marketing management capabilities of SMEs producing traditional food products in EU throughout the development of a benchmarking tool. SMEs represent the greater part of European food firms and they find it very difficult to adapt to market changes, and to compete with big enterprises. In this context, marketing management plays a key role in good SMEs performances in the market. The benchmarking tool, utilised to assess marketing capabilities, is aimed at improving critical points in the marketing area of traditional food firms by following the example of the best ones. This method is developed in the innovative form of an interactive questionnaire published on the Web. At the moment the sample is composed by 60 firms located in three member states (Belgium, Italy, and Hungary) producing traditional food products belonging to five sectors (cheese, beer, dry ham, sausage and white pepper). The data were analysed with cluster analysis. Results show that the majority of firms is weak in marketing research, and also the marketing strategy is not well developed. On the other hand, stronger performance is shown in innovation. Related to the size and production, generally, micro sized firms perform worse than small and medium enterprises, and the production of PDO-PGI products affects positively the marketing capabilities.

Keywords: *marketing capabilities, traditional food, benchmarking, cluster analysis* **JEL**: L25, L66, M31, Q13

1. Introduction

The growth of competition that has characterised the European food market in recent years is imputable to different factors, such as progressive market globalisation, the evolution of the demand pattern and the harmonisation of food regulations at the European and international levels (Banterle and Carraresi, 2007; Knight, 2000). The qualitative attributes of food products are considered important strategic tools to face the competition of food firms in the EU market (Traill, 1998).

Small and medium sized enterprises (SMEs), that represent the greater part of European food firms (Spillan and Parnell, 2006), find it very difficult to adapt to market changes, and to compete with big enterprises. In this context, marketing management plays a key role in good SMEs performance in the market (Kohli and Jaworski, 1990).

The purpose of this paper is to assess the marketing management capabilities of SMEs producing traditional food products throughout the development of a benchmarking tool. This analysis is carried out in the context of a European research project¹.

The definition of traditional food products makes reference to different rules concerning the production (national/regional/local), the authenticity (recipe, origin of raw material or produc-

^{1.} European Integrated project "Traditional United Europe Food" (Truefood), 6th Framework Program for RTD. <u>www.truefood.eu</u>

tion process), the commercial availability of the products (at least 50 years) and their gastronomic heritage.

The benchmarking tool was developed by means of an interactive questionnaire, available on the web¹, aimed at evaluating traditional food firms competitive position in the marketing area. We carried out a survey in three EU states, i.e. Belgium, Italy and Hungary, and the sample is composed by 60 firms belonging to five different sectors (cheese, beer, dry ham, sausage and white pepper).

Cluster analysis was applied in order to underline firms and sectors with similar features in marketing capabilities and to make comparison between them.

The paper is organised as follows: the theoretical framework is presented in section 2; the methodology is described in section 3; the results are analysed in section 4, and concluding remarks are presented in section 5.

2. Theoretical framework

The theoretical framework to analyse marketing capabilities can be connected to three different approaches: the Market Orientation (MARKOR), the Resource Based View (RBV), and the Porter's model on competitive advantage.

MARKOR approach argues that a firm which is market oriented reveals the main pillars of marketing (customer focus, coordinated marketing, profitability) perfectly integrated (Kohli and Jaworski, 1990; Spillan and Parnell, 2006). Indeed, inside the organisation of the firm a market intelligence has to be generated, namely there should be an analysis of the consumers' needs together with a study of the external environment, and the results of this market research have to be disseminated across departments with perfect coordination (Kohli and Jaworski, 1990; Kara *et al.*, 2005).

According to Barney (1991), *RBV approach* underlines that firms are different in terms of resources. The three typologies of resources (physical, human and organisational) can be arranged and utilised in such a way that the firm will obtain a sustained competitive advantage, not duplicated by any other company (Barney, 1991; Ray *et al.*, 2004).

The *Porter's model on competitive advantage* asserts the existence of three strategies to enable a firm to reach good performances in the market: cost leadership, differentiation and focus (Porter, 1985). The first one concerns the application of a lower price of the products in comparison with the ones of the competitors (Kaleka, 2002). On the opposite, the differentiation strategy is related to the perceived peculiar characteristics given to the product and to the achievement of a premium price. Finally, the focus strategy is related to a firm choosing to operate in a narrow segment where it can apply cost leadership or differentiation (Porter, 1985).

In all these three approaches marketing capabilities play an important role. In the first approach they are necessary to realise the market intelligence (Kohli and Jaworski, 1990), in the second one they are included on the organisational resources (Barney, 1991), and in the third one they are useful to apply the strategy of the firm, especially the differentiation (Porter, 1985).

In our analysis we most considered the MARKOR approach, even though some aspects of the other two models are taken into account, as the aptitude of small traditional food producers of being market oriented is investigated.

The realization of marketing on the part of firms is achieved through the process of "marketing management" that consists of analyzing market opportunities, searching and selecting market objectives, and developing marketing strategies that should be realized and controlled (Kotler, 2004).

Hence, to evaluate the marketing activities of firms it is important to concentrate the attention

^{1.} http://users.unimi.it/truefood

on marketing management capabilities of traditional food producers in terms of marketing research, marketing strategy, planning and implementation, control and evaluation (Bagozzi, 1998; Kotler, 2004).

The *marketing research* aims at collecting information and data in order to analyse the competitive environment in which the firm operates. According to the American Marketing Association definition, "marketing research is the function that links an organisation to its market through information. This information is used to identify and define marketing opportunities and problems; generate, refine and evaluate marketing actions; monitor marketing performance and improve understanding of marketing as a process" (Gofton, 1997). An analysis of the internal and external environments requires studies on where the firm operates and on possible market opportunities, indeed, marketing is the company's area which is more related to the external environment (Bagozzi, 1998).

Marketing strategy is necessary for any firm that wants to be market oriented. The aims of a marketing strategy are twofolds: shaping the product business in the best way to obtain profits, and managing objectives, capabilities and resources in line with market opportunities changes (Kotler, 2004). A firm must adapt its strategy step by step to the changes taking place (Kohli and Javorski, 1990). Once the market segment is chosen, the firm has to apply a marketing strategy that comes out from the elaboration of the "marketing mix" variables (product, price, place, promotion) (Bagozzi, 1998; Kotler, 2004).

Planning and implementation is crucial to achieve the objectives of the marketing strategy. A firm should apply a marketing plan, and such a plan, together with the budget allocated for marketing activities, should be adapted to market conditions (Kotler, 2004).

Control and evaluation is related to the check and the examination of the planned marketing activities in order to be ready to carry out corrective actions if something does not work well, and to verify that the firm had reached its sales and profit objectives (Kotler, 2004). Moreover, marketing strategies of competitors have to be analysed in order to remain up to date and to improve the marketing plan by 'imitating' the marketing techniques of companies revealed as leaders of the sector (Kohli and Javorski, 1990).

In our analysis, also *innovation* aspects are considered as performance indices for marketing capabilities; offering new products is necessary for a firm that wants to become successful, to satisfy continuously the changing consumer needs, and to face the increasing market competition (Knight, 2000).

3. Methodology

An interactive questionnaire, available on the web, has been developed as benchmarking tool in order to evaluate the marketing management capabilities of SMEs. Before extending the survey all around EU, we carried out a survey in three countries partners of the European research project (Belgium, Italy, and Hungary).

The sample was composed by 60 firms producing traditional food products belonging to five sectors: cheese, beer, dry ham, sausage and white pepper.

In order to be considered traditional, products must have some features concerning production, authenticity, commercial availability, and gastronomic heritage. The key steps of the production process must be carried out at national or regional or local level; the products must have an authentic recipe (mix of ingredients) or an authentic origin of raw material or an authentic production process; the products must be commercially available in stores and restaurants for at least 50 years; the products must have a gastronomic heritage.

The questionnaire is organised in six sections, which reflect the main steps of the marketing management analysis (Kotler, 2004; Padberg *et al.* 1997).

- *General data of the firm*: information as company name, country, legal status, employees, and turnover are required; open questions about distribution channels, sales markets, and voluntary certification are added too.
- *Information*: this part concerns the marketing research, necessary to apply market intelligence (Kohli and Jaworski, 1990); the questions are related to the analysis of information about the position of the brand in the market, the skills of suppliers, the requirements of retailers and consumers, and the strategy of competitors.
- *Objectives*: this part refers to the analysis of the marketing strategy, concerning the aptitude of the firm to be market oriented; the questions consider if a firm has measurable objectives, if the marketing strategy is implemented strictly, if the products are tailored in accord with the needs of the consumers, if the firm applies differentiation, if the firm invests in sales force and in advertising, and if the distribution channels are chosen by following the sales objectives.
- *Organisation*: this part is focussed on the analysis of the marketing planning and implementation, and the questions concern the realisation of the marketing plan in advance, the adaptation of the promotional activities according to the changes of the market, and the adaptation of the budget for marketing when it is necessary.
- *Evaluation*: this part analyses the control of the achievement of the results, therefore the questions regard the capacity of the firm to check if the objectives were realised, and if the marketing costs are in line with the results obtained.
- *Development*: the level of innovation of the firm is studied in this part; indeed the questions are related to the investment in improving the products, the tendency to search for new market and for innovative distribution channels.

Except for the first part of the questionnaire, in the other sections the possibility of answer is formulated with a scale from 1 to 5, reflecting the worst performance and the best one, respectively. This scale format is useful for two main reasons. Firstly, the marketing performance of a firm is expressed in a quantitative way, therefore it is easy to compare the firms with those recognised as leaders in marketing, obtaining the maximum score or almost; in other words it is more feasible to apply the benchmarking and to find the best performing firms constituting the points of reference for improving marketing capabilities (Camp, 1989; Scozzese, 2005). Secondly, these numerical answers can be converted in scores expressed in tenths in order to make more simple for the firms to understand their marketing performance.

With the numerical data obtained from this survey cluster analysis was also carried out in order to find similar characteristics in marketing capabilities of the firms composing the sample.

Cluster analysis is an exploratory data analysis instrument that covers several algorithms and methods for joining cases of similar type into respective clusters (Jobson, 1992). In other words cluster analysis is a tool which aims at sorting different objects into groups in a way that the degree of association between two objects is maximal if they belong to the same group and minimal otherwise. In this research hierarchical analysis is applied, aiming to group cases into successively larger clusters with a measure of distance. This method uses the distances between cases as the principles for grouping items, and a linkage rule to determine when two clusters are sufficiently similar to be linked together. In this analysis the method used for grouping items is Chebychev distance, and the linkage rule is "within groups".

4. Results

4.1 Descriptive analysis

The size of the firms interviewed for each sector is shown in table 1. A greater part of the sample is represented by SMEs (92%). Micro sized firms represent the majority of the sample (60%) and they are observed especially in both Belgian sectors (cheese and beer) and in the Hungarian white pepper. In this category most firms are single entrepreneurs. The 25% of the sample is composed by small firms and the 7% by medium sized firms. Moreover, 8% are big firms, most of which belong to Italian dry ham sector where there are two consortia for the protection of the brands PDO-PGI.

Referring to the kind of distribution channels chosen by the firms of the sample, the ones most frequently used are direct sale and wholesalers, which represent a typical choice of very small firms (fig. 1). Specialised shops are chosen just by some Hungarian firms, whereas supermarkets play an important role for Italian dry ham firms, due to their larger size.

The strong representation of micro firms in the Belgian and Hungarian sectors justifies the local character of the sales and the low orientation towards exports (fig. 2). On the opposite, Italian firms are seen to be more open to the market, selling at national level, due to their bigger size and, especially for dry ham, to the reputation of their product.

Focusing on marketing management capabilities, the results were summarised for each sector in figure 3 by analysing the individual sections of the questionnaire. The individual scores in tenths that the firms obtained in each section were summed per sector and the average was calculated in order to understand the weaknesses and the strengthens in marketing capabilities of each sector.

With regard to section 2 (Information), where marketing research is investigated, almost all the sectors obtain scores quite low (around 6). The results are homogeneous due to the fact that marketing research is one of the more difficult aspects of marketing management especially for SMEs.

In section 3 (Objectives), that investigates the firms' marketing strategy, the differences among sectors increase. These differences in the scores reveal the need for intervention to improve weak situations, as it is impossible to have good marketing capabilities without an adequate marketing strategy. The most lacking sector is that of Belgian cheese, characterized by microsized firms. The best sector is the Hungarian sausage, that appears market oriented. However, the other sectors also obtain scores higher than six.

Table 1. Size of firms composing the sample

SUPPLY CHAINS	SIZE OF FIRMS (n° employees)				
-	Micro (< 10)	Small (10-50)	Medium (51 - 250)	Big (> 250)	Total
Belgian beer	8	2	0	0	10
Belgian cheese	9	1	0	0	10
Hungarian white pepper	8	2	0	0	10
Hungarian sausage	5	2	2	1	10
Italian cheese	5	4	1	0	10
Italian dry ham*	1	4	1	4	10
Total	36	15	4	5	60

(*) Among the big firms, two consortia are included.

Source: direct survey

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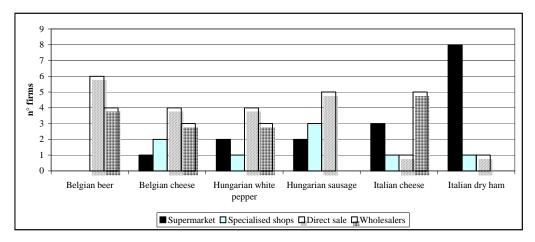


Figure 1. Distribution channels Source: own calculations based on direct survey

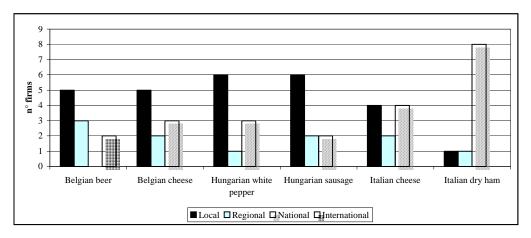


Figure 2. Sale markets Source: own calculations based on direct survey

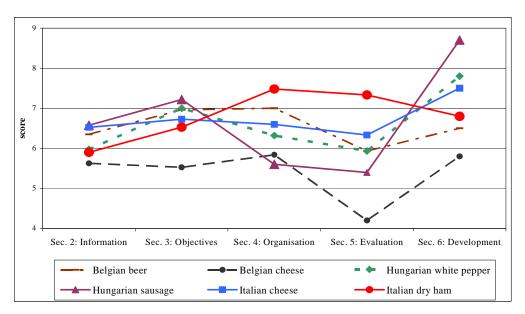


Figure 3. Comparison of the performance between the Hungarian, Belgian, and Italian sectors Source: own calculations based on direct survey

In Section 4 (Organisation), that investigates planning and implementation, a quite good performance is observed in the sectors of dry ham, beer and Italian cheese, which also reached a good score in the marketing strategy. Hungarian sausage, despite having a good marketing strategy, reveals the need to implement it. Also the Belgian cheese sector is found in a low position.

In Section 5 (Evaluation), analysing the control and evaluation of the marketing objectives, big differences among sectors are shown: the lowest score is noted in Belgian cheese and the highest score in Italian dry ham. Moreover, it has to be noticed that, except for dry ham sector, all the others obtain their lowest score in this section, showing that control and evaluation are weak and critical points to be improved.

In section 6 (Development), concerning the innovation aspects, great differences are evident, too. All the analysed sectors show innovation, but the best are the Hungarians', followed by the Italians' and then the Belgians'.

4.2 Cluster analysis

The cluster analysis revealed four clusters. The values utilised for clustering the sample are the raw data of questionnaire, not converted in tenths, namely values between 1 and 5. The firms with the lowest marketing management capabilities are grouped in cluster 1, in clusters 2 and 3 there are firms with growing performances, and in cluster 4 the highest marketing management capabilities are represented (fig. 4).

The first cluster comprises six micro sized firms characterised by the lowest performances in terms of marketing management capabilities (fig. 5). Among them, Belgian cheese firms are predominant.

The second cluster is bigger than the first one and it is composed by 20 firms. Micro sized firms are still the majority, but also three small sized firms are included. Half of the firms in this cluster are Belgian, with an equal distribution between cheese plants and breweries. Also Hungarian firms are highly represented, with a predominance of sausage producers. They have better marketing capabilities than those firms belonging to cluster 1, even if some weaknesses are revealed especially in planning and implementation (section 4) and in control and evaluation (section 5).

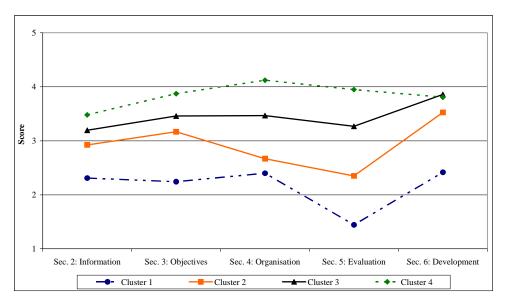


Figure 4. Performance distribution between clusters Source: own calculations based on direct survey

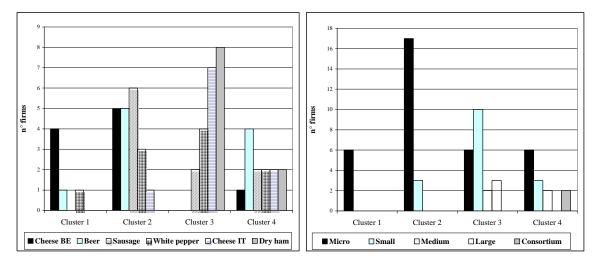


Figure 5. Distribution of sectors and firms' size between clusters Source: own calculations based on direct survey

The third cluster is characterised by marketing capabilities fairly good, and it is constituted by almost all kind of firms. Mainly small and micro sized enterprises are represented, but there are also two medium sized and three large firms. This cluster is predominated by Italian ham and cheese producers, followed by Hungarian white pepper and sausage producers. The Italian ham firms achieved the highest average score for marketing management capabilities of all sectors, followed by Hungarians' which attained the second highest score.

The fourth cluster includes the best performing firms. All the sectors are represented here: one firm for the Belgian cheese, four firms for the beer, and two firms for each of the other sectors. Related to the firms' size, six micro, three small and two medium sized enterprises plus two consortia are grouped in this cluster, showing that good results in marketing management are not necessarily determined by the firm's size. It has to be noticed that the two consortia are responsible for the marketing management of a group of producers, and therefore they achieve high scores in marketing capabilities.

5. Concluding remarks

The purpose of this paper was to assess the marketing management capabilities of traditional food producers. The interest was focused on SMEs, because of the great percentage of them in the traditional food production. Furthermore, the traditional food producers are sometimes so small or even micro businesses that it is really difficult for them to stay on the market, and to compete with big enterprises. For this reason, the analysis carried out would support the SMEs in being more competitive in the globalised market.

In the survey the results about marketing management capabilities permit to make comparison among sectors. The Belgian cheese sector is that with the worst performance on marketing management. It is characterised by micro business with few employees, a destination of products mainly local, and distribution and communication channels less widespread.

On the opposite, we found the Italian dry ham sector with quite high scores, except in the section of marketing research. Here the firms are bigger than in the previous sector, they sell their products also in the national market, and they utilise distribution and communication channels with a wide range.

The Italian cheese, the Hungarian white pepper products, and the Belgian beer are characterised by quite homogeneous values among the marketing activities, revealing fairly good marketing capabilities. Instead, the Hungarian sausage sector is the only that has a very variable score revealing a good marketing performance only in some aspects of marketing activities. The cluster analysis outlined four clusters:

- the first cluster could be called "the Belgian cluster", as we found a predominance of Belgian firms producing cheese; it is the cluster which reflects the worst performance in marketing management capabilities;
- the second cluster is characterised by firms with better marketing capabilities compared to the previous one; here we found the Hungarian firms producing sausage and some Belgian cheese firms with a bit higher performance;
- the third cluster could be called the "Italian cluster", as most firms operate in the Italian cheese and dry ham sectors; they have good marketing capabilities, especially in planning and implementation and innovation aspects, better than those firms part of the two clusters described above.
- the fourth cluster embodies the best performing companies; all sectors are represented, and also most of the firm sizes.

With regard to the link between marketing management capabilities and firms' size, the survey showed that, generally, micro sized firms perform worse than small and medium enterprises. Nevertheless, in some cases micro firms achieved high performances revealing that the firm's size is not a so insuperable constraint to reach good results in marketing. Moreover, the production of PDO-PGI products affects positively the marketing capability as those firms that produce certified products are more aware of marketing management.

From this survey it appeared that the firms are weak especially in marketing research, namely they do not analyse the competitive environment in which they operate; a solution might be to develop better ways of information about the situation of the market, the competitors, and all the actors which deal in the supply chain. This could be accomplished by simplifying the access and the comprehensibility of market information provided by governmental and research institutions.

Further research will be addressed to extend the survey in the SMEs all around European Union. By means of the questionnaire and the benchmarking tool it is possible for the firms to know their performance in terms of marketing capabilities which reflects their competitive position in the market.

6. References

Bagozzi, R. (1998). Marketing Management. Upper Saddle River, N.J., Prentice Hall.

- Banterle, A. and Carraresi, L. (2007). Competitive performance analysis and European Union trade: The case of the prepared swine meat sector. *Food economics*, 4(3), 159-172.
- Barney, J. (1991). Firm Resource and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.
- Camp, R.C. (1989). Benchmarking: The Search for Industry Best Practices That Lead to Superior Performance. Milwaukee, WI, American Society for Quality Control Quality Press.
- Gofton, L. (1997). Marketing Research. In D.I. Padbergh, C. Ritson and L.M. Albisu, *Agro-food marketing*. CAB International, Wallingford, Oxon, 225–252.

Jobson, J.D. (1992). Applied Multivariate Data Analysis (Vol.2). Springer-Verlag, New York.

Kaleka, A. (2002). Resources and capabilities driving competitive advantage in export markets: guidelines for industrial exporters. *Industrial Management Journal*, 31, 273-283.

Kara, A., Spillan, J., and DeShields, E.W. Jr. (2005). The Effect of a Market Orientation on Business Performance: A Study of Small-Sized Service Retailers Using MARKOR Scale. Journal of Small Business Management, 43(2), 105–118.

- Knight, G. (2000). Entrepreneurship and marketing strategy: the SME under globalization. *Journal of International Marketing*, 8(2), 12-32.
- Kohli, A. K. and Jaworski, B.J. (1990). Market orientation: The construct, research propositions. *Journal of Marketing*, 54(2), 1-19.
- Kotler, P. (2004). Marketing Management. Prentice Hall, USA.
- Padbergh, D.I., Ritson C., and Albisu, L.M. (1997). *Agro-food marketing*. Cab International, Oxon (UK).
- Porter, M. (1985). Competitive advantage. Free Press, New York.
- Ray, G., Barney, J., and Muhanna W.A. (2004). Capabilities, business processes, and competitive advantage: choosing the dependent variable in empirical tests of the resource-based view. *Strategic Management Journal*, 25, 23-37.
- Scozzese, G. (2005). Il benchmarking. Armando, Roma.
- Spillan, J., and Parnell J. (2006). Marketing resources and firm performance among SMEs. *European Management Journal*, 24(2-3), 236-245.
- Traill, B. (1998). Structural changes in the European food industry: consequences for competitiveness. In W.B. Traill and E. Pitts (eds.), *Competitiveness in the food industry*. London, Blackie Academic & Professional, 35-57.

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