Marketing management capabilities of SMEs: an empirical analysis in the EU

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Abstract— **SMEs, that represent the greater part of European food firms producing traditional food products (TFPs), meet difficulties in adapting their strategies to market changes, and in competing with big enterprises. Marketing management capabilities play a key role in good SMEs performance in the market. The purpose of this paper is to evaluate the marketing capabilities of SMEs that produce TFPs. The theoretical framework considers the Market Orientation approach and marketing management capabilities in terms of marketing research, marketing strategy, planning and implementation, control and evaluation. A self evaluation tool was developed by means of an interactive questionnaire, available on the web, aimed at assessing traditional food firms competitive position in the marketing area. The sample consists of 112 Italian firms. Descriptive analysis shows that the most problematic dimensions of the marketing management are planning and implementation and control and evaluation. Moreover, the firms' size is not a relevant feature to determine the marketing capabilities, whereas quality voluntary certifications have a direct linkage with marketing capabilities, as the more a firm is certified the more it improves its marketing performance. Linear Regression model confirms these results.**

Keywords— **Marketing capabilities, SMEs, traditional food, linear regression**

I. INTRODUCTION

In the EU market small and medium sized enterprises (SMEs) represent the greater part of food industry (Spillan and Parnell, 2006), specially with regard to traditional food products (TFPs). However, the growth of competition, connected mainly to globalisation, is making it very difficult for SMEs to adapt to market changes and to survive alongside big enterprises (Banterle *et al*., 2008). Marketing capabilities represent an important tool to face the growing firms competition and to comply with changing consumer preferences.

The purpose of this paper is to evaluate the marketing management capabilities (MMC) of SMEs producing traditional food products in order to analyse the level of SMEs marketing capabilities in food industry and to develop some management implications.

The choice to analyse the traditional food sector is connected to a number of elements: TFPs constitute an important part of the food production in Europe, deriving mostly from SMEs, they are strongly related to the evolution of consumer patterns, and in most cases they have a deep link with specific geographic areas (some certified as PDO/PGI), with significant implications in the local economy. The definition of traditional food products, that we use, makes reference to rules concerning the production (national/regional/local), the authenticity (recipe, origin of raw material or production process), the commercial availability of the products (at least 50 years) and their gastronomic heritage.

A self evaluation tool was developed by means of an interactive questionnaire, available on the web, aimed at evaluating traditional food firms competitive position in the marketing area. A sample of 112 Italian firms was used in the analysis. This paper is carried out in the context of the European research project *Truefood*.

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.

II. ECONOMIC ISSUES

Among the different theoretical frameworks used to analyse firms marketing capabilities, our analysis refers to the Market Orientation approach (MARKOR).

The concept of Market Orientation is explained by Kohli and Jaworski (1990) and Spillan and Parnell (2006) as "organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to this intelligence". Market intelligence is a wide concept that includes not only the study of the customers' needs, but also an analysis of the external environment in which the enterprise operates everyday (Kohli and Jaworski, 1990; Kara *et al*., 2005).

The Market Orientation approach considers marketing as "a philosophy of business management, based upon a company-wide acceptance of the need for customer orientation, profit orientation, and recognition of the important role of marketing in communicating the needs of the market to all major corporate departments" (McNamara, 1972). In this context a market oriented firm shows a perfect integration of these three marketing concepts, i.e. customer focus, coordinated marketing and profitability (Kohli and Jaworski, 1990; Spillan and Parnell, 2006; Kara *et al*., 2005).

In this approach, marketing capability plays a key role as it is the basis on which the firm applies its market intelligence and which enables it to be really customer oriented. Moreover, marketing capability is derived by a well performed marketing management that consists of analysing market opportunities, searching and selecting market objectives, and developing marketing strategies that should be realized and controlled (Kotler, 2004).

According to Kotler (2004), Bagozzi (1998) and Padberg *et al.,* (1997), the marketing capabilities consist of multiple elements. Thus, the assessment of firm marketing capabilities should be referred to the four dimensions of marketing management, namely marketing research, marketing strategy, planning and implementation, control and evaluation.

The objective of marketing research is to collect information and data to analyse the competitive environment, namely the frame where the firm operates; in this way it will be possible to understand the market opportunities. Moreover, in order to be competitive, it is very important for the firm to understand, to the greatest degree possible, the behaviour of all the actors interacting with the firm as suppliers, buyers, competitors and final consumers, namely to generate market intelligence (Kohli and Jaworski, 1990).

Marketing strategy represents a fundamental dimension for firms that try to be market oriented, as it aims to manage objectives, capabilities and resources in line with changes in market opportunities. Therefore, a marketing strategy aims to shape the product business in the best way to obtain profits (Kotler, 2004; Kohli and Jaworski, 1990). It may be important for a firm to adapt its products to several kinds of consumers as consumers act differently and have different tastes. In other words the firm needs to apply segmentation and targeting (Bagozzi, 1998; Porter, 1985). A marketing strategy of a firm is connected to a specific market segment, combining the four variables that constitute the "marketing mix" (product, price, place, promotion) (Bagozzi, 1998; Kotler, 2004).

Planning and implementation is a key point in marketing management as the application of a marketing plan is a condition to achieve the objectives of the marketing strategy. Such a plan should be adapted to market conditions, together with the budget allocated for marketing activities (Kotler, 2004). In order to be successful, a marketing plan must be in line with the global strategy of the firm. Therefore good coordination within the firm is needed (Kohli and Jaworski, 1990).

Control and evaluation is connected to the check of the marketing activities in order to maintain an efficient marketing plan. The principal aim of control and evaluation is to verify that the sales and profit objectives of the firm have been reached (Kotler, 2004). Thus, the firm should be ready to carry out corrective actions if something does not work well. Moreover, marketing strategies of competitors have to be analysed in order to remain up to date (Kohli and Javorski, 1990).

Finally, besides the four dimensions of marketing management, we included also innovation aspects in our analysis as indicators of marketing capabilities. Indeed, new products, new markets and new

distribution channels represent important elements to satisfy the changing consumer needs, and to face the increasing market competition (Knight, 2000).

III. DATA AND METHOD

An interactive questionnaire, available on the web[1], has been developed in order to evaluate the marketing management capabilities of SMEs producing traditional food products.

The questionnaire is organised in six sections, which reflect the main dimensions of the marketing management, including 29 questions. The first part regards general data of the firms interviewed (questions regard the company name, country, legal status, employees, turnover, distribution channels, sale markets, voluntary certifications, membership to a consortium, and PDO/PGI products). The second part (*Information*) investigates the firms *market research* (questions regard the position of the brand in the market, the skills of suppliers, the requirements of retailers and consumers, and the strategy of competitors, and the analysis of market data). The third one (*Objectives*) regards the analysis of the *marketing strategy*, concerning the aptitude of the firm to be market oriented (questions regard firm objectives, marketing strategy implemented, the relation between product and consumers needs, the firm differentiation, the price of products, the investments in sales force and in advertising, and the type of distribution channels chosen). The fourth part (*Organisation*) of the questionnaire is focused on the marketing *planning and implementation* (questions regard the level of planning in advance, the adaptation of the promotional activities and the budget according to the changes of the market). The fifth part (*Evaluation*) analyses the *control* of the results achievement (questions regard the capacity of the firm to check the realization of the objectives, and to review the marketing costs with respect to the results obtained). Finally, the sixth part (*Development*) is concentrated on the level of innovation carried out by the firm (questions are related to the investment in improving the products, the tendency to look for new markets and innovative

distribution channels).

The sample was composed by 249 European firms producing traditional food products. All the EU countries are involved in the survey, but until now the following countries are represented in the sample: Belgium (20%), Czech Republic (4.4%), Spain (13.2%), France (4.8%), Greece (1.6%), Hungary (9.6%), Ireland (0.4%), Italy (45%), Austria (0.4%), United Kingdom (0.4%).

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 or an authentic origin of raw material or an authentic production process; the products must be commercially available for at least 50 years; the products must have a gastronomic heritage.

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, respectively, the worst performance and the best one. This scale format is useful for two main reasons. First, the marketing performance of a firm is expressed in a quantitative way; second, these numerical answers can be converted in scores expressed in tenths in order to make more simple to understand the marketing capabilities. The conversion in tenths was also useful to avoid the effect of the numerousness of the questions in each section.

In order to verify the results reached with the descriptive analysis, a linear regression model was run. Dependent variable is the total score resulting from the questionnaire and it represents the marketing management capabilities.

The independent variables are divided into two groups. The first six are related to the characteristics of the firm coming from the answers at the first part of the questionnaire (production of PDO/PGI, membership to a consortium, size of the firms, number of certifications, distribution channels, wideness of the market).

The last four are connected with the other sections of the questionnaire. We chose, as variables, one question for each section of the questionnaire

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[1] www.truefood.eu and http://users.unimi.it/truefood

representing the four dimensions of marketing management. We estimate the following equation:

$$MMC = f\,(PDO,\ CON,\ SIZ,\ CER,\ DC,\ MAR,\ INF,$$
$$OBJ,\ ORG,\ EVA) \qquad [I]$$

where:
MMC = marketing management capabilities
PDO = production of PDO/PGI
CON = membership to a consortium for brand protection, or cooperative or organisation of producers
SIZ = size of the firms based on number of employees
CER = number of voluntary quality certifications which the firms implement
DC = distribution channel chosen by the firms to sell their products
MAR = wideness of the market in which the firms sell their products (from local to international)
INF = analysis of market data and information
OBJ = implementation of the marketing strategy
ORG = application of a detailed marketing plan in advance
EVA = review of the accomplishment of the planned objectives

Our analysis is carried out on the Italian firms of the original sample, because they represent the most numerous firms in the sample (45%). The 42% of this sample is composed by micro sized firms (less than 10 employees), the 38.4% by small firms (10-50 employees), and the 15.2% by medium firms (50-250 employees). Only the 4.4% of the sample is represented by big firms.

IV. RESULTS

A. Descriptive analysis

The global marketing management capability was calculated by summing the score of the firms in each section of the questionnaire and by converting this score in tenths, in order to make easier the comprehension of the performance.

It must be underlined that the questionnaire reveals subjective perceptions as it is a self evaluation of the MMC. Even if in the questionnaire is specified that all firm information is confidential, this method can lead to an overvaluation of firm capabilities in some cases and an underassessment in others.

In order to highlight better the characteristics of the firms, the sample has been segmented in four parts, according to the scores reached in the MMC:
- worst performance, score < 6,
- lower intermediate performance, $6 \leq$ score < 7,
- upper intermediate performance, $7 \leq$ score < 8,
- best performance, score > 8.

The Italian firms analysed in the sample show, on average, fairly good MMC demonstrated by scores above 6 in all the sections composing the questionnaire. The firms with the worst performance constitute the 16.1% of the sample, the best performing firms are the 31.3% of the sample, and firms with lower and upper intermediate performance are respectively the 28.6% and the 24.1%.

With regard to the dimensions of marketing management, it is clear that the most problematic aspects of the marketing management are planning and implementation (Organisation) and control (Evaluation) (Fig. 1). The firms in the sample do not frequently formulate a marketing plan, therefore they are not so ready to adapt their promotional activities and their marketing budget to the changes of the market. Moreover, the firms are not used to check the realization of the objectives, consequently they do not usually review the consistence of marketing costs with respect to the results achieved.

The firms with the worst performance are weak in all dimensions of the marketing management, and, in particular, they face lack in Organisation (Fig. 2). On the opposite, the best performing firms have good scores in all sections, with light weaknesses in Organisation and Evaluation.

The firms with lower and upper intermediate performance show the same trend, with the lowest score achieved in Evaluation, where the firms with lower intermediate performance score below 6.
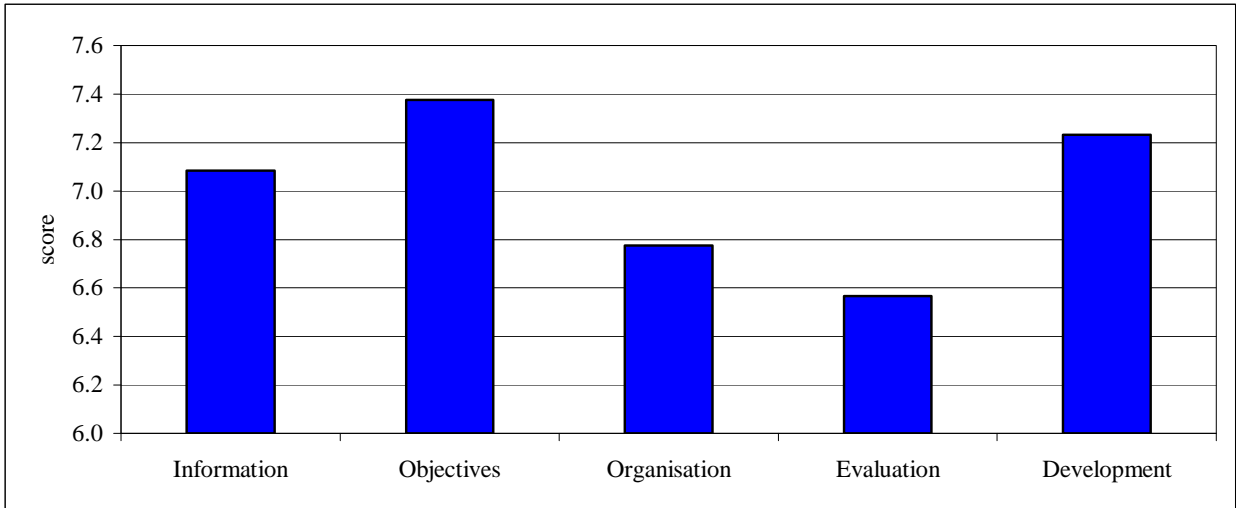
Fig. 1 - Marketing management capabilities of the Italian firms
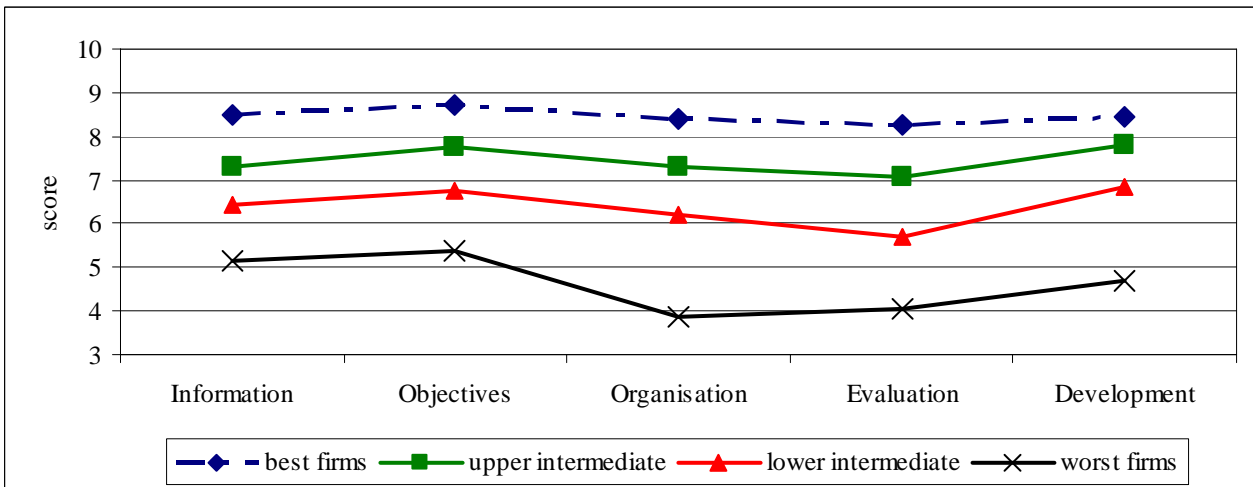Source: Own calculation based on our survey

Fig. 2 - Performance of the segmented sample
Source: Own calculation based on our survey

From both the composition and the segmentation of the sample it comes that the size of a firm is not a relevant feature for the marketing capabilities; indeed, the micro sized firms are concentrated among firms with lower and upper intermediate performances (29.8%) (Tab. 1). Small firms are represented for the most part in the group of the best performing firms (34.9%) as the big ones (60%). The most of the medium firms (41.2%) is comprised in the lower intermediate performance group of firms.

Among firms producing PDO/PGI, 28.6% has lower intermediate performance, whereas 46.4% of firms not producing PDO/PGI are included in the best performing group. This could be explained by the fact that firms with PDO/PGI products are supported by a consortium that carries out marketing and promotional activities for the protection of the brand.

On the contrary, quality voluntary certifications have a direct linkage with marketing management capabilities, as the more a firm is certified the more

it improves its marketing performance.

Distribution channels and sale markets are not so important for the determination of the level of marketing capabilities; indeed, the firm distribution (in percentages) among the different groups, in term of retailing channels and sale markets, do not reveal a strong relation between the choice of a channel or a specific market and MMC.

Table 1. Composition of the sample

	Marketing Management Capabilities (MMC)									
	Worst	Lower interm.	Upper interm.	Best	Total	Worst	Lower interm.	Upper interm.	Best	Total
	%					%				
Size										
< 10 empl.	14.9	29.8	29.8	25.5	100.0	38.9	43.8	51.9	34.3	42.0
10-50 empl.	18.6	23.3	23.3	34.9	100.0	44.4	31.3	37.0	42.9	38.4
50-250 empl.	17.6	41.2	11.8	29.4	100.0	16.7	21.9	7.4	14.3	15.2
> 250 empl.	0.0	20.0	20.0	60.0	100.0	0.0	3.1	3.7	8.6	4.5
Total						100.0	100.0	100.0	100.0	100.0
PDO/PGI										
yes	19.0	28.6	26.2	26.2	100.0	88.9	75.0	81.5	62.9	75.0
no	7.1	28.6	17.9	46.4	100.0	11.1	25.0	18.5	37.1	25.0
Total						100.0	100.0	100.0	100.0	100.0
Voluntary certifications										
0	35.7	42.9	14.3	7.1	100.0	27.8	18.8	7.4	2.9	12.5
1	22.6	38.7	25.8	12.9	100.0	38.9	37.5	29.6	11.4	27.7
2	7.7	30.8	15.4	46.2	100.0	11.1	25.0	14.8	34.3	23.2
3	8.0	8.0	32.0	52.0	100.0	11.1	6.3	29.6	37.1	22.3
4	0.0	40.0	40.0	20.0	100.0	0.0	6.3	7.4	2.9	4.5
> 4	18.2	18.2	27.3	36.4	100.0	11.1	6.3	11.1	11.4	9.8
Total						100.0	100.0	100.0	100.0	100.0
Membership to consortium										
yes	19.7	21.2	25.8	33.3	100.0	72.2	43.8	63.0	62.9	58.9
no	10.9	39.1	21.7	28.3	100.0	27.8	56.3	37.0	37.1	41.1
Total						100.0	100.0	100.0	100.0	100.0
Distribution channels										
supermarkets	15.8	31.6	13.2	39.5	100.0	37.5	38.7	19.2	42.9	35.2
specialised shops	22.2	11.1	22.2	44.4	100.0	25.0	6.5	15.4	22.9	16.7
direct sale	5.9	29.4	41.2	23.5	100.0	6.3	16.1	26.9	11.4	15.7
wholesalers	13.6	40.9	22.7	22.7	100.0	18.8	29.0	19.2	14.3	20.4
others	15.4	23.1	38.5	23.1	100.0	12.5	9.7	19.2	8.6	12.0
Total						100.0	100.0	100.0	100.0	100.0
Sale markets										
local	12.5	50.0	0.0	37.5	100.0	6.3	12.9	0.0	8.6	7.4
regional	21.1	42.1	26.3	10.5	100.0	25.0	25.8	19.2	5.7	17.6
national	12.5	25.0	23.4	39.1	100.0	50.0	51.6	57.7	71.4	59.3
international	17.6	17.6	35.3	29.4	100.0	18.8	9.7	23.1	14.3	15.7
Total						100.0	100.0	100.0	100.0	100.0
Sample										
n° firms	18.0	32.0	27.0	35.0	112.0					
% firms	16.1	28.6	24.1	31.3	100.0					

Source: Own calculation based on our survey

B. Regression analysis

In order to verify the results obtained with the descriptive analysis, we tried to estimate a Linear Regression model, and we came up with the following preliminary results.

Using MMC as dependent variable, the results show that significant independent variables are the PDO/PGI products, the number of quality voluntary certifications that the firm implements, and the four questions of the questionnaire (one for each section) added as variables (Tab. 2).

Regarding the PDO/PGI certification, this variable has an inverse relationship with the MMC, because the marketing activities are often supported by a consortium that is involved in the promotional activities for the protection of the brand.

The number of voluntary certifications implemented is significant and positive correlated with the dependent variable; this fact means that the increase of the level of certified quality determines a better capability in marketing activities, because the firms try to set a strict link with the other economic subjects of the supply chain and to guarantee the quality and the value of the product.

The four variables INF, OBJ, ORG, and EVA represent single questions (among the 29 questions of the questionnaire) representing the four dimension of the marketing management; therefore they directly contribute to the value of the total marketing management capabilities. For this reason they result extremely significant.

The firms' size is not significant and this could be linked to the fact that the dimension of the firm is not relevant for the level of marketing capabilities. Even if a firm is micro or small, it could realize good marketing activities anyway.

Table 2. Linear regression model

	Marketing Management Capabilities (MMC)	
	β	Sig.
Constant	**54.685**	0.000
PDO / PGI production (PDO)	**-7.271**	0.064
Membership to consortium (CON)	3.174	0.368
Size (SIZ)	-2.272	0.329
Certifications (CER)	**3.930**	0.002
Distribution channels (DC)		
- supermarkets	-4.784	0.390
- specialised shops	-2.279	0.681
- direct sale	0.810	0.886
- wholesalers	-3.582	0.518
Sale market (MAR)	-0.384	0.832
Market data and information (INF)	**8.755**	0.000
Marketing strategy (OBJ)	**4.578**	0.002
Marketing plan (ORG)	**7.580**	0.000
Review of the objectives (EVA)	**6.859**	0.000
obs.	112	
adj. R square	0.729	
F-statistics	23.935	

Source: Own calculation based on our survey

V. CONCLUDING REMARKS

Our empirical analysis, referred to 112 Italian firms operating in the traditional food sector, reveal that marketing management capabilities of SMEs do not seem particularly weak, as only 16% of the sample firms show a low level of MMC and 29% lower intermediate level. Such results are based on a self evaluation tool used in the data collection. Although this method is affected by a subjective view, the results outline firms perception about MMC level.

With regard to marketing management dimensions, the comparison of groups of firms within the sample has shown that most problematic aspects are represented by the planning and implementation of marketing activities and also by the control and evaluation of these activities. Therefore, the firms of the sample do not frequently provide a marketing plan, and they face difficulties to adapt their promotional activities and their marketing budget to market changes. Moreover, the firms seldom analyse if the objectives of marketing strategy are achieved. This is particularly true for the firms that show the worst performance; on the other side, a good MMC is reached with the contribution of all dimensions of marketing management.

With regard to the variables that can affect the MMC, the empirical results underline that firm size is not an important variable to reach a good performance in marketing, as also micro and small firm achieve significant MMC in the analysis.

On the contrary, the results reveal that quality voluntary certifications are positively related to MMC. This result can be explained by the firm attitude to establish more transparent relationships with the other economic subjects of the supply chain and to guarantee the quality and value of products. Such attitude is an indicator of market orientation of the firms. Instead, the production of PDO/PGI reveals an inverse relation with MMC. This can be explained by the fact that firms can transfer some marketing activities to the consortium for brand protection.

From the results of the analysis it is possible to come up with some relevant economic issues. Are the SMEs producing traditional food products really market oriented and can they comply with consumer preferences?

Although our analysis do not lead to find specific answers with regard to these problems, from the preliminary results we can infer that the sector of traditional food products is very segmented in geographical terms and the different regional specificities help firms to meet consumer preferences.

However, an interesting managerial implication from our analysis regards the organisation of marketing activities, as the improvement of MMC requires the effort of the firm to plan in advance the marketing activities and to check the results, in order to be ready to adapt to market changes. This is a crucial point for SMEs.

Further research are addressed to extend the analysis to the other EU countries and compare the national situation.

ACKNOWLEDGMENT

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