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**Using a Digital Platform
to Support Market Research for SMEs**

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Abstract

Small and medium-sized enterprises (SMEs) are the backbone of a national economy. To survive and thrive, they must adopt a market orientation. This process involves collecting market information related to customers, competitors, and using it in the decision-making process.

Such information can be gathered both formally through market research and informally from personal and business networks. However, few SMEs use formal market research because they do not have the necessary resources, such as money, skills, or even time. With the advent of digital technologies and to compensate for the shortcomings, new digital tools can be used. This study investigates the extent to which SMEs are interested in using a digital platform to perform market research activities. Data were collected from 403 organizations through a CAPI survey and were analysed using cluster analysis. The results indicate that only 6% of SMEs perform market research, while 18% intend to do it soon. We identified four clusters with distinct behaviours and valuable findings related to digital platform characteristics to increase the adoption rate.

Keywords: SMEs, digital platform, market information, market orientation.

JEL Classification: M31, L20, O33

1. Introduction

Small and medium-sized enterprises (SMEs) are a major player in the economy, an agent of innovation, an important creator of new jobs, and added value. For instance, in the EU, SMEs are 99.8% of all companies, employ 65% of the workforce, and generate 53% of total turnover (Muller et al., 2020). Similarly, in

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Romania, SMEs are 99.7% out of total enterprises, hire 65% of employees, and generate 58% turnover (European Commission, 2020a).

Compared to larger firms, SMEs are encumbered by liabilities of smallness and market entry barriers, difficulties in raising capital, recruiting, and training the workforce, and meeting governmental requirements to taxation and regulation (Aldrich & Auster, 1986). Nevertheless, they manage to survive and thrive in such adverse conditions. Several theories have been developed over time to explain how companies grow over time. One of them explains the superior performance by the market orientation of the companies (Raju, Lonial, & Crum, 2011), which implies identifying customer needs and offering products tailored to them. This orientation is based on collecting information about current and future customers' needs, dissemination between the company's departments, and the organization's response (reaction) to them (Kohli & Jaworski, 1990).

2. Literature Review

A market orientation summarizes the essence of the marketing concept and is a business philosophy that focuses on effectively creating superior value for customers. It is based on three dimensions: customer orientation, which involves understanding their needs, competitor orientation, which means knowing their strengths and weaknesses, and cross-functional coordination, which involves the coordinated use of resources to create value for the customers (Narver & Slater, 1990). Therefore, it is based on managing information about customers and competitors. Previous research indicates that SMEs' most important information is about customers' needs and behaviour, competitors' activities, and new production technologies. To a lesser extent, they are interested in regulatory information, suppliers, and the macroeconomic environment (Moraes, Pimentel, & Spinola, 2013). Unfortunately, SMEs have problems accessing specific information; the quality of some information is low – outdated and inaccurate - and the cost to obtain certain data is high (Leonidou, 2004).

For SMEs, knowledge acquisition is more important than knowledge creation because they have limited capabilities (Bratianu, Prelicean, & Bejinaru, 2020). Knowledge acquisition is about identifying external knowledge that is important to the firm's operations (Saad, Kumar, & Bradford, 2017). This acquisition can be done in three distinct ways: through social capital - that is part of the relationships at the individual or organizational level, by scanning the environment or purchasing knowledge (Hock-Doepgen, Clauss, Kraus, & Cheng, 2020). According to previous studies, the first method is the preferred one. SMEs rely heavily on their social networks made by family, friends, customers, suppliers, and even competitors to gather information (Costa, Soares, & de Sousa, 2016). This approach seems well adapted to these companies' organic structures that use personal contacts to manage a significant amount of information simply and informally (Alvarez, Zamanillo, & Cilleruelo, 2016).

Scanning the environment is the second method used by SMEs to gain knowledge and consists of environment surveillance by searching and collecting

information about events and changes outside the company. This process is somewhat situational and reactive and strongly influenced by owner-managers' skills and attitude (Moraes et al., 2013).

The third method to acquire knowledge is to purchase it. SMEs buy the information that is gathered through formal market research, not necessarily knowledge. As previously mentioned, SMEs consider this method expensive and complicated and can only be performed by specialized people (Venkatesan & Soutar, 2001); therefore, they tend not to use it.

Regardless of the method used, it is not enough only to collect information. Companies must convert and apply it in internal business processes to generate superior performance (Lee & Lan, 2011). It has been shown that knowledge management directly influences a company's financial performance (Moraes et al., 2013), its ability to innovate (Lee, Foo, Leong, & Ooi, 2016), (Costa et al., 2016), to strengthen its position on the internal market (Alvarez et al., 2016), and to expand on the international market (Leonidou, 2004), (Santoro, Mazzoleni, Quaglia, & Solima, 2019).

Although we know that SMEs avoid expensive and complicated methods of gathering information in general, we do not know to what extent the adoption of new digital technologies - which reduce costs and simplify use (Hosseini, Fallon, Weerakkody, & Sivarajah, 2019) - can change their behaviour.

Digital technologies are an important driver of a company's digital transformation. This process has put huge pressure on traditional companies and has impacted many functional areas such as marketing, operations management, information systems, and innovation. There are three distinct phases in this process, namely: digitization, digitalization, and digital transformation (Verhoef et al., 2019). SMEs lag behind large companies and previous studies indicate that they are in the second stage, namely digitalization (Eller, Alford, Kallmünzer, & Peters, 2020).

3. Research Questions / Aims of the Research

This study aims to investigate SMEs' current and future knowledge acquisition behaviour through formalized market research. As previous studies suggest, market orientation is a strategic orientation highly correlated with the company's financial and non-financial performance. Companies that adopt this orientation rely on information, which can be collected in several ways. Given the high costs and complexity, SMEs do not prefer formal market research for information acquisition. Therefore, we have the following research objectives:

- to identify if SMEs allocate financial or human resources for marketing activities;
- to measure the importance of different types of information;
- to find out the percentage of SMEs that have used formal market research;
- to see if SMEs intend to conduct market research shortly.

Some SMEs have started to adopt digital tools and technologies to carry out different business processes. That is why we have an additional set of research objectives:

- to find out how many SMEs intend to use a digital platform for managing their market research activities;
- to identify the functionalities that such a platform must have.

4. Research Methods

To address these research objectives, we conducted a quantitative study using a survey. Data collection was done by the personal interviewing method at the company's headquarters, between March 6th and March 16th. Between March 16th and March 23rd, given the restrictions imposed by the SARS-CoV-2 pandemic, the data were collected by telephone (CATI). The questionnaire was reviewed by two university academics to increase face validity and pre-tested. Comments on questions and wording were considered for the final questionnaire to improve comprehensibility.

The analysis unit is the SME, an enterprise with less than 250 employees from various industries. The respondents are entrepreneurs or managers of these enterprises. We must mention that, according to the European Union definition, even an association may be considered an enterprise if it is engaged in an economic activity (European Commission, 2020b). Given that many professional/business associations offer paid services to their members, we decided not to exclude them from the survey. A quota sampling procedure was employed to reflect the SMEs' structure in Romania by size and industry (see Table 1. Characteristics of respondents). Data collected from 403 respondents (58% response rate) were processed and analysed using the IBM SPSS® Statistics software.

Table 1. Characteristics of respondents

	Frequency	Percent (%)
<i>Size (no. of employees)</i>		
Micro (0-9)	343	85.1
Small (10-49)	49	12.2
Medium (50-249)	11	2.7
Total	403	100.0
<i>Industry</i>		
Wholesale and retail trade	101	25.1
Services (real estate, leasing, administrative)	81	20.1
Professional/business associations	64	15.9
Manufacturing	46	11.4
Accommodation and food service activities	37	9.2
Transport and storage	30	7.4
Construction	24	6.0
Professional services (legal, accounting, management, architecture, engineering)	16	4.0
Education	4	1.0
Total	403	100.0
<i>Age (years)</i>		
0-3	91	22.6
4-9	175	43.4
10-20	114	28.3
Over 20	23	5.7
Total	403	100.0

After importing the data into IBM SPSS® Statistics, a data check and data cleaning were performed to eliminate data-entry errors and identify outliers. Subsequently, depending on the type of scale used, the data were transformed (converted from nominal variables to metric variables and vice versa), and some new variables were calculated. The analysis applied basic statistical methods, such as frequencies distribution and crosstabs. Multivariate cluster analysis using a two-step clustering procedure was also used to identify distinct groups of SMEs regarding market research behaviours.

5. Findings

Results indicate that only 16.1% of SMEs allocate resources (people, money, time) for marketing activities, considering the first research objective. Therefore, we consider such companies to have a marketing orientation. The problem is that a high percentage of respondents (43.2%) answered that they did not know, which suggests that they avoided answering these questions, as they considered that a negative answer would be undesirable.

It is interesting to see which SMEs have or do not have a marketing orientation. Thus, we found an association between marketing orientation and industry: construction companies and professional/business associations allocate resources for marketing activities compared to companies in manufacturing, services, tourism, and trade. It seems that those companies which have direct contact with customers are not allocating dedicated resources for marketing. Although the results are surprising, they are statistically significant, with a contingency coefficient of 0.358.

Another interesting association was found between the company's size and age on the one hand and marketing orientation, on the other hand. Larger and older companies allocate more resources for marketing activities than smaller and newer organizations.

Considering the second research objective, we measured the importance of different information (about customers, competitors, business partners, market, industry, economic environment, socio-cultural environment, technological environment, and political environment). The variables were converted into metric variables on a scale from 0 - unimportant, 1 - less important, 2 - important, 3 - quite important to 4 - very important. All types of information have the same importance for SMEs (mean value varies between 2.00 for business partners and 2.11 for customers). Afterward, we converted the final score from a metric variable to a nominal variable as follows: if the value was between 0-1.99, we assigned low importance, and for a value higher than 2, high importance. We then tested to see if there was an association between the importance of information for an organization and the extent to which it has a marketing orientation. We found that almost 50% of companies that assign high importance to information have a marketing orientation, while only 5% of those who consider that information has low importance have a marketing orientation. The association is statistically significant,

and the contingency coefficient is 0.473. The importance of information is also correlated with the probability of doing market research.

Regarding the third research objective, we found that only 6.5% have conducted market research in the last three years, while the 93.5% did not, for several reasons: they do not need market research (47.6%), do not have resources – such as money, skills, time (28.8%) or do not believe in them (17.1%).

There is a moderate correlation (Pearson correlation coefficient = 0.37) between the importance of information and market research. Like the marketing orientation, we found that the larger the company, the greater the chances of conducting market research.

Micro-enterprises do not use market research because they consider that they do not need it, while small enterprises declare that they do not have resources for such an activity.

If we analyse who are the organizations that have conducted market research in the last three years, we find that the most active organizations are professional associations, followed by companies in manufacturing, construction, and transport.

Surprisingly, companies in trade and services are the most inactive ones; over 50% declare that they do not need market research.

Considering the fourth research objective, we found that 17.6% of respondents intend to use market research next year. Again, we identified an association between those who intend to carry out market research and industry, professional/business associations continuing to hold the first place, followed by companies from construction, transport, and manufacturing (contingency coefficient = 0.342, p -value < .001).

Regarding the fifth research objective, results suggest that only 58% of those who intend to use market research in the next year are willing to use a digital platform. It is interesting to mention that, again, professional/business associations are the most eager to use a digital platform for conducting market research. Then, we explore how important the information is for those who do not intend to do research, who intend to do research and use a platform, and those who intend to do research and not use a platform. The results indicate an important difference between those who do not intend to do research (score 1.79 on a scale from 0 to 4) and those who intend to do it, either with a platform (score 3.30) or without a platform (score 3.35). It is surprising that those who assign the highest importance to information do not want to use a digital platform. Maybe they are reluctant to perform - on their own - such activities, which are critical to them given the importance assigned to information. Therefore, they prefer to transfer this activity to experts.

If we analyse the company's age, we find that 26% of companies over 20 years are interested in using a platform, while only 1% of young organizations (<3 years) expressed their intention to use such a platform. The degree of association between the two variables is statistically significant, and the contingency coefficient is 0.250.

Finally, our sixth research objective was to explore the functionalities that respondents are looking for on the online research platform. Respondents had to express their agreement with nine statements (Total disagreement = 1 -> Total agreement = 5). As we can notice, the highest score was obtained by the library of templates (4.39) followed by the expertise of specialists (4.34), while the lowest score was for organizing a research from scratch (2.88). This result indicates that although respondents are willing to work with a platform, the tendency is to “transfer” to experts or – if they are to do it by themselves – to be helped with some templates. Respondents state that they trust the automated data collection and analysis software, and it is important that the results are presented in an attractive graphical form (infographics).

Finally, we explored SMEs’ research behaviour, and we grouped the respondents according to three clustering variables: the importance of information, if they did market research in the past and if they intend to do it in the near future. Given that both metric and non-metric variables are used in the clustering procedure, we used a two-step clustering method. After running the clustering procedure, we obtained four groups, and the model is considered good (see Figure 1).

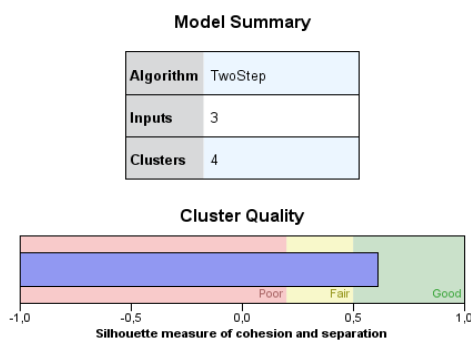


Figure 1. Clustering procedure

The ratio between the number of cases in the largest group and the smallest group is 2.46 (<3), which indicates a balanced clustering. Group 1 represents 28.8% of the total SMEs, group 2 - 17.1%, group 3 - 15.6% and group 4 consists of the remaining 38.5% respondents.

The following characterise cluster 1:

- they did not use market research because they do not have resources (time, money, skills);
- they do not intend to conduct market research in the future;
- the importance of the information is average (2.06 out of 4);
- in general, they are micro-enterprises of 4-9 years, operating in trade field.

Cluster 2 has the following attributes:

- they did not use market research because they do not believe in it;
- they do not intend to research in the next period;
- the importance of the information is average (1.76 out of 4);
- they consist of micro-enterprises with age between 4-9 years in the field of services.

Cluster 3 is made of organizations that:

- did not conduct market research because they consider they do not need it;
- however, they intend to do research;
- the importance of the information is very high for them (3.35 out of 4);
- generally, they are professional/business associations with up to 9 employees and 4-9 years old.

Ultimately, cluster 4 consists of enterprises which:

- did not do market research because they do not need it;
- do not intend to do research;
- the importance of the information is small for them: score 1.66 out of maximum 4;
- in general, there are micro-enterprises, between 4-9 years, operating in services, trade, and manufacturing fields.

6. Conclusions

This study aimed at investigating the market research behaviour of SMEs. We found that a small number of organizations (16.1%) allocate resources for marketing activities in general, and an insignificant percentage (6.5%) employ market research to acquire external information. The main reason for not using market research is that they do not need it (47.6%) or do not have available resources (28.8%). Still, there is a high percentage of SMEs which do not believe in market research (17.1%).

Surprisingly, trade and service companies are not using market research. This insight means that they use other methods of collecting external information, given the proximity to customers and the direct contact they have with them. On the other hand, professional/business associations rely on market research, followed by companies in industries that do not necessarily directly contact customers (construction, transport, and manufacturing).

Our results revealed a correlation between the importance of external information and the resources allocated to marketing activity in general and market research.

Regarding the intention to conduct market research, results indicate that only 17.6% of organizations intend to do it next year. In general, these are professional/business associations, construction, transport, and manufacturing companies, which means that the best predictor of future behaviour is past behaviour.

Interestingly, around 60% of those who want to conduct market research would be willing to use a digital platform. The most sought-after functionalities are a library of predefined research templates, support of experts, automated software, and infographics. Respondents prefer fast and basic data analysis instead of a complex one. Only a few respondents are interested in developing their research from scratch on the platform. Moreover, if a company considers that external information is of high importance, it will transfer this activity to an expert and avoid performing it by itself on a digital platform. The vital role that professional/business associations seem to play in the marketing research process

should be mentioned. It seems that this function has been outsourced to them by companies that are members of the association.

This research has both theoretical and practical contributions. At the theoretical level, this study confirms that formal market research is not the first choice of SMEs for collecting information. Companies that are close to customers and interact directly with them consider that they do not need research, maybe because they use other alternative methods. There is also a high percentage of SMEs who do not believe in market research. Therefore, it would be interesting to know why.

At a practical level, this study reveals the crucial role of professional/business associations. To justify their existence, they must offer value-added services to their members, such as reliable, relevant, and updated market information.

Future research should focus on how SMEs combine and use the information gathered from market research to increase the company's performance.

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