

## Marketing Strategy Implementation in Machine Construction Industry: Belarus Vs Portugal

Pavel Panarad; Belarus State Economic University; Minsk-Belarus; e-mail: ai42oh@gmail.com

Paula Odete Fernandes; Applied Management Research Unit (UNIAG); Instituto Politécnico de Bragança (IPB); Bragança-Portugal; e-mail: pof@ipb.pt

Svetlana Razumova; Belarus State Economic University; Minsk-Belarus; e-mail: swrasum@yandex.ru

### Abstract

The purpose of the research is to study practical application of the marketing strategy system by the companies of the machinery-producing industry and to develop recommendations on its enhancement, to study specifics and effectiveness of marketing strategy on the example of companies in Belarus and Portugal and to determine their differences. All in all, the researchers agree that the elements playing critical role in managing marketing performance are data, analytics and metrics (Patterson, 2015). Required data has been obtained via the questionnaire; 13 Belarusian and 23 Portuguese companies were interviewed. The survey determined that companies in the industry apply marketing only on a basic level, missing benefits from elements such as performance metrics, customer orientation, benchmarking, etc. As a result of this work, the following research hypotheses were confirmed: There is a positive association between return on sales and marketing strategy; return on sales and degree of flexibility of marketing strategy; return on sales and degree of business collaboration in marketing. In addition, it was determined that number of monitored metrics has a statistically significant impact on return on sales, and there is a statistically significant difference in marketing system depth between the countries. This data provides ground to help the management in creating marketing strategies, which will help establish a definitive vision of what should be done to save current market share, to find new markets for development, to plan more effective internal work.

**Keywords:** B2B; machine construction industry; Belarus vs Portugal; Competition and Benchmarking.

### Introduction

Working under ineffective and outdated economic model that includes strict production and sales plans as well as vast state support, Belarusian machinery-producing companies don't have a well-developed practice of setting and analysing marketing strategy indicators, which has a negative influence on businesses' long-term effectiveness. In 2015, the production of machinery and equipment occupied 7,6% of the total industrial production, average return on sales was 10,2%, while 33,8% of the companies reported a net loss (Belstat, 2016). Portuguese companies, however, working in a highly competitive environment of European Union, have a far better experience in applying different strategies.

Marketing performance management has been one of the most prominent streams in recent marketing research and practice. In fact, the Marketing Science Institute has ranked marketing accountability, return on marketing investments and marketing performance management systems among the top 10 research priorities (Mone, Pop & Racolça-Paina, 2013). Furthermore, as stated by Grønholdt, Martensen, Jørgensen, and Jensen (2014), investors' requirements of measuring marketing performance tend to increase, which makes the task of determining precise marketing indicators more important.

In this sense, the aim of the research is to study practical application of the marketing strategy system by the companies of the machinery-producing industry and to develop recommendations on its

enhancement; to study specifics and effectiveness of marketing strategy on the example of companies in Belarus and Portugal and to determine their differences.

Research objectives include determining the current situation regarding marketing strategy implementation by the companies of the machine construction industry, checking if various marketing elements impact financial performance and establishing differences in practical marketing development between the two countries. Research questions will be answered with the help of descriptive analysis and non-parametric statistical tests.

The work is structured as follows: starts with a short review of the literature that address key issues of the study; the methodology applied; the results; and the main conclusions.

## **Literature Review**

Marketing as we know is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. Since the inception of marketing as a separate function of management, it has grown from being an operational function to a strategic one. Many of the authors today view marketing as a dominating function, which holds way over the rest of the functions of a business activity. Since the day concept of marketing has evolved, much has been written, proposed and discussed about its nature, scope, activities it encompasses and so on. A constant effort has been underway to make marketing relevant in each period. Theories and principles have changed over a period of time to accommodate fresh ones that are in line with the demands of the current times. Therefore, one model has remained there for a very long period, the 4Ps model of marketing mix.

Marketing mix is the set of controllable tactical marketing tools that the firm blends to produce the response it wants in the target market. The concept of marketing mix was then popularized by E. Jerome McCarthy with the help of 4Ps model in 1960. The parts in original marketing mix included product, planning, pricing, branding, distribution channels, personal selling, advertising, promotions, packaging, display, servicing, physical handling, fact finding and analysis. E. Jerome McCarthy later grouped these ingredients into the four categories (product, place, pricing, promotion) that today are known as the 4Ps of marketing (Wani, 2013).

Products. In consumer markets products are traditionally made available with limited opportunities for adaptation or customization. Increasingly, manufacturers are seeking ways in which customers feel they can customize the product. For example, some cars can be ordered via a dealer showroom directly from the production unit. This enables customers to specify the interior and exterior finishes, grade of in-car entertainment and perhaps a range of other cosmetic touches. However, the norm is to provide relatively little flexibility within different product ranges. In the B2B market the entire offering (product and service components) can often be reconfigured to meet a customer's particular requirements. It is quite usual for more technical products to be developed and specified through joint negotiations and partnership arrangements. The result is an offering that is unique to the buying organization.

Following the examination of market characteristics and customers in the B2B sector, this section highlights the variety and complexity of the goods and services that are bought and sold. It is possible to discern three main categories of goods. These are input goods, equipment goods and supply goods (see Table 1).

**Table 1: Types of B2B market goods**

Type of goods	Explanation
<b>Input goods</b>	Raw materials and semi-manufactured parts, which become part of the finished item.
<b>Equipment goods</b>	Capital items that are not part of the finished item but necessary to enable production process to take place (e.g. land and buildings).
<b>Supply goods</b>	Materials necessary to keep the production process running (e.g. electricity and oil).

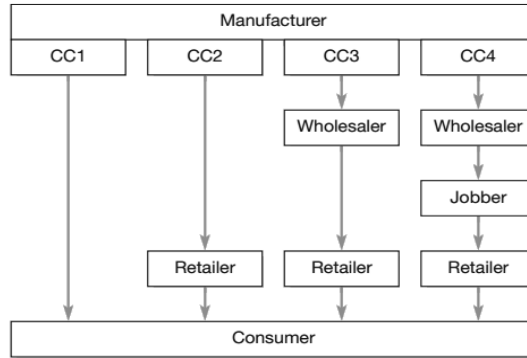
*Source: Adapted from Fill and McKee (2012, p. 16).*

Hutt and Speh (2012) add business services as facilitating goods. Business services include maintenance and repair support (for example, machine repair) and advisory support (for example, management consulting or information management). Like supplies, services are considered expense items.

**Pricing.** Price is a measure of the value that both parties assign to their contribution to an exchange. In consumer markets, list prices are usually the norm and limited discounts applied to them, especially for more expensive items. Discounts and allowances become more varied and complicated and reflect the risks and opportunities faced by the two parties. Negotiation becomes an important aspect of pricing in B2B markets. Large projects and intricate technical offerings often require complex financing arrangements, while pricing for international markets introduces new risks and financial uncertainties (Fill & McKee, 2012).

Pricing is an aspect of the marketing mix within which ethical issues often arise. The principal ethical issues that arise concerning B2B pricing decisions are anti-competitive pricing, price fixing, price discrimination, and predatory pricing or dumping. Anti-competitive pricing occurs where a group of producers collude to raise prices above the level that would apply in a freely operating market. Companies may also feel tempted to enter into explicit price-fixing arrangements to reduce risks of price wars. Unethical pricing practices arise particularly in industries where competitive tendering is in common use. Collusive tendering occurs where there is an exclusive agreement between competitors, either to tender or to tender in such a manner as not to be competitive with one of the other tenderers. One of the organs, controlling the procurement process is the World Bank. It works to ensure that procurement in Bank-financed projects and programs is conducted in accordance with its Articles of Agreement, which require increasing the efficiency, fairness, and transparency of procurement. Similar rules and document regarding procurement process are developed by Organization for Economic Co-operation and Development (Brennan, Canning, & McDowell, 2017).

**Place.** In consumer markets intermediaries provide utility in terms of reducing the complexity of the range of goods consumers are offered, by providing a level of specialization and support (advice) and enabling consumer expectations to be met. This leads to direct relationships and new dimensions in terms of the way in which offerings are made available. Producers are faced with a basic decision: direct channel (sell direct to consumers) or the indirect channel. The structure of distribution channels varies according to whether end users are consumers or business customers. Within each channel configuration there are several levels, each representing a different number or types of intermediaries, each of whom is involved in bringing products closer to end users. The length of a channel, therefore, is a function of the number of intermediaries involved in moving products from producers to end users (see Figure 1) (Fill & McKee, 2012).



**Fig. 1: Levels of marketing channels for consumer markets.**

Source: Fill and McKee (2012, p.163).

**Promotion.** In consumer markets advertising has long been regarded as the focal point of the marketing communications mix. Some of the reasons for this concern the need to reach large, widely dispersed audiences, with relatively simple messages relating to awareness, interest and beliefs. Feedback is minimal and relationships between reseller and consumer are more commonly temporary and not very close. In recent years, increased use of the other tools in the mix has reduced the high reliance on advertising, but it remains the focal part of a consumer organization’s promotional strategy. Advertising is a relatively impotent marketing communications tool in B2B markets because of the need to provide more detailed, often technical information. Messages need to provide means of differentiation, reinforcement and persuasion. Feedback is important in B2B and so the emphasis is traditionally placed on personal selling. This helps the development of both a dialogue and also a relationship. Relationships between organizations in business markets are expected to be close and their duration much longer than in consumer markets. Direct marketing is also important in B2B markets and, in some situations, can be used effectively to support the personal selling effort (see Table 2) (Brennan, Canning, & McDowell, 2017).

**Table 2: Marketing practice differences**

Dimension	Business marketing	Consumer marketing
Selling process	Systems selling	Product selling
Personal selling	Used extensively	Limited
Use of relationships	Used extensively	Limited
Promotional strategies	Limited, customer-specific	Mass market
Web integration	Greater	Limited
Branding	Limited	Extensive, sophisticated
Market research	Limited	Extensive
Segmentation	Unsophisticated	Sophisticated
Competitor awareness	Lower	Higher
Product complexity	Greater	Lesser

Source: Brennan, Canning and McDowell (2017, p. 11).

As Table 2 shows, marketing promotion in business markets differs from consumer market because of the underlying differences in market structure and because of the differences in buying behavior. The extensive use of personal selling in business markets can be traced to the market structure and buying behavior characteristics commonly found in business markets, which are usually not found in consumers’ markets. Specifically, in many business markets, demand is concentrated in the hands of a few power buyers (market structure), who employ teams of purchasing professionals to do their buying (buying

behavior). In most consumer markets demand is dispersed widely throughout the buying public and no single consumer has any real buying power (market structure), and buyers are not trained professionals (buying behavior). Personal selling makes sense in the first set of circumstances (concentrated demand, powerful buyers, and trained professionals), while advertising makes sense in the second set of circumstances (dispersed demand, no powerful buyers).

**Advertising.** Advertising is a non-personal form of mass communication and offers a high degree of control for those responsible for the design and delivery of advertising messages. However, the ability of advertising to persuade target audiences to think or behave in a particular way is suspect. Furthermore, the effect on sales is extremely hard to measure. In consumer markets, advertising is used a great deal because of its ability to reach a national or mass audience and its flexibility in communicating with a specialized segment. However, in the B2B market this capacity is not important and, as the associated costs can be extremely large, advertising is not the most effective means of communication and is therefore not the primary tool of the communications mix. The most important roles of advertising in the B2B context are to inform and remind, whereas differentiation and persuasion are delivered through other tools of the promotional mix, namely public relations, direct marketing and personal selling.

**Sales promotion.** Sales promotion seeks to offer buyers additional value, as an inducement to generate action, often to make an immediate sale. In B2B marketing these inducements, normally referred to as trade promotions are targeted at three main audiences, intermediaries, end-user customers and the sales force. Sales promotion is used for one of two main reasons: as a means to accelerate sales or to generate a change in attitude. Indeed, B2B promotions are often aimed at moving buyers along the buying process rather than making a complete transaction. Therefore, gifts, free merchandise or premiums are used in the hope of generating a reciprocal action. For example, they are used at exhibitions to attract buyers to stand, they are left at the end of sales visits as a way of triggering name recall and as a form of residual value, and they are used as an insert in a piece of direct mail to stimulate interest and to provoke further action, such as an appointment (Fill & McKee, 2012).

**Public relations.** Public relations is used to manage a company's image with its stakeholders and to close the gap between companies' desired image and the way it is actually perceived by its various publics.

The main types of public relations include press releases, press conferences, interviews, events, lobbying, corporate advertising, sponsorship, crisis management, investor relations. A relatively new development is the use of blogs and social media. These offer the opportunity of community involvement and feedback, although a code-of-conduct needs to be set for employees who participate in these PR-activities.

**Direct marketing.** Direct marketing can represent a strategic approach to the market although some organizations use it as a tactical tool. Use of this tool signifies an attempt to actively remove channel intermediaries, reduce costs and improve the quality and speed of service for individual customers. The significance of B2B direct marketing is that it can be used to complement personal selling activities and in doing so reduce costs and improve overall performance. Direct marketing is generally regarded as the second most important tool of the communication mix for most B2B organizations. Direct marketing seeks to target individual customers with the intention of delivering personalized messages and building a relationship with them based on their responses.

**Exhibitions or trade shows.** Trade shows bring buyers and sellers together in one physical location. Sellers showcase and demonstrate their products/services to a fairly well-qualified (international) audience. The main aims, therefore, are to develop partnerships with customers, to build upon or develop the corporate identity and to gather up-to-date market intelligence. This implies that trade shows should not be used as isolated events, but that they should be integrated into a series of promotional activities (Brennan, Canning, & McDowell, 2017).

**Alternate models.** As time lapsed, many management practitioners and thinkers suggested new models as a fit for their respective times. As a result, many new models became known. Worth mentioning among them are the 7P (Product, Price, Place, Promotion, People, Process and Physical evidence), 4C

(Consumer, Cost, Communication, Convenience), 4E (Experience, Everyplace, Exchange, Evangelism) models (Wani, 2013).

The recent addition to the marketing models is the SAVE Model. Researchers offer to remodel the 4P and shift the emphasis from products to solutions, place to access, price to value, and promotion to education (Ettenson, Conrado, & Knowles, 2013) (see Table 3).

**Table 3: SAVE model elements**

4P	SAVE model	Definition
Product	Solution	Defining offerings by the needs they meet, not by their features, functions, or technological superiority.
Place	Access	Develop an integrated cross-channel presence that considers customers` entire purchase journey instead of emphasizing individual purchase locations and channels.
Price	Value	Articulate the benefits relative to price, rather than stressing how price relates to products costs, profit margins, or competitor`s prices.
Promotion	Education	Provide information relevant to customers` specific needs at each point in the purchase cycle, rather than relying on advertising, PR and personal selling, that covers the waterfront.

*Source: Author`s own elaboration based on Ettenson, Conrado and Knowles (2013).*

In this new framework the 4Ps aren`t thrown away, but their emphasis shifts to one that emphasizes the superior value of solutions. For the marketing organization this requires some new management guidelines, and perhaps the most important is to encourage collaboration between marketing and sales, as well as development teams. Putting customer-focused requirements in the forefront helps development teams understand the solutions approach and focus on delivering customer-centric results.

### Research Methodology

The aim of the research is to study practical application of the marketing strategy system by the companies of the machinery-producing industry and to develop recommendations on its enhancement; to study specifics and effectiveness of marketing strategy on the example of companies in Belarus and Portugal and to determine their differences. On the basis of goals, 9 researches hypothesis (H) were formulated (the same for both countries):

- H<sub>1</sub>: There is a positive association between return on sales and marketing strategy
- H<sub>2</sub>: There is a positive association between return on sales and degree of flexibility of marketing strategy
- H<sub>3</sub>: Number of monitored metrics has a statistically significant impact on return on sales
- H<sub>4</sub>: There is a positive association between return on sales and usage of marketing automation
- H<sub>5</sub>: There is a positive association between return on sales and degree of business collaboration in marketing
- H<sub>6</sub>: There is a positive association between return on sales and degree of involvement in benchmarking
- H<sub>7</sub>: There is a positive association between return on sales and marketing expenses
- H<sub>8</sub>: There is a positive association between return on sales and company`s marketing involvement
- H<sub>9</sub>: There is a statistically significant difference in marketing system depth between the countries

To determine the population for this research, official statistical data was used; the latest published data for both countries is of year 2015. Thus, the number of Portuguese companies engaged in economic activity “Manufacture of machinery and equipment n.e.c.” is 1 523 (INE, 2016). For Belarus, the number of organizations in the category “Manufacture of machinery and equipment” is 1 122 (Belstat, 2016). The sample size for this population with 95% confidence level and 5% margin of error equals 307 for Portugal and 287 for Belarus. For this particular study, 13 Belarusian and 23 Portuguese companies were interviewed, which is 1.16% and 1.51% of respective populations.

The list of organizations has been compiled using web search and online business catalogues. The questionnaire was distributed via e-mail; Google Forms has been chosen as a survey platform to automate the data collection. Data obtained via the survey was compiled and treated using IBM SPSS Statistics software. Distribution of responses was described using means and standard deviation when are on basis quantitative variables. In order to analyse demographic profile of respondents will be used descriptive analysis, which will show absolute and relative frequencies. Research hypotheses were tested with non-parametric statistical tests, as the sample size does not allow application of parametric tests. All aforementioned hypotheses were tested with confidence level of 95%.

## **Presentation and Results Analysis**

### ***Machinery-producing industry: Belarus vs. Portugal***

The first group of questions concerns business and employee demographics. While not directly related to the research objective, this information provides insight into market specifics. Majority of the sample is represented by the companies ranging between 50 and 999 employees, which, for the machinery production, are relatively small businesses. In total, 8 (61.5%) Belarusian and 17 (73.9%) Portuguese respondents have an employee number in this range. A 1000 to 4999 range, or medium size, is reported by 2 (15.4%) companies from Belarus and 3 (13%) from Portugal; 3 (23.1%) respondents from Belarus and 1 (4.3%) from Portugal are large businesses, having 5000 and more employees. Additionally, 2 (8.7%) of the Portuguese respondents have less than 50 permanent employees.

The gender distribution in both reviewed countries is similar, resulting in 66.49% to 33.51% in Belarus and 65.44% to 34.56% in Portugal. These results reflect the typical structure of a heavy industry company where production and engineering employees are predominantly male, while women are mostly employed in departments not related to the primary manufacturing, such as accounting, marketing, etc.

Among the respondents, majority of the companies has an average employee age between 35 and 44 years, counting 9 (69.2%) companies based in Belarus and 15 (65.2%) – in Portugal. 3 and 7 (23.1% and 30.4%) companies, respectively, have an average between 22 and 34 years, while 1 company (7.7% for Belarus and 4.3% for Portugal) in each country reported a 45 to 54 years’ employee age. The next question concerns the total number of employees, which represents business size.

Two (15.4%) of Belarusian respondents entered the market 15 to 19 years ago, 11 (84.6%) companies are older than 19 years. This distribution is explained by the fact that many of companies in machinery manufacturing are a Soviet Union legacy, working for more than 50 years and continuing their work nowadays as completely or partially state-owned enterprises. Distribution of Portuguese companies is more diverse: 11 (47.8%) respondents have been present for 10 to 14 years, 3 (13%) – for 15 to 19 years, 1 (4.3%) – for more than 19 years and 4 (17.4%) for each 5 to 9 and less than 5 years.

Out of 13 respondents from Belarus, 5 (38.5%) have a Return on Sales (RoS) within the 0% to 4% interval, 2 (7.7%) – between 10% and 14%, 1 (7.7%) company reported RoS within each of 5%-9%, 15%-19% and 20% or more ranges. Also, 3 (23.1%) of the interviewed companies have had losses for the past five years. Among the Portuguese respondents, majority is evenly split between answers “5% - 9%”

and “10% - 14%” with 10 (43.5%) responses each. 2 (8.7%) companies have Return on Sales within 15% to 19% margin, and 1 (4.3%) business reported this indicator as negative.

4 (30.8) of Belarusian participants use strategies developed by themselves, 2 (15.4%) companies had their marketing strategies developed by specialized organizations and 7 (53.8%) do not use a strategy at all. Meanwhile 15 (65.2%) of the respondents from Portugal develop their own strategies, 3 (13.0%) use outsourced ones and 5 (21.7%) do not use marketing strategies, although 4 of these companies responded that they may use one in future. In total, 46.2% of respondents from Belarus and 78.3% of respondents from Portugal, resulting in 66.7% of all respondents, have a marketing strategy in some form.

Table 4 show a rather low degree of implementation of data-driven marketing, with only 3 of proposed metrics used by few interviewed companies. Particularly, 5 (38.5%) companies use sales revenue as a marketing effectiveness indicator, 4 (30.8%) practice calculation and analysis of market share, and 3 (23.1%) respondents monitor conversion rates. These three metrics also have highest mean values, meaning they are considered more important by the survey participants. By codifying proposed answers in the questionnaire from 1 to 6, the average figure may be obtained, which shows the depth of applied data-driven marketing by sample in average. For companies from Belarus this indicator is equal to 3.16 out of 6 with standard deviation of 0.224. This result allows to speak that there is no tendency to improve marketing system by adding measurable indicators within the sample.

According to collected responses, all proposed metrics except perceived quality/esteem are used by at least one survey participant, however the percentage is low for most metrics. The most widely used metrics are sales revenue (22 companies out of 23), customer complaints (14 out of 23) and customer satisfaction (12 out of 23); highest mean values belong to sales revenue, customer complaints and customer satisfaction. The average sample score for this question is 3.70 with standard deviation 0.539. This result is slightly higher compared to Belarusian part of the sample, though with higher deviation.

**Table 4 : Performance metrics application – Belarus vs Portugal**

Metric	Belarus		Portugal	
	Mean	Standard deviation	Mean	Standard deviation
<b>Brand awareness</b>	2,85	1,144	2,74	1,137
<b>Perceived differentiation</b>	1,77	0,439	2,26	1,054
<b>Perceived quality</b>	2,77	0,927	1,48	0,665
<b>Market share</b>	4,15	1,725	4,74	1,421
<b>Conversion</b>	4,08	1,605	3,57	1,903
<b>Market penetration</b>	2,54	1,330	3,52	1,442
<b>Customer loyalty</b>	3,23	1,013	4,39	1,500
<b>Customer satisfaction</b>	3,62	1,121	4,96	1,492
<b>Customer attrition</b>	2,92	1,256	4,09	1,505
<b>Customer complaints</b>	3,54	0,877	5,26	1,214
<b>Customer lifetime value</b>	2,38	0,870	2,78	1,445
<b>Return on marketing investments</b>	3,23	1,423	3,17	1,614
<b>Customer profitability</b>	2,92	1,256	2,83	1,527
<b>Sales revenue</b>	4,23	1,589	5,96	0,209

## Research Hypotheses Confirmation

Results of hypotheses testing are presented in Table 5.

**Table 5: Research hypotheses confirmation**

Hypothesis	Test	Value	p-value	Conclusion
There is a positive association between return on sales and marketing strategy	Phi	0.544	0.001	Confirmed
There is a positive association between return on sales and degree of flexibility of marketing strategy	Cramer's V	0,508	0,022	Confirmed
Number of monitored metrics has a statistically significant impact on return on sales	Kruskal-Wallis H	20,855	0.001	Confirmed
There is a positive association between return on sales and usage of marketing automation	Phi	0.284	0.089	Rejected
There is a positive association between return on sales and degree of business collaboration in marketing	Cramer's V	0.535	0.009	Confirmed
There is a significant connection between return on sales and degree of involvement in benchmarking	Kruskal-Wallis H	6.974	0.223	Rejected
There is a positive association between return on sales and marketing expenses	Cramer's V	0.543	0.060	Rejected
There is a significant connection between return on sales and company's marketing involvement	Kruskal-Wallis H	0.878	0.645	Rejected
There is a statistically significant difference in marketing system depth between the countries	Mann-Whitney U	-4.596	<0.001	Confirmed

According with the results presented in the previous table is possible to conclude that:

- (i) The results of Phi-test show that there is a positive moderate (54.4%) association between return on sales and presence of marketing strategy, which means that respondents with a marketing strategy generally perform better;
- (ii) Cramer's V-test conducted for return on sales and strategy flexibility has proven that there is a moderate (50.8%) positive association between these two variables. Among the interviewed companies, ones with more flexible marketing strategies achieve better sales;
- (iii) To determine if there is a connection between a number of performance metrics used by the companies and their return on sales, Kruskal-Wallis H-test has been conducted. The results show that connection exists, meaning companies with better financial results tend to implement a larger number of metrics;
- (iv) According to the results of Phi-test between return on sales and marketing automation application variables, there is a weak (28.4%) positive association, however it is not statistically significant. A probable reason for it is a low number (19.4%) of marketing automation software users in the sample, and a survey of bigger number of companies may yield different results;
- (v) The connection between involvement in collaboration in parts of marketing strategy and return on sales is confirmed with Kramer's V-test. There is a moderate (53.5%) positive association, meaning that companies reaching their strategic goals with outside help tend to have better financial result;
- (vi) Results of Kruskal-Wallis H-test do not confirm existence of any statistically significant connection between return on sales and involvement in benchmarking; the distribution of return on sales values does not differ for any degree of benchmarking efforts for this sample;

(vii) According to Cramer's V-test, the existing moderate (54.3%) connection between marketing budget and return on sales is not statistically significant. A probable reason for this result is the small number of companies – 13.9% of the sample – with marketing budget over €50 000;

(viii) The hypothesis about a connection between return on sales and mean of the group of marketing involvement variables is rejected, meaning that companies with better financial results do not tend to strongly agree with proposed statements regarding involvement of marketing into companies' activities;

(ix) The gap in levels of implementation such instruments as performance metrics and benchmarking, as well as in means of marketing involvement responses between the analyzed countries is confirmed by Mann-Whitney U-test. The marketing strategies of Portuguese respondents are more complex.

Thus, five research hypotheses were confirmed. Such factors as application of a marketing strategy, higher degree of flexibility of a strategy, monitoring more performance metrics and better involvement into collaboration with other entities in realization of parts of the strategy are attributes of better performing companies. Further researches in the matter with bigger sample may achieve results with stronger association as well as confirm some of currently rejected hypotheses.

## **Conclusions, Limitations and Future Research Lines**

The study clarified weak points of respondents' marketing systems and established relations between various marketing elements and financial result, marking points for prioritized improvement. The results of the work implicate that impact of marketing on a company's overall performance is significant, thus time and resources spent to develop or improve marketing strategy are justified.

Based on the results obtained it is possible to present recommendations for implementing and enhancing marketing strategies which are described in the following paragraphs.

According to the results of the survey, 33.3% of the sample does not develop and apply a marketing strategy. Marketing activities of such companies are limited either to spontaneous short-lived ideas or to a small number of routines which rarely change and do not follow any market requirements. This approach may be caused by several reasons, such as:

- more complex involvement is not deemed necessary – a company has its own stable niche with regular customers, and owners are satisfied with financial results;
- the executives are unable to create an effective marketing system due to lack of knowledge;
- marketing has a reputation of expense-only department, as positive effect is often hard to evaluate.

These and other possible reasons derive from the lack of high-quality education in the field of marketing. As a mean of solving this problem, executive educational courses may be introduced. Suggestions for such courses are as follows:

- Schedule – evening hours, 2-3 hour long classes;
- Duration – short (1-2 weeks) courses for covering a short range of topics and long (1-2 months) courses for a more thorough approach;
- Providers – universities and faculties specializing in marketing;
- Result – development of a strategy project.

Because of raising awareness of marketing benefits for the company and providing necessary knowledge, it is expected that share of companies not implementing strategies will decrease by 2-5% countrywide after the first year of the programs' operation, and will continue decreasing with lower rate later.

The survey also showed an unsatisfactory level of performance measurement by the interviewed companies, so improving their strategies by implementing a Key Performance Indicator (KPI) system is advised. Although the indicator choice depends on the needs, possibilities and market position of a company, the nature of machine construction industry allows to develop a sample list:

- Return on marketing investments – for managing amount and effectiveness of marketing budget;
- Customer loyalty and churn rate – as companies in the industry rely on major regular customers, and cost of customer acquisition is generally higher compared to B2C, companies must target low churn rate and high customer loyalty;
- Market penetration and market share – monitoring positions on target markets with these metrics is crucial for export-orienting companies, allowing them to make decisions on penetrating or exiting the market;
- Website traffic and conversion rate – for evaluating the effectiveness of company's website. To correctly calculate conversion rate, due to absence of online sales in the industry, unique contacts should be used on the website.

Situation with collaboration within the sample is noticeably better, with majority of respondents including it in their strategies. Nevertheless, there is room for improvement. For instance, by observing or even participating in daily activities of partner company's respective departments, managers may come up with potentially useful ideas for both the partner and their own company. Although such rotations require managers to spend time away from their positions, they provide an opportunity to eliminate partner's weaknesses or borrow his strengths. Another recommendation is working with partners to develop a synergetic marketing strategy, dividing marketing efforts to achieve better efficiency in delivering products to customers.

Lastly, the benchmarking, though unused by majority of the sample, is a powerful tool for understanding and gaining competitive advantage. Taking into consideration specifics of the industry, following directions for benchmarking may be proposed:

- New products or services – provides opportunity to counter a threat to existing market position or to expand to a new niche;
- Pricing – helps in adapting own prices to any market changes;
- Distribution channels – provides information for improving own channels by altering channels or by uncovering potential dealers.

The aforementioned recommendations will enable the producers of machines and equipment to deepen their marketing involvement, to complement their marketing strategies with potentially effective elements and, in time, to make marketing a stronger point of the industry.

Limitations of conducted work lie in low sample size, which limits the chances of finding significant connections within the sample and does not allow spreading the results of the research on the population.

Future research lines include similar surveys for other industries and other countries, which would determine various strengths, weaknesses and dependencies, thus creating possibilities to develop industry- and region -specific recommendations. Another research line lies in experimental application of proposed recommendation to several chosen companies, thus giving opportunity to gather data on speed and strength of impact.

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