

SENIOR MANAGEMENT SUPPORT FOR NEW PRODUCTS: EMPIRICAL FINDINGS FROM BULGARIA

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Abstract: *The purpose of this paper is to present the findings from an empirical study on the impact of company senior management support on the performance of the new products of Bulgarian companies. The paper considers the major studies on company senior management support and suggests a typology of these studies based on two criteria. A methodological framework for the research on company senior management support has also been substantiated. The empirical study results show that there is a relation between the degree of company senior management support and the degree of new product success as well as between the degree of company senior management support and the indicators measuring new products' performance. The theoretical and practical contribution of the paper is related to the justification of the methodological framework for the research on company senior management support as well as to the results concerning the relation between senior management support and the success of new products.*

Keywords: *Product innovations, Product success, Senior management role, Empirical results, Bulgaria.*

1. INTRODUCTION

The high likelihood for new product failure along with the growing need for product innovation projects make the study of the circumstances influencing new product results relevant and significant. Research shows that company senior management support for new product projects is related to new products' market performance and that is why it is one of their success factors.

The aim of this paper is to find out whether company senior management support influences new product success. The object of research is the process of new product development in Bulgarian companies and the subject of research is company senior management support as a variable influencing new product success. To achieve the aim formulated above, the studies on company senior management support for new product projects were systematized, the methodological aspects of the empirical research on company senior management support were presented and the findings of the same research were presented as well.

2. LITERATURE REVIEW

Company senior management support is among success factors in the three large-scale meta-analytic studies carried out so far: those of Montoya-Weiss and Calantone, Henard and Szymanski, and Evanschitzky et al. (Montoya-Weiss & Calantone, 1994; Henard & Szymanski, 2001; Evanschitzky et al., 2012). In the first meta-analytic study, Montoya-Weiss and Calantone call this factor "senior management support and skills" and consider it one of the factors related to the process of new product development. In the other two meta-analytic studies, those of Henard and Szymanski, and Evanschitzky et al., company senior management support is once again among new product success factors in the group of the ones related to product innovation process.

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Senior management support is always regarded as one of the most important factors for new product success. Among the most significant studies in this area are the ones of Barczak et al., Cooper and Kleinschmidt, Cormican and O'Sullivan, Zirger and Maidique, etc. (Barczak, Griffin, and Kahn, 2009; Cooper and Kleinschmidt, 1996; Cormican and O'Sullivan, 2004; Zirger and Maidique, 1990). Apart from this, a number of empirical studies are focused mostly on senior management involvement in new product development such as those of Gomes et al., Green, Hegarty and Hoffman, Rodriguez et al., Swink (Gomes, Weerd-Nederhof, Pearson, and Fisser, 2001; Green, 1995; Hegarty and Hoffman, 1990; Rodríguez et al., 2008; Swink, 2000).

In the literature on new product development, the concepts of support and involvement of senior management are used interchangeably. The categories of senior management and senior managers are synonymous as well. Even though not all studies specify what they mean by senior management, we accept Hambrick's view according to which this term refers to a group of managers holding certain positions that give formal authority and who have decision-making responsibilities for the activities related to new product development (Hambrick, 2007).

Publications from the last decade (see e.g. Felekoglu and Moultrie, 2014) register an increased number of studies on the involvement of senior management in new product development. This increase seems to reflect the growing understanding of the importance of senior managers for product innovations. Senior managers can contribute to company growth with their valuable opinion of the evaluation and development of company competences. They also play an important role in the process of company strategic planning deciding on which company products to introduce on the market; the kinds and levels of investment; pricing policy in terms of new products (Netseva-Porcheva, 2011) as well as company agenda related to research and development.

Based on their focus, the studies on senior management support can be divided into three groups:

1. studies on the success factors for new products;
2. studies on the best practices in new product development;
3. specific studies.

The studies in the first group are empirical and deal with the impact of various factors on the results of new product development with senior management support being one of these factors. The studies in the second group present standard practices in new product development that have proved successful. In the studies in the third group, senior management involvement is the main or one of main issues dealt with.

What is more, the studies on this issue can further be classified as exploratory and relational. Exploratory ones aim at collecting prior information on the involvement of senior management in product innovation in order to understand and structure this problem better. Relational ones aim to test hypotheses about the relationship between senior management support and other variables.

The main *findings of the exploratory studies* on senior management support can be summarised in several directions.

First, earlier studies explicitly found out that the level of senior management support has a positive impact on the economic success of a project (see e.g. Cooper and Kleinschmidt, 1996).

Second, the research on the best practices is focused on specific activities conducted by senior managers in the leading product innovation organisations. For instance, Cormican and O'Sullivan found out a positive impact when senior management: is responsible for new products' market performance; actively encourages giving ideas for new products; is willing to take risks related to product innovations (Cormican and O'Sullivan, 2004). Nicholas et al. found out something similar establishing that small and medium-sized companies as well as big companies feel that senior management support is a best practice (Nicholas, Ledwith, and Perks, 2011).

Third, the various forms of senior management support are also a research problem. For instance, Gomes et al. established the perceptions of the different participants in new product projects in terms of senior management support related to the activities for new product development (Gomes et al., 2001). This support can be divided into three categories:

1. The first category includes the direct influence of senior management on new product projects by forming multifunctional teams of senior managers, forming executive committees, joint management, using direct communication channels, introducing positions in charge of the smooth conduction of certain processes (the so-called process champions).
2. The second category includes the indirect influence of senior management on new product projects at the level of particular processes by providing resources, participating in brainstorming sessions, participating in joint visits of clients, support for company innovations, training projects, introducing knowledge management systems, etc.
3. The third category includes the indirect influence of senior management on new product projects *at the level of the whole organisation* by formulating a mission and objectives, company strategy, and structured company decisions.

Fourth, a number of studies focus on senior management role for new product development. McDonald and Eastlack's work is among the first ones investigating senior management role in organisations which are the most or the least successful in new product development (McDonald and Eastlack, 1971). They find out that there are a host of managerial roles and responsibilities within new product development such as strategic planning, directing and conducting the activities related to new product development, encouraging company efforts, selecting and developing the personnel involved with new products, organising the activities related to new products, supervising and controlling these activities. The same authors examine the intensity of senior management support noting that support intensity does not explain the nature or quality of this support. McDonald and Eastlack conclude that the main barriers to successful product innovations are rooted in motivation and work organisation: creating an innovation atmosphere, encouraging risk-taking, improving in-company communication, eliminating organisational barriers to innovation.

Harmancioglu et al. also investigate organisational factors and establish four specific roles of senior managers: ideas generator, planner, orchestrator and doorkeeper (Harmancioglu et al., 2007). Lakemond and Berggren (Lakemond and Berggren, 2006) offer an in-depth analysis of a single new product project with strong senior management support and find out that inconsistent senior management support can be very detrimental to a project.

As for the major *findings from the relational studies* on senior management support, they can be divided into several groups as well.

First, in different relational studies senior management support is regarded as an independent, dependent, mediating or impacting variable. Swink considered senior management support an independent variable and tried to establish its impact on three different dimensions of the results of a new product project taking into account the impact of the technological innovativeness of the new product (Swink, 2000). He found out that there is a strong positive relation between senior management support and the time for product development, product design and financial results. However, this pattern was not observed with highly technological projects. The reasons for this can be three: first, inexperienced senior managers can misjudge a situation; second, they can be overoptimistic about the development of completely new products; and third, other factors can have a stronger effect on project results than senior management support.

Second, a small number of studies focus on the prerequisites for senior management support. For instance, Green's research examines not only the relation between management support and project results, but also the correlation between project characteristics and senior management support (Green, 1995). Green found out that senior management can be selective in its support for new products depending on the expected project contribution to company welfare, the expected size of project investment, project innovativeness and initial origin of the project.

Third, some studies find out that senior management support can influence the relations between other variables. For instance, senior management support has a positive impact on the relation between knowledge accumulation in a company and new product timeliness (Yang, 2008).

The above-cited findings about senior management support give reasons to make several *conclusions*:

First, company senior management support is a necessary element of product innovation, but it has to be given in the right way. Support is of special importance when it comes to product launch on the market. This is confirmed by the comparison of projects that have been abandoned and projects that have been completed and that have finished with the launch of the product. The significance of this factor is due to the fact that senior management is able to provide the necessary resources and do the right things in order to realise a project.

Second, the key role of senior management in product innovation is to set the stage and environment for product innovation; to facilitate the process behind scenes; and not to be the lead actor on this stage. Management's modelling of company environment aimed at innovation success is crucial. Senior management must take long-term commitment with regard to product development as a source of company growth. It must develop a vision and strategy for product innovation corresponding to company objectives and strategies. It must provide the necessary resources and guarantee that in times of crisis these resources will not be redirected to meet the more immediate company needs. It must also adhere to a structured process of preparing products for the market. And what is the most important: senior management must delegate enough authority to project groups and support group leaders by taking on the roles of mentor, facilitator and guarantor of their work.

Third, senior management's role is not to participate in the day-to-day project work and to be constantly involved in it, i.e. to manage them in detail. Constant involvement in a project is not productive because it weakens group authority and compromises the concept of having an authorised group working on a project as well as because thus senior management distracts itself and cannot fully fulfil the rest of its obligations, including key decision-making related to project progress.

3. METHODOLOGY

The research was conducted in the end of 2016. The methods used for data collection are the structured personal interview and the structured personal online survey.

The research question is whether company senior management support influences the results of new product development. Two hypotheses are proposed with regard to this question:

Hypothesis One: There is a relation between company senior management support and new product success.

Hypothesis Two: There is a relation between company senior management support and the indicators measuring new product success.

In terms of the empirical indicators measuring the independent variable of senior management support, it should be taken into account that in the studies cited in the literature review, the most frequently used approach for evaluation of the level of involvement of senior management are used Likert scales comprising several indicators each. The scales for evaluation of senior management involvement vary from more general statements like “senior management is committed to new products” and “the product was strongly supported by senior management” to more specific formulations of senior management activities and behaviours related to new product development.

Overall, there is no consistency in the operationalisation of senior management support. In some studies, senior management involvement is seen as a core construct (e.g. Rodríguez et al., 2008), as a sub-construct in other ones (e.g. Gomes et al., 2001), and as an empirical indicator in third ones (e.g. Swink, 2000). In some studies, there are several indicators for measuring senior management support, whereas in others a longer list of indicators is applied. In some studies, several indicators make up one factor, while in others the same indicators form a number of factors. Some studies explicitly define the key concepts they use (e.g. Akgün et al., 2007; Green, 1995; Rodríguez et al., 2008), whereas others do not. The clear definition of concepts makes it possible for the reader to understand the reasons why the study was carried out and to get oriented in the results. In the absence of precise definitions, it is difficult to understand what exactly is meant by senior management and its involvement, support or commitment. A problematic point in the formulation of the indicators is also the fact that it is not always clear which level they refer to – the level of the particular new product project or the level of the whole organisation. The ambiguity would be avoided if a formulation explicitly indicated the level of support it referred to, for example “Senior management provided the resources needed *for the project* for new product development”.

Initially, in order to determine senior management support in this study, the author used and adapted the following indicators applied in previous research (Rodríguez et al., 2008; Akgun et al., 2007):

1. Senior management clearly defines the objectives of the new product project.
2. Senior management participates in the whole process of product development.
3. Senior management provided the resources needed for the new product development project.
4. Senior management evaluates positively employee ideas and suggestions.
5. Senior management formally encouraged the team work of the marketing, and research and development departments.

6. Senior management informally encouraged the contacts between the employees from the marketing, and research and development departments.
7. Senior management is committed to the success of this project.
8. Overall, senior management supported the project.
9. Overall, senior management helped coping with the obstacles to the project and did not create obstacles.
10. At project meetings and when they attended them, senior managers encouraged and did not discourage project team.
11. When project team members asked senior management for help, they received it.

A qualitative study was conducted in order to specify the empirical indicators, to structure the research problem and to refine the working hypotheses as part of this empirical research. It consists of 20 individual in-depth interviews with managers in charge of new product development in their companies. As a result of these individual interviews, the fourth, fifth, sixth, eighth, ninth, tenth and eleventh indicators mentioned above were rejected. The characteristics of company senior management support that they described were not mentioned by managers – not in concrete terms, but in meaning. That is why these seven empirical indicators were excluded from the final version of the questionnaire.

We defend the position that there can be distinguished several different, even though related to one another, aspects of company senior management support. Accordingly, in the present study we took the approach of Rodriguez et al. and Akgun et al. for operationalisation of senior management support, but with a modification of the empirical indicators. We assume that it is most appropriate to use a composite variable calculated as the weighted average of the values of four empirical indicators. Each of the empirical indicators is a statement whose truth the respondent has to deny or confirm, i.e. the indicator has values 0 or 1. The composite variable takes values in the interval between 0 and 1. The four empirical indicators are formulated as follows:

1. Senior management clearly defines the objectives of a new product project.
2. Senior management participates in the whole process of product development.
3. Senior management provides the resources needed for the new product development project.
4. Senior management is committed to this project success.

The dependent variables used to measure new product success are two. The first one is “Indicators measuring new product performance”. It was operationalised with 13 empirical indicators as follows: consumer satisfaction from a new product; number of consumers of a new product; acceptance of the new product by company intermediaries/distribution system; new product sales; new product market share; new product profit; new product advantage to competitor products; time for new product development; costs of new product development; the new product influences positively other company products sales; share of the number of new products from the total number of company products; share of sales of all new products in the total sales of the company; share of the profit from all new products in the total profit of the company.

The second dependent variable is “Degree of new product success”. It was measured with a five-point scale including answers from complete failure to complete success.

The primary units in the empirical study are companies operating on the territory of Bulgaria and who are active in new product development. Units of observation are those managers in

the primary units who in terms of function allocation in a particular company are in charge of product innovation. In each primary unit there is only one unit of observation. The primary units are randomly selected. The collected sample has a volume of 304 units of observation in the same number of primary units.

4. EMPIRICAL RESULTS AND DISCUSSION

The relations between senior management support and the dependent variables were established by applying correlation analysis. The calculations were made using SPSS. The correlation coefficients between the independent variable and the two dependent variables are given in Table 1. The values in bold are the values of the statistically significant correlation coefficients between the independent variable and the two dependent variables.

Table 1. Correlation coefficients between senior management support and dependent variables

Variable	Indicators measuring new product performance			Degree of new product success		
	Correlation coefficient	Significance (2-tailed)	N	Correlation coefficient	Significance (2-tailed)	N
<i>Dependent variables</i>						
Indicators measuring new product performance	1,000		304	-0,020	0,732	304
Degree of new product success	-0,020	0,732	304	1,000		304
<i>Independent variable</i>						
Senior management support	0,168*	0,003	304	0,181*	0,002	304

* With a level of significance 0,01.

Table 1 gives a reason to formulate the findings from the check of the working hypotheses. The result is that there is a relation between the degree of company senior management support and the degree of new product success as well as between the degree of company senior management support and the indicators measuring new product performance. This means that company senior management support is a success factor for new products which influences both dependent variables.

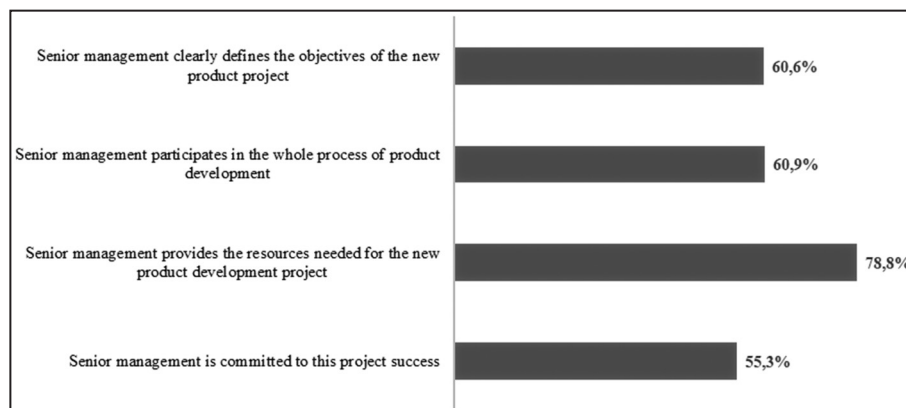


Figure 1. Share of the positive answers to the indicators making up the variable of senior management support

Figure 1 shows the share of the positive answers to the indicators making up the variable of senior management support. The frequency distribution shows that senior management support is mostly related to the provision of the resources needed for the new product development project (78,8%) as well as to, even though to a smaller extent, senior management participation in the development process (60,9%) and the clear definition of project objectives (60,6%).

5. CONCLUSION

The paper examines the impact of company senior management support on new products' performance. For this purpose, a review of the major studies on the problem of senior management support is made and a typology of these studies is suggested based on two criteria; the methodological aspects and the findings of an empirical study on senior management support of Bulgarian companies for new product development are presented as well.

The possibility for future research on the impact of company senior management support on new products' performance is related to the re-conduction of the empirical study with the use of the already developed research instrument. This will allow the tracking of changes in the presence of a relation between the degree of senior management support and new products' performance as well as in the strength of this relation. Furthermore, with the proposed questionnaire it is possible to examine the specific features of the sector manifestation of company senior management support.

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