

Management of Innovations Through Communications in Bulgarian Small and Medium Enterprises

Yanica Dimitrova

University of Library Studies and Information Technologies, Bulgaria

Abstract

In today's highly unpredictable business environment, any organization that wants to increase its competitiveness must innovate. Understanding the importance of innovation is determined by the corporate culture and communications of the organization. They broadcast its messages to all stakeholder groups, facilitate the transfer of knowledge and information and support innovation. The sample is based on the number of companies implementing innovations in Bulgaria. The methodology used is as follow: the profile of the surveyed companies is as follows: the number of respondents - 300 companies, and the owners and managers of the companies were interviewed. The closed-question survey is pre-prepared by the author. The data is collected from The National Statistical Institute in Bulgaria. The studied variables trace the relationship between the innovative efforts of the companies, the corporate culture-competitive performance link, with their internal and external communications and maintained partnerships in the context of open innovation. With the help of the Media Riches Theory and DART models, we could create effective communication programs to promote stakeholder innovation efforts and co-creation processes. The studied variables trace the relationship between the innovative efforts of the companies with their internal and external communications. The results show that small and medium-sized enterprises predominate in Bulgaria. Most managers understand the positive influence that corporate culture has on the overall competitive performance of companies. The studied companies maintain contact with the different groups of stakeholders. Part of this is keeping an effective communication policy, both inside and outside the "borders" of the organization. The significant investments of the investigated companies are in tangible resources. It is necessary to increase the understanding of the importance of intangible resources and increase the investment in them. Effective communication practices would be a reasonable basis for this.

Keywords: innovation, corporate culture, corporate communication, the Media Richness Theory, DART model

1. Literature review

Organizations are under constant pressure to compete successfully, and innovation helps them. Innovation is an essential factor in the competition because it provides opportunities to meet customers' needs, contributes to technological development, and increases the chances of acquiring positive performance in a turbulent business environment. Innovation is seen as a critical factor in the context of change. Corporate culture is essential for innovation in the company (Tushman & O'Reilly, 1997; Ahmed, 1998: 31; Dimitrova, 2017; Dimitrova, 2018). The communication practices of the organizations are also directly related to the management of innovations.

1.1 Innovation and Open Innovation

In a business environment characterized by a high degree of volatility, one of the primary goals of each company is to create value. The core of innovation is to renew the business of companies needed to maintain a positive competitive advantage and increase the ability to create value (Hax & Wilde, 2003). According to the definition of Crossan and Apaydin (2010), innovation is the product of acceptance, assimilation, and use of innovation that adds value in the economic and social spheres supports the renewal and expansion of the range of products, services, and markets, and establishes new management systems.

One of the most popular concepts related to innovation is that of open innovation, which outlines the purpose of organizations to get over their limitations through the potential to soak knowledge and technology from their environment (Chesbrough, 2003; 2006).

Adopting this concept is especially necessary for Small and Medium Enterprises because they are more resource-constrained than large companies. Companies that rely on open innovation are more open in communication and relationships with their external stakeholders - customers, competitors, and suppliers. In this way, they can implement innovations that better meet market trends, meet customers' needs, and in many cases, reformulate them. This organization also builds more sophisticated systems that secure interactions and the exchange of information and knowledge. The creation of innovation networks is also related to open innovation. This type of network presents opportunities for integrating diverse stakeholder groups during innovation processes. In many sectors, the locus of innovation is not in themselves but in the networks they participate in (Ritter & Gemünden, 2003). Innovation networks combine different resources, knowledge and opportunities (Ritter & Gemünden, 2003), which are often not only possible through market transactions (Gulati, 1999). This configuration becomes highly significant in the growing complexity of new developments (Pullen et al., 2012).

1.1.1 Corporate Culture

Introducing innovations requires openness and a desire to create mutual relations with the company's key stakeholders. Mentioned shows us the deep and multilevel link between innovation and corporate culture, which is a culture of innovation.

Corporate culture is a set of values, norms and basic assumptions that the organization members accept and shapes daily routines (Schein, 1992; Miron et al., 2004). It represents "shared social knowledge" in the organization, which determines employees' attitudes and behaviour (Colquitt et al., 2009). Corporate culture is the invisible infrastructure of the organization. It is directly related to strategy and structure, is interdependent with management, determines the implementation of communications in the organization, and is the framework in which the other constructs are formed and exist, contributing to the company's uniqueness and competitiveness - identities, images, reputation.

Different studies have been presented in the research literature, outlining the positive relationship between corporate culture and company innovation (Hernández-Mogollón, Cepeda-Carrión, Cegarra-Navarro, & Leal-Millan, 2010; Dimitrova, 2017 Dimitrova, 2018). A corporate culture that determines overall organizational performance has a huge impact. Mentioned said that a culture of innovation is also a condition for achieving a competitive advantage.

One of the most studied aspects of corporate culture is its impact on its competitiveness (Dimitrova, 2012; Dimitrova, 2015; Sackmann, 2011; Boyce et al., 2015). According to Kotter and Heskett (2011), adaptability must be encouraged to maintain lasting positive financial performance. An essential factor for the continuous change of corporate culture is a perception of its importance for the overall successful development of the organization by top management.

1.1.2 Corporate communication. The Media Richness Theory. DART Model

Communications are understood as essential to the existence of the organization. In general, they are subdivided into internal and external and managerial, and the trend of integration of communications is increasingly applied.

The research literature has described that internal communication supports continuous change, which is also associated with innovation (Dover & Lawrence, 2012). Through effective internal communication, employees understand and adopt organizational strategies, gain knowledge and information and build trust based on this, and the latter is related to management communications (Byrne & LeMay, 2006; Tkalac Verčič, Verčič & Sriramesh, 2012). Last, effective communication helps increase organizational performance (Mazzei, 2013).

As already mentioned, the culture of innovation is disseminated through internal communication. Introducing a culture of innovation is seen as a transformational organizational change (Linke & Zarfass, 2011).

External organizational communication is communication with external stakeholder groups - customers, suppliers, media, and competitors, and it is connected with the management of the invisible values of the company. In modern communication theory, external communication is successful only with an integrated approach (Christensen & Askegaard, 2001; Dimitrova, 2013).

In the context of innovation, external communication maintains an innovative image, creates trust and shares knowledge and information between different stakeholder groups and the organization.

Innovative companies with good external communications policies increase their overall performance, show concern for stakeholders and meet their demands (Bonn, 2001). However, this was only possible with corporate culture and communication policy, which shapes organizational behaviour that fosters debates between different stakeholder groups.

The traditional understanding is that external communications are intended for the external environment. The research literature outlines mechanisms by which the company can attract information from the external environment - interactions with external stakeholders, benchmarking and crowdsourcing, and interactive communication channels.

This study will look at Media Access Theory and the DART model developed by Prahalad and Ramaswamy (2004a).

Daft & Lengel (1984) formulated the Media richness theory, stating that the media has different ways of overcoming ambiguity, comparing interpretations of messages and facilitating their understanding. Through four criteria, they present the hierarchy of media access, ranked from higher to lower, to illustrate media types' ability to process incomplete information within organizational communication. The criteria are the following: 1) the possibility for immediate feedback; 2) the ability of the media to retransmit numerous meanings such as body language and peculiarities of timbre; 3) the use of a particular conceptual apparatus and 4) personal focus on the media. Face-to-face communication is the most accessible communication medium in the hierarchy, followed by telephone, e-mail, letters, notes, memos, reports, flyers and newsletters. Information reduces uncertainty and uncertainty in the organization, but the capabilities of communication channels decrease from face-to-face communication to the other mentioned media (Daft & Lengel, 1986). In order to overcome the uncertainty, it is necessary to hold meetings (i.e. face-to-face communication). Electronic and printed forms of communication are recommended when there is no uncertainty. From the strategic point of view of management, Daft and Lengel's theory (1986) assumes that managers make the best choices by determining the appropriate communication

medium for the concrete task and the degree of access it provides, depending on the task's requirements. The organization must apply various communication approaches depending on the existing degree of uncertainty of the information.

The practical implementation of organizational communications depends on the choice of media to disseminate the necessary information. Further research (Fulk et al., 1987) shows that media choice is determined by the social environment in which the organization operates and influences members' attitudes toward media/channels and how they are used in the organization.

Through companies' networking practices, customers are understood as co-creators of the value of innovation. Mentioned is illustrated with the DART model developed by Prahalad and Ramaswamy (2004a), including dialogue, access, risk assessment, and transparency. The model indicates the different ways of developing the connections between the company and customers, understood as value creators. In order to generate one, at least one of the four elements must be implemented.

Considered in more detail, the components of the model are:

The dialogue is associated with interactivity, the exchange of knowledge and the mutual actions of organizational stakeholders. Applying symmetrical communication to share and consider stakeholders' interests is encouraged. Affordability is when customers can test and "experience" the product or service. It is critical to have comprehensive information related to the product/service and provide access to knowledge and expertise that create completeness of experience with the product/service.

Risk assessment is preventing harm to consumers from the product or service. The main question is whether the company can manage the risk regardless of the conditions and whether it is possible for consumers to know and take responsibility for possible risks. There is a primary goal of shared responsibility in the decision-making process. Presumably, consumers seek more information about risk in co-creating value.

Transparency provides needed information about the product or service and the company that produces it. There should be no information asymmetry- i.e. the company has more information, part of which "hides", which violates consumers' ability to make informed decisions. Transparency is the brightest manifestation of symmetrical communication based on mutual trust.

The model's authors also made different combinations of the elements that make it up: accessibility and transparency, dialogue and risk assessment, accessibility and dialogue, and transparency and risk assessment.

The application of the DART model illustrates the change in the relationship between companies and their stakeholders. It connects with the transparency of the company's actions

and the participation of customers in them. On the other point of view - it outlines the critical of the organization's communications for its overall successful development and ongoing competitiveness (Dimitrova, 2017).

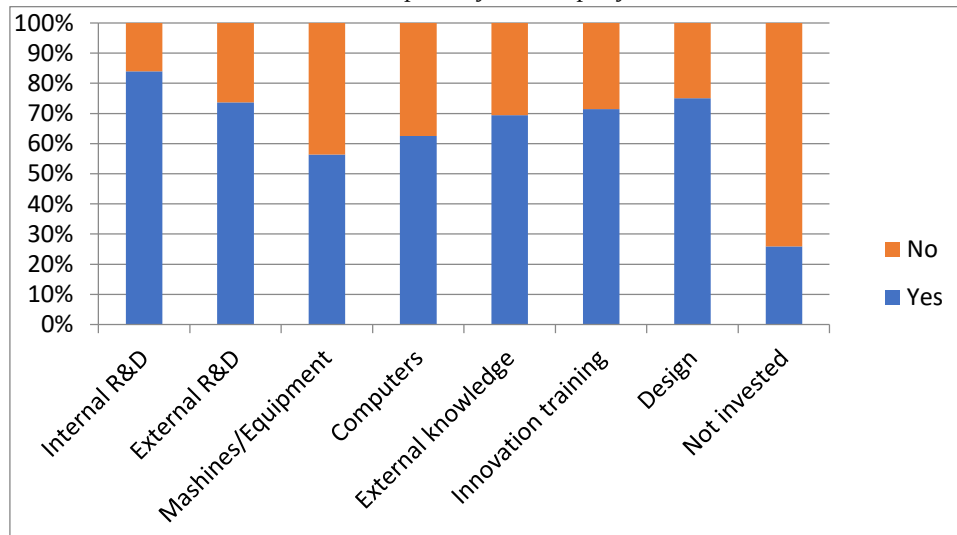
Empirical Study

The sample is based on the number of companies implementing innovations in Bulgaria. Data is according to National Statistical Institute.

The profile of the surveyed companies is as follows: the number of respondents - 300 companies, and the owners and managers of the companies were interviewed. The closed-question survey is pre-prepared by the author. The survey was conducted in the period March-April 2020. The size of the companies is determined according to the European classification. The micro enterprises (up to 10 people) - one hundred fifty-nine respondents, small (10-49 people) - ninety-two, medium (50-249) - thirty-two, and large (over 250 employees) - five. The twelve respondents still need to answer which group the company belonged. From the demographic profile, we see that the respondents in the survey are mainly representatives of small and medium enterprises. By field of activity: twenty-three of the respondents in the survey are employed in trade, sixty-seven companies in manufacturing, ninety in the services sector, fifteen in the light and processing industries, fourteen in mechanical engineering, seven in energy, seven in science and education - nine. Twenty-seven of the participants in the survey represented the IT sector. Fourteen of the respondents are engaged in construction, design, and engineering. Thirty-four have applied for other economic activity. In the Bulgarian business reality context, micro and small companies predominate.

Through the presented results, we visualize the relationship between innovation and communication in the context of small and medium enterprises operating in Bulgaria. It is shown through their investments in various activities related to innovation, the creation of innovative products and services, ways to implement internal and external communications, and maintaining relationships with customers and partners.

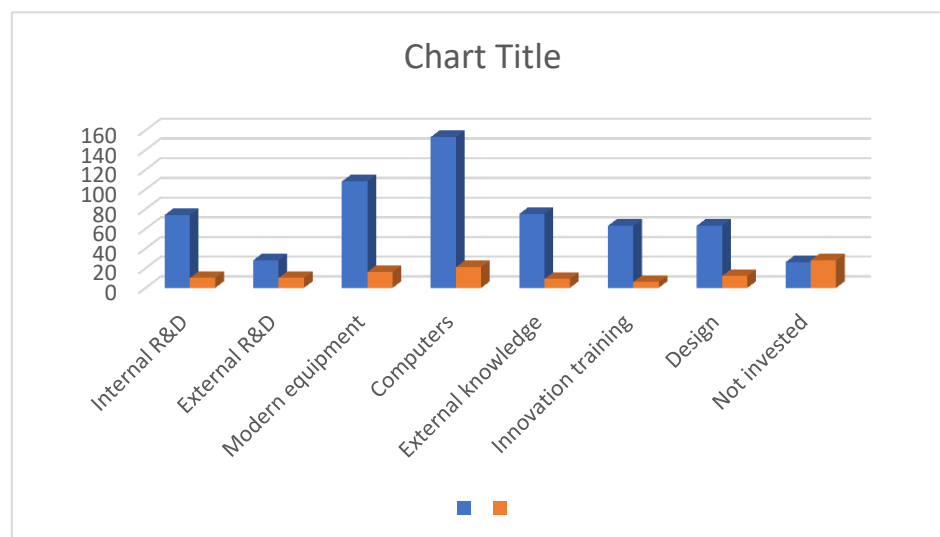
Figure 1: In the last three years, has your company invested in/Has innovative products and services been developed in your company?



Source: (Author)

It is evident that those who implement innovative products and services also invest in activities directly related to innovation. To a greater extent, investors in internal and external research and development (R&D) invested in acquiring superficial knowledge and training for innovation to realize innovative products and services.

Figure 2: In the last three years, has your company invested in:/ Corporate culture-performance positive connection.

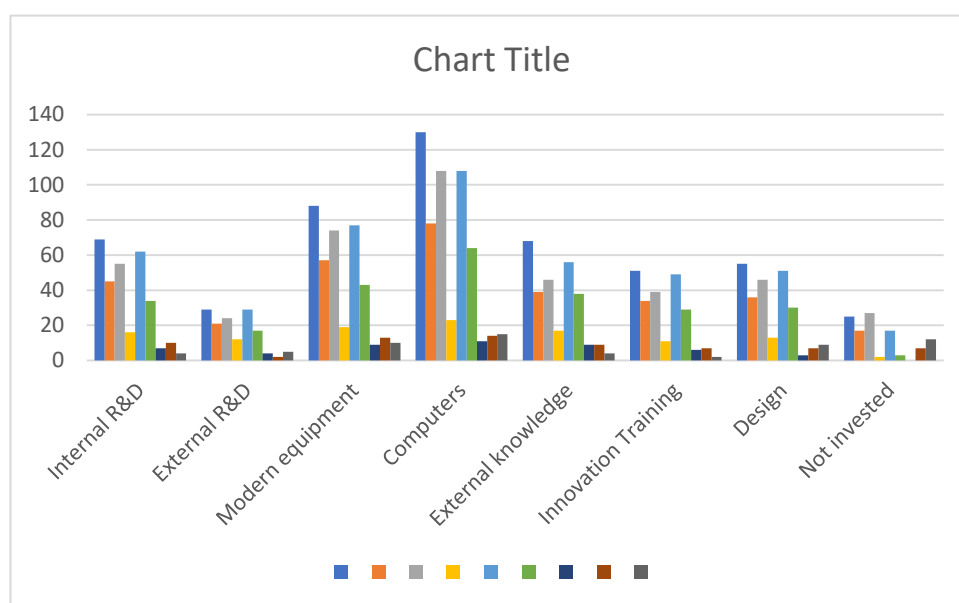


Source: (Author)

Here we can note the positive relationship between the understanding of the positive effect of corporate culture on the competitive performance of companies and investments in innovation. To the greatest extent, those who answered negatively to the question about the

influence of corporate culture on increasing competitiveness do not invest in resources directly related to the implementation of innovation.

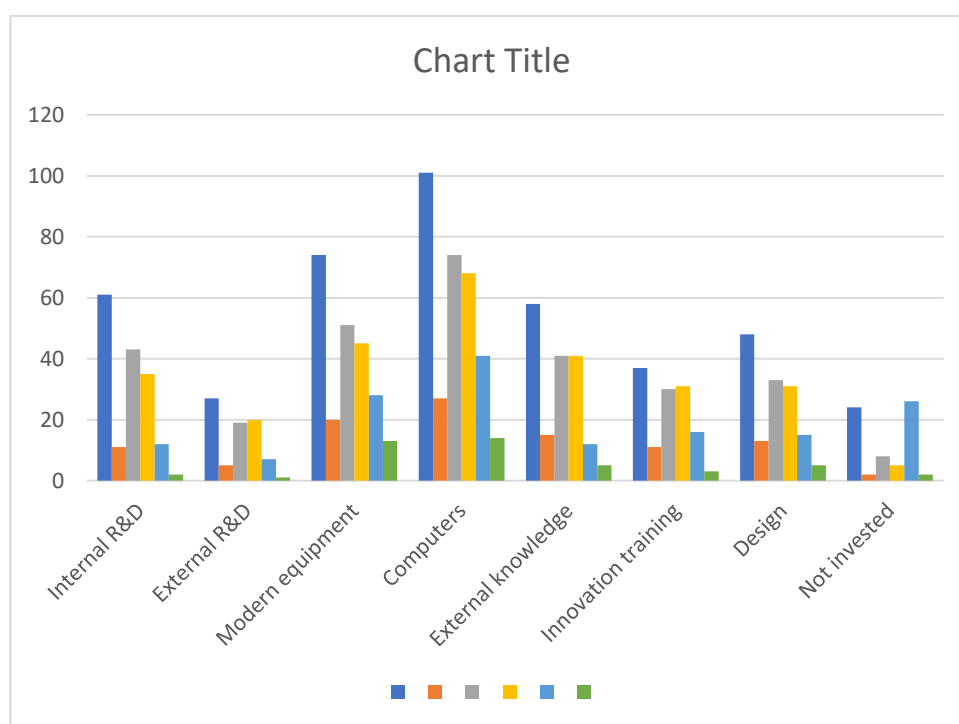
Figure 3: In the last three years, has your company invested in:/ How are the internal communications in your organization?



Source: (Author)

We see that the communication policy of the respondents investing in innovations is well managed. The primary internal communications are realized through the official e-mail, the supervisor, and the official operatives. These ways of communication allow being realized both face-to-face and online. Training is also a channel of communication in which, as with others, can exchange knowledge. Print channels are being used less and less, but this is logical with digitalization processes.

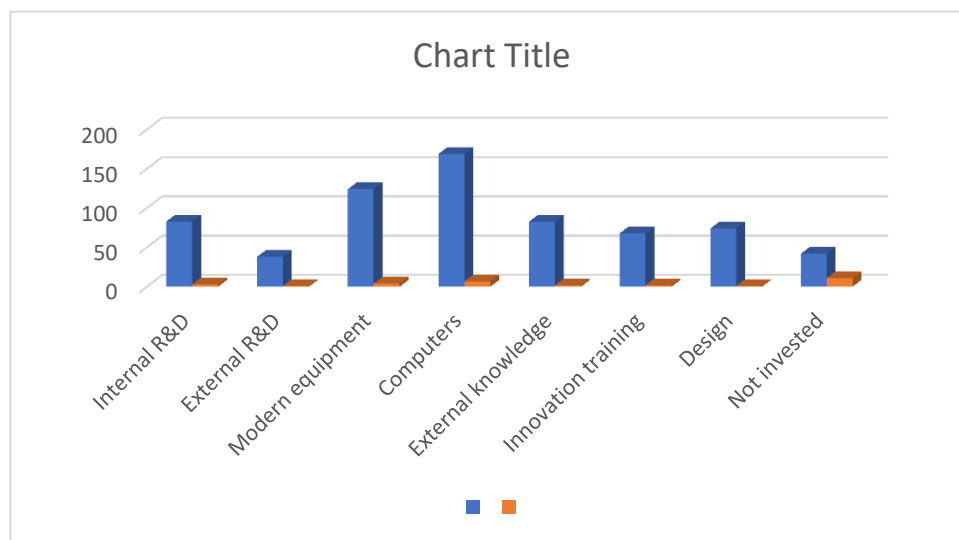
Figure 4: In the last three years, has your company invested in:/ How do you maintain the corporate image in the public sphere?



Source: (Author)

The maintenance of the image of an innovative company in the public space is realized mainly through participation in professional forums and exhibitions; the internal corporate public relation is also used. The use of the services of public relation agencies is less common.

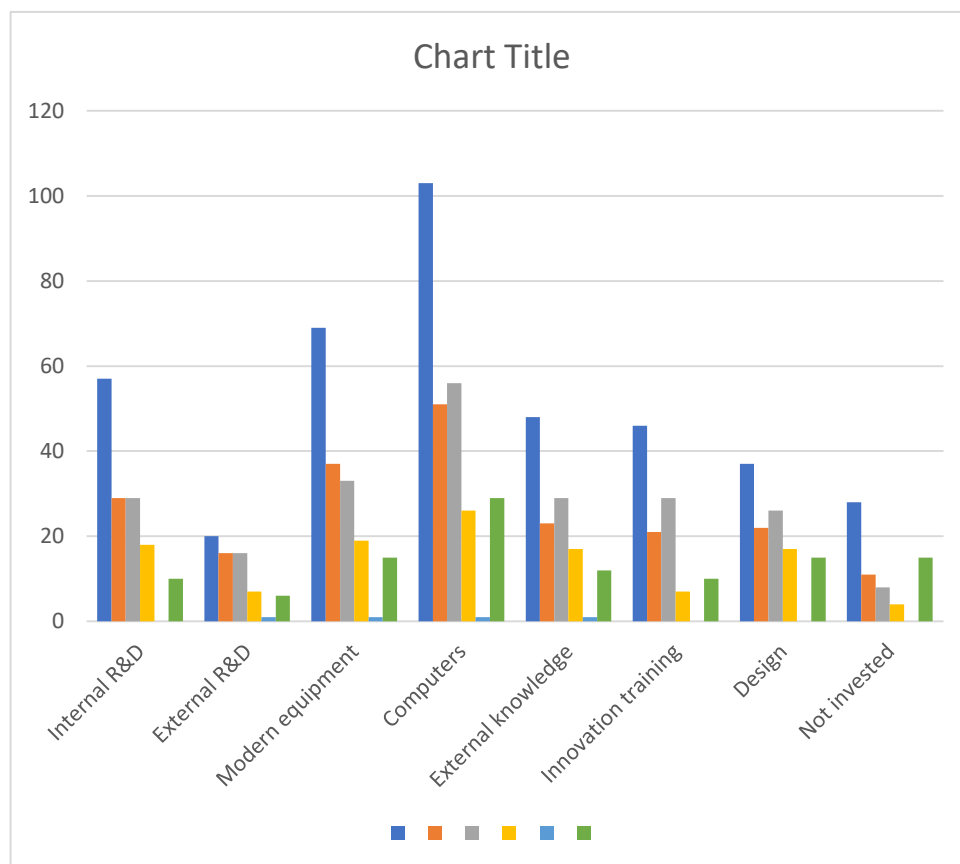
Figure 5: In the last three years, has your company invested in: / In the previous three years, has your company/organization maintained partnerships with other companies/organizations?



Source: (Author)

The main percentage of respondents in the survey maintain relationships with their partners and customers, which is an excellent opportunity to implement practices in open innovation and networking.

Figure 6: During the last three years, does your company invest in: / When offering a new service / creating a new product, do you include/do you consult your partners and clients?



Source: (Author)

The predominant number of respondents actively involve their customers and partners in the creation of innovative products and services and the processes of innovation. The possible benefits and risks are discussed, and transparency and accessibility are visible.

Discussion

The conclusions we can draw from the present study are related to the lasting understanding of the positive impact that corporate culture has on the company's competitiveness. Based on this understanding, plan an effective communication policy for all stakeholder groups affiliated with the companies. Existing partnerships can determine the more straightforward application of transparent communications to products and innovation processes, leading to improvements and minimizing adverse effects in the creation process.

Still, in the Bulgarian business practice, the realization of investments in tangible resources is mainly observed - computers and modern equipment. Investments in intangible resources are less represented - internal and external knowledge, training of employees related to innovation, namely the leading creative solutions that lead to the implementation of the invention. However, the figures show that the respondent companies that market innovative products and services invest more in intangible resources.

The present study should be compared with a previous one realized by the author (Dimitrova, 2017). The comparison shows that the understanding of the positive influence that corporate culture has on the overall performance of companies is sustainable. Managers who confirm it are more likely to invest in innovation and have an effective, professionally built and maintained communication policy. The results of the present study, in terms of attitudes towards investment in tangible resources, are in sync with previous research. The positive thing is that more and more companies realize partnerships with their external stakeholders and make more use of the services of professional public relation specialists and agencies.

Small and medium-sized enterprises need more resources. For their successful existence and competitive performance, it is necessary to establish partnerships with organizations of different sizes, structures and forms. The realization of partnerships with scientific and educational institutions, as well as with organizations from the Third Sector, is significant. It is essential to realize the importance of intangible resources - the acquisition of external knowledge through crowdsourcing, for example, and inclusion in various networks is crucial for generating and implementing innovations. Last but not least, the motivating effect that internal communication has on employees is also essential. The rapid development of communication and information technologies facilitates communication within the company and with external stakeholder groups, successfully integrating the organization's communication practices. The co-creation of value is possible precisely through the constant nature of the messages sent to all interested parties, as well as by supporting the free sharing of knowledge and promoting the processes of organizational learning and unlearning. Using the services of an internal public relation expert and external consultants and agencies is positive for any company because it helps maintain a mutual understanding of the needs of internal and external stakeholder groups and facilitates the establishment of collaborations and mutually beneficial partnerships. Internal corporate public relation should also be actively involved in creating and maintaining an innovative image and seeking the assistance of PR agencies, rather than focusing on participation in specialized forums.

To be competitive in the domestic and international markets, Bulgarian companies must realize the importance of corporate culture in generating and introducing innovations. The process is supported by a professional, effective and efficient communication policy,

investing wisely in tangible and intangible resources, for which they initiate and maintain diverse partnerships.

The limitations of the research are related to the fact that it is not clear to what extent the respondents have created and managed their corporate culture, which is the framework of the innovations and communications implemented by the organizations. The external factors that have a significant impact on the overall policy of the companies are not considered here either.

Conclusion

In the future, based on this study, with the help of additional empirical research, it is possible to create and subsequently test a model for managing innovation. This model must be addressed through corporate communications, considering the components of the DART model, opportunities for cooperation between different nature organizations, the increasing use of social media, and the favourable or unfavourable business climate. As a basis for this model, the one proposed by the author (Dimitrova, 2022) can be used to support the adoption of innovations through communications. The essential components are the internal and external stakeholders, both inside and outside the very conditional boundaries of the organization, because their division can be dependent and belong to both groups simultaneously. Communications are integrated and interactive and promote the understanding, perception and generation of innovations.

Acknowledgment (TNR 12pt. bold)

This paper is an output of the science project “Innovation in business and education. Development of a conceptual communication model for innovations in a business-information organizational environment”, Fund of Scientific Research, Bulgaria, KII-06-H-35/5-18.12.2019.

References (TNR 12pt. bold)

Ahmed, P. K. (1998). Culture and Climate for Innovation. *European Journal of Innovation Management* 1(1): 30-43.

Bonn. I., (2001). Developing strategic thinking as a core competency. *Management Decision*, 39(1), pp. 63-71

Boyce, A., Nieminen, L., Gillespie, M., Ryan, A. M., D. Denison (2015) Which comes first, *organizational culture or performance? A longitudinal study of causal priority with automobile dealerships*, *Journal of Organizational Behavior*, Vol.36, Issue3, pp.339-359

Byrne, Z. S. and E. LeMay (2006). Different Media for Organizational Communication: Perceptions of Quality and Satisfaction. *Journal of Business and Psychology*, 21(2), 149–173.

Chesbrough, H. V. (2006). *Open Business Models: How to Thrive in the New Innovation Landscape*. HBS Press.

Chesbrough, H. V. (2003) *Open Innovation: The New Imperative for Creating and Profiting from Technology* Harvard Business Press.

Christensen, L and Askegaard, S (2001) .Corporate Identity and Corporate Image Revisited. A Semiotic Perspective. *European Journal of Marketing* Vol.25 N ¾, 2001, pp.292-315

Colquitt, A.C., J.A. Lepine, and Wesson, M.J. (2009). *Organizational Behavior: Improving Performance and Commitment in the Workplace*, McGraw-Hill, New York, NY.

Crossan, M. M. and Apaydin, M. (2010). A Multi-Dimensional Framework of Organizational Innovation: A Systematic Review of the Literature. [Article]. *Journal of Management Studies* 47 (6): 1154-1191.

Daft, R. L. and R. H. Lengel (1984). *Information richness: A New approach to managerial behavior and organization design*. In B. M. Staw and L. L. Cummings (Eds.), *Research in Organizational Behavior* (Vol. 6, pp. 191–233). JAI Press INC.

Daft, R.L. and Lengel, R.H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science*, 32, 554-571.

Dimitrova, Y. (2012). *The Corporate Culture as The Competitive Advantage*, AI “Prof. Marin Drinov”, S. [BG]

Dimitrova, Y. (2013). *The Organizational Identity – “The Invisible Value” Of The Modern Organization*, AI “Prof. Marin Drinov”, S. [BG]

Dimitrova, Y. (2015). Specificity of the corporate culture of Bulgarian Small and Medium Enterprises, *Entrepreneurial / Managerial Innovative Strategies and Behavior in Global Multicultural Environment*, Proceedings of the Sixth International Conference, 09-12 September 2014, BAMDE, 2015, pp. 85-106

Dimitrova, Y. (2017) *Culture of Innovation*, Izdatelski complex UNWE, S. [BG]

Dimitrova, Y. (2018). The Culture of Innovation Model, *Economic Studies journal*, Bulgarian Academy of Sciences - Economic Research Institute, Vol. 27, issue 1, p. 39-68, ISSN 0205-3292.

Dimitrova, Y. (2022) Communication Model to Promote the Perception of Innovation in Business Organizations, . *Journal of International Scientific Publications: Educational Alternatives* 20, 387-396 (2022). <https://www.scientific-publications.net/en/article/1002406/>

Dover, G., and T. B. Lawrence, (2012). The Role of Power in Nonprofit Innovation. *Nonprofit and Voluntary Sector Quarterly*, 41(6), 991–1013. h

Fulk, J., Steinfield, Ch, Schmitz, J. and Power, J. Gerard (1987). A Social Information Processing Model of Media Use in Organizations. *Communication Research*, 14, 529-552.

Gulati, R. (1999). Alliances and Network, *Strategic Management Journal*, 19, pp. 293-317.

Hax, A. and D. Wilde (2003) The Delta Model - a New Framework of Strategy, *Journal of Strategic Management Education*, Senate Hall Academic Publishing. 21 pp.

Hernandez-Mogollón, R., Cepeda-Carrión, G., Cegarra-Navarro, J.G. and Leal-Millan, A. (2010). The role of cultural Barriers in the relationship between open-mindedness and Organizational innovation, *Journal of Organizational Change Management*, Vol. 23 No 4, pp. 360-376.

Kotter, J. P. and Heskett, J. L. (2011). *Corporate Culture and Performance*. New York, The Free Press., 2nd ed.

Linke, A. and Zarfass, A. (2011). "Internal communication and innovation culture: developing a change framework", *Journal of Communication Management*, Vol. 15 Iss: 4, pp.332 - 348

Mazzei, A. (2013). Internal communication for employee enablement: Strategies in American and Italian companies. *Corporate Communications: An International Journal*, 19(1), 82–95.

Miron, E., Erez, M. and Naveh, E. (2004). Do personal characteristics and cultural values that promote innovation, quality, and efficiency compete or complement each other? *Journal of Organizational Behavior*, 25(2), 175–199.

Prahalad, C.K. and Ramaswamy, V. (2004) Co-creating unique value with customers,” *Strategy. Leadersh.*, vol. 32, no. 3, pp. 4–9.

- Pullen, A., de Weird-Nederhof, P., Groen, A., Fischerr, O. (2012). Open Innovation in Practice: Goal Complementarity and Closed NPD Networks to Explain Differences in Innovation Performance for SMEs in the Medical Devices Sector, *Journal of Product Innovation Management*
- Ritter T. and Gemünden, H.G. (2003) The impact of a company's business strategy on its technological competence, network competence and innovation success. *Journal of Business Research*, 57: 548–556.
- Sackmann, S.A. (2011). Culture and Performance. *The handbook of organizational culture and climate* 2, pp.188-224.
- Schein, Ed. (1992) *Organizational Culture and Leadership*. Jossey-Bass Publishers, 2nd ed.
- Tkalac Verčič, A., Verčič, D. and Sriramesh, K. (2012). Internal communication: Definition, parameters, and the future. *Public Relations Review*, 38(2), 223–230.
- Tushman, M. L. and O'Reilly, Ch. A. (1996). The ambidextrous organization: managing evolutionary and revolutionary change. *California Management Review*, 38: 1-23.