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RESEARCH OF ENTREPRENEURIAL BUSINESS INNOVATIONS IN TIMES OF CRISIS

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Abstract

The article presents the results of a study of the preparedness of the entrepreneurial business in Bulgaria to innovate in times of crisis. The aim is to clarify the specifics of innovations, their role in the successful development of an entrepreneurial business and to outline the main problems. The assessment of the entrepreneurial business for innovations before and during the crisis is based on the results of a survey among 41 representatives of this business in Bulgaria. The theoretical aspects of innovation are discussed. Based on the survey, the main problems of the entrepreneurial business related to the implementation of innovations in a crisis are identified.

Keywords

Innovations – Entrepreneurial business – Times of crisis

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Introduction

In the face of a crisis, which results in sharp and rapid changes in the business environment, the entrepreneurial business faces the challenge of making adequate and rapid anti-crisis decisions not only for survival, but also for development in the current conditions. It should be borne in mind that the problem of change is quite complex due to the fact that major changes take place in all processes (social, economic, political, interpersonal and personal) affecting directly and indirectly the external and internal environment of the entrepreneurial business¹. Moreover, the crisis creates favorable business opportunities in terms of rapid improvement of the organization, implementation of a number of innovations and technological changes that generally contribute to the dynamics, prosperity and modernization².

The development of entrepreneurial business is one of the main factors influencing the growth and competitiveness of the economy of each country. At the same time the deployment of entrepreneurship promotes the manifestation of various forms of innovation.

In this context, one of the essential questions of theoretical and practical importance that appropriate action is taken by entrepreneurial business success according to dynamic market changes in a crisis and the availability of increasingly intense competition. It should be borne in mind that an important source of success for this business are the practical and marketable innovative ideas, regardless of their specific type - related to products, technologies, materials, organization or markets³. Moreover, the European entrepreneurship development policy is based on the role of innovation in improving competitiveness. The European Commission defines the importance of innovation for the survival and prosperity of business today as "bigger than ever" due to the fact that "markets are changing at an increasingly dynamic pace" and "competition from emerging Chinese economies and India is becoming more intense"⁴. Innovations are also one of the most important determinants of organizational performance⁵.

It is obvious that innovation is an important entrepreneurial tool for tackling this issue by business. They help to build competitive advantage and increase competitiveness, as well as to advance scientific and technical progress.

Knowledge of the nature and features of innovation will help to better identify the problems of an entrepreneurial business in terms of its innovation activity in a crisis. Schumpeter's views support this, defining innovation as a result of entrepreneurial search

¹ V. Vasilev; D. Stefanova and V. Cherkezov, *Menidzhmant na krizi (teoretichni i prakticheski aspekti)* (Sofiya: Monografia, izd. „Propeler“, 2019).

² V. Vasilev; D. Stefanova and V. Cherkezov, *Menidzhmant na krizi...*

³ R. Madgerova, *Ikonomicheski i sotsialni izmereniya na predpriemachestvoto* (Blagoevgrad: Monografia, Univ. izd. „Neofit Rilski“, 2013): 384.

⁴ MSP sa nash prioritet, Evropa e dobar dom za MSP, MSP oblagodetelstvat Evropa, izd. Evropeiska komisija, *Predpriyatiya i promishlenost*, 2008, s. 21.

⁵ F. Damanpour; R. M. Walker and C. N. Avellaneda, "Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations", *Journal of Management Studies* Vol: 46 num 4 (2009): 650-675, doi:10.1111/j.1467-6486.2008.00814.x; D. A. Marín-Idárraga and J. C. Cuartas-Marín, "Organizational structure and innovation: Analysis from the strategic co-alignment", *Academia* Vol: 29 num 4 (2016): 388-406, doi:10.1108/ARLA-11-2015-0303.

for new products, new processes and new organizational structures⁶. In this context, the need to clarify the nature and characteristics of the various types of innovation that entrepreneurs pursue in their business is of particular importance. The analysis of the literature sources shows that four main types of innovation are considered in the scientific literature - product, organizational, process and marketing.

Product innovation can be defined as new to market or new to firm⁷. Mohnen and Hall's view is that product innovation benefits firms' productivity by creating a new source of demand potentially giving rise to scale effects or requiring less of inputs than the old products⁸. In addition, product innovation is seen as crucial performance factor which provides the capability to expansion into the new market and industries⁹ and enables digging the opportunities to earn an abnormal profit and providing the route for the firms to earn profits¹⁰. Authors who have a contribution to the understanding of product innovation are Gaynor, Bradner, Iansiti and Kung. They state that new innovative products, along with design help to maintain market share of the company and increase profits in those markets¹¹. It is obvious that product innovation is at the heart of the innovativeness of the entrepreneurial business, which should be seen as fundamentally new products or modified or adapted to existing products.

As already mentioned, innovation can also be viewed from a process perspective. In this regard, the essence of process innovation is treated as the implementation of a new or significantly improved production process, distribution method, or support activity for goods or services¹². According to Martínez-Ros and Labeaga process innovation is rather concerned with the identification of more effective internal operations of production and distribution hence related with the cost effectiveness¹³. Some authors' view of process innovation is that they may have influence on the productivity, productivity growth or profitability¹⁴.

⁶ J. A. Schumpeter, *The Theory of Economic Development*, (Cambridge, U.S: Harvard University Press, 1934).

⁷ Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data (Paris: Organization for Economic Cooperation and Development OECD, 3rd edition, 2005), <https://www.oecd-ilibrary.org/docserver/9789264013100-en.pdf?expires=1588525524&id=id&accname=guest&checksum=F51C2A2B41522B8833804BFEEA CC74883>.

⁸ P. Mohnen and B. H. Hall, "Innovation and productivity: an update", *Eurasian Business Review* Vol: 3 num 1 (2013): 47–65.

⁹ F. Damanpour and S. Gopalakrishnan, "The dynamics of the adoption of product and process innovations in organizations", *Journal of Management Studies* Vol: 38 num 1 (2001): 45-65.

¹⁰ S. Nambisan, "Information systems as a reference discipline for new product development", *MIS Quarterly* (2003): 1-18.

¹¹ M. Gaynor; S. Bradner; M. Iansiti and H. T. Kung, "The real options approach to standards for building network-based services". In: 2nd IEEE Conference on Standardization and Innovation in Information Technology, October 3–6, Boulder, CO, (2001): 217–228.

¹² Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data (Paris: Organization for Economic Cooperation and Development OECD, 3rd edition, 2005), <https://www.oecd-ilibrary.org/docserver/9789264013100-en.pdf?expires=1588525524&id=id&accname=guest&checksum=F51C2A2B41522B8833804BFEEA CC74883>.

¹³ E. Martínez-Ros and J. M. Labeaga, "Product and process innovation: Persistence and complementarities", *European Management Review* Vol: 6 num 1 (2009): 64-75.

¹⁴ R. Veugelers, "The role of SMEs in innovation in the EU: A case for policy intervention?", *Review of Business and Economics* Vol: 53 num 3 (2008): 239-262.

Another view of process innovations defines them as novel changes to the act of producing or delivering the products which allow significantly increase the value delivered to the stakeholders¹⁵.

The essence of marketing innovations is seen as “introducing new marketing methods involving significant changes in product design, product placement, and product promotion or pricing”¹⁶. In addition, we believe that marketing innovation is not only an important tool for the entrepreneurial business to cope with the ever-growing needs of consumers and the positioning of new markets, but also one of the essential factors for achieving sustainable growth.

In terms of organizational innovation, they can be defined as the introduction of significantly changed organizational structures, advanced management techniques or new or substantially changed corporate strategic orientations¹⁷. In clarifying the nature of organizational innovations, some authors draw attention to their immediate positive effect on firm performance with regard to productivity, as they improve quality and flexibility of firm operations¹⁸. In their understanding of the essence of organizational innovation, Van der Aa and Elfring emphasize their connection to all administrative efforts. According to them, organizational innovation is strongly linked to renewing the organizational systems, procedures, routines to encourage the team cohesiveness, coordination, collaboration, information sharing practice and knowledge sharing and learning¹⁹.

In this context, the focus of the development is on the evaluation of the innovations implemented by the entrepreneurial business and the main problems in this regard.

Methodology

This study has used the primary data. The primary data was collected through a survey, which was distributed to 41 representatives of entrepreneurial business. The survey was a sample one of representative character. Direct survey in which respondents themselves fill in the questionnaire was used as a data collection method.

The study was limited in time and place. The survey was conducted between March-April 2020 in Bulgaria. Statistical methods were used to analyze and evaluate the

¹⁵ L. A. Savitz; A. D. Kaluzny and D. L. Kelly, “Life cycle model of continuous clinical process innovation”, *Journal of Healthcare Management* Vol: 45 num 5 (2000).

¹⁶ Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data (Paris: Organization for Economic Cooperation and Development OECD, 3rd edition, 2005), <https://www.oecd-ilibrary.org/docserver/9789264013100-en.pdf?expires=1588525524&id=id&accname=guest&checksum=F51C2A2B41522B8833804BFEEA CC74883>.

¹⁷ Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data (Paris: Organization for Economic Cooperation and Development OECD, 3rd edition, 2005), <https://www.oecd-ilibrary.org/docserver/9789264013100-en.pdf?expires=1588525524&id=id&accname=guest&checksum=F51C2A2B41522B8833804BFEEA CC74883>.

¹⁸ J. Womack; D. Jones and D. Roos, *The Machine That Changed the World: The Story of Lean Production* (New York: Harper Perennial, 1990); S. Goldman, R. Nagel and K. Preiss, *Agile Competitors and Virtual Organisations: Strategies for Enriching the Customer* (New York: Van Nostrand Reinhold, 1995).

¹⁹ W. Van der Aa and T. Elfring, “Realizing innovation in services”, *Scandinavian Journal of Management* Vol: 18 num 2 (2002): 155-171.

results obtained in the study as the method of grouping, the method of analysis, table method and comparison method. Using questionnaire as research instrument enables the collection and analysis of quantitative data using descriptive statistics. Data were collected from these enterprises using an own questionnaire, due to the fact that it corresponds to a high degree to the goals set for this current research. Data on innovation were collected for two periods: before the COVID-19 crisis (January-February 2020) and during the COVID-19 crisis (March-April 2020).

Results and discussion

In view of the fuller and more accurate identification of the problem, we consider it necessary to outline the profile of the entrepreneurial business. The results of the business analysis by form of registration reveal that the share of limited company with one owner is the most significant (45.5%), followed by limited company (27.3%), EAD (18.2%) and sole proprietor (9.1%).

An important element of the characteristics of an entrepreneurial business is the choice of economic activity. The results presented in Table 1 show that the largest share is represented by the representatives of the entrepreneurial business in the services sector (36.4%), followed by light industry, trade and agriculture - with equal shares of 18.2% each. The percentage of respondents from the food industry, the construction sector, computer and information systems and the manufacturing sector is relatively low (9.1% for each of them).

| Sphere of economic activity | Respondents, % |
|---|----------------|
| Light industry (furniture, tailoring, etc.) | 18.2 |
| Food industry | 9.1 |
| Trade | 18.2 |
| Services | 36.4 |
| Construction | 9.1 |
| Computer and information systems | 9.1 |
| Agriculture | 18.2 |
| Production | 9.1 |

Note: percentages exceed 100% because more than one answer is possible

Table 1

Distribution of entrepreneur business by sphere of economic activity - %

Source: authors' own research

The structure of the surveyed businesses can also be viewed in terms of their size. The data in Table 2 shows that micro-enterprises predominate - 45.5%. The share of large enterprises is much smaller - 27.3%, followed by the representatives of small enterprises, whose share is 18.2%. Only 9.1% of the respondents indicate that they are representatives of medium-sized enterprises.

| Size of the enterprise | Respondents, % |
|------------------------|----------------|
| micro | 45.5 |
| small | 18.2 |
| medium | 19.1 |
| large | 27.3 |

Source: authors' own research

Table 2

Distribution of entrepreneurial businesses by size - %

Of particular importance for the entrepreneurial business is the ability to pursue international business. With its help, the businesses manage to enter the international market and gain better market positions in order to increase its market share. In this context, the survey results show that 90.9% of representatives of this business claim to be engaged in international business. As already mentioned, the ability to innovate is particularly important for the entrepreneurial business. With their help, the business manages to increase its competitiveness and develop, especially in times of crisis. In this context, the results of the study presented in Table 3 show that a significant share of the entrepreneurial business is implementing different types of innovation in January-February 2020. It is noteworthy that 63.6% of businesses carry out technological innovations, followed by those who carry out marketing innovations (54.6%). The share of enterprises that have made product innovations and so-called 'new markets' innovations is not small, with equal shares of 45.5%. The percentage of those who carry out organizational and process innovations is relatively lower (27.3% for each of them). Only 9.1% of representatives of this business claim that they have not implemented any of these types of innovations.

| Types of innovation | Respondents, % |
|---------------------|----------------|
| Marketing | 54.6 |
| New markets | 45.5 |
| Organizational | 27.3 |
| Product | 45.5 |
| Process | 27.3 |
| Technological | 63.6 |
| None of the above | 9.1 |

Note: percentages exceed 100% because more than one answer is possible

Table 3

Distribution of entrepreneurial business according to the innovations made in January-February 2020 - %

Source: authors' own research

Of interest are the innovations made by entrepreneurial businesses in March-April 2020, that is, when these businesses are forced to operate in a crisis (Table 4). The survey results show that much less innovation is taking place. It is found that technological innovations are twice less during the crisis - only at 36.4%. Marketing (36.4%), product (36.4%), new markets (27.3%) and organizational innovations (18.2%) are significantly less realized. It is noteworthy that process innovations have not been made in a crisis. The share of representatives of the entrepreneurial business (27.3%) who have not implemented any of the types of innovations is also not small.

| Types of innovation | Respondents, % |
|---------------------|----------------|
| Marketing | 36.4 |
| New markets | 27.3 |
| Organizational | 18.2 |
| Product | 36.4 |
| Process | 0.0 |
| Technological | 36.4 |
| None of the above | 27.3 |

Note: percentages exceed 100% because more than one answer is possible

Source: authors' own research

Table 4

Distribution of entrepreneurial business according to the innovations made in March-April 2020 - %

An important point for any business carrying out an innovation activity is the question of how much it funds this activity (Table 5). In this regard, the survey results show that in the face of the COVID-19 crisis, the entrepreneurial business reinvested half of its profits - from 63.6% to 36.4%. It is noteworthy that the share of businesses using bank credit is increasing - from 9.1% to 18.2%. Of interest is the fact that before the crisis, the entrepreneurial business finances its innovation activity with the help of European programs and projects (18.2%), while in the conditions of crisis it does not use them.

| Types of funds | Before the crisis (Respondents, %) | During the crisis (Respondents, %) |
|------------------------------------|---|---|
| Own funds | 81.8 | 72.7 |
| Bank credit | 9.1 | 18.2 |
| Reinvestment of part of the profit | 63.6 | 36.4 |
| Funds from partners | 9.1 | 9.1 |
| European programmes and projects | 18.2 | 0.0 |

Source: authors' own research

Note: percentages exceed 100% because more than one answer is possible

Table 5

Distribution of entrepreneurial business according to funding sources for innovation before and during the COVID-19 crisis - %

In relation to the expenditures for innovations from the entrepreneurial business, in January-February 2020 it was found that 36.4% spent up to BGN 5 000 (Table 6). Second are companies that have spent more than 20 000 leva - 27.3%, followed by those who spent up to 1 000 leva (18.2%). The share of representatives of the entrepreneurial business who spent up to BGN 10 000 is relatively low - 9.1%. At the same time, the results of the survey show that the entrepreneurial business has minimized the resources it spends on innovation in March-April 2020, that is, when the business is operating in a crisis. In the mentioned period, the most significant is the share of the business, which spends up to BGN 1 000 - 45.5%.

| Spending in leva | Before the crisis (Respondents, %) | During the crisis (Respondents, %) |
|-------------------------|---|---|
| Up to 1 000 | 18.2 | 45.5 |
| Up to 5 000 | 36.4 | 9.1 |
| Up to 10 000 | 9.1 | 0.0 |
| Up to 15 000 | 0.0 | 9.1 |
| More than 20 000 | 27.3 | 9.1 |

Source: authors' own research

Table 6

Distribution of entrepreneurial business by pre-crisis and during COVID-19 crisis spending -%

It is interesting to find out the opinion of respondents on spending for different types of innovations in January-February 2020 (Table 7). In this regard, the results of the survey show that the largest share of respondents spend up to BGN 1 000 on technological innovation - 54.6%, followed by those who make marketing innovation of up to BGN 1 000 (36.4%).

It is noteworthy that in terms of process innovation, only up to BGN 1 000 is spent, by only 27.3% of the business. With regard to spending of over BGN 20 000, it is found that they were made by 9.1% for new markets and technological innovations, and 18.2% for product innovations. Only 9.1% of entrepreneurs say they have not spent any money on any type of innovation.

| Spending in leva | up to 1 000 | up to 5 000 | up to 10 000 | up to 15 000 | more than 20 000 |
|---------------------------|-------------|-------------|--------------|--------------|------------------|
| Type of innovation | | | | | |
| Marketing | 36.4 | 9.1 | 0.0 | 9.1 | 0.0 |
| New markets | 27.3 | 9.1 | 9.1 | 0.0 | 9.1 |
| Organizational | 27.3 | 9.1 | 0.0 | 18.2 | 0.0 |
| Product | 18.2 | 27.3 | 9.1 | 0.0 | 18.2 |
| Process | 27.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| Technological | 54.6 | 9.1 | 9.1 | 0.0 | 9.1 |

Source: authors' own research

Note: percentages exceed 100% because more than one answer is possible

Table 7

Distribution of entrepreneurial business according to spending by type of innovation in January-February 2020 - %

With regard to the spending on different types of innovation in March-April 2020, that is, when the entrepreneurial business operates in a crisis, it is found that less is spent overall. Even with spending of up to BGN 1 000, there is a decrease in the share of enterprises spending money for different types of innovation, as shown in Table 8. It is noteworthy that, in times of crisis, the proportion of businesses that spend no money increases fourfold - from 9.1% in January-February 2020 to 36.4% in March-April 2020.

| Spending in leva | до 1 000 | до 5 000 | до 10 000 | до 15 000 | над 20 000 |
|---------------------------|----------|----------|-----------|-----------|------------|
| Type of innovation | | | | | |
| Marketing | 27.3 | 0.0 | 0.0 | 9.1 | 0.0 |
| New markets | 18.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Organizational | 36.4 | 0.0 | 9.1 | 0.0 | 0.0 |
| Product | 27.3 | 9.1 | 0.0 | 0.0 | 9.1 |
| Technological | 18.2 | 18.2 | 0.0 | 9.1 | 0.0 |

Source: authors' own research

Note: percentages exceed 100% because more than one answer is possible

Table 8

Distribution of entrepreneurial business according to spending by type of innovation in March-April 2020 - %

With regard to the difficulties encountered by the entrepreneurial business in implementing innovations before the COVID-19 crisis, it was found out that these difficulties were mainly related to organizational issues - 36.4% (Table 9).

| Difficulties | Respondents, % |
|--|-----------------------|
| Organizational | 36.4 |
| Financial | 27.3 |
| Reducing unit costs of production and product delivery | 9.1 |

| | |
|-----------------------------------|------|
| Defining technical specifications | 9.1 |
| Logistics | 18.2 |
| I cannot decide | 18.2 |

Source: authors' own research

Note: percentages exceed 100% because more than one answer is possible

Table 9

Distributing entrepreneurial businesses according to the difficulty of implementing innovation before the COVID-19 crisis - %

In connection with the question whether the entrepreneurial businesses encounter greater difficulties in the implementation of innovations in the context of crisis, it is found that almost all respondents (90.9%) stated that they had difficulties.

Concerning the difficulties encountered by the entrepreneurial business in innovating in times of crisis, the results of the study show that these difficulties are mainly financial, personnel-related or marketing-related (Table 10).

| Difficulties | Respondents, % |
|--|----------------|
| Financial | 54.6 |
| It is difficult to stimulate staff to make the necessary changes | 9.1 |
| Repositioning staff responsibilities | 18.2 |
| Applying a new organizational pattern in business practice | 18.2 |
| Create new sales and delivery channels | 9.1 |
| Creating new communication channels | 18.2 |
| Purchase of materials due to restricted access | 9.1 |
| I cannot decide | 9.1 |

Note: percentages exceed 100% because more than one answer is possible

Source: authors' own research

Table 10

Distributing entrepreneurial businesses according to the difficulty of implementing innovation in times of crisis (COVID-19) - %

It is of interest to see the assessment given by representatives of the entrepreneurial business regarding the impact of the COVID-19 crisis on the development of their innovation activity. In this regard, 45.5% of businesses rate this impact as "strong", followed by entrepreneurs (36.4%) who rate the impact as "very strong". A relatively small proportion of respondents described the impact of the COVID-19 crisis as "medium" and "weak" - with equal shares of 9.1% each.

The results of the study reveal that the main problems faced by entrepreneurial businesses in a crisis are related to taking high risks in the pursuit of their activity, and in particular in the pursuit of innovation. These risks are related to the reduction of the available financial resources of the business, which in turn leads to difficulties in retaining the available staff in the enterprises, efficient marketing activities, as well as to reducing the market share of the enterprise.

Conclusion

The theory proves that innovation is an important source of success and generates sustainable competitive advantages, especially in times of crisis. The continuous development of new products, the adaptation and modification of existing products, the absorption of new markets, the application of new technologies, the use of new sources of

supply and marketing channels are essential features of an entrepreneurial business that strives not only for sustainable development, but also to expand their influence and take leadership positions. In addition, the development and use of new communication channels from entrepreneurial businesses in crisis conditions contributes to the achievement of good communication, which in experts' opinion plays a key role in the world of business and organizations²⁰ and to better meet the needs of consumers.

Practice shows that in times of crisis the entrepreneurial business faces serious difficulties and takes considerable risks to its survival. It is obvious that the various types of innovation, which are one of the main tools of business to achieve effective and long-term business results, proper business management and changes occurring in the business environment are not sufficiently used.

References

Damanpour, F. and Gopalakrishnan, S. "The dynamics of the adoption of product and process innovations in organizations". *Journal of Management Studies* Vol: 38 num 1 (2001): 45-65.

Damanpour, F.; Walker, R. M. and Avellaneda, C. N. "Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations". *Journal of Management Studies* Vol: 46 num 4 (2009): 650-675, doi:10.1111/j.1467-6486.2008.00814.x

Gaynor, M.; Bradner, S.; Iansiti, M. and Kung, H. T. "The real options approach to standards for building network-based services". In: 2nd IEEE Conference on Standardization and Innovation in Information Technology, October 3–6, Boulder, CO (2001): 217–228.

Goldman, S.; R. Nagel and K. Preiss. *Agile Competitors and Virtual Organisations: Strategies for Enriching the Customer*. New York: Van Nostrand Reinhold. 1995.

Kyurova, A. "Communication as a managerial tool for the processes in organizations". *Entrepreneurship* Vol: V Issue 2 (2017): 67.

Madgerova, R. *Ikonomicheski i sotsialni izmereniya na predpriemachestvoto*. Blagoevgrad: Monografia, Univ. izd. „Neofit Rilski“. 2013.

Marín-Idárraga, D. A. and Cuartas-Marín, J. C. "Organizational structure and innovation: Analysis from the strategic co-alignment". *Academia* Vol: 29 num 4 (2016): 388-406, doi:10.1108/ARLA-11-2015-0303.

Martínez-Ros, E. and Labeaga, J. M. "Product and process innovation: Persistence and complementarities". *European Management Review* Vol: 6 num 1 (2009): 64-75.

Mohnen, P. and Hall, B. H. "Innovation and productivity: an update". *Eurasian Business Review* Vol: 3 num 1 (2013): 47–65.

²⁰ A. Kyurova, "Communication as a managerial tool for the processes in organizations", *Entrepreneurship* Vol: V Issue 2 (2017).

MSP sa nash prioritet, Evropa e dobar dom za MSP, MSP oblagodetelstvat Evropa. Izd. Evropeiska komisiya, Predpriyatiya i promishlenost. 2008.

Nambisan, S. "Information systems as a reference discipline for new product development". MIS Quarterly (2003): 1-18.

Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data. Paris: Organization for Economic Cooperation and Development OECD, 3rd edition, 2005, <https://www.oecd-ilibrary.org/docserver/9789264013100-en.pdf?expires=1588525524&id=id&accname=guest&checksum=F51C2A2B41522B8833804BFEACC74883>.

Savitz, L. A.; Kaluzny, A. D. and Kelly, D. L. "Life cycle model of continuous clinical process innovation". Journal of Healthcare Management Vol: 45 num 5 (2000).

Schumpeter, J. A. The Theory of Economic Development. Cambridge, U.S: Harvard University Press. 1934.

Van der Aa, W. and Elfring, T. "Realizing innovation in services". Scandinavian Journal of Management Vol: 18 num 2 (2002): 155-171.

Vasilev, V., D. Stefanova and V. Cherkezov. Menidzhmant na krizi (teoretichni i prakticheski aspekti). Sofiya: Monografia, izd. „Propeler“. 2019.

Veugelers, R. "The role of SMEs in innovation in the EU: A case for policy intervention?". Review of Business and Economics Vol: 53 num 3 (2008): 239-262.

Womack, J., D. Jones and D. Roos. The Machine That Changed the World: The Story of Lean Production. New York: Harper Perennial. 1990.