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## **BUDGET MANAGEMENT IN SOCIAL INNOVATION PROJECTS**

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**Purpose:** In the article, we examine the impact of management effectivity on the budget of a social innovation project. To this end, the following research hypotheses were established: Budget planning depends on the effect of social innovation project management; The form of monitoring and inspection depends on the effect of social innovation (SI) project management; Introduction of product and result indicators depends on the effect of social innovation budget management.

**Design/methodology/approach**: Based on the literature research, it was decided to conduct face-to-face interviews with leaders of non-profit organizations that have had at least one social innovation project. In order to verify the research hypotheses, semi-structured interviews were conducted with representatives of 11 organizations.

**Findings:** Our findings confirm the relationship between management effectiveness from the respective phases of budget project and implementation. Respondents noted that they used respective effective management approaches in budgeting during implementation of social innovation projects.

**Research limitations/implications**: The limitation of the relatively small research group was noted, which does not allow generalizing the results. However, it gives inspiration to expand the research.

**Practical implications:** Our findings make it possible to better tailor budget management to heterogeneous social needs.

**Social implications:** SI-related projects are highly dependent on the project budget. Budget monitoring and inspection focus primarily on the degree of matching of the implemented project to social needs.

**Originality/value:** The article systematizes the knowledge of the theory of effectual SI budget management, which directly affects better adaptation of projects to social needs.

Keywords: social innovation, project management, budget management.

Category of the paper: Conceptual paper.

## 1. Introduction

In today's highly uncertain and rapidly changing social and economic environment, efforts to develop innovative products, processes and services have become a key factor in the sustained success of organizations (e.g. Newman et al., 2020) Much has been written on innovation in the literature. Given the distinctiveness of the subject of social innovation as a special type of innovation, it is necessary to lean into the challenges of the effectiveness of planning, monitoring of implementation, analysis and evaluation of results, decisions made on the basis of social innovation project budgets.

#### 2. Social innovation as a project challenge.

Innovation drives progress in productivity and economic growth. However, it is true that the contribution of innovation is not only economic, but also pursues social goals (OECD, 2024).

The sciences that study innovation focus on two distinct trends.

One examines the organizational and social processes that produce innovation, such as individual creativity, organizational structure, environmental and cultural context, or management and leadership approaches (Stachel, Mussante, 2022, 2023).

The other treats innovation as an outcome that manifests itself in new products, product features and production methods. This branch of research leans into the source and economic consequence of innovation (Yezersky, 2007).

To be considered an innovation, a process or result must meet two criteria. The first one is novelty: while innovations do not necessarily have to be original, they must be new to the user, context or application. The second criterion is to improve an existing solution (process and/or product). To be considered an innovation, a process or result must be either more effective or more efficient than pre-existing alternatives, more sustainable and/or more equitable. Sustainable means solutions that are both environmentally, socially and/or culturally sustainable, as well as organizationally sustainable – ones that can work over the long term. (Phills et al., 2008, pp. 37-39). Moulaert and Nussbaumer (2004) believe that SI goes further than economic and technological innovation because it focuses on the role of transforming human relationships.

It is important to distinguish four distinct elements of social innovation: First, the innovation process is the generation of a new product or solution, which includes technical and economic factors that enhance and influence social change. Second, the product or invention itself – the result is the actual innovation, which will directly affect the social environment, changing

human relations, among other things. Third, the diffusion, scaling or adoption of the innovation, as a result of which it becomes popular. Fourth, the ultimate value created by an innovation that results in lasting social change. Understood this way, it provides the basis for defining social innovation: a new solution to a social problem that is more effective, efficient, sustainable and/or equitable than pre-existing solutions.

Meanwhile, a project is an endeavor carried out to achieve some goal, at a specific time, using specific resources within a specific budget (Knosala, Deptuła, 2018, p. 23). In the subject literature (e.g. Wirkus et al., 2018; Świtalski, 2005) the basic parameters of a project are time, cost and quality - the so-called Iron Triangle (Pollack et al., 2018; Baloyi, Bekker, 2011). The Institute (2017) pointed out that time in itself does not directly affect project implementation and budget, and it only affects the schedule. Accordingly, a schedule was introduced as part of project management. The developed schedule is a detailed plan in which the activities needed for implementation will be the links between the respective activities and the time needed to perform them and the estimated expenses and results within the budget (Perić et al., 2021).

A social innovation project focuses primarily on social goals, the solution to which should be more sustainable and/or equitable. Therefore, when creating a social innovation project, it is necessary to face the specifics of the goal taking into account the available social and economic resources embedded into the project budget plan in the schedule.

## 3. Social Innovation Budget Project

Any innovative endeavor must demonstrate the economic viability of its implementation. This is why the budget is so important as a financial plan for the project, created as a result of the required cash to meet the needs during and after implementation – scaling the project.

A budget is a document that deals with future decisions to be made at a certain time and under certain conditions and assumptions. A budget is a plan expressed in numbers for the term of the project.

The numerical presentation of the plan imposes a kind of order, making it possible to see what money and by what organizational units will be spent, where and what costs will be incurred, and what revenues will be received. The budget combines the functions of planning and control (Adamowicz, Łuniewska, 2015).

Budget determination is the process of aggregating the estimated costs of the respective activities or work packages to establish an authorized cost baseline. A key advantage of this process is that it establishes a cost baseline against which project performance can be monitored and verified. This process is done once or at defined moments (milestones) in the project (Institute, 2017).

An additional feature of the budget is to show the economic equilibrium determining the activities of the entities. In every organization, the process of planning takes place on a continuous basis. As a result, there are always patterns of action and patterns of evaluating task performance. A feature of a good budget is flexibility, which entails mutual variability of economic quantities. The budget report, on the other hand, presents outcomes that result from the decisions actually made. As a result, budgeting is a process involving specific management activities in an organization. These activities are based on phases and are arranged in the following sequence of stages: budget creation, budget implementation and budget verification. The separation of these stages and their implementation depend on each individual decision, cannot be imposed (Sojak, 2010), and should be adapted to the current needs of the organization. The social innovation budget must also result from meeting the needs, of the beneficiaries who are the recipients of the innovation, at a satisfactory level. It must not just result from the need of the innovating organization itself.

Christensen et al. (2006) warns of social change as a "primary goal" that "largely creates an unintended byproduct" of disrupting or preventing SI. The author points out that wrong orientation of innovations reduces the social value added. Expanded support is needed for organizations that approach social sector problems in fundamentally new ways and create scalable, sustainable, systems-changing solutions. SI disruption is called catalytic innovation, where current players in any sector have the resources, processes, partners and business models designed to support the status quo. This makes it difficult for them to challenge the dominant way of doing things, and is unattractive to them. Organizations are created to support their existing business models. Since implementing a simpler, cheaper, more accessible product or service could sabotage their current offerings, it is almost impossible for them to disorganize themselves. Therefore, catalytic innovations that will bring new benefits to most people are likely to come from outside the group of established players. Features of catalytic thinking include (Christensen et al., 2006):

- 1. They create systemic social change through scaling-up and replication.
- 2. They satisfy a need that is either over-satisfied (because the existing solution is more complex than many people need) or not satisfied at all.
- 3. They offer products and services that are simpler and less costly than existing alternatives, and may be perceived as having a lower level of efficiency, but users consider them good enough.
- 4. They generate resources, such as donations, grants, volunteer labor or intellectual capital, in ways that initially seem unattractive to existing competitors.
- 5. They are often ignored, disregarded or even supported by existing entities for whom such a business model is unprofitable or otherwise unattractive and who therefore avoid or withdraw from this market segment.

An interesting approach to project management, including budget management, which can prevent catalytic innovation, was proposed by Sarasvathy (Chandler et al., 2011; Sarasvathy, 2001), who defined four principles of efficiency of project management while translating them into socio-economic needs, namely: (1) being guided by available means, not by predetermined goals; (2) affordable loss, not expected gains; (3) adaptability and recognition of the unexpected instead of using the existing knowledge, and (4) partnership instead of competitive analysis.

The basic idea of **the means-oriented approach** is to focus on the available resources and experiment to create business opportunities for the unpredictable future, rather than formulating specific goals and targets to forecast the future. The available resources can take the form of financial support or free resources, such as skills or equipment that are not currently in use. The means-oriented approach allows the decision-maker to explore alternatives, without the constraints of an expected outcome, and then evaluate multiple options and test different approaches through experimentation. Using effective reasoning and relying on available resources in the context of a project can enable a decision-maker to use their identity, skills and network while considering the inventory of available resources to achieve an outcome. The project budget will only consist of a plan of available tangible and social resources at a certain time and under certain conditions. The implementation and inspection of the project budget will be driven by the need to evaluate the alternatives tested.

The principle of **affordable loss rather than expected gains** takes into account the potential risk of investing in a project and bases decisions on an acceptable amount of loss, while focusing on experimenting with as many strategies as possible with the resources available. An affordable loss promotes the creation of more options in the future, rather than maximizing short-term profits. The principle of affordable loss takes into account the available resources, as well as the risks associated with their use. Decisions are made taking into account the level of possible loss to ensure that any loss does not exceed a level that is "affordable", i.e. does not lead to an unacceptable level of negative consequences (Berends et al., 2014; Blauth et al., 2014).

In the context of project management, traditional causal decision logic begins with project planning and uses methods such as business plans or forecasting to calculate and minimize risks, as well as calculate expected returns (Salomo et al., 2017) including social value added. Applying the principle of affordable loss to project management could increase the emphasis on assessing the potential risks or drawbacks of project investment and reduce the emphasis on financial calculations of the expected returns. This can be especially beneficial in highly innovative, high-risk project environments.

Adaptability means the degree to which one recognizes the unexpected and the ways to take advantage of opportunities. Effectuation focuses on the controllable aspects of unpredictable future, and the underlying logic is this: to the extent that we can control the future, we do not need to predict it. Consequently, under the principle of adaptability, unforeseen events and surprises are not seen as risks, but rather as sources of opportunity. In contrast, causal

logic focuses on the predictable aspects of uncertain future. The basic logic of causation is: to the extent that we can predict the future, we can control it. Unforeseen events and surprises are avoided or overcome in order to achieve project goals.

The logic of causation may be suitable for decision-making in projects with low levels of uncertainty, since flexibility is not required (Brettel et al., 2012). Thus, the project budget will be a reserve that will allow rapid adaptation in case of unpredictable events or opportunities. The adaptability of the project budget activates and creates social participation in the creation of social innovation. The flexibility of project implementation and budget control is essential for organizations to thrive in a constantly changing environment. Agile project management methodologies and flexible budgeting practices enable organizations to adapt quickly to unforeseen circumstances, ensuring responsiveness and effective resource allocation.

**Partnerships instead of Competition** play an important role in many project environments. "A successful approach is only associated with risk concerning resources that can be lost profitably; thus, it also drives partnerships as the main method of resource augmentation" (Sarasvathy et al., 2017). Effective logic focuses on early collaboration with stakeholders and beneficiaries to extend resources and measures, reduce or share uncertainty, and obtain decision support and funding for social innovation activities. Partnerships enable a higher level of control in the future; each partner brings new resources and capabilities that can be combined to shape a future project. In addition, stakeholders may be able to provide information to reduce ambiguity and uncertainty. Besides, the partnership of different communities also provides the budget with intangible resources, expanding the reach, knowledge and access to new communities of beneficiaries.

#### 4. Hypotheses

In this section, we develop hypotheses on the relationship between project factors such as goal, schedule and socioeconomic qualitative result, and the sequence of budgeting stages in project management effectuation. Therefore, management provides the structure through which project goals are set, the means to achieve those goals, and the monitoring of results. Our study focuses on two mechanisms of budget management and their relationship to effective decision-making: the use of available funds (resources) and the degree of budget monitoring. Economic and social justification is created to evaluate budget management and plays a crucial role in supporting strategic decision-making. Budget monitoring takes into account the day-to-day inspection of the project and is therefore crucial in deciding what to do next in project implementation.

Our hypotheses combine planning, monitoring and inspecting, as well as evaluating the social innovation budget, to decision-making with four principles of effectuation: "meansoriented approach", "affordable loss", "adaptability", and "establishing partnerships". The conceptual model is shown in Figure 1.



#### Figure 1. Framework for the Study.

Source: Own study.

## 4.1. Project budget planning

Budget planning is an important introductory element for initiating projects. Planning methods are called ways of preparing and making decisions, while planning techniques include a set of accounting, statistical, information, optimization, etc. activities that are the basis for preparing and making decisions (Grabińska, Stabryła-Chudzio, 2010).

There are also several methods for developing budgets, depending on the assumptions made and the budgeting procedure (Czubakowska, 2004, pp. 83-92):

- top-down budgeting involves preparing a budget taking into account the amount of subsidies or grants,
- bottom-up budgeting the budget is drawn up according to project needs,
- incremental budgeting the budget is adjusted for anticipated changes in a future period,
- budgeting from scratch budgets are drawn up from scratch, based on new assumptions and procedures, making this method more efficient than the incremental method, as it consciously abandons past data and assumptions where errors may exist,
- static budgeting involves not taking into account the impact of the time factor on budgeted items,
- dynamic budgeting mainly applies to budgets in which the impact of predictable but rapid changes is specified; with this method, it is important to specify terms and conditions.

Meanwhile, project management textbooks distinguish three basic methods of project cost planning (Institute, 2000, pp. 88-89):

- planning by analogy involves using information about the actual costs of similar projects and adjusting these values based on differences between projects,
- parametric modeling planning project costs using fixed cost parameters, specifying unit costs set for selected relevant variables characterizing the project,
- planning from scratch determining the cost of projects without reference to actual data from other projects, most often focuses on planning the need for the respective resources required to carry out the project.

Based on the demonstrated divergence of approaches to budget development, we propose that the method of cost planning should depend on the effect of project management.

H1: Budget planning depends on the effect of social innovation project management.

#### 4.2. Budget monitoring and inspection

Monitoring and controlling the work on a project is the process of tracking, reviewing and reporting overall progress to meet the performance goals outlined in the project management plan. The key benefits of this process are that it allows stakeholders to understand the current status of the project, recognize activities undertaken to address any performance issues, and have insight into the future status of the project with cost and schedule projections (Institute, 2017).

Inspection includes determining corrective or preventive measures or re-planning and tracking action plans to determine whether the measures taken have resolved the performance problem.

The work process for the Monitor and Control project involves:

- Comparing actual project performance with the project management plan.
- Periodically evaluating performance to determine whether any corrective or preventive measures are indicated, and then recommending such measures as necessary.
- Checking the status of the respective project risks.
- Maintaining an accurate, timely database of information on project product(s) and related documentation until project completion.
- Providing information to support status reporting, progress measurement and forecasting.
- Providing forecasts to update current cost information and current schedule.
- Monitoring the implementation of approved changes as they occur.
- Appropriately reporting on project progress and status to program management when the project is part of an overall program.
- Ensuring that the project remains in line with community needs.

Hence, we pose the following hypothesis:

H2: The form of monitoring and inspection depends on the effect of social innovation project management.

# 4.3. Analysis and evaluation of the effect of the implementation of the social innovation project budget.

The project budget includes expected revenues and cost plans for the respective activities defined by the project schedule. In addition, additional quantitative items indicating the size of the activities are entered for each activity in the budget. In this way, the cause-and-effect links between the three important aspects are clearly visible in the project budget:

- the value of the project the scope, quality and timing of the expected results as a cumulative effect of the planned size of the activities,
- the course of project implementation the distribution of the respective activities over time, taking into account the existing constraints,
- project costs resources used for carrying out subsequent activities.

Thanks to such a data approach, the project budget prepared across activities provides a suitable basis for analyzing the effectiveness of the project and seeking a wise compromise between the value and cost of the project (Łada, 2007, pp. 37-40), and the effectiveness of the activities carried out.

When analyzing and evaluating the effects of implementation, they should be directly linked to the goal and the effect of achieving the intended purpose. Therefore, measurable indicators should be put in place to achieve sub-goals – milestones, and to assess the final goal of the project.

In projects supported by European Funds, two groups of indicators are stated, i.e.:

- product indicators- specify the direct, actual effect of project implementation, measured by absolute quantities,
- result indicators describe the changes in the situation of the beneficiary or final recipients of the project, which occurred as a result of its implementation.

Therefore, we suggest:

H3: The introduction of product and result indicators depends on the effect of social innovation budget management.

## 5. Methods

The study employed a qualitative method using a flexible research project approach. For this purpose, semi-structured interviews were conducted with leaders of NGOs, lasting between 30 and 45 minutes. The purpose was to achieve an in-depth understanding of the objectives, issues and processes affecting the principles of project management efficiency, in the area of the implemented project budget. The study involved eleven organizations (affiliated with the Association) from the Silesian province. A prerequisite for selection of the organization was that it implemented at least one project related to social innovation. During the interview, respondents were asked to indicate what management effect principle they chose in the respective specific phases and activities related to the budget, and then the interviewer would elaborate and check the appropriate box. Summarized responses are included in the table (Table 1).

#### Table 1.

Item	Funds-based approach	Affordable loss	Adaptability	Creating partnerships			
How did you budget the social innovation projectweb?							
Planning by analogy	5	0	0	0			
Parametric modeling	1	0	0	0			
Planning from scratch	2	0	0	3			
Do you monitor and inspect the budg	get during implei	t during implementation of the social innovation project?					
Comparing actual project performance with the project management plan	6	6 2 1					
Performing periodic performance evaluations to determine whether any corrective or preventive measures are needed	5	1	5	0			
Checking the status of the respective risks	2	9	0	0			
Maintaining an accurate, timely database of information	0	0	0	0			
Providing information to support status reporting	0	2	0	0			
Providing forecasts to update current information	9	2	0	0			
Monitoring the implementation of approved changes	6	1	1	3			
Ensuring adequate reporting on project progress and status	0	1	2	0			
Ensuring that the project remains in line with social needs	10 0		1	0			
Has the analysis and evaluation of the effect of implementation of the budget of a social innovation project included social value in the indicators? If so, how much and in which indicator							
Product indicators	3	5	1	0			
Result indicators	1	3	3	5			

#### Summary of the aggregated responses of respondents

Source: Own study based on the responses given.

This approach was considered to be the legacy. Qualitative research benefits from a flexible research project rather than a fixed procedure (Maxwell, 2012). Denzel and Lincol (2018) believe that ...*There is no one way to do critical interpretive, qualitative inquiry. We are all interpretive bricoleurs stuck in the present, working against the past, as we move into a politically charged and challenging future.* 

### 6. Results

#### 6.1. Budget planning depends on the effect of social innovation project management

When planning the budget for a social innovation project, respondents mainly used the available funds (73%), while the rest established partnerships. During the interviews, project leaders mainly noted the funds raised to implement the project. They believed that programs that support the implementation of social innovation largely determine the project budget and this forms the basis for projecting budget values.

#### Table 2.

Item	Item Funds-based approach		Adaptability	Creating partnerships		
Planning by analogy	45%	0%	0%	0%		
Parametric modeling	9%	0%	0%	0%		

0%

Social innovation budget planning by project management effect

18%

Planning from scratch Source: Own study.

It should be noted that if the respondents declared a plan management approach based on available resources, the planned budgets were determined by analogy (45%) of project cost planning. The choice of forming partnerships as an outcome of project management influenced budget planning from the bottom up. In project budgeting, respondents were not following affordable loss and adaptability.

0%

27%

Based on the results of the study, it can be confirmed that the budget planning of a social innovation project is determined by effective management: a means-oriented approach and the establishment of partnerships.

## 6.2. The form of monitoring and inspection depends on the effect of project management

The purpose of hypothesis 2 is to establish the relationship between the phases of project implementation and the conduct of monitoring and inspection. The implemented social innovation projects were carried out by non-profit organizations operating in the Silesian province. These entities implemented monitoring and inspection primarily using an approach based on free resources (Table 3). Monitoring of project compliance with social needs was conducted in 92% of the cases. Respondents also noted the inspection of updating forecasts (82%), and implementing changes (55%). Another important issue was the comparison of project budget implementation with the plan (55%).

#### Table 3.

The effects of social innovation project management and the phasis of budget monitoring and inspection

Item	Funds-based approach	Affordable loss	Adaptability	Creating partnerships
Comparing actual project performance with the project management plan	55%	18%	9%	18%
Performing periodic performance evaluations to determine whether any corrective or preventive measures are needed	45%	9%	45%	0%
Checking the status of the respective risks	18%	82%	0%	0%
Maintaining an accurate, timely database of information	0%	0%	0%	0%
Providing information to support status reporting	0%	18%	0%	0%
Providing forecasts to update current information	82%	18%	0%	0%
Monitoring the implementation of approved changes	55%	9%	9%	27%
Ensuring adequate reporting on project progress and status	0%	9%	18%	0%
Ensuring that the project remains in line with social needs	91%	0%	9%	0%

Source: Own study.

What is interesting from the point of view of the adaptive effect of project budget management is that 45% respondents indicated performance evaluation to assess the need for corrective and preventive measures.

To sum up, leaders operating social innovation projects introduced monitoring and/or inspection in all the management outcomes, in phases: comparing the actual budget with the planned one, and monitoring the implementation of approved changes. In the remaining cases, budget monitoring and inspection depended on the adopted management outcomes, which is consistent with the second research hypothesis.

## 6.3. The introduction of product and result indicators depends on the effect of social innovation budget management

Allocation of funds for projects and initiatives that aim to solve social problems in an innovative way depends on the effect, the measurement of which is expressed in indicators. To ensure efficiency and transparency in spending the funds recorded in the form of numbers in the project budget, it should be reflected in the product and result indicators. Based on the result of the study (Table 4.), it is clear that the introduction of product indicators related to social innovation was the result of management of the so-called affordable loss (45%).

#### Table 4.

The e	effect o	of pro	oject	budget	management,	and	the <i>i</i>	number	of	product	and	result	inc	licate	ors
									./	1					

Item	Funds-based approach	Affordable loss	Adaptability	Creating partnerships
Product indicators	27%	45%	9%	0%
Result indicators	9%	27%	27%	45%
$C \rightarrow 1$				

Source: Own study.

It should also be noted that all organizations planning and implementing projects related to social innovation applied different budget management effects in the project and measurement of the result indicator, which demonstrates a high degree of flexibility in its definition and measurement.

## 7. Discussion and Conclusions

The purpose of this article was to explore the use of budget management effectuation in decision-making in project environments. Considering factors both at the project budget level, we bring new findings to whether and how the logic of effects impacts the management of social innovation projects. Our findings show that the effects of social innovation project management are closely linked to the phases and activities of project budgeting. In different phases, respondents use analogous management effects that enable them to better align activities with social goals and needs.

These results are consistent with the findings that effectuation is applied to the product innovation processes of small organizations, where the approach can be described as meansoriented, staged and open (Berends et al., 2014), which is also appropriate for social organizations. Our results suggest that in innovative projects, project leaders oversee the evolution of projects and project changes as opportunities arise. The budget should be flexible enough to adapt to changes in the environment.

Another important finding is that budget monitoring and inspection focuses on the degree to which the implemented project matches the social needs. The decision-makers mainly noted monitoring during budget implementation for any discrepancies between the plan adopted in the schedule and the actual needs. The logic of SI is to fulfill social needs in a changing environment in a more efficient way. The approach presented makes it possible to detect any errors or omissions during project implementation. Awareness of the goal related to social needs is an important element related to SI.

All respondents point to the important roles of projecting product and result indicators. Uncertainty in innovative projects is high, so estimating and mitigating the risk of possible losses is more appropriate than predicting expected gains when measuring the effectiveness of social innovation indicators. Our research clearly indicates that SI projects have different sensitivity regarding effectuation. Analysis of the phenomenon of the effect of project budget management led to findings that should indicate follow-up work on IS. The relatively small sample size does not allow generalizing the results, but is becoming an inspiration for further research on social innovation projects in Poland and the world.

### References

- Adamowicz, M, Łuniewska, S. (2010). Planowanie i budżetowanie jako narzędzie zarządzania finansami przedsiębiorstwa. *Zeszyty Naukowe Uniwersytetu Szczecińskiego, No.* 873, pp. 357-366, doi: 10.18276/frfu.2015.77-37
- Baloyi, L., Bekker, M. (2011). Causes of construction cost and time overruns: The 2010 FIFA World Cup stadia in South Africa. *Acta Structilia, Vol. 18, No. 1*, pp. 51-65.
- 3. Berends, H., Jelinek, M., Reymen, I., Stultiens, R. (2014). Product innovation processes in small firms: combining entrepreneurial effectuation and managerial causation. *Journal of Product Innovation Management, Vol. 31, No. 3,* pp. 616-635.
- Blauth, M., Mauer, R., Brettel, M. (2014). Fostering creativity in new product development through entrepreneurial decision making. *Creative Innovation Management, Vol. 23, Iss. 4,* pp. 495-509. Retrieved from: https://doi.org/10.1111/caim.12094, 10.11.2004.
- Brettel, M., Mauer, R., Engelen, A., Küpper, D. (2012). Corporate effectuation: entrepreneurial action and its impact on R&D project performance. *Journal of Business Venturing Vol. 27, Iss. 2,* pp. 167-184. Retrieved from: https://doi.org/10.1016/ j.jbusvent.2011.01.001
- Chandler, G.N., Detienne, D.R., McKelvie, A., Mumford, T.V. (2011). Causation and effectuation processes: a validation study. *Journal of Bussnes Venturing, Vol. 26, Iss. 3,* pp. 375-390. Retrieved from: https://doi.org/10.1016/j.jbusvent, 2009.10.006, 10.11.2024.
- 7. Christensen, C.M., Baumann, H., Ruggles, R., Sadtler, T.M. (2006). Disruptive Innovation for Social Change. *Harvard Business Review, Vol. 84, No. 12*, pp. 94-101.
- 8. Czubakowska, K. (2004). *Budżetowanie w controlingu*. Gdański: Ośrodek Doradztwa i Doskonalenia Kadr sp. z o.o.
- 9. Denzin, N.K., Lincoln, Y.S. (Eds.) (2018). *The sage handbook of qualitative research*. Thousand Oaks, California: Sage.
- 10. Grabińska, B., Stabryła-Chudzio, K. (2010). Przegląd metod planowania budżetu. Zaszyty naukowe Uniwersytetu Ekonomicznego w Krakowie, No. 840.
- 11. Knosala, R., Deptuła, A.M. (2018). Ocena ryzyka wdrożenia innowacji. Warszawa: PWE.
- 12. Łada, M. (2007). Budżetowanie projektów. Przegląd Organizacji, No. 3(806), pp. 37-40.

- Maxell, J.A. (2012). Qualitative Research Design: An Interactive Approach. In: L. Bickman, D.J. Rog (Eds.), *The SAGE handbook of applied social research methods* (pp. 214-253). California: Sage.
- 14. Newman, A., Round, H., Wang, S., Mount, M. (2020). Innovation climate: a systematic review of the literature and agenda for future research. *Journal of Occupational Organizational Psychology, Vol. 93, No. 1*, pp. 73-109.
- 15. Nussbaumer, J., Moulaert, F. (2004). Integrated Area Development and social innovation in European cities: A cultural focus. *City, Vol. 8, No. 2*, pp. 249-257. Retrieved from: https://doi.org/10.1080/1360481042000242201, 4.11.2024.
- 16. OECD (2024). Strengthening Sustainable Investment through International Investment Agreements. Retrieved from: https://doi.org/10.1787/a8729c98-en, 11.11.2024.
- Perić, M., Tomino, A.C., Barač-Miftarević, S., Mekinc, J. (2021). Review and analysis of project management knowledge areas in the contemporary literature. *Academy of Strategic Management Journal*, Vol. 20, Iss. 6, pp. 1-15.
- 18. Phills, Jr J.A., Deiglmeier, K., Miller, D.T. (2008). Rediscovering Social Innovation. *Stanford Social Innovation Review*.
- 19. Pollack, J., Helm, J., Adler, D. (2018). What is the Iron Triangle, and how has it changed? *International Journal of Managing Projects in Business, Vol. 11, Iss. 2*, pp. 527-547.
- 20. Project Management Institute (2000). A Guide to the Project Management Body Knowledge. Newtown Square, Pennsylvania, USA: Project Management Institute.
- 21. Project Management Institute (2017). *A guide to project management: Body of knowledge.* 6th Edition. Newtown Square, Pennsylvania, USA: Project Management Institute.
- 22. Salomo, S., Weise, J., Gemünden, H.G. (2007). NPD planning activities and innovation performance: the mediating role of process management and the moderating effect of product innovativeness. *Journal of Product Innovation Management, Vol. 24, Iss. 4,* pp. 285-302. Retrieved from: https://doi.org/10.1111/j.1540-5885.2007.00252.x, 10.11.2024.
- 23. Sarasvathy, S. (2001). Causation and Effectuation: Toward A Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review, Vol. 26, Iss. 2*, doi: 10.5465/AMR.2001.4378020.
- 24. Sarasvathy, S., Kumar, K., York, J.G., Bhagavatula, S. (2014). An Effectual Approach to International Entrepreneurship: Overlaps, Challenges, and Provocative Possibilities. *Entrepreneurship Theory and Practice, Vol. 38, Iss. 1*, pp. 71-93. Retrieved from: https://doi.org/10.1111/etap.12088, 10.10.2024.
- 25. Sojak S. (2010). *Rachunek kosztów podstawowe aspekty sprawozdawcze i decyzyjne*. Warszawa: Stowarzyszenie Księgowych w Polsce.
- 26. Stachel, R., Mussante, L. (2022). How Corporate Entrepreneurship Practices Impact Innovation—A Pilot Study. In: *Innovation Research Interchange's (IRI)*. Research-Technology Management, Vol. 65, No. 6. Annual Conference in June 2022, pp. 25-33.

- 27. Stachel, R., Mussante, L. (2023). Corporate Entrepreneurship: Innovation in Global, Corporate Environments. In: L. Aldieri (Eds.), *Innovation - Research and Development for Human, Economic and Institutional Growth*. DOI: 10.5772/intechopen.111805
- 28. Świtalski, W. (2005). *Innowacje i konkurencyjność*. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
- Yezersky, G. (2007). General Theory of Innovation. In: N. León-Rovira (Ed.), *Trends in Computer Aided Innovation*. *IFIP The International Federation for Information Processing*, Vol 250. Boston, MA: Springer. Retrieved from: https://doi.org/10.1007/978-0-387-75456-7\_5, 10.11.2024.