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RISK MANAGEMENT IN SOCIAL PROJECTS

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Purpose: The purpose of this article is to propose risk management recommendations for social projects taking into account their specificities by analysing and evaluating the ways in which social project risks are managed in the literature and applied in practice.
Design/methodology/approach: Both literature and empirical research have been used to provide an analysis of how risks of social projects are managed. The literature research, consisting of a literature review, will be contrasted with the results of the qualitative research carried out in the form of a single embedded case study. The result is a proposal in the field of project risk management for social projects.
Findings: An analysis of the way in which social project risks are managed has made it possible to identify the interdependencies that exist in this area and to identify areas of social project risk management that are particularly in need of improvement.
Research limitations/implications: The research is worth continuing by increasing the number of social project investigated in order to gain a broader perspective related to the risk management of social projects and to improve the proposed recommendations.
Practical implications: The research led to the development of a diagram of the steps needed to be taken in social project risk management and how to automate it through the creation of a prototype project risk management tool.
Social implications: The main aim of social projects is to achieve social change. This can take the form of creating new opportunities and spaces, resolving situations that hinder well-being and social development, as well as raising awareness and bringing about changes in the way society thinks. A prerequisite for the fulfilment of these objectives is the success of the project achieved through its correct implementation across all elements. One of these elements is effective and efficient risk management.
Originality/value: The article expands on the number of studies related to social project risk management and draws attention to the very limited amount of literature slanting on this topic. In addition, it presents its own solutions for social project risk management.

Keywords: social project, risk management, case study.

Category of the paper: Research paper, Conceptual paper.

1. Introduction

This article deals with the issue of risk management of social projects and aims to propose recommendations in this regard on the basis of an analysis and evaluation of the ways in which risk management of social projects is carried out, taking into account their specific characteristics. The topic of project risk management is particularly important in the aspect of project management, however, in the case of social projects it can be considered insufficiently explored, as indicated by the small number of literature items (literature review was made in the first half of 2022). The relevance of social projects in everyday life should be emphasised. Their main motivation is to develop and improve the well-being of society, instead of focusing on the profit of the project implementer. Social projects are designed to raise awareness, create new opportunities and create an environment conducive to the potential of a territory.

In order to achieve the purpose formulated in the article, literature research and empirical research, in the form of qualitative research, were used, in which the EcoDevelopment Foundation, operating mainly in Poland, especially in and around Wrocław, was selected as the object of the research. The literature research, among others: (Cairampoma-Caro et al., 2022; De Lima, Caldana, 2021; Moraes et al., 2021; Silvius, 2016) made it possible to identify good risk management practices and to identify areas in particular need of improvement in project risk management, taking into account the specific nature of social projects. Empirical (qualitative) research, on the other hand, focused on the identification and assessment of the risk management of social projects in the studied research object, the EcoDevelopment Foundation. The qualitative research strategy used is the case study, which covers the various projects implemented by the Foundation, and therefore case study type was defined as a single embedded case study. The research as a whole provided direction for the creation of improvements and allowed for the development of risk management recommendations for social projects taking into account their specificities. For the purposes of this article, a social project is understood as a unique endeavour aimed at achieving social change, with specific time and resource constraints, implemented under assumptions of financial rationality. A project risk, on the other hand, is an event occurring as a result of operating under uncertainty, which can generate both threats and opportunities to project objectives.

2. Research methodology

The research carried out includes both literature and empirical research. This section is mainly devoted to the methodology of the empirical research performed on the selected research object, i.e. the EcoDevelopment Foundation and its projects. The results of the empirical

research will be compared with the results of the literature research on risk management of social projects in order to propose our own recommendations in this field. A single embedded case study was chosen as the empirical research strategy.

2.1. Research strategy

There are various research methods used in the social sciences. The main determinant for the choice of a particular form of research is the structure of the questions posed by the researcher. Groups of questions can be determined by establishing the objectives that the questions define. The basic categories are the questions: "Who?", "What?", "How?" and "Why?". The choice of research method should be based on what we want to achieve. The "Who?" and "What?" questions support the conduct of exploratory research to develop hypotheses and assumptions for further verification. Research methods in this category can be used to determine the effects caused by a phenomenon or the magnitude of its occurrence. The "How?" and "Why?" questions, on the other hand, extend conclusions about the extent and frequency of phenomena by identifying relationships and tracing the phenomena over a given period. This means that the research is exploratory in nature, and the choice of a method to assist in obtaining answers to questions formulated in this way will allow the research results described in the article to be fully valid (Yin, 2015; Creswell, 2014).

The chosen research strategy belonging to the exploratory methods is the case study. It is based on data sets from the present concerning a person, a group of people or an individual. The case study is used to investigate a complex phenomenon in the environment in order to better understand it. It allows the use of a number of techniques to gather both quantitative and qualitative data, so that the researcher gains a deeper insight into the issue at hand (Roberta, Heale, 2017) The use of this research form is unlikely to allow the manipulation of relevant behaviour. The case study has the advantage of being able to use direct observation of phenomena, analysis of documents, artefacts and interviews with the participants under study. Because it draws data from a variety of sources, it allows one to look at many variables of interest to the researcher (Yin, 2015).

According to Robert K. Yin, the case study can be used in different types. The two basic groups are the single case studies and the multiple case studies. Single case studies focus on considering only one case. This is useful when the case is unusual, exploratory or, on the contrary, very common and recurring. A multiple case study should be constructed when it is intended to cover more than one case. These are definitely more extensive and resource-intensive studies, where each of the highlighted cases should be treated as a separate experiment. Both single and multiple case studies can be based on different numbers of units of analysis. A distinction is made between holistic approaches, which allow a global view of the problem at hand, and embedded approaches, which focus on additional sub-units and operational details.

The chosen research strategy is an single embedded case study.

2.2. Selection of case study

The choice of the embedded variant of the single case study (where the units of analysis are the projects of the subject) will result in the research results being related to the general way in which projects are managed in the studied object, i.e. the EcoDevelopment Foundation. A holistic view is necessary, so the research cannot focus solely on one selected project. In order to obtain as much information as possible about the projects implemented and to fully understand the way in which project risks are managed, care was taken to include a variety of data collection sources and stakeholders involved in the research. The research participants were selected based on their role within the foundation and during project implementation. They range from board members, project coordinators, those performing substantive tasks to those supporting project implementation. Due to the small size of the organisation chosen as the object of the research, the roles taken on by its employees intermingle. Consequently, a given project team member may have responsibilities for more than one project role.

2.3. Data collection methods

Data collection for the research is based on building a database from a variety of sources. The best approach is to use as many sources as possible. This increases the quality and broadens the scope of the case study. Obtaining a convergence of information from different sources will result in a more convincing conclusion to the completed study.

The analysis of the collected data was based simultaneously on the information contained in the documentation received from the Foundation and the conclusions resulting from the interviews conducted. The elements of the documentation are: the statute of the EcoDevelopment Foundation (the document constituting the basis for the activities of the Foundation) and the application form for one of the implemented projects (a description and plan for carrying out the project according to the template imposed by the financing institution). Regardless of the form, all the interviews conducted refer to the way projects are managed, with risk management specified. The face-to-face interviews have one respondent, while in the focus interview more than one respondent provided answers.

The result of the analysis of the empirical research will be a synthesis of information regarding the manner of project management at the EcoDevelopment Foundation with the specification of project risk management. This synthesis will be followed by a reference of the results obtained to the overall risk management of projects, taking into account the specificity of social projects on the basis of literature solutions. The final step will be to construct a proposal for risk management recommendations for social projects.

As already mentioned in chapter 2.2, a variety of stakeholders were asked to participate in the study. In an effort to identify how project risks were managed at the study, they were asked to participate in interviews. The interview structure has been divided into two parts in order to get a complete picture of how social projects are managed at the Foundation. The first part

refers to project management in general, while the second part focuses on risk management. The full structure of the interviews is presented in Table 1.

Table 1.
Structure of interviews conducted as part of the research

	Project management processes	**Questions**
Part I: Project management at the EcoDevelopment Foundation	Initiating projects and obtaining funding	How are projects initiated? Is it usually driven by systematic needs (e.g. strategy, business plan), situational needs (e.g. changes in regulations, technologies) or are they spontaneous initiatives (new ideas)? At what point are project funding decisions made?
	Assigning roles in projects	How are project team members selected? Is this influenced by factors such as, for example, the size of the project, the field of interest of the project? On what basis is the project coordinator selected?
	Project planning process	Are project planning tools being used? Who is responsible for project planning? Are there more people responsible for different parts of planning? (i.e. planning schedule, resources, scope of work, budget) What are the subsequent planning phases? Are scheduling tools used? Are time reserves for specific tasks taken into account? Is a critical path for the project drawn up? In what form is the schedule recorded? e.g. Gantt chart How and who is responsible for determining the resource requirements of the project? (human, tangible and intangible) What tools are used to estimate project costs? How is the project budget drawn up, who is responsible for it and who approves it?
	Monitoring and controlling the progress of the project	How is the course and level of tasks in the project controlled? Who is responsible for it?
	Summary and evaluation of completed projects	Are project evaluations carried out? What methods are used to evaluate projects?
Part II: Project Risk Management	Risk management	What is the approach to term "risk"? Is risk classified as a negative or also a positive event? Who is responsible for risk management? Are tools used to identify risks? If so, which ones? For example, is a risk register used, consisting of a list of risks with their description, probability of occurrence and magnitude of impact? Is a risk assessment carried out? Are any tools used, e.g. a risk matrix? If risks are assessed - are they then prioritised? How are important and less important risks handled? What strategies in risk management can be taken? Are the actions to be taken in the event of a risk or to avoid/minimise it developed?

Source: Own elaboration.

3. Results

Research carried out at the EcoDevelopment Foundation showed that the foundation does not have internal rules and instructions for project risk management. The actions taken, for the Foundation, are usually based on the experience of the project coordinator. Mostly, responses to risks are not planned, but developed on an ongoing basis when the risk arises. According to members of the EcoDevelopment Foundation, this has to do with operating in a dynamically changing environment, which is confirmed in the literature on community organisations. Particularly highlighted are the frequent changes occurring in the political and legal environment of social organisations. (Peter-Bombik, 2019) The members of the EcoDevelopment Foundation attribute to it the characteristic of flexibility and constant readiness to adapt to the environment. All social organisations are characterised in this way. They have the ability to react quickly to problems and to recognise social needs (Marciszewska, 2019).

Social projects are usually carried out by organisations that do not have enough money to carry them out, which is why projects are mainly funded by public institutions. Using the example of the research object, it can be seen that the way the project is managed is influenced by the requirements set by the grantor. Typically, a grant application must be developed as part of the project planning, which must follow the structure of the application form developed by the funding institution concerned. The sample form (Fundacja EkoRozwoju, 2015) and the interviews carried out show that, in most cases, a foundation has to carry out a more or less detailed risk analysis. It includes the identification of risks and the development of activities to deal with them. It does not include risk assessment and classification, which is recommended in the literature on risk management of social projects. This is an important aspect of risk management, as the prioritisation of risks will aid decision-making on how to proceed in a risk situation (Domański, 2014).

Respondents in the interviews cover a variety of roles in the projects, but their answers did not turn out to be very divergent. The differences that emerged are due, among other things, to their experience. The analysis of the answers made it possible to identify the main problems: the lack of systematisation of activities increasing the probability of project failure in the case of less experienced coordinators and differences in approach to project evaluation and assessment. Project evaluation and assessment is not a formally required stage of project management for organisations and is often a neglected aspect dependent on the will of the project coordinator.

Based on indications from the literature, it is possible to distinguish the stages that make up the decision-making process of social project risk management. These are: establishing the context for risk management, identifying risks, assessing risks, decision-making, acting on decisions made, and controlling and improving (Head, 2002) The information was related to

project risk management at the EcoDevelopment Foundation. Table 2. presents to which the research object meets the recommendations on risk management of social projects.

Table 2.
Degree of fulfilment in which the EcoDevelopment Foundation has met the literature recommendations on risk management of social projects

<table>
<tr><th>Risk management phase of social projects</th><th colspan="2">Fulfilment of the risk management phase by the EcoDevelopment Foundation</th><th colspan="2">Degree of fulfilment</th></tr>
<tr><td>Establishing the context for risk management</td><td colspan="2">The Foundation has a defined approach to the management of risk in projects. It accepts its presence to such an extent that it considers it an integral part of all projects undertaken. Often, the sense of social mission outweighs the fear of the appearance of risks. The foundation's premise is to remain flexible and able to adapt quickly. When risks arise, it takes action to both minimise losses and maximise possible benefits.</td><td colspan="2">3</td></tr>
<tr><td>Identifying risks</td><td colspan="2">The structured identification of risks only occurs when preparing a grant application to an institution with related requirements. Within the foundation, the identification of risks takes an unstructured form and depends entirely on the experience of the project coordinator and its members.</td><td colspan="2">2 - structured identification of risks occurs according to the requirements of the financing institution</td></tr>
<tr><td rowspan="2">Assessing risks</td><td>Analysis of risks in terms of probability of occurrence and degree of impact</td><td>Prioritisation of risks</td><td>Analysis of risks …</td><td>Prioritisation of risks …</td></tr>
<tr><td>Internally, the Foundation does not analyse risks in terms of their probability of occurrence and the degree of their impact on the project. The risk analysis is created in a descriptive form depending on the requirements of the financing institution. However, numerical values for the levels of the mentioned categories, i.e. probability of occurrence and degree of impact, are rather not developed.</td><td>Risks are not prioritised. Where risks are identified, no attempt is made to assess their impact on the project. A fairly detailed description of the risks is given when required by the funding institution.</td><td>2 - depending on the requirements of the financing institution, a risk analysis is carried out (usually in descriptive form)</td><td>1 - risks are not assessed and classified</td></tr>
<tr><td>Decision-making</td><td colspan="2">Decisions are always being made about how to respond to risks. However, these usually only occur when a risk arises. Preventive actions are planned in advance when required by the project's financing institution. Nevertheless, there are risks that are recurrent and the response to them is generally accepted. However, all decisions taken are analysed on a project-by-project basis.</td><td colspan="2">2 - a decision is not taken in advance unless required by the financing institution. Inside the foundation, decisions are taken at the stage of project implementation and risk occurrence</td></tr>
</table>

Cont. table 2.

Acting on decisions made	The EcoDevelopment Foundation takes action according to the decisions made. Roles in projects often intersect, but everyone has specific responsibilities. The project coordinator has the main influence on project risk management. His or her task is to ensure that any corrective actions taken are carried out correctly and lead to the planned results.	3
Controlling and improving	The EcoDevelopment Foundation is constantly observing the changing environment. It is in constant readiness to take action in situations of threat or opportunity. It does not plan risk-related activities in advance, but constantly monitors and adapts to changes in the environment during project implementation.	3

Note. Degree of fulfilment: 1 - completely not met, 2 - partially met, 3 - completely met.

Source: Own elaboration.

On the basis of Table 2. it is possible to detail areas that require some improvements related to project risk management at the EcoDevelopment Foundation as an exemplary organisation implementing social projects.

Particular attention should be paid to the recommendations on identification and risk assessment. In the case of identification, the recommendation has been partially met. This is due to the fact that projects funded by public institutions are required to identify risks, but there are no procedures or guidelines for this within the Foundation. Risk assessment, on the other hand, consists of two elements, i.e. risk analysis in terms of probability of occurrence and the degree of impact and prioritisation of risks. The risk analysis is partly fulfilled as it is usually required by the funding institution. It takes a descriptive form and is unlikely to include the quantification of probability values and the degree of impact of risks on the project. In contrast, risk classification is completely unfulfilled during project implementation. Both the interviews and the analysis of the documentation did not reveal any attempt to prioritise risks.

Another aspect, only partly fulfilled by the EcoDevelopment Foundation, is the decision-making regarding the actions to be taken in a risk situation. It is intended that decisions should be made before the risk occurs. However, the specific nature of the EcoDevelopment Foundation and the way in which it implements projects means that the necessary actions to be taken are not determined in advance. This occurs only when required by the financing institution at the stage of creating the application form.

The other literature recommendations are fully met by the research object.

The degree of both completely fulfilled, partially fulfilled and completely unfulfilled recommendations is due to the specific nature of social organisations. They have a shaped approach to risk, which is a consequence of their missionary nature. The main reason for action is to meet social needs regardless of possible risks. The lack of structured identification and categorisation of risks is a result of the desire for limited formalisation in organisations of this type. On the other hand, the greatest asset of social organisations, including the

EcoDevelopment Foundation, is their ability to adapt. They constantly observe the changing environment and try their best to adapt to it. (Marciszewska, 2019) Nevertheless, the introduction of certain improvements could increase the efficiency of the activities carried out and the course of project taken.

4. Discussion and practical implications

This section will present recommendations for risk management of social projects in general. The development of improvements was led by conducting literature research in the field of social projects and risk management, taking into account their specific characteristics, as well as research relating to the specific case of project risk management on the example of the research object, i.e. the EcoDevelopment Foundation.

When constructing recommendations relating to the risk management of social projects, it is important to take into account their specific characteristics. Organisations implementing social projects usually avoid internal formalisation. Their activities are focused on fulfilling the mission and achieving the intended social change. Communication between team members is based on mutual respect and trust. In addition, project roles often intersect as a result of a rather flat organisational structure.

Implementing social projects involves constantly observing and adapting to the environment. Organisations undertaking such projects tend to be flexible and able to cope with sudden and unforeseen events.

The recommendations developed will address, in particular, the risk project management phases included in Table 2. and considered as partially met or completely not met. These are: the timing of decisions related to the risk response and its identification and assessment, consisting of analysis and classification.

4.1. Recommendations – risk identification and assessment

Risk identification and assessment is particularly important in risk management. It provides the basis for decision-making in the next steps. In addition, it provides a broader view of the materiality of events that may occur during project implementation.

In the case of external funding of a project, a reference to risk is usually required at the stage of structuring the application to the funding institution. Depending on the structure of the application form, it may require the use of other tools. Therefore, the recommendations created must be as simple as possible and be as compatible as possible with the structures of the application forms. This is in order not to introduce over-complicated and formalised guidelines that hinder the work of implementing a social project.

Identification and assessment of risks are consecutive phases of risk management in projects. It is important that risk assessment consists of two parts, i.e. risk analysis and risk prioritisation. The tools chosen to support risk management are the risk register and the risk matrix. The risk register facilitates the identification of risks and enables the first phase of risk assessment to be carried out, which is the analysis of risks in terms of their probability of occurrence and the degree of impact of the risk on the project. It can then be used as a basis for further risk assessment using the risk matrix. It allows risks to be ranked in terms of importance, taking into account their analysis.

The risk register can take the form of a table, the basic elements of which are: the name of the risk, a brief description, the probability of the risk occurring and the value of the degree of impact on the project objectives (Wysocki, 2014). It has been proposed to extend the structure of the risk register with an additional element related to the source of the risk. This is intended to systematise and facilitate the identification of risks when constructing the risk register. Sources of risk refer to the areas in which risk can be sought and are based on the categories of risk occurrence distinguished by Robert K. Wysocki. These include: technical risks, project management risks, internal (organisational) risks and external risks. The proposed sources of risk do not have a rigid framework. Depending on the needs of the organisation, it can modify their division.

In addition, a list of the most common risks for social projects is proposed, taking into account the categories listed. The risks listed are the result of literature and empirical research. It should be emphasised that the creation of a list of risks should take into account both threats to the project and opportunities. The proposed list of risks will in the following be referred to as the baseline list (related to threats). It should start with the identification of risks and be modified depending on the scope of activities performed in the project. The baseline list includes:

- technical risks (introduction of the new technological tools required, the problem with the technical infrastructure needed for online meetings, increasing outreach by holding meetings in a hybrid format),
- project management risks (loss of a critical team member, carrying out too many activities not foreseen in the schedule),
- internal (organisational) risks (problem in building a team with the required competences, incorrectly estimated costs per task in the project),
- external risks (political and legal changes, sudden reductions in revenues, disengagement or conflict with project collaborators, publicity of the issue through those around the organisation).

Already at the stage of constructing the risk register, its alignment with the risk matrix should be taken into account. Therefore, the following levels of risk probability and the degree of impact of the risks on the objectives have been proposed.

Levels of probability of risk occurrence:

- low (risk is unlikely to occur),
- medium (risk may occur from time to time - occasionally),
- high (occurrence of risk is certain, may occur many times).

Levels of the degree of impact of the risks on the objectives are as follows:

- low (there is little impact of the risk on the objectives),
- medium (risk can affect the realised objectives to a noticeable extent),
- high (the impact of the risk on the objectives is very high).

The created risk register is the basis for the next step, which is to classify risks in terms of importance using the risk matrix tool. The design of the matrix should form a 3x3 matrix. The heading for the columns of the matrix is the probability of the risk occurring, while the rows are the degree of impact of the risk on the objectives. The levels defined for the probability value and the degree of impact must be consistent with the levels proposed at the risk register construction stage. An example of the structure of the risk matrix is presented in Table 33.

Table 3.
Example of risk matrix structure

		PROBABILITY		
		High	Medium	Low
DEGREE OF IMPACT	High	Critical	High	Medium
	Medium	High	Medium	Low
	Low	Medium	Low	Acceptable

Source: Own elaboration based on (Trocki, 2012; Wysocki, 2014).

Based on the matching of risks to the relevant configurations, risk importance levels are created. The highlighted risk levels are relevant to the project threats. The levels created are:

- acceptable - risk whose occurrence can be accepted and no corrective action taken,
- low - the risk does not require additional procedures, routine actions are sufficient,
- medium - risk requires the development of specific actions to respond to its occurrence,
- high - risk requires constant monitoring and preparation of a response to its occurrence,
- critical - risk not acceptable at all, requires immediate action, possible need to involve higher levels of management.

The risk matrix created can support further decision-making. Assigning risks to categories suggests which risks should be addressed with the highest priority. For risks classified in this way, actions (responses) can be created that should be taken before or when the risk occurs. Some risks, such as acceptable risks, can be ignored at the project planning stage.

The responses developed are designed to reduce the negative impact of the risks on the project (in the case of threats) (or to maximise the benefits in the case of opportunities, when considered in risk management).

Constructing the risk matrix in a handwritten manner can create many errors due to the time-consuming nature and the need for high concentration. For this reason, an improvement is proposed in the form of a simple automation of the risk categorisation.

Organisations implementing social projects do not usually use very sophisticated technology, so the proposed solution is based on a Microsoft Excel spreadsheet. The application is often used for simple calculations and budgeting, so it can also be useful for categorising project risks.

Excel offers the possibility of simple programming using the Visual Basic for Applications (VBA) language. This allows for the automation of the determination of risk categories after entry into the risk register. An excerpt from the main interface of the sample application is shown in the Figure 1.

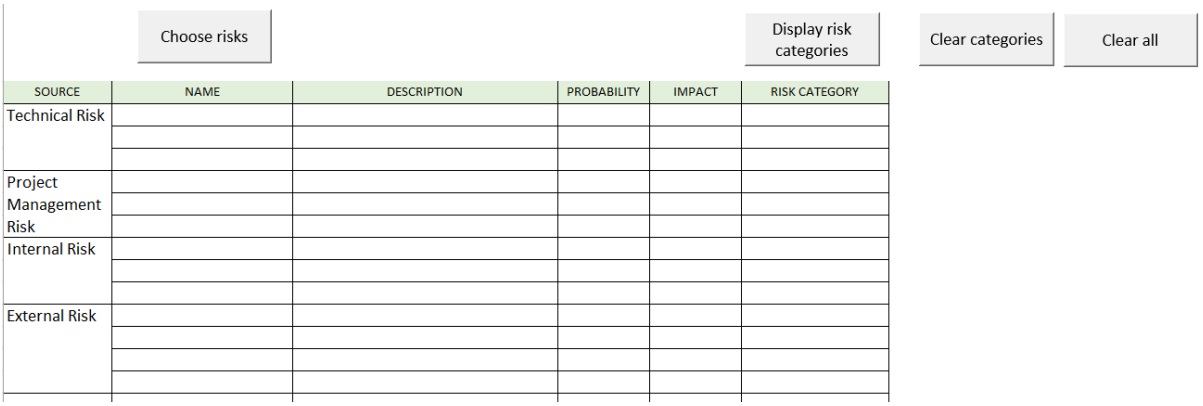

Figure 1. Excerpt from the interface of an application that automates risk classification.
Source: Own elaboration.

The application interface is divided into two parts. The lower part, representing a table, contains all the information entered into the risk register and a risk category column. The risk category refers to the risk levels that are determined by comparing the probability of a risk occurring and its degree of impact on the objectives pursued. For example, the level for the probability of a risk occurring and the degree of impact of the risk on the objectives can be described using a scale from 1 to 3.

For the level of risk probability, the scale given means: low (1), medium (2), high (3). For the level of impact of the risk on the objectives pursued, the scale given means: low (1), medium (2), high (3).

This first part of the interface is designed to allow the user to enter data on project risks. At the same time, it supports the identification and assessment of risks by providing a tool for constructing a risk register. On the other hand, the upper part of the application interface consists of function buttons. The names of the buttons indicate their functionalities:

- Choose risks (displays forms where the user can select the risks of interest from the base list divided into categories).
- Display risk categories (shows the importance categories assigned to the risks in the Risk category column, i.e. Acceptable, Low, Medium, High, Critical).
- Clear risk categories (deletes data from the Risk category column).
- Clear all (deletes data entered in the table excluding risk sources).

The proposed simple way to automate risk classification allows for a more streamlined workflow and reduces the possibility of error. In addition, the use of the tool does not require advanced Microsoft Excel skills. Creating an electronic risk register makes it easy to edit and store for long periods. Each register created in this way can serve as a basis for constructing another one for a similar project. The tool allows risks to be quickly prioritised and presented clearly and transparently. There is no need for additional analysis comparing the probability of a risk arising with the degree of its impact on the objectives pursued. The result obtained using the tool can lead directly to risk response planning.

4.2. Recommendations – decision making related to risk response

The decision-making stage determining the risk response is closely linked to the prior identification and categorisation of risks. The development of the risk response should be done taking into account the prioritisation of risks determined by their category. The simplest way is to draw up tables consisting of two elements, i.e. the name of the risk and a description of the risk response. To automate these activities, it was proposed to extend the functionality of the tool presented in chapter 4.1 by adding more sheets by risk category. It was decided to group the risk categories as follows:

- Critical and High.
- Medium.
- Low and Acceptable.

An example of a tool interface for creating responses to risks in the Critical and High categories is shown in the Figure 2.

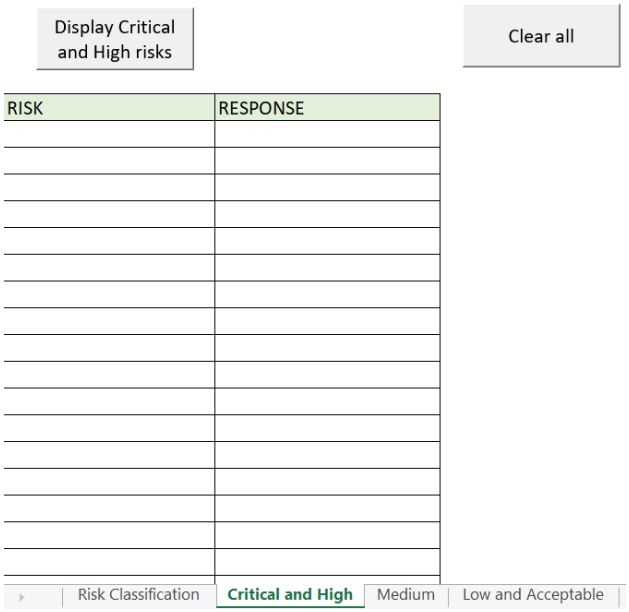

Figure 2. Example of response development interface for Critical and High risks categories.
Source: Own elaboration.

The tool has a panel with the following function buttons:

- Display Critical and High risks (retrieves risks of the appropriate category from the previously constructed risk register, then places the names of the risks in the Risk column).
- Clear all (removes data from the worksheet).

The worksheets for creating responses for risks in the Medium, Low and Acceptable categories are analogous.

The proposed tool is very simple to use and does not require advanced skills in using a Microsoft Excel spreadsheet. On the other hand, it can streamline work and increase transparency related to the assignment of risks to specific categories of importance. The consequence of using the tool when developing a risk response is to reduce the likelihood of error, especially when a large number of risks are identified.

This tool should be available to every member of the project team for the duration of the project. Not only one person should work on its development for the project. The effectiveness and correctness of the risk identification is higher when it is created as a result of a conversation between team members performing different functions and having different roles in the project. However, the project coordinator should have control over the changes made to the tool. Moreover, he/she is responsible for identifying and deciding on the risk response and controlling changes in the environment.

5. Conclusions

When creating the recommendations for risk management of social projects, special attention was paid to the simplicity of their application. The solutions were intended to streamline the work without introducing excessive formalisation. A prototype of a tool was created that supports the processes of identifying risks, analysing risks in terms of their probability of occurrence and degree of impact on the project, classifying risks in terms of importance and making decisions on how to respond to risks.

Given the need to systematise risk management, it is possible to propose the next steps to be taken for effective risk management of social projects. Figure 3. shows the developed diagram.

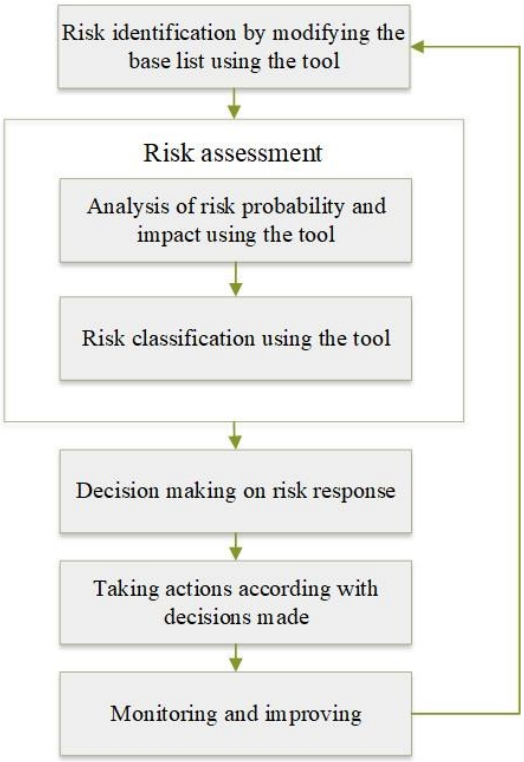

Figure 3. A diagram of the proposed risk management of social projects.
Source: Own elaboration.

The diagram is a graphical representation of the proposed social project risk management recommendations described in Chapter 4.

The identification of risks with the tool is based on the selection and modification of risks included in the baseline list. Using the baseline list reduces the chances of overlooking a significant risk, especially for less experienced project coordinators. In addition, the list can be modified according to the needs of a particular project.

Note that the risk assessment is based on the principles of constructing a risk register, but it has been automated through the proposed tool. Performing the analysis and classification of risks is straightforward, requiring no special skills in using Excel or performing risk assessments.

An important aspect in risk response decision-making is to make it as early as the project planning stage. This does not mean that one can neglect to observe changes in the environment throughout the course of the project. Adaptation and adjustment are inherent in social projects and should occur at every stage of the project.

6. Research limitations and further works

The creation of risk management recommendations for social projects was guided by the ease of their implementation and application in organisations implementing social projects. A basic requirement was to avoid excessive formalisation and highly complex methods. The created prototype of the automation tool is only a proposal for a solution that can be modified and extended as needed. The usefulness of the overall recommendations for social project management was assessed from the point of view of the research object. The feedback highlights the positive impact of the solutions on streamlining work, by reducing effort and systematising project risk management. However, the research is worth enriching by gaining a broader perspective among a larger number of organisations implementing social projects. This could influence the observation of additional unaddressed aspects and the improvement of the proposed solutions for social project risk management.

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